An Investigation into Design-Driven Approaches within Fast Moving Consumer Goods Brand Development

Submitted in part fulfilment of the requirements for the degree of Doctor of Philosophy

By

YOUNJOON LEE

Lancaster Institute for the Contemporary Arts Lancaster University

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An Investigation into Design-Driven Approaches within Fast Moving Consumer Goods Brand Development

Abstract

The attention of design has evolved from developing new products to developing a mechanism to offer more innovative and competitive products. Driven by design thinking and design-driven innovation perspectives, expanded roles for design have been highlighted in academia and business and have been identified as a means to bring innovation to organisations through the application of designerly approaches. Such approaches are often applied to diverse organisational activities in a manner that is at odds with conventional roles for design. However, there has been little research investigating how to undertake such a new role for design corresponding to specific industry contexts. In addition little research has explored using (the role of) design in the FMCG industry: research has predominately been confined to design's contribution to brand identity development. Therefore, this PhD aims to propose a way to underpin a new role for design within fast moving consumer goods (FMCG) industry, via the following research phases.

First, preliminary research in the form of content analysis of relevant literature was undertaken to discover how an expanded role of design is defined and the manner in which they are being adopted in a number of sectors, which entails a concept of design-driven approaches (DDA): approaches to applying a way of designerly conceptualising and exploiting tasks.

Secondly, based on the features of DDA, this research was conducted through transformative mixed methods: a sequence of online survey and in-depth semi-structured interviews in order to explore phenomena which enhance and/or hinder design's integration within business. Grounded on the findings from a series of research activities and empirical data analysis, this research proposes a conceptual model – a framework and roadmap – of how the FMCG industry can overcome

establishing a collaborative designerly frame to encompass activity-based and relational perspectives and elucidating contemporary and expanded roles of design.

Finally, via member-checking validation, this model proposes an appropriate way to embed designerly ways into FMCG brand development by underpinning a collaborative ideas generation phase, especially for establishing environmental and organisational change to enhance designerly application.

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The completion of this research would not have been possible without the help and support of many individuals to whom I owe a great deal of thanks.

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Secondly, my gratitude also goes to all the participants in this research, who gave all of their valuable time to pass on their knowledge and expertise.

Finally, I wish to dedicate this PhD project to my parents. I truly acknowledge my parents, Changwon Lee and Kyungja Park, for their constant support of my study with enormous love and encouragement. I would also like to thank all my other family members for their encouragement. They always raised me up so I could move forward whenever I felt discouraged and lost or unable to complete my study.

Publications

A number of publications have resulted from this research including:

Journal Paper

Lee & Evans. (2012). What drives organisations to employ design-driven approaches? A study of fast moving consumer goods brand development, *Design Management Journal*, 7(1), 74-88.

Conference Papers

Lee & Evans. (2012). A framework for design-led culture within the fast moving consumer goods industry. In DMI (Design Management Institute), *Leading Innovation through Design: 2012 International Research Conference*, Boston, USA 8-9 Aug. 2012: DMI International Conference.

Lee & Evans. (2012). The dichotomy between marketing and design: Incorporating designerly approaches into organisational culture within consumer packaged products. In R&D Management, *the R&D Management Conference 2012*, Grenoble, France 23-25 May. 2012: R&D Management Conference.

Lee & Evans. (2011). Investigating how the FMCG industry employs design-driven approaches: The dichotomy between literature and practice. In IASDR (International Association of Societies of Design Research), the 4th World Conference on Design Research, Delft, the Netherlands 30 Oct.-04 Nov. 2011: IASDR Conference.

Lee & Evans. (2011). Design-driven approaches: The dichotomy between corporations and consultancies. In Cambridge Design Management Group, *the 1th Cambridge Academic Design Management Conference*, Cambridge, the UK 7-8 Sept. 2011: Cambridge Design Management Conference.

Lee & Evans. (2010). An investigation into features of design thinking in fast moving consumer goods brand development: Integration and collaboration, In DRS (Design Research Society), 2010 Design Research Society (DRS) International Conference: Design & Complexity, Montreal, Canada 7-9 July. 2010: DRS Conference.

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* Only Appendix 29 will be presented in the printed version of the thesis; the other appendices will be included in the electronic version (CD-Rom).

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Chapter 1 Introduction

This chapter gives an overview of the research. Briefly, it presents the research background to explain how this research is justified, the research aims and questions, and subordinate objectives and propositions; it also outlines the chapter composition, as shown in Figure 1.1, below.

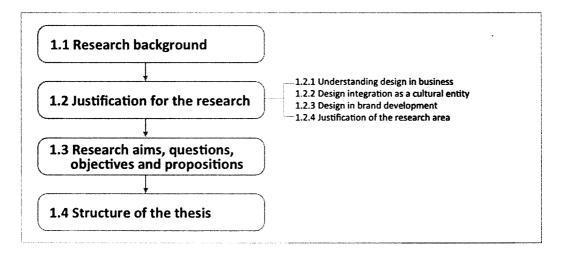


Figure 1.1 Map for introduction

1.1 Research background

In recent times, the role of design has been emphasised as a driver to develop difference and competitiveness in business (e.g. Mozota, 2003; Press and Cooper, 2003). Thereby, a role for design in business has evolved from developing artefacts to transforming the organisational culture into being design-led. This expanded role for design calls for integration across organisational activities, going beyond focusing solely on products per se. Currently, within the manner of design thinking and design-driven innovation perspectives (e.g. Brown, 2009; Verganti, 2009), these expanded roles are highlighted in academia and business in order to bring innovation to business. Accordingly, design has

increasingly moved its business role away from simply creating tangible artefacts to attempting to drive organisational cultural change. Along with this attention on the role of design, the role of designers has started to be investigated as an integrator and catalyst to fulfil a role for design (Porcini, 2009).

However, reflecting on the researcher's experience as a designer and project manager at a branding consultancy, design was confined to developing the structural or aesthetic parts of brands or products. On top of that, the design process was rarely integrated into other design processes or the entire brand development process. Thus, the researcher encountered different views of business compared to those of academia in terms of what a designer/design can do. The acknowledgement of this difference motivated the researcher to start this research to find a way to expand the role of design beyond its traditional role and bridge the gap between design in academia and design in practice.

1.2 Justification for the research

This section presents three perspectives which form the research background: 1) understanding design in business, 2) design integration as a cultural entity and 3) design in brand development. Afterwards, grounded in the research background, how this research is framed will be explicated.

1.2.1 Understanding design in business

The definition of design has evolved in response to the demands of society and users and from different perspectives, depending on the contexts of the disciplines where design occurs. Amongst the diverse views of the role of design, it has been acknowledged that design can envisage a way towards competitive products and services (Montaña et al., 2007; Mozota, 2003; Press and Cooper, 2003), whilst "good design" has the ability to contribute to the competitiveness of a business (Bruce and Bessant, 2002).

Researchers in business and academia study how design contributes to developing artefacts, such as products and brands, by exemplifying successful cases (e.g. Philips, 3M, Apple) (Ulrich and Eppinger, 2008; Bruce and Cooper, 2000). Thus, in particular, the usage of design in new product development has been rapidly increasing and businesses have started to employ design management (Best, 2006; Mozota, 2003; Cooper and Press, 1994). Concurrently, researchers investigate which features of processes and organisational management facilitate and catalyse design's integration, going beyond traditional design development activities (Sato et al., 2010; Lockwood, 2009a; Cooper et al., 2009; Jenkins, 2009; Stevens et al., 2008).

This transition calls for design engagement at the strategic level in order to cause an impact on the entire activities within organisations. Furthermore, the role of design has expanded beyond traditional design work and into taking up other disciplines:

Design skills and knowledge can contribute to many aspects and activities of a business, including research, marketing, product augmentation, flexibility, competitor intelligence, integrating technology, spotting new opportunities, trends predictions, product improvements and cost reductions (Bruce and Bessant, 2002: 32).

Therefore, researchers study designers' (designerly) ways of conceptualisation and exploitation: design thinking and design-driven innovation.

Despite the efforts mentioned above to exemplify successful cases and thus, encourage businesses to employ design, researchers find that design in business still struggles to integrate with organisational processes: predominantly, design plays a role at an operational level in developing artefacts such as product development, packaging, advertising and communications (Tether, 2005; Mozota, 2002). In addition, designers are even disconnected from key design decisions, which are made by people with limited design knowledge: consultancies are still managed and instructed by business people (Jevnaker, 2005).

Research has explored the phenomena which enhance and/or hinder design integration into the business in order for it to be transformed into a design-driven culture (Holm and Johansson, 2005;

Filson and Lewis, 2000). This transformation highlights the need to enhance the internal capability for design conceptualisation and exploitation in order to propose innovative products and brands continuously and take a lead in the market.

Nevertheless, in reality, the relationship between marketing and design or between creative/innovative and commercial perspectives still involves tensions when utilising design or design management in business (Beverland, 2005; Filson and Lewis, 2000). Design activities are limited to making artefacts and appreciation of the role of design in business alters the ways of employing designerly approaches to go beyond classical design execution; thus it is important for businesses to find their own ways in order to raise their understanding of design and enhance design performance. This research intends to investigate design's integration across organisational activities in business contexts and to break down obstacles to design integration within organisational processes and activities.

1.2.2 Design integration as a cultural entity

Researchers proclaim that business-driven management (efficiency and sales-driven approaches) hinders moving in innovative directions to sustain business within fast-changing markets (Neumeier, 2008b); instead, a better and/or innovative solution might be achieved through design (Cooper et al., 2009).

Therefore, this progression of design integration – an expanded role for design – drives researchers to identify ways to help business people undertake design (Liedtka and Ogilvie, 2011; Clark and Ron, 2008). Since design culture can be embedded into an organisation through practical work (Golsby-Smith, 1996), developing internal and external collaboration flows between design and business disciplines is critical to mutual interaction to create one's own designerly culture. Ind and Watt (2006) indicate that creative balance is generated through collaboration between personal, organisational, team and client/customer needs. This calls for the transformation of organisational and project processes and reconfiguring human resources management in order to embed design thinking/innovation through a (collaborative) learning mechanism (Davenport, 2009; Beckman and

Barry, 2007). Mostly, the tacit entities revealed in activities during a project have an impact on the fulfilment of an explicit procedure: communication practice, relationship, coordination, etc. (Sachs, 1995). Thus, it is vital to imbue each employee with a new role of design in their day-to-day activities beyond classical design practice, as an organisational entity.

1.2.3 Design in brand development

Brand equity is a key strategic asset for companies and retailers in a fast changing market. To ensure that brands can be both competitive and sustainable, researchers suggest that design can assist in the development of competitive advantage (Mozota, 2002, 2003; Vazquez and Bruce, 2002; Walsh, 1992): design can play a substantial role in creating and differentiating brand value and the high performance of design or design management has made great contributions to brand development (Montaña, et al. 2007; Southgate, 1994); design as a driver can help develop intangible value for a brand (Roscam-Abbing, 2010). Thus, it is claimed that a combination of design strategy and brand strategy creates synergy to develop competitive brands (Roscam-Abbing and Gessel, 2008).

While the role of design within brand development has received some attention, it has not drawn much attention in terms of how design, in an integrated way, supports effective brand development and provides new directions for it. Researching design in brand development is mostly limited to developing tangible brand identity and there is little research discourse detailing the interaction of design within brand development.

1.2.4 Justification of the research area

Grounded in the previous three perspectives: 1.2.1 understanding design in business, 1.2.2 design integration as a cultural entity and 1.2.3 design in brand development, this subsection explicates the problems which stem from the research background and how the research area is framed.

Despite the current transition of design to integration at the strategic level, design research cases are often found in the industrial sector (high-technology industry); there is little guidance for organisations on how to adopt a more designerly approach in specific sectoral contexts, which is

particularly challenging, given that design culture may seem alien on its own. Rachel Cooper also notes that there is a need for sector-specific understanding of design adoption across a range of different contexts (Collins, 2010) to ensure that research is relevant to the needs of specific industries. Where organisations have adopted designerly approaches, the lack of guidance with regard to how to navigate and lead such change through design has resulted in the ad hoc adoption of an expanded role for design: design thinking and design-driven innovation perspectives.

Although design in brand development has been highlighted, the fast moving consumer goods (FMCG) industry does not draw attention to it in terms of design integration within current design and branding discourse. Instead, according to Tether (2005), the FMCG industry – also called the consumer packaged goods (CPG) industry – is categorised into low technology and design oriented sectors; meanwhile, this industry is separated into low design expenditure (as a percentage of sales) compared to Research and Development (R&D) oriented and high technology industry sectors (e.g. automotive, electronics, etc.). This denotes that the FMCG industry is situated in a sector where design can contribute, but there is lower design expenditure.

Moreover, from the researcher's experience of various brand development types (e.g. electronics, automotive, finance, etc.), the FMCG industry has more propensity to utilising design in the last part of brand development: designers are involved in developing visual and structural identity or a campaign after development of brand direction. Besides, there is little integration between design-related projects: there is rare integration between structural and visual identities although these together are presented on the shelf.

Therefore, this PhD research concentrates on studying FMCG brand development and its organisational infrastructure (culture) in order to enhance and foster design and create synergy as an organisational entity for consistent design performance. Ultimately, this intends to propose a way to assimilate design values into the FMCG industry via design-driven brand development.

1.3 Research aims, questions, objectives and propositions

The role of design research is currently perceived as being important to transit a new role into societies and businesses and to help designers utilise this new role in their own practice (Koskinen, 2011). Hence, in this thesis context, to enhance and foster design within the FMCG industry, this research aims to "Develop a model which helps corporations and consultancies integrate designdriven approaches (DDA) at strategic and project levels through FMCG brand development". Since the term "design" per se is not enough to convey the current stance of design's expanded role, it is interpreted as the following terms: design thinking, design-driven innovation, integrated design, big D, etc. Hence, by analysing the current discourse on an expanded concept of design, a term, designdriven approach, is chosen to apply a way of designerly conceptualising and exploiting tasks and this concept is explained in detail in Section 2.3. Through answering the research questions below, it is revealed that, briefly, the FMCG industry needs guidance (a framework) to underpin DDA within a project and then to disseminate it to other departments and non-design related activities. Also, to utilise this guidance, a strategic commitment to DDA is required. This thesis seeks to develop such multi-level guidance - project and strategic levels - to motivate the FMCG industry proactively to fulfil DDA across organisational activities by borrowing the term "model" to encompass a framework and roadmap at multiple levels (see Section 7.2.3).

To achieve the research aim, a primary question arises: *"How can organisations employ DDA within the FMCG industry?"* which has two subordinate questions, as shown below:

1. What is a design-driven approach (DDA)?

- a. How has DDA evolved?
- b. What features of DDA are identified from the literature?

2. What features of DDA can be identified in FMCG brand development?

- a. What factors enhance/hinder the employment of DDA within corporations/consultancies?
- b. How does DDA integrate at strategic and project levels?

The first subordinate questions relate to secondary research to explore and scrutinise the expanded concept of design in terms of design thinking and design-driven innovation in order to understand and identify the features of DDA from the literature; the latter one relates to primary research to investigate what features of DDA identified from the selected literature analysis are utilised and what the underlying features are which influence a phenomenon from a previous investigation within FMCG brand development and organisations.

To substantiate evidence for the research questions above, seven objectives are elicited and illustrated in Figure 1.2. The first two objectives are associated with the secondary research and the other objectives are associated with the primary research.

Objective 7: To identify embedding DDA into and develop how consultancies can clients' projects 2. What features of DDA can be identified in FMCG a. What factors enhance/hinder the employment contribute to Proposition 4: Four themes extracted collaboration, strategic endorsement of DDA within corporations/consultancies? and intellectual capability (human b. How does DDA integrate at strategic and interdependent: the effective employment of designerly application will result in resources), or vice versa. from the literature are identify and develop organisational activities at different levels (strategic and can employ DDA in Subordinate research question 2 how corporations **Objective 6: To** project levels) brand development? project levels? identify what drives consultancies - to Primary research corporations and and consultancies appreciate and exploit DDA differently consultancies integrate design-driven approaches (DDA) at organisations investigate and appreciate and exploit DDA **Objective 5: To** Proposition 3: Corporations within FMCG brand strategic and project levels through FMCG brand How can organisations employ DDA within the FMCG industry? development. employed in different identify how DDA in contexts (e.g. size of sector, department, company, industry Primary research question development is **Objective 4: To** investigate and FMCG brand etc.) characteristics influence their Proposition 2: Consultancies' performance when utilising DDA features in brand development. development applications of DDA within the **Objective 3: To** theoretical and FMCG industry compare the practical b. What features of DDA are identified from 1. What is a design-driven approach (DDA)? features to support its identify significant theoretical base of literature) and to integration into **Objective 2:** To understand the DDA (from the organisational Subordinate research question 1 company, industry sector, etc.) a. How has DDA evolved? context-specific (e.g. size of activities which DDA is employed is Secondary research Proposition 1: The way in the literature? **Objective 1:** To embody research questions by exploring ways of development FMCG brand

Develop a model which helps corporations and

Aim

Figure 1.2 Outline of research aims, research questions, objectives and propositions

To achieve the objectives – in particular objectives 3, 4 and 5 – four overarching and subordinate propositions are entailed for primary research, an online survey and subsequent interviews. Vaus (2002: 14) states that 'a proposition is a statement which specifies the nature of a relationship between two factors'. Thus, propositions are elicited to investigate ways of employing design and underlying features in the FMCG industry from multifaceted perspectives depending on corporations' and consultancies' perspectives, the size of the organisation, departments, etc.

- Proposition 1: The way in which DDA is employed is context-specific (e.g. size of company, industry sector, etc.).
 - P1-1 The effective employment of DDA can result in corporate growth;
 - o P1-2 The value placed upon design-driven culture affects FMCG brand development;
 - P1-3 Depending on the positions and departments (disciplines) in an organisation, the way(s) of employing or perceiving DDA will be different.
- Proposition 2: Consultancies' characteristics influence their performance when utilising DDA features in brand development.
 - P2-1 Consultancies' characteristics influence the way(s) of understanding clients' performance of DDA;
 - P2-2 Consultancies' characteristics determine ways of collaborating with clients.
- Proposition 3: Corporations and consultancies appreciate and exploit DDA differently within FMCG brand development.
 - P3-1 Corporations do not consider external collaboration when developing overall ideas for brand and product development;
 - P3-2 Consultancies' contribution to brand development is limited to operational activities.
- Proposition 4: Four themes extracted from the literature are interdependent: the effective employment of designerly application will result in collaboration, strategic endorsement and intellectual capability (human resources), or vice versa.
 - o P4-1 Strategic endorsement to design influences ways of applying DDA;

- P4-2 Intellectual capability of stakeholders (employees) influences adapting DDA to brand development;
- P4-3 An attitude to collaboration elevates the appreciation (performance) of DDA.

1.4 Structure of the thesis

This section illustrates how the thesis is structured. Chapters 2 and 3 relate to the secondary research and Chapters 5, 6, and 7 relate to the primary research (see Figure 1.2). Amongst them, other chapters are configured to develop a DDA model, which is presented in Chapter 7 and illustrated in Figure 1.3, below.

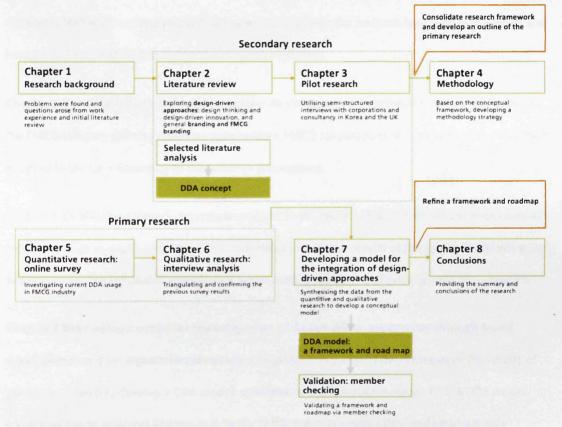


Figure 1.3 Chapter flow and outcomes: the shapes in yellow green colour indicate outcomes via the chapters

Chapter 1 Introduction: Delineates how the research was motivated by personal experience and

current design discourse, and then how the research is framed by illustrating research aims,

questions, objectives and propositions.

Chapter 2 Literature review: Divided into two for different areas: 1) an expanded role for design and 2) (FMCG) brand development in the literature: 1) the first part explores design evolution and focuses on an expanded role for design at the strategic level, going beyond the classical role of making artefacts, in terms of design thinking and design-driven innovation. Afterwards, this part explains a concept of DDA and a way of extracting features of DDA from seven commentators in the literature and specifies the key elements of DDA. 2) The second section explores (FMCG) brand development and the role of design in the FMCG industry.

Chapter 3 Pilot research: Through semi-structured interviews (n=9), this chapter explains how design is utilised within branded packaging development, consolidates the research frame and creates an outline for the primary research.

Chapter 4 Methodology and research framework: Illustrates the methodology used in the thesis and how the methodology is justified by the research objectives.

Chapter 5 Quantitative research: Online survey: An online survey investigates current DDA usage in **the FMCG** industry and two main two stakeholders: FMCG corporations and consultancies which have **an office in** the UK – according to the research propositions.

Chapter 6 Qualitative research: Interview analysis: To triangulate and confirm the previous research results, through in-depth semi-structured interviews (n=10), the results of the survey are interrogated and the underlying influences investigated, which lead to the results of prior quantitative research.

Chapter 7 Developing a model for the integration of design-driven approaches through brand development and for organisational culture: Comprises two parts: 1) the synthesis of the results of previous research to develop a DDA model: quantitative and qualitative research; 2) a DDA model corresponding to synthesis findings to help the FMCG industry employ DDA and embed it into organisational culture: framework and roadmap.

Chapter 8 Conclusion: Provides the summary and conclusions of the research by presenting a research summary, conclusions, contribution to knowledge, and limitations on and further extension(s) to the research.

2.1 Introduction

This chapter aims to explore and understand current design discourse – focusing on an expanded role for design: design thinking and design-driven innovation – and FMCG brand development to establish the ground for primary research: this research aims to develop a model of DDA application to the FMCG industry.

Section 2.2 seeks to explore a plethora of literature about an expanded role for design – design thinking and design-driven innovation – though the literature is too large to cover every detail: i.e. design thinking corresponds to the changing meaning of design (Cooper et al., 2009). Thus, this literature review mainly concentrates on investigating ways in which design(ers) view(s) and undertakes a project (problem): stances directly and indirectly referring to design thinking and how this concept is applied in practice – design and business – will be investigated (Kimbell, 2009a, b). Section 2.3 seeks to extract DDA features via the selected literature analysis of seven commentators to investigate DDA usage in the FMCG industry within primary research. Since various brand definitions have evolved and diverse approaches to brand development have been developed, Section 2.4 focuses on exploring a plethora of literature about FMCG brands and their development, rather than encompassing all notions of brands and approaches to their development. A detailed chapter outline is presented in Figure 2.1, below.

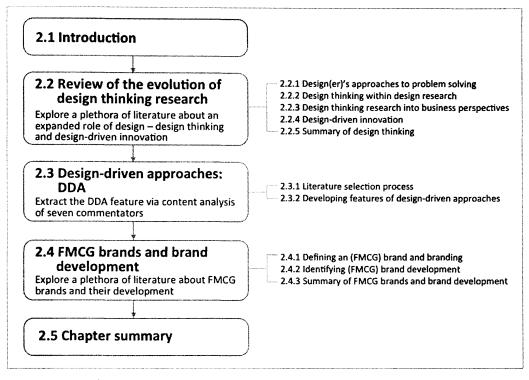


Figure 2.1 Map for literature review

2.2 Review of the evolution of design thinking research

The concept of design thinking stems from thorough investigation of what design is and what value design(er) create(s) (Kimbell, 2009a). Vogel claims that throughout the twentieth century, opportunities for design(ers) increased and their new influence was felt by businesses, organisations and societies (Vogel, 2009). Accordingly, 'attentiveness to design methods in the 1960s and 1970s gave way to claims about a generalised "design thinking" in the 1980s and 1990s' (Kimbell, 2009a: 2).

However, "design" alters, 'the meaning of which radically shifts dependent upon who is using it, to whom it is applied, and in what context' (Heskett, 2003: 3); the concept of design thinking is literally recognised as a way of "thinking like a designer" (Brown, 2009), but this concept can be interpreted as new nuances and forms of impact on practice (Cooper et al., 2009). Depending on researchers' perspectives, alternative terms to design thinking are used: design per se, design-driven, designminded, creative, strategic, disruptive, designful, innovative by design, designerly, etc.

· Therefore, this section seeks to understand design thinking in the following four subsections.

First, in Subsection 2.2.1, the ways that design(ers) think and exploit are investigated: how they structure a frame of problems and solve them (e.g. Cross, 2001, 2006, 2011; Lawson, 2006; Dorst, 2006; Boland and Collopy, 2004; Dorst and Cross, 2001; Simon, 1996; Buchanan, 1992; Rowe, 1991; Alexander, 1964). Much of this subsection focuses on attempting to clarify the nature and characteristics of design – designers' problem-solving and design methods within design projects – of which much has been undertaken mostly from the perspective of industrial and architecture design, focusing especially upon creating tangible objects.

Secondly, Subsection 2.2.2 investigates design thinking within a design research context in order to understand the characteristics of design thinking through investigation of its application within design strategies and organisations (e.g. Kimbell, 2011; Brown, 2008, 2009; Esslinger, 2009; Neumeier, 2008b; Owen, 2007) by examining how design activity helps actions (service, user behaviour, etc.) or objects (brand, product, etc.).

Thirdly, design thinking is increasingly being cited as a contributory factor to the development of competitive advantage (Martin, 2009) in business contexts. Thus, in Subsection 2.2.3, design thinking research from a business perspective is discussed in terms of the sustainable growth of a business: using design thinking methods to develop a mechanism for a product, service, culture, etc. (Liedtka and Ogilvie, 2011; Martin, 2009; Fraser, 2009; Ilipinar et al., 2008, etc.).

Finally, the notion of innovation by design – design-driven innovation – stems from an expanded role for design. Purely technological innovations are easily copied by competitors, but by combining them with an expanded role for design, a new meaning for a product or brand is highlighted (e.g. Richardson, 2010; Verganti, 2009; Esslinger, 2009). Since the features of design-driven innovation are similar to those of design thinking, Subsection 2.2.4 briefly explicates a concept of design-driven innovation.

The concept of design thinking has been applied to societal concerns, such as helping non-profit organisations to address social change, and to environmental challenges (Brown and Wyatt, 2010; Brown, 2009). However, in this thesis' context, the literature on design thinking in a business context is stressed and discussed to achieve the research objectives (see Figure 1.2).

2.2.1 Design(er)'s approaches to problem solving

Researchers (e.g. Cross, 2011; Dorst, 2006; Lawson, 2006) have identified the ways designers think and solve problems in order to identify the competence of design, and then empower this competence to contribute to creating value. Since the 1960s, researchers have proposed mechanisms for how designers identify problems, generate ideas in creative ways, and solve problems (Dorst, 2006). This subsection seeks to understand the mechanisms designers use to identify and solve problems. The following categories will be delineated to identify such mechanisms within suitable subsections:

- How designers view problems: Understand and classify the features of how designers identify and appreciate a problem;
- How designers think: Understand and classify the features of how designers generate a creative idea: ways of reasoning;
- How designers solve a problem: Understand and classify the attitudes of designers to solving a problem.

2.2.1.1 How designers view problems

This subsection begins with Cross's assertion that, in design disciplines, 'there are forms of knowledge special to the awareness and ability of a designer, independent of the different professional domains of design practice' (2001: 54). For this reason, it is pivotal to focus on designers' identification and appreciation of a problem in order to illustrate the ways in which designers view problems.

There are comparisons between viewing a problem in design and in other disciplines (Dorst, 2006; Owen, 2007; Lawson, 2006; Cross, 2001, 2006; Buchanan, 1992; Jones, 1992, etc.). Alexander (1964) asserts that while scientists try to identify the components of existing structures, designers try to shape the components of new structures in the course of their recognition of problems. The natural sciences are concerned with how things are, while design is concerned with how things ought to be (Simon, 1996). Thus, it can be interpreted that designers are good at dealing with the uncertainty of a problem.

Problems within a creative (design) task can be analysed and divided via three interpretations: welldefined problem, ill-defined problem and wicked problem (Rowe, 1991). Well-defined problems already have prescribed and apparent goals, so their solution requires the provision of proper means without need for further information (Simon, 1996; Rowe, 1991). It is asserted that most people in business and science are used to handling well-defined problems (Martin, 2009; Dunne and Martin, 2006; Boland and Collopy, 2004). On the other hand, ill-defined problems have an end that is unknown, so time is required to define such problems (Rowe, 1991). Finally, a wicked problem is often called a design problem (Rittel and Webber, 1973; Rittel, 1972; Churchman, 1967), it has more specific and detailed characteristics compared to an ill-defined problem, as illustrated by Buchanan's (1992) take on the wicked problem.

Buchanan (1992) claims that most design problems addressed by designers are "indeterminate" and "wicked", because design has no special subject matter of its own apart from what a designer conceives it to be'. He captured ten aspects of wicked problems based on Rittel's identification (1972) as illustrated below (p.16).

- Wicked problems have no definitive formulation, but every formulation of a wicked problem corresponds to the formulation of a solution;
- Wicked problems have no stopping rules;
- Solutions to wicked problems cannot be true or false, only good or bad;
- In solving wicked problem there is no exhaustive list of admissible operations;
- For every wicked problem there is always more than one possible explanation, with explanations depending on the *Weltanschauung* (intellectual perspective) of the designer as an integral part of the design process;
- Every wicked problem is a symptom of another "higher level" problem;
- No formulation of or solution to a wicked problem has a definitive test;
- Solving a wicked problem is a "one shot" operation, with no room for trial and error;
- Every wicked problem is unique;

 The wicked problem solver has no right to be wrong – they are fully responsible for their actions.

Rowe (1991) identified four characteristics of wicked problems: 1) continual reformulation, 2) the possibility of proposing a solution at any time, 3) the problem's solution being determined by a preconception and 4) a plausible alternative solution. To summarise the above views, two prime aspects can be explicated: 1) continual reformulation corresponding to identifying solutions: iterative process and 2) development of a different approach depending on the problem under consideration: emphatic attitude to facing a problem. Dorst claims (2006: 7) that 'there is a basic assumption here that even though well-structured problems as such do not exist in the real world, the construction of well-structured problems from ill-structured problems is the way to solve an ill-structured problem', which supports the above position.

Current research criticises Simon's claim (1996), that design problems are ill-defined or ill-structured per se, in a view of design as science, the *science of design* (Hatchuel, 2001; Cross, 2001; Schön, 1983). Simon's view relies on scientific knowledge – approaches to solving a well-structured problem – so that 'design as an activity may be the subject of scientific investigation' (Cross, 2001: 53). This overlooks design practice tackling problematic situations. Dorst (2006) explains that a design problem is situated in a "paradoxical situation" where an engineer and designer solve problems together, and also points out that designers use their understanding of the ways of thinking within different discourses to create a framework in which a solution is possible for a paradoxical situation. 'The paradoxical problem situation works as both a trigger to creative imagination and as a context for the evaluation of the design' (Dorst, 2006: 15). As design problems evolve through process, his point is that a problem cannot be defined at the beginning. In addition, in general, a design problem cannot be identified at a single glance. Churchman (1967) proposed that design-problem distinctions could be made between well-defined problems and ill-defined problems. Lawson (2006) also describes how 'design problems are often both multi-dimensional and highly interactive' (p.58).

Currently, designerly ways of viewing a problem – "wicked problem" – are applied not only to classical design-related activities, but also to current problems which organisations and society have to engage

with to embrace paradoxes, to break with the habitual ideas generation process in traditional business management, and to cope with complex problems (Neumeier, 2008b). Owen also offers the possibility to expand the ways of viewing a problem by going beyond design projects: the problems that business and society currently face are ill-defined and there is a 'great need for ideas that can blend that understanding and insight in creative solutions' (Owen, 2007: 17).

2.2.1.2 How designers think

Design thinking has been emerging as a great potential contributor since the start of the twentieth century, but it has been neglected as a discipline because of unformulated mechanisms of thinking (Buchanan, 1992). Researchers have started to investigate the competence of designers' ways of thinking by comparing so-called creative people from different disciplines, such as science and business (Owen, 2007; Lawson, 2006), or by formulating design and identifying design-science (engineering) relationships (Simon, 1996).

In design research in the 1970s and 1980s, researchers asserted that analytical thinking processes involved designers thinking through and decomposing problems (Rowe, 1991; Alexander, 1964). In this view, designers analyse a problem in much the same way that scientists do, and analytical thinking is imposed on the interpretation of information and the logical coherence of an operational frame. This assertion emerged from a perspective of architecture and engineering areas relating to well-structured problem-solving through inductive logical thinking.

Meanwhile, researchers like Cross (2006) and Lawson (2006) acknowledge that design thinking is a matter of inference (intuition). Abductive thinking (or reasoning) is highlighted by Martin (2009), Brown (2009) and Neumeier (2008b). Different to 'deductive logic – the logic of what must be – reasons from the general to the specific' and 'inductive logic – the logic of what is operative – reasons from the general' (Martin, 2009: 63), abductive thinking allows inference with intuition, so it can entail multiple results and more opportunities within an organisation or project. In Dunne's interview with Martin (Dunne and Martin, 2006: 513), Martin stresses the competence of designer thinking, specifically 'the designers who can solve wicked problems do it through collaborative and

integrative thinking, using abductive logic, which means the logic of what might be'. This logic is not taught in the formal education system because of the uncertainty of proofs or explanations which preclude accepted forms of statistical data, analytical balance sheets, etc. However, this way of thinking is relevant and cited as designers' thinking in much of the literature.

Owen (2007: 23) declares that 'creativity is of major importance to design thinking' and explains other substantial design thinking by comparing different disciplines (Figure 2.2): the horizontal axis is analytic and synthetic; the vertical axis is symbolic and real (actual or practical). He explains that 'design in this mapping is highly synthetic and strongly concerned with world subject matter. [...] Because design requires analysis to perform synthesis' (ibid.: 18). As can be seen in Figure 2.2, below, design is strongly positioned in the synthetic and real (practical) quadrant. In other words, his claim is inclined towards synthetic thinking, including analytical and intuitive thinking.

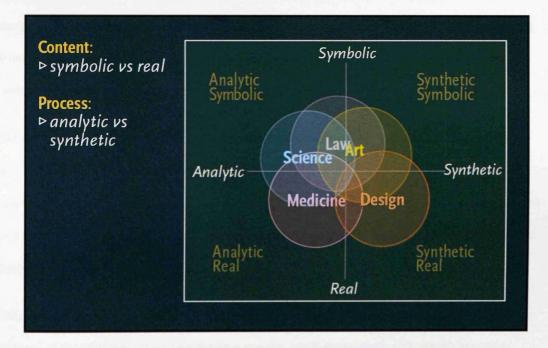


Figure 2.2 Differences: discrimination between fields (Owen, 2007: 18)

The stance of synthetic thinking currently converges in integrative thinking – a meta skill encompassing opposing ideas or models generating better ones (Martin, 2009) and reinterpreted as a feature of design thinking (Brown, 2009; Martin, 2009): a feature of design thinking to synthesise and generate new ideas by understanding and analysing a complex and paradox situation. To sum up, three explicit ways of designer thinking can be distinguished: 1) abductive thinking, 2) thinking for actual and practical solutions, rather than abstract and theoretical solutions, and 3) synthetic thinking (integrative thinking).

2.2.1.3 How designers solve a problem

This subsection will identify how designers solve problems within design projects. Some researchers explain problem solving as a process of formulating knowledge and decision procedures (Martin, 2009; Owen, 2007), and some describe it as a way of generating ideas (Brown, 2009; Martin, 2009; Neumeier, 2008b). Interestingly, some researchers have started to adopt other terms, "project" (Hatchuel, 2001) or "design situation" (Dorst, 2006), instead of problem-solving. Hatchuel (2001: 7) notes that: 'A basic procedure of problem solving is the generation of a short list of possible solutions that could be evaluated and compared.' However, Hatchuel also argues that problem solving is not a design process in itself but just one attribute of a whole design process: this restricts design thinking from being broadened. Thus, it is necessary to integrate designers' problem solving with other features of design thinking in order to reframe problem solving.

Martin highlights "iterative" and "collaborative" as typifying designers' style of working, and the dominant attitude toward a project as being 'nothing can't be done' and 'constraints increase the challenge and excitement', i.e. "empathy and challenge to constraints" (Martin, 2004, cited by Dunne and Martin, 2006). He also notes that, in contrast to business people, designers work with ill-defined (wicked) problems.

What follows is an explanation of the features Martin outlines above. First, Best (2006) explains that because of the nature of design and dynamic real life, which design deals with, design processes cannot be standardised as linear processes can. She notes that 'iterations are a natural part of the creative design process' (2006: 114). Secondly, a collaborative feature accounts for a team-project approach. As Best notes, designers do not solve problems alone, they normally collaborate to resolve a problem. Thirdly, the "nothing can't be done" approach, which is associated with "empathy", stimulates designers to generate and refine ideas and evaluate these ideas to solve a problem

continually and empathetically. Fraser (2009: 58) notes that, with empathy, designers step into 'understand[ing] your customer (and other critical stakeholders) more broadly and deeply'. Fourthly, the 'constraints increase the challenge and excitement' feature means that designers tend to challenge the constraints which processes and stakeholders (client, user, designer, manager, etc.) generate as a team (Lawson, 2006). This characteristic relates to designers' capability to cope with constraints and an empathetic attitude, and Berger (2010) notes that designers are good at identifying better solutions to ill-defined and ambiguous problems. These dictates can be distinguishing features of the working style and attitudes of designers from people in other disciplines. Besides, these also influence an inclination towards ideas generation, from design to other disciplines.

Through investigating ideas generation, the overall design thinking process is discussed first. Lawson (2006) describes three stages of generating an idea within a process: analysis, synthesis and evaluation. This ideas generation process is a combination of inductive and deductive logic, and further develops into a design process: first insights, preparation, incubation, illumination and verification. This conceptual approach to generating ideas is rooted in the notion that design employs a combination of the intuitive and the cognitive (Archer, 1965). Amongst various design thinking processes, three types of design thinking processes are discussed, which are developed to indicate design thinking competencies as well.

First, Martin (2009) discusses how ideas are developed by illustrating "knowledge funnels" through three stages (Figure 2.3): mystery, heuristics and algorithms. This shows that an idea starts with questioning as a creative action, and continues through intuitive thinking, understanding phenomena and information, and analysing these. Finally, distilled ideas exploit a certain pattern of algorithm.

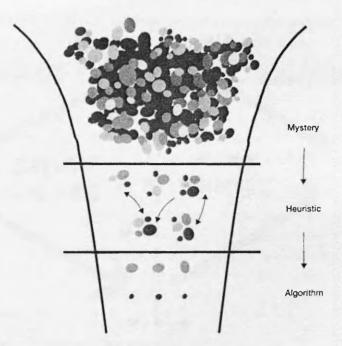


Figure 2.3 Marin's knowledge funnel (2009: 8)

This knowledge funnel process is similar to the design funnel process which Clarkson and Eckert (2005) developed: the innovation process funnel. The difference is that while Martin's funnel indicates iteration as a heuristic, Clarkson and Eckert's funnel indicates the importance of coping with the continual constraints arising in a process.

Secondly, the concept of "divergent and convergent thinking" (Figure 2.4) is described by Brown as "creating alternatives and choosing them" (2009: 67). While Martin's knowledge funnel only explains the "convergence" part of the process below, Brown emphasises alternative ideas generation using intuition.

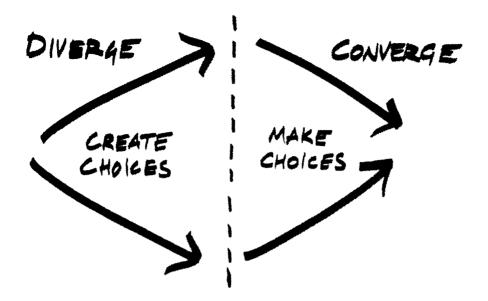


Figure 2.4 Divergent and convergent thinking by Brown (2009: 67)

Lastly, since thinking processes accommodate the design process and occur repeatedly, this means that, in a multi-step problem-solving process, each problem solver will get the chance to pile interpretation upon interpretation, and thus end up taking the problem-solving process in completely different directions (Dorst, 2006). Thus, the Design Council (2006), modifying this concept and stretching it to action, developed the "Double Diamond" model (Figure 2.5). This process model specifies the stages of ideas generation, from identifying a problem to providing a solution, amongst alternatives, to explain a multi-problem solving process within the design process. This model can be illustrated differently, according to the occurrence of better ideas during an ongoing process. For instance, in developing one idea, a better idea arises, a previous step such as defining discovering is repeated, and also, in the double diamond procedure, small diamond shapes of "divergent and convergent" thinking occur at the same time.

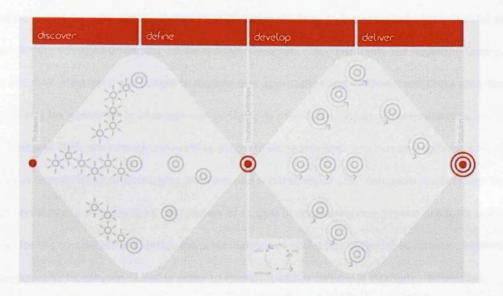


Figure 2.5 Double diamond model by the Design Council: this process can be divided into two stages: problem finding and problem solving (Design Council, 21 November 2006, updated 25 September 2009)

The three processes above have different shapes, but they all seek to embrace the competencies of design thinking: iteration, experiment, empathy, etc. However, problem solving is sometimes controversial within design research because too much highlighting of it restricts design from integrating with a higher strategy and other disciplines, and thus broadening design boundaries. Nevertheless, designerly problem solving is still the primary part of the design process, and is differentiated from those of other disciplines (Owen, 2007; Dorst, 2006; Dorst and Cross, 2001). Dorst (2006: 17) asserts that 'temporarily bracketing the term "design problem" allows new frames of reference and descriptions of the design activity to emerge'. In particular, the last designerly problem-solving model can be a foundation to be modified to embed the features of design thinking.

2.2.2 Design thinking within design research

From previous subsections, broadly, design thinking is not only just a way of designer thinking but also a process which accommodates designers' actions and methods. Hence, this subsection intends to understand design thinking by expanding the literature ranging from mentioning design thinking directly to the periphery of other design research which implies design thinking: design theory and methodology (methods, models, guidelines, etc.) for practice have been developed and reinforced by design academia and professional designers within different design disciplines (Kimbell, 2009a, b). According to Vogel's notes (2009), the concept of design thinking, as incorporated with industrial and graphic design, emerged during the 1920s and 30s. Designers and consultants like Raymond Lowey, Henry Dreyfuss, Paul Rand etc. sought to explore new approaches and methods, and these contribute to identifying the competence of design and verifying its role. Currently, design consultancies, such as IDEO, Frog and ZIBA, are strongly embedding design thinking into their projects and collaborating with companies to contribute to developing products and services which offer competitive advantage to clients' companies and businesses. This history of success in developing competitive products and services for the companies and design agencies mentioned above has triggered companies, business and academia to investigate design in order to employ it within corporate strategies. Nowadays, design is perceived as a discipline, and it has been recognized that 'design is truly moving into a more pivotal role within the corporate world and design managers should rejoice at the prospect of developing design into a continuous element of corporate strategy' (Joziasse, 2008: 31).

Their endeavours have resulted in companies turning design's application into a business unit. Companies have sought to bring design into their organisations and incorporate it into their processes. As Esslinger (2009: 7) notes, underlying design consultancies' successes, there is the client's understanding that 'design is an integral part of any successful business strategy, and not an artistic "boutique" profession'. A successful design thinking/design case calls for integration into the business and/or organisational strategy. However, giving design a key role in organisations was poorly executed, thus triggering design management to emerge itself in design and business academia, design consultancies and companies. Cooper et al. (2009) suggest a reason for the impediment of design integration at the strategic level, as shown below:

In fact, it is here that design management originated in the 1960s. The main purpose of a product here is to succeed in a competitive market. In this context, design management concerns itself with management issues that directly relate to the product development process. (ibid.: 53)

According to Farr (1966), one of design management's earlier researchers, 'design management is the function of defining a design problem, finding the most suitable designer, and making it possible for

him to solve it on time and within an agreed budget' (p.3). Farr's view is compatible with managing a design project or incorporating design into a company, rather than integrating it into a corporate strategy. This view is over 40 years old and may suggest limited design integration at the operational level.

Although design is developed by a cognitive approach, which is difficult to manage via traditional corporate management techniques, researchers seek to study 'the integration of design into management and vice versa. The design management area is more coherent than both the design area and the management areas alone' (Johansson and Woodilla, 2008: 16). Thus, design management emerged as an academic discipline and has developed credibility. The first design management course was taught at the London Business School in 1976, headed by Peter Gorb, and is now taught all around the world, in both business and design academia. These days, the definition of design management from Design Management Institute (DMI) has finally transcended design areas:

Design management encompasses the ongoing processes, business decisions, and strategies that enable innovation and create effectively-designed products, services, communications, environments, and brands that enhance our quality of life and provide organisational success. On a deeper level, design management seeks to link design, innovation, technology, management and customers to provide competitive advantage across the triple bottom line: economic, social/cultural, and environmental factors. It is the art and science of empowering design to enhance collaboration and synergy between "design" and "business" to improve design effectiveness.

The above definitions from Farr and the DMI show how design management has evolved. This evolution reflects the effort of design management to embed design into business. The previous definition will be helpful when seeking to understand the role of design management so as to find how design spreads throughout business and is integrated into a corporate strategy. Hence, when design thinking penetrates into design management, 'dealing with and converting ambiguity to a clearly focused strategy is key and gives design thinking the leverage for running competitive businesses in the post-dot.com' (Dziersk, 2007: 42-43).

As already noted, there is a degree of tension between design and management departments (Filson and Lewis, 2000). However, ongoing endeavours are filling this gap between design and business with a new framework and methodology which are emerging from design management research (Holm and Johansson, 2005). Thus, researchers seeking to identify methodologies and implement design management at the strategic level have driven organisations to become design-minded companies that are ready to foster design thinking (e.g. Best, 2006; Press and Cooper, 2003; Mozota, 2003; Cooper and Press, 1994).

The direction of design research is shifting from design's integration into design projects to design's integration into corporate strategies and, moreover, its social impact: for example, ways in which design can create value within projects and corporate strategies (Lockwood and Walton, 2008; Mozota, 2003; Bruce and Bessant, 2002); ways of incorporating and integrating design into new product development (Petrie, 2008; Bruce and Cooper, 2000; Blaich and Blaich, 1993); design integration in a collaborative manner (Poggenpohl and Sato, 2009); reshaping the role of design and designers according to the new demands of consumers and society (Press and Cooper, 2003; Mozota, 2003); design concepts and knowledge (Weil and Hatchuel, 2009); communication and decision-making (Chhatpar, 2008). These efforts now work as a beacon to steer companies away from focusing on controlling quality, like "Six Sigma", which is claimed by Deming (cited in Neumeier, 2008b) to find ways of embedding design thinking into corporations at the strategic level.

Clearly, innovation is further fuel that ignites design's integration into corporate strategies (e.g. Richardson, 2010; Wylant, 2008; Kelley and Littman, 2001) and innovation has been investigated into design management by incorporating it into the design process. Press and Cooper claim (2003: 41) that 'many definitions of innovation ally it to product development process. [...] The design process will often be central to product and technological innovation, and will also be a facilitator of process or market innovation'. As Berger (2010) states, innovation is a tool which designers use, researchers and companies investigate how innovation in design is adopted by companies within new product development (e.g. Trott, 2008; Ulrich and Eppinger, 2008; Cagan and Vogel, 2002).) and provide a methodology illustrated by successful cases (e.g. Lafley and Charan, 2008; Kelly and Littman, 2001; Cooper, 2001). Innovation is often confused with design thinking because of an expanded perspective

which is close to design thinking: Best (2006:18) notes that innovation involves "new exploitation of ideas": a process for either new ways of looking at existing problems, or recognising new opportunities.

The remark below clarifies this confusion and suggests how, together, design thinking and innovation create synergy:

Designers can create innovative products or services as well as translate innovative ideas to the marketplace. By extending the designer's role beyond the product design process, design sensibilities can be integrated with other functions and so widen their impact. (Bruce and Bessant, 2003: 32)

Therefore, it can be asserted that designers who generally employ design thinking are able to achieve innovation. Since, by adopting design thinking, there are more possibilities to obtain innovation, it is necessary to expand design thinking and the role of the designer beyond product design and developing artefacts.

However, as noted, like the confusion over innovation, there is some confusion over the usage of terminology – between design thinking and design management. Hence, two stances – British Standards Institution's BS 7000 (2008) and Lockwood (2009) – might show how the concept of design thinking can be appreciated, compared to the other concepts of innovation and design management.

First, according to BS 7000 (British Standards Institution, 2008), design thinking is defined as a 'type of process or approach primarily centred around four aspects: customer focus and intimacy, experimentation, prototyping and emotional connectedness', and design management is defined as the 'totality of design activity, its administration and contribution to an organisation's performance' (BS 7000-10). The definition of Innovation (ibid.) is explicated to relate to ideas, processes, products, techniques and materials: it is not confined to R&D in technology but is fulfilled across an organisation. In this view, design approaches or ways – design thinking and design managed – help an organisation to achieve innovation, thus many tools and techniques for managing innovation in BS 7000 overlap those in the design thinking literature: rapid prototyping, user-cantered approaches,

brainstorming, etc.

Secondly, Lockwood seeks to profile the terminology used (Table 2.1) and reports that:

Generally design management and design leadership lie in the areas of integrating design into business and in continuous improvement. Design strategy sets direction and road map, and design thinking is more involved in the front-end innovation processes. However, all are critical to helping an organisation become more design-minded. (Lockwood, 2009b: 84)

Profile of terminology Thinking style Objective Scope Process **Typical Players** Design Innovation, Concept of Collaborative, Designers, Abductive thinking thinking clarifying fuzzy objects, services conceptual, researchers, iterative, ideas front end, and processes managers, individual direction formulation and demonstration contributors, funding anyone Inductive Clarify design Define use of Define and Designers, Design thinking design and strategy attributes and guide, a design design policy design style, continuous managers, including look process brand managers and feel Project, business Management of Design manager, Inductive and Direct design Design brand manager, deductive unit, or people, projects manageme organisation and thinking nt operations, corporate level and budgets project or processes, programme manager resources and projects Chief design Deductive Design Connect design Design and Influence and thinking officer, design leadership to business. business guide top Lead design integration, topmanagement council, expert consultant, CEO, operations and level advocacy decisions collaboration VP

Table 2.1 Profile of terminology by Lockwood (2009b: 84)

This profile of terminology may be controversial depending on the viewpoints of researchers and audiences. For example, it can be argued that a single way of thinking is not attributable to each thinking style, rather each thinking style comprises a combination of logic in the practice of each profile: inductive, deductive and abductive logic. As illustrated previously (Figure 2.2), a view of design thinking demands a mixture of thinking styles, rather than a single thinking style (e.g. abductive thinking or intuitive thinking). In both of the above views, design thinking is confined to a type of innovative ideas generation. However, as can be seen in the table above, it is appreciated that design thinking is an overarching essential for the integration of all other attributes into corporate strategy by empowering anyone in an organisation to integrate design into corporate strategy.

To sum up, within design research, design thinking has drawn attention to design management in terms of new product development or innovative ideas generation. However, as noted above regarding Table 2.1, design thinking needs to penetrate organisational culture – each employee and stakeholder – to fulfil the other elements. Indeed, via these elements' interplay, an organisation can have the competitiveness to create value for products, services and society, and become a design-driven organisation.

2.2.3 Design thinking research into business perspectives

Before the nineteenth century, design research approaches were not seen as important by management or other disciplines, such as science and technology (Vogel, 2009). In more recent times, due to the success of design-driven (led) companies like Herman Miller and Philips, and contemporary companies like Apple and P&G, the concept of design thinking has now expanded into a business regime: in both business academia and practice. Hence, this subsection concentrates on reviewing the literature on design thinking in order to relate it to a business environment.

Design researchers have made efforts to provide evidence of design's contribution to creating business competitiveness (Bruce and Bessant, 2002) and the further benefits of more organisational support for and collaboration in design: e.g. recent research by the DTI's (Department of Trade and Industry) "think piece". This move towards design integration and designerly ways of conceptualising and exploitation are proliferating in organisational management approaches – i.e. organisational activities at strategic and operational levels going beyond developing artefacts (Sato et al., 2010; Poggenpohl and Sato, 2009; Jelinek et al., 2008; Jacoby and Rodriguez, 2008).

The following researchers illustrate design's application in terms of brand development. Kootstra and Vink (2007) explain the relationship between design and brand effectiveness and they claim design

adapts to organisational policies and strategies. Bevolo and Brand (2003) point out that design applications initiate research programmes and product developments and ultimately offer strategic brand direction to create value for brands. Kathman (2002) asserts that design can connect brands and consumers' emotions by identifying unleashed consumer needs and desires.

Due to these efforts and according to the Design Council, '16% of British businesses say that design tops their list of key success factors. Amongst "rapidly growing" businesses, a whopping 47% rank it first' (Neumeier, 2008b: 12). Design is perceived as an important engine to create competitiveness and allow a corporation to grow; in the meanwhile, design thinking in business contexts has started to be discussed in terms of applying design and innovation to business consistently (e.g. Martin, 2009; Clark and Ron, 2008; Dunne and Martin, 2006). This movement wants design to be adopted by business to overcome an attitude of tackling existing problems via their own disciplines to develop new products and help the organisation to thrive. Martin (2009: 6-7) specifies the concept of design thinking from a business perspective as a manner of integrative thinking thus: 'The most successful businesses in the years to come will balance analytical mastery and intuitive originality in dynamic interplay that I call *design thinking*.'

Nevertheless, this move towards design's application often fails to employ design as a strategic competence due to vulnerabilities and obstacles within organisations; i.e. given the nature of business, a marketing team and marketers may administer design projects although they are uncomfortable with coping with intangible values which design creates (Liedtka and Ogilvie, 2011): 'Design is still a neglected area of market research, and it cannot be expected to suddenly come to the fore' (Kootstra and Vink, 2007: 89). Holm and Johansson (2005) point out that impediments to design integration at multiple levels derive from different appreciations of the following attitudes between design and marketing management: 1) product, 2) professional identity, 3) corporate identity, 4) creating value, and 5) consumer and market research; however, they claim that dynamic support from different appreciations of marketing and design – an interdisciplinary approach – helps the organisation to innovate.

Therefore, corporations need to see design (thinking) as being integrated into corporate strategy in order to embrace design as their "DNA", rather than imposing design forcefully onto people in organisations. Companies such as P&G (Lafley and Charan, 2008), 3M (Porcini, 2009) and IBM (Clark and Ron, 2008) activate their own programmes to include design thinking as experiential intelligence. For example, Lafley and Charan (2008) exemplify the changes in P&G: by design integration in the innovation process of P&G, designers are able to broaden their territory and business people accept that designers perform strategically through collaboration in an integrated process. In addition, Kotchka (2006), vice-president of design innovation and strategy at P&G, highlights new design perspectives in terms of design thinking: a way of designer thinking and acting adapts to the entire organisational culture as a cultural entity – DNA. These claims relate to how design culture has evolved from a process of context-informed practice to something organisational and attitudinal (Julier, 2008).

To cultivate design thinking at the strategic level, an underlying role of designers is, in addition to design, substantially to disseminate design thinking throughout corporate and business thinking, and it is premised that the ways which designers use it can be applied to help organisations solve a wide range of problems and find opportunities at the strategic level (Brown, 2009). The following two notions show a degree of applying design thinking at the strategic level, going beyond the limited role of design thinking – designer's skills at the operational level:

The principles of design thinking turn out to be applicable to a wide range of organisations, not just to companies in search of new product offerings. [...] An interdisciplinary team of skilled design thinkers is in a position to tackle more complex problems. (Brown, 2009: 7)

Design thinking is the form of thought that enables movement along the knowledge funnel, and the firms that master it will gain a nearly inexhaustible, long-term business advantage. (Martin, 2009: 6-7)

Both perspectives claim that design thinking can contribute to creating powerful competitive advantages for products and services and, furthermore, can help companies to transform and become design driven. This is a fundamental preliminary to exploiting design thinking by it residing in the

cultural norms of organisations. Most researchers emphasise the importance of incorporating design thinking into the strategies of corporations, businesses and projects (e.g. Martin, 2009; Brown, 2009; Neumeier, 2008b; Stevens et al., 2008; Baglieri et al., 2008). Stevens et al. (2008) illustrate two perspectives of a strategic role for design as: 1) differentiation of products and services and 2) design as a competent norm in organisations (close to design thinking). These two stances align with two stances of design thinking: 1) a designer's skills per se and 2) the application of design thinking to organisational culture. Furthermore, Baglieri et al. (2008) state that devoting a higher amount of managerial competence to creativity contributes to continuous innovation. That is, when design (thinking) is endorsed by management, innovation/design can be clearly validated throughout company, business or project operations: underlying design thinking is also pivotal in committing to undertake strategic design thinking. This implies organisational culture changing to become design driven, whereby employees and stakeholders inherit design thinking.

To sum up, from this subsection, it can be claimed that design thinking can help organisations move forward to perpetual a culture of fulfilling design and innovation as well as achieving the goals previously mentioned: creating competitive advantage and values, maintaining sales growth, etc. Therefore, these benefits motivate researchers and companies to investigate methodologies to include design thinking and/or designers into the day-to-day practices of corporate, business and project strategies, e.g.: service design thinking tools (Stickdorn and Schneider, 2011); designerly collaborative tools (Doorley and Witthoft, 2011); design thinking tools (Liedtka and Ogilvie, 2011); designers' contribution to service design (Viladàs, 2011).

2.2.4 Design-driven innovation

Through the previous subsections, design thinking is stressed as being coupled with innovation regarding its application to different disciplines. According to the categories of innovation definition in the Oslo Manual (OECD, 2005), there are four types of innovation – product, process, marketing and organisation – but innovation is mostly highlighted along with new product development, thus companies' R&D focuses on the feasibility of technology. The definition of innovation is generally accepted as being technology, or a combination of technologies, that offers benefits (McDermott and

O'Connor, 2002). In rapidly changing markets, even a radical technological approach can easily be replicated by competitors (Buganza and Verganti, 2006).

Therefore, this subsection discusses Verganti's (2009) "design-driven innovation" which is another attempt anchored to designer and design competencies whilst elevating the role of design and designer to the upstream strategy. This notion of branching out from design and innovation disciplines arises in securing innovation through meaning. Hence, designers and design are also key to designdriven innovation.

Verganti (2009: 4) specifies that 'design-driven innovation – that is, radical innovation of meaning' solicits profound changes in sociocultural regimes, like imbuing a new spirit into objects and systems (e.g. Nintendo Will, Whole food, etc.). 'This strategy aims at radically change the emotional and symbolic content of products (i.e. their meanings and languages) through a deep understanding of broader changes in society, culture, and technology' (Verganti, 2008: 436). This design-push strategy (Figure 2.6) is able to change the meanings of products by understanding sociocultural environments as being broadly coupled with technological advances.

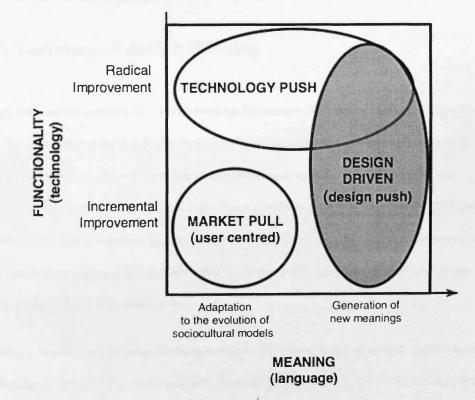


Figure 2.6 Design-driven innovation strategies (Verganti, 2008: 444)

Verganti (2009) also focuses on the exploration of concept generation, called "idea focus": a combination of ideas, vision and concepts. This involves leading groups to focus on ideas and this notion is close to open innovation, which collects information or knowledge from outside, a way of researching ideas that follows a convergent process to distil ideas. Ultimately, this notion is developed to empower design to prevail over traditional or conventional ways of using design like design thinking: both notions move the role of design and designers to the strategic level and help the organisation transform toward being design driven.

In summary, according to Verganti's view (2008, 2009), design-driven innovation is clearly equivalent to the creation of knowledge and researching ideas broadly to develop radical new values and meanings by focusing on sociocultural phenomena rather than on market analysis. Design thinking, for the most part, encompasses design-driven innovation and can be a tool enabling design research to develop radical meaning for products, brands and organisations. Verganti's examples, such as IDEO and Apple, which are mentioned in his book (Verganti, 2009), are used in other books and articles about design thinking. This implies that design thinking and design-driven innovation are inaugurated as ways to embed designerly ways into organisations, systems and projects.

2.2.5 Summary of design thinking

Through the previous sections, the design thinking literature – or a related concept: design-driven innovation – is explored and it is found that design thinking research has evolved from special designers' skills and/or competencies into an organisational norm or culture for design and innovation. Earlier scholars (e.g. Lawson 2006; Simon, 1996; Jones, 1992; Churchman, 1967; Archer, 1965; Alexander, 1964) theorized the nature of design and its value, whereas recent scholars (e.g. Berger, 2010; Brown, 2008, 2009; Martin, 2009; Esslinger, 2009) have investigated how design thinking is adapted at the strategic level.

such as iterative, project-based work processes and so forth. That is to say, design thinking encompasses the competences of designers, design projects and the nature of design per se in order to offer opportunities for a design-integrated corporate strategy. To embed design thinking effectively into the development of products, systems and services within different contexts, design thinking needs to reside in corporate or organisational culture, and involves identifying the proprietary methodology involved in the foci (design-driven research: user-centred, product-centred, etc.) to understand different corporate and business environments and find an appropriate balance between designerly and business mindsets.

A summary of design thinking is briefly encapsulated in Brown and Wyatt's definition:

Design thinking relies on our ability to be intuitive, to recognize patterns, to construct ideas that have emotional meaning as well as being functional, and to express ourselves in media other than words or symbols. [...] Design thinking, the integrated approach at the core of the design process, provides a third way. The design thinking process is best thought of as a system of overlapping spaces rather than a sequence of orderly steps. (Brown and Wyatt, 2010: 33)

Therefore, before extracting features of design thinking from selected commentators – to achieve research objectives 1 and 2 – this subsection summarises what has been explored so far and the features of design thinking that have been captured as:

- From the literature, there is no solid and single concept of design thinking. Depending on
 researcher perspective, there are differences in interpreting the concept of design thinking
 However, the same intention underlies the various stances to underpin designerly ways at a
 the strategic level and then to enhance/procure a design-driven culture;
- Design thinking is not only abductive thinking, it is also analytical thinking, i.e. design thinking can be defined as meta synthetic (integrative) thinking which emphasises abductive thinking along with intuition and creativity;
- The key characteristics of designer problem-solving experimentation, iteration and empathy – are also distinguishing features of design thinking;

- Design thinking has to be integrated at the strategic level in order to foster it throughout an entire company;
 - Early design thinking can help companies to solve problems and find new opportunities through innovation and creativity (design process) which then impact the entire process;
 - Strategic design thinking enables design to broaden its boundaries; furthermore it enables a perpetual design-driven culture or norm.
- To imbue/enhance design thinking within organisations, they need to move designers to upstream activities. According to Porcini's claim (2009), designers have the higher ability to be design thinkers. If they recognise and encompass the features of design thinking, they are able to mange a process (beyond the classical design process) whilst working with other departments.

Even though design thinking is perceived as a new approach to finding ways to sustain products, systems and services, few researchers underline how design thinking is articulated and adopted in different business contexts. Therefore, it is necessary to contextualise different businesses and develop specific frameworks for specified contexts. The claim of Cooper et al. (2009: 48-49) is close to a reflection on literature of design thinking in that:

The role of design is broader and more comprehensive than the role it is assigned in traditional product development. Increasingly synonymous with thinking like a designer, thinking thorough design has the greatest potential to establish the activities involved in designing as a core capability, and that goes beyond its traditional boundaries. But what exactly does it mean to complex, nature of some design problems (that is, that they are difficult to solve because of incomplete, contradictory, or changing requirements) to our attention and highlighted the values of design inquiries and systems thinking.

Throughout the literature review, to underpin the advantages of applying design thinking at multiple levels, it can be asserted that organisations need to:

- Establish a design thinking culture for design process and innovation. It is essential to develop a proprietary methodology (models, processes and methods) that integrates with design thinking;
- Establish a specific mechanism of design thinking to be disseminated within organisations, including design and non-design departments, and to enable non-design departments to understand design thinking within corporate strategy.

2.3 Design-driven approaches: DDA

Using the terms "design thinking" or "design-driven innovation" per se is not sufficient to demystify the current demanding role of design; neither concept focuses only on the thinking process or innovation. Lockwood (2009b) and Jenkins (2009) describe certain features that can stimulate and/or encourage an organisation to adopt ways of design thinking and acting. Both papers suggest some principles to empower design within organisations to ensure it is utilised as an engine of change. In the current literature which promotes design thinking (e.g. Berger, 2010; Brown, 2008, 2009; Martin, 2009), researchers exemplify how to adopt ways of design thinking within the organisations and its transformative benefits (evolution). Design thinking is not limited to the design process; rather, it applies to the entire operation of organisations, going far beyond the design process.

Therefore, in this thesis, the term "design-driven approach(es)" (DDA) is proposed to encapsulate the contemporary discourse relating to the use of design in organisations: approaches to applying designerly ways of conceptualising and exploiting tasks. From the selected literature analysis, the commentators emphasise ways of designers' approaches and simultaneously highlight supportive and underlying approaches to fulfil/empower designer approaches in an organisation and project. This DDA concept is devised to encompass a multitude of conceptual and practical designerly activities in design development projects and, within organisational activities, more widely in society: e.g. organisational commitment to designer approaches.

Since corporations are now involved in solving complicated and ill-defined problems (so-called wicked problems) within fast changing markets and catering to demanding consumers (users), to cope in

these environments corporations cannot renew their processes only at the business level; they must also transform their culture and draw a bigger picture at the strategic level. Figure 2.7, developed from Mau's perspective (Berger, 2010), shows an initial reflection of this analysis; design is not a part (process) of business, but encompasses corporate and business culture.

/	Ways of designer's thin and acting and values design (Design world	of
/ * /	Corporate culture	
	Business culture Product characte ristics	Personnel mindset
	srsonnel behaviour	

Figure 2.7 Culture of design: developed from Mau's concept (Berger, 2010)

Thus, coupled with a combination of design thinking literature, this analysis is keen to identify an emerging theme of culture: how can design interplay enable (help) organisations to adapt to a "design-driven (led) culture"?

Therefore, this section is configured to construct a foundation to conduct primary research by selecting and analysing commentaries on design thinking and design-driven innovation, which are mainly composed of DDA after a literature review of design thinking.

2.3.1 Literature selection process

First, a selection of books is chosen from the literature on design thinking and design-driven innovation to explore the features of DDA for primary research. To proceed, it is better to investigate

both an author's books and papers, because concise papers have less opportunity to develop the latent meaning of design-driven ways in sufficient depth.

The selection is based on citations in articles that consider design thinking and design-driven innovation recommendations in appropriate online discussion groups, such as Linked-In's Design Thinking Group, and an in-depth understanding of the literature based upon a state-of-the-art literature review. Thus, first, three commentators' books and their related papers are considered (Brown, 2008, 2009; Martin, 2009; Neumeier, 2008a, b; Dunne and Martin, 2006). Secondly, the selection process then branches out in two respects: 1) business vs. design, and 2) innovation by design vs. general design empowerment. Thus, four more commentators are selected and Figure 2.8 illustrates the different stances of seven commentators, which vary in terms of how to bridge the gap(s) between design and business (practices) and enhance/embed DDA in organisations.

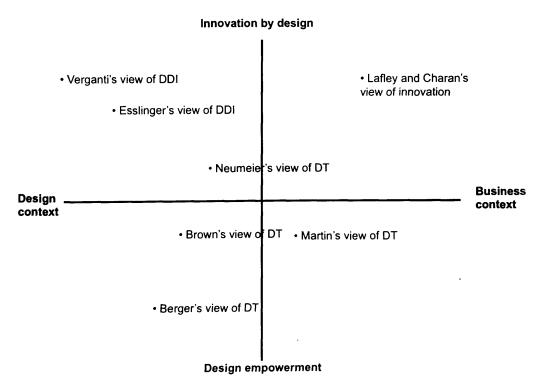


Figure 2.8 Relationship between design-driven aspects

The horizontal axis presents two aspects: design context and business context. Although each claims in the literature values and stimulates DDA, the extent to which authors identify nodes for design or business determines an author's view. Verganti (2009) and Esslinger (2009) propose a radical designdriven approach. Specifically, in the views of Berger (2010) and Brown (2009), business tends to incorporate or integrate DDA into the entire business context and DDA per se is highly emphasised; on the other hand, in the views of Lafley and Charan (2008) and Martin (2009), business encompasses a driver for DDA in organisations and DDA integration and its contribution to business are emphasised. The literature is diverse, with different views on how design is incorporated into business. Amongst them, the views of Brown and Neumeier seek to promote DDA by emphasising striking a balance between business and design and not losing sight of design principles.

On the vertical axis, some authors discuss DDA within innovation boundaries, whereas some discuss it in terms of general design (thinking) principles. Esslinger (2009) discusses DDA as the design-driven innovation of clients and agencies, and Verganti (2009) discusses design-driven ways as more of a "design discourse" for exploring ideas. Berger (2010) tries to illustrate the benefits of an expanded role for design and designers.

As illustrated in Figure 2.8, the ways of adopting a stance are situated differently. Figure 2.9 seeks to clarify the dimensions in the literature whereby each stance is positioned. This drives the researcher to consider how to set up parameters to measure the extent to which a stance values business or design. Above all, features in the literature are ultimately delineated in order to amplify the same goal: to achieve changes to and transformation of the culture in organisations, and mechanisms for products in business.

 Drive design creativity into organisation · Embed design-driven ways into Design integration at strategic level innovation (creativity strategy) Integrated design strategy/ · Roles of a design agency Supplement learning and Supplement learning and experience of creativity · Supplement learning and Primary cultural themes User-centred innovation Supplement learning and Integrate design-driven Design-driven innovation approaches into brand development experience of creativity Design creativity Adopting design Experimentally · Collaboration Collaboration Collaboration Collaboration · Collaboration Collaboration Collaboration organisations Innovation experience experience Visionary leadership, transform to focused plan and strategic creative + Collaboration, strategy, optimising mechanisms for developing products, brands and systems with + Designers and design's methods (management side) and intuitive Visionary leadership, strategic designers are doing, synthesis User-centred, experimentally embed ways that design and Balance between analytical Through design discourse innovative organisation Interventions collaboration, attitude design-driven ways design side) ultimately change lives by solving Change old patterns of human · Drive everyday innovation into and organisational behaviours. + Transform to shift companies organisation to have designful organisations and have consistent revenue and profit methods to match people's + Changing and developing designers' sensibility and design driven innovation. new meaning and value · Find and solve wicked problems and transform · Transformation of /for which can contribute to · Building a culture of to design companies. success of business Aims problems mindset needs Design thinking **Design thinking Design thinking Design thinking Designful mind** Design-driven **Design-driven** (innovation) Innovation/ Innovation Notions strategy Lafley and Charan Neumeier Esslinger Verganti - Berger · Brown • Martin

Ultimate goal

For change and transformation of culture of organisations and mechanism for products in business

Figure 2.9 Summary of the literature on design thinking and design-driven innovation

Not all authors specify the attributes of DDA within a certain category level such as the strategic, tactical or operational. Even though all authors illustrate the components for application at the strategic level, project tools are discussed without explication of the boundaries between strategic and tactical approaches. Thus, it is necessary to clarify which features are specific to the strategic or project level via an analysis of the seven commentators. Therefore, the following process will seek to categorise primary cultural themes and subsequent themes under strategic and project levels.

2.3.2 Developing features of design-driven approaches

The features of DDA are systematically characterised via a selected literature analysis. The first step is to collect all the features from the literature previously mentioned. Secondly, it is necessary to clarify which cultural themes arise from the features collected. Instead of explicating features within prescribed themes, an emphatic approach is to search for insights.

By exploring the literature, it is identified that the features of DDA comprise four themes to achieve a design-led culture. First, the following two themes are primarily discussed in terms of an interdependent relationship: 1) *designerly application:* undertaking designerly ways to conceptualise and exploit a task at strategic and operational levels within organisations, and 2) *design endorsement:* organisational commitment to embed and enhance designerly applications (through championing and investing in design) by overcoming a predominantly sales-driven business culture. However, since these two themes often conflict when underpinning designerly applications, to bridge the gap between design and business contexts, a booster theme – *collaboration* – calls for unifying the first and second attributes for a design-driven culture in order to embed designerly applications within organisational activities and achieve better results for a project. In addition, to enhance the three previous themes, a *human resources* theme arises in the literature as a second booster theme. To catalyse the features in other themes, the capability of designerly applications is examined in the analysis. As illustrated in Figure 2.10, below, the four themes form the epicentre for design-driven culture in the organisation. While the first two themes are primary, the last two themes can be regarded as boosters for the primary themes.



Figure 2.10 Relationship between primary and booster themes

Each theme and its characteristics are delineated in detail below, in terms of primary and booster themes.

Primary themes:

- **Designerly Applications (DA):** This theme is a cluster of features which draw on designerly ways of conceptualising and exploiting tasks, going beyond the limited design development process in the design thinking and design-driven innovation literature: i.e. abductive thinking, challenging constraints, visualisation, prototyping, iteration, etc. It focuses on how to solve the possible challenges facing organisations and projects via a designerly mindset.
- Design Endorsement (DE): Simply providing designerly ways cannot achieve design integration at the strategic level in corporations nor, furthermore, a design-driven culture in the organisation. Thus, this theme relates to how business supports designerly exploration and exploitation and endows them with authority in order to embed them throughout the organisation as an essential entity.

Booster themes:

• **Collaboration (CO):** The above two cultures (DA, DE) often result in paradoxical situations, as features in the two cultures of design and business are contradictory or run in parallel.

Collaboration calls for an integrated approach, both internally and externally, to bridge the gap between designerly applications and design endorsement.

 Human resources (HR): Culture often represents behaviour and attitudes internally and externally. In order to transform the habitual attitudes toward designerly exploration and exploitation, it is imperative to embed design-driven notions into employees' mindsets and, ultimately, organisational culture.

DDA themes are interdependent, so organisations need to catalyse the interplay between themes in order to achieve a design-driven culture—the integration of designerly applications into the organisation. However, 'the major challenge of cultural change is that culture is transformed through actions' (Ind and Bjerke, 2007: 189). Ind and Bjerke (ibid.) state that 'actions determine the nature of the culture and the culture determines the ability to notice movements in the environments' – "a double loop process". In contrast, Hands (2009) states that to transform culture is to transform behaviour. Hence, it can be interpreted that some interplay between culture and action is necessary to transform one culture into another culture.

Therefore, the next features resonate with mechanisms for action, which fulfil four key themes of design-driven culture. Figure 2.11 illustrates the relationship between elements at strategic and project levels, as well as the primary and booster themes explained above. The elements in the theme, strategic and project circles are interlocked and interplay. The subordinated elements are mainly categorised into designerly approaches (half of the reddish-coloured circle) and design endorsement approaches (half of the bluish-coloured circle) from the analysis.

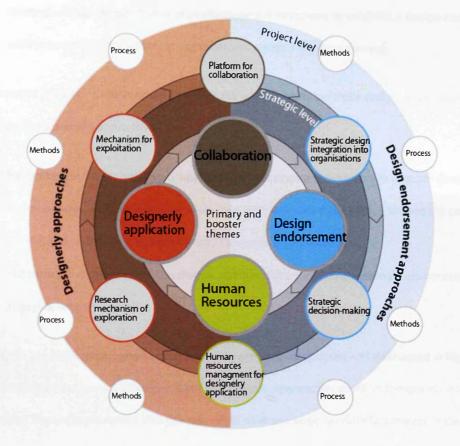


Figure 2.11 DDA wheel: relationship elements within theme, strategic and project levels First, strategic features in designerly approaches can be divided into two mechanisms: research mechanism for exploration and mechanism for exploitation:

- Research mechanism for exploration: Enables organisations to understand/identify customers' needs and desires and explore ideas incrementally and radically in designerly ways: foundation for designerly ways' exploitation.
- Mechanisms for exploitation: Creates design mechanisms for designerly exploitation using abductive thinking and integrated thinking at the strategic level and enabling experimentation with the ideas generated.

Secondly, strategic features in design endorsement are categorised as two primary features:

 Strategic decision-making in organisations: Develops a strategic decision-making process whereby designerly mindsets reside and trigger a bottom-up process to engage in designerly applications. • Strategic design integration in organisations: It is necessary to establish a design-endorsed environment (infrastructure) in organisations within a business context.

Lastly, booster themes – Collaboration and HR – are interventions between design-driven approaches and design-endorsement approaches.

- HR management for designerly applications: Develops a mechanism to allocate designdriven people (design thinkers), collaborate with different disciplines, enhance the capacity of DDA and understand designerly applications in an organisation.
- **Platform for collaboration:** Develops a platform for internal and external collaboration whilst engaging with designers.

To configure the mechanisms above, diverse approaches are categorised and delineated in Figure 2.11. As illustrated in Figure 2.12 below, from the analysis, approaches to HR at the project level are rarely found. Thus, it is presumed that the role of HR does not directly relate to projects; instead, before starting a project, efforts are made to enhance employees' understanding of and to fulfil DDA. On the other hand, other ways are indicated in each theme at the project level. Intentionally, human-(user-) centred methods in the designerly application theme at the project level are separately indicated, because the degree of underpinning differs, as indicated, depending on the commentator; while Brown emphasises user-centred methods in terms of co-creation, Verganti (2009) just indicates a user-centred approach as a part of design discourse on social culture, rather than directly engaging with users (customers). A summary of each commentator is attached in Appendix 1.

Way of thinking: holistic thinking, parallel thinking, abductive reasoning, balance between intuitive and analytic reasoning, systematic thinking, integrative thinking

Jes-puiW

Design Endorsement	Consistent, reliable, balance, willingness for foster design culture, decisive Leadership mind-set: Value design, visionary (foresight), decisive, idealistic	 Strategic decision-making in organisations for DDA Design leadership in business Enhance board members' early involvement Enhance board members' early involvement Entaregic design integration into organisations Develop long term plan strategy for design Align binance allocation for innovation and design Align binance and no innovation and design Onnamic combination for innovation and design Manage and balance portfolio and projects incrementally and radically Balance between reliability (management) and validity (design) Develop unque core strength for design Develop unque core strength for design Monue auto-added work Unque value-added work Guentify killer issues problems for design projects Genetify killer issues problems for design projects 	Methods of balance between business and creativity - segment the who to more larget innovation - Project-based work for experiencing DDA - Begin any where - Provide design leadership tool - Bring design management inside organisations	ations • Enhance design leadership beyond board members • Develop a personal knowledge system for DDA • Develop a reward system for DDA	5
Collaboration	Foster free flowing of ideas, trust, mutual, open debate, frank conversation, productive and honest critique	Platform for collaboration • Develop an interdisciplinary team for design • Develop open architecture types • Develop collaborative concentrate style in organisation • Build relational asset internally and externally • Open and organic communication internally and externally	Collaboration methods • Put unfamiliar concept in tamiliar terms • Co-location (open space) • Develop free spech zone/ corcept collect box • Trugue to honest • Trugues an articulated and constructed brief	HR management for designerly applications • Recognise talents and allocate them to organisation	Human Resources 2.12 Summary of DDA features
Designerly Application	For experimentation (Problem Solving): Empathetic (open- mind), optimistic, challenging, enthusiastic, flexble, iterative, intuitive, imaginative, self-confident (pride), courage (risk taking), curious, authentic, playful, responsive to new trends & new technology, overcome industrial colonialism	Research mechanism of exploration Develop a design research centre Embrace constraints Understanding users (customers) Understanding users (customers) Cubics relative processes Cubics design discourse/Seek for diverse channels Utilits design discourse/Seek for diverse channels Utilits design discourse/Seek for diverse channels Reframe of develop structures and processes for design Reframe of develop structures and processes for design Develop design involvement and solution Early design involvement and solution Motor treative approaches Adopt user-centred approaches Cutilise open-end processes Overlop design innovation and creativity flows	Exploring and exploitation methods for new mechanism • Make ideas tangible and visible (Visualisation / Prototyping) • Apply brainstorming / mind-map • Deploy creativity through eveloping products and services • Deploy creativity through developing products and services • Think out of box (e.g. appette for thinking wrongly) • Work with metaphor • Understand manufacture system and their knowledge • Human (user)-centred methods • Human (user)-centred methods • Human interaction • Cast design development path through social and human interaction	HR man: • Educate on designerly ways and collaboration for DDA • Re • Consider creativity in recruitment	2.12 5

Strategic Level

Project Level

Strategic Level

In summary, this section intends to develop what features make up DDA from the literature by the selected literature analysis: primary themes to enhance and support designerly applications by organisational endorsement to fulfil designerly applications; and booster themes to facilitate the features of primary themes. Despite the limited literature referred to in this section, these features are mostly discussed in other design thinking literature so it can be asserted that these are the features promoted by seven commentators to solicit organisations to be design-driven. Hence, these identified features (Figure 2.12) will be grounded for the primary research.

2.4 FMCG brands and brand development

As noted at the beginning of this chapter, since it is composed of two areas: design thinking and FMCG brand development, from this section, another area – mainly FMCG brand development – is discussed. The intention of the brand literature review is to understand (FMCG) brand development and to investigate the trends in brands/branding research in order to develop a DDA model that aligns with current FMCG contexts and complies with branding research trends. There is, however, little research which articulates how business can cope with FMCG brands per se and their development, despite the proliferation of brand research. Therefore, identifying brand notions requires some elementary steps to facilitate understanding of FMCG brands and their development.

First, it is necessary to understand and clarify branding terms and features, and how brand definitions have evolved. Then, thorough identification of emerging definitions of what constitutes a brand and approaches to branding, it will accordingly be shown what an FMCG brand is, what features influence FMCG brand development; and there will be a discussion of the challenges faced by the FMCG industry.

2.4.1 Defining an (FMCG) brand and branding

It is acknowledged in the literature review that brands are important strategic assets and are embedded into our daily lives, though some are antithetical to prevailing world brands, e.g. the antiglobalism *"No Logo"*, claimed by Klein (2000). According to Interbrand and Businessweek's Best Global Brands 2011, Coca-Cola's value is around 71bn. dollars. Global Brands' 2007 research revealed that the 'Coca-Cola brand alone accounted for 54% of the stock market' (Clifton and Ahmad, 2009: 28). A brand is, per se, both a tangible and an intangible asset, and crucial for sustaining a company; in particular, most marketing researchers claim that corporations are keen to develop proprietary methods to develop salient brands and sustain leading brands, as is also advocated a lot in design.

However, the range of brand definitions is both varied and broad, depending on the researchers' views: brands have no single authoritative definition. Thus, this subsection intends to understand the evolving definitions of (FMCG) brand and branding in order to align DDA with the current brand development trend.

2.4.1.1 Definitions of brand and branding

The term "Brand" stems from old Norse "Brandr", meaning to burn (Clifton and Ahmad, 2009). Owners marked cows with hot irons to show ownership. Brands started out for "identification" purposes. As commercial principles became established, the notion of brand was applied for "differentiation" purposes, to help the sales or marketing position, e.g. selling pottery with a mark. So brand intention was to build credibility/trust and make a brand proposition to customers to gain a competitive edge.

After the Industrial Revolution (1830-70), markets changed rapidly and advertising played an important role in communicating brands, increasing the demand for pre-packaged articles, mass production and improved infrastructure for distribution. Increasing numbers of shops and groceries affected the branding of articles (Riezebos et al., 2003). The market encouraged the incorporation of identification and differentiation into commercial applications, and brand development focused on developing brand salience. Companies and marketers, led by practitioners, undertake brand identity development to attract consumers' attention. This may result in focusing on developing the aesthetic attributes of brand identity rather than delivering values. This separation generates a "brand gap" (Neumeier, 2006) between marketers and design agencies, and between company-given and consumer-interpreted values. Clearly, 'a brand is not a name, logo, or graphic device. It is a set of

intangible values in the minds of consumers' (Southgate, 1994: 27). Brand notions have broadened from product and corporate brands to national and service brands. Riezebos et al. (2003: 32) state that 'a brand is every sign that is capable of distinguishing the goods or service of company'. Within these definitions, a brand meaning is still determined and formed by what a corporation offers.

Current prominent brand definitions tend to be assimilated into integrated views to engage consumers, communities and cultures (Riezebos et al., 2003). According to the Design Council's (2010) report: "The power of branding: A practical guide", a 'brand is a set of associations that a person (or group of people) makes with a company, product, service, individual, or organisation'. Researchers categorise brands by articulating a plethora of brand meanings. According to Heding et al. (2009), the notions of brand have shifted from marketers' or company-provided notions (consumers are passive receivers) to a consumer-driven notion (consumers are active). Brand perspectives segment into seven groups: 1) economic approach, 2) identity approach, 3) consumer-based approach, 4) personality approach, 5) relational approach, 6) community approach, 7) cultural approach. From (3), a brand is analysed as residing in the minds of individual consumers (Keller, 1993). De Chernatony and Riley (1998), when analysing 100+ articles, mostly in the 1980s-1990s, clustered brand definitions into twelve themes: 1) legal instrument, 2) logo, 3) company, 4) shorthand (related to brand association), 5) risk reducer, 6) identity system, 7) image in consumers' minds, 8) value system, 9) personality, 10) relationship, 11) adding value, 12) evolving entity. In this categorisation, after theme (7), brand from a consumer-based perspective rises. In both segmentations, the shift to consumer-based brand development is obvious. This drives companies to investigate what consumers value and how companies can add value to build their relationship with consumers and differentiate their brands from those of competitors.

Furthermore, current brand meanings are expanded to incorporate community, culture and society. Heilbrunn (2006) indicates that brands promote contemporary society's key values, citing Davis and Chun's assertion of "brand as a living entity" and "brand as a person". This emphasises brands as organic identities, interacting with consumers, society and cultural contexts. Grant (2006: 27) claims 'a brand is a (cluster of) (strategic) cultural ideas': the internal and external culture of providers. Olins (2007: 27) states 'brands have such a clear and unique manifestation of our time'. These perspectives

contend that a brand is not simply a single point, but is understood holistically, organically and integrally.

Holt (2009: 223, edited by Heding et al., 2009) explains different characteristics of the postmodern (1960s onwards) and post-postmodern (emerging) branding paradigms:

- **Postmodern:** authentic cultural resources; ironic, reflexive brand persona; coat-tailing on cultural epicentres; lifeworld emplacement; stealth branding;
- **Post-postmodern:** brand as a cultural resource in its own right + community pillar + honest about profit motive.

Consequently, it is inferred that definitions of brands have evolved from a classical role of identification, via the relationship with customers, to a role of cultural resources. Current brand definitions reflect sociocultural issues in their interaction with customers and society.

Next, branding can be described as disciplined activities to develop a brand, thus the branding perspective alters depending on brand perspectives. The next three views concisely show the evolving notions of branding, like the definition of a brand:

First, Casaba and Bengtsson (2006: 118) emphasise differentiation in branding:

Previously, the fundamental function of branding was to identify a product and an assurance of standard and quality, thereby suggesting difference from alternative offerings. Differentiation is essential in that it prevents a good or service from being reduced to a commodity, with fierce price competition as a result.

Secondly, Wheeler (2009: 6) emphasises the relationship with customers:

Branding is a disciplined process used to build awareness and extend customer loyalty. [...] Branding is also about seizing every opportunity to express why people should choose one brand over another. Lastly, the Design Council's report (2010: 2), "*The power of branding: A practical guide*", emphasises a driver for better organisational performance:

If a brand results from a set of associations and perceptions in people's minds, then branding is an attempt to harness, generate, influence and control these associations to help the business perform better. Any organisation can benefit enormously by creating that brand that presents the company as distinctive, trusted, exciting, reliable or whichever attributes are appropriate to that business.

These notions show branding shifting from developing products and services, in terms of developing tangible entities, to strategies for developing and managing brands as organisational entities. This can be summarised as two approaches. First, after the postmodern period, consumers' brand perceptions were more active and more involvement occurred. Therefore, it was pivotal to adopt branding as a consumer-based perspective. Roellig (2001: 40) states that 'branding is important because it communicates a brand's business proposition and, hopefully, a reason why a consumer should desire the product represented by the brand'. This approach calls for building a concrete relationship between consumer and brand. Secondly, Clifton and Ahamad (2009) discuss 'the emergence of new practice in branding: the application of branding techniques to corporations, and the "internalisation" of brands and their management'. This remark demands integrating strategic activities toward branding activities. This change encourages researchers to study integrated or holistic approaches: from a full-team approach (Kapferer, 2008; Olins, 2007; Aaker, 1996; Southgate, 1994) to the transformation of whole organisations for branding, and finally mechanisms for "living the brand" (e.g. Ind and Bjerke, 2007; Ind, 2007; Mitchell, 2002).

To sum up, clearly, evolving notions of brands determine notions of branding. Recent notions – transforming organisations and living the brand – demand that brand providers integrate organisations' branding activities with long-term business strategies. Consumers' involvement in branding is underlined as an important attribute within branding.

As previously stated in this subsection, a brand is an important business asset. As companies prioritise branding in their business and corporate strategies, researchers start to discuss the advantages

brought to organisations by adopting branding as a core entity. Researchers (see most marketing books in the opening section) first illustrate financial benefits, and then, depending on their perspectives, they delineate the advantages of adopting brands as a priority at the strategic level. This section discusses the internal and external advantages of organisations when valuing brands and adopting branding at the strategic level. These advantages underlie the aims of a branding strategy.

Riezebos et al. (2003: 23) state that 'an important advantage of a brand strategy is that it can give higher rewards than a product strategy in the long run': 'the "cash flow" of the product with a brand name will in the long run be greater than the "cash flow" of the product without a brand name' (Shocker and Weitz, 1998 cited in Riezebos et al., 2003: 23). Riezebos et al. (ibid.) specify some advantages:

- Financial advantages: Higher sales, bigger margins, guarantee of future income;
- **Strategic advantages:** Position in relation to (potential) competition, position in relation to trade, 3) relevance to labour market;
- Management advantages: Extension/endorsement of brands, global branding.

However, branding brings advantages beyond financial and managerial factors, such as creating corporate culture (Hatch and Schultz, 2001) and bonding stakeholders and employees (Olins, 2007; Ind, 2007; Mitchell, 2002). 'Brands become the prime manifestation of the corporate purpose. That is why they are important not just for customers, but for the people who work for or deal with the organisation as employees, partners or investors' (Olins, 2007: 115).

To summarise this subsection, according to brand evolution, the meaning of branding and its advantages have evolved too. A brand is no longer a product or service but a reflection of corporate vision, brand strategy and the relationship with customers. Thus, the extent to which corporations can achieve advantage through brands/branding is different, depending on how companies define their brands and develop their brand strategies.

2.4.1.2 Defining FMCG brands

FMCG's origins lie in the nineteenth century, the first great wave of branding was in the 1870s-80s (Olins, 2007). 'Between about 1880 and 1970, what FMCG companies did was called branding' (ibid.: 54), they produced imaginative and innovative products to change social habits. Hence, 'marketing expertise lay with FMCG companies' (ibid.: 60), although, having once shaped branding ideas, they lost direction to finding new ideas (ibid.). FMCG companies focus on selling in keenly competitive markets, so price, like other features, influences consumer choice. Consumers' brand loyalty is no longer concrete, their mindsets differ from when brands were not affluent, in the nineteenth century. FMCG product brands lose effectiveness whilst service and IT brands, for example, adopt innovative and creative methods to cope with changing contexts: consumers, markets, trends, etc. Hence, FMCG corporations need to perceive that 'the method had been generally regarded as a way of strengthening a business in the long term, rather than creating a business asset that could be sold off quickly' (Gough, 2003: 17).

The following P&G description shows how FMCG brands can recapture initiatives within a new direction for brand development. P&G saw its stock drop over 50% in six months in the fiscal year 1999-2000 and recognised that traditional ways of brand management were inadequate. Hence, P&G sought new ways to handle changing environments: severe competition, Internet growth, changing consumer behaviour, etc. Corporation started to focus on design thinking and innovation, 'on the ideas of customer is boss' and to crystallise how they could implement organisational transformation (Lafley and Charan, 2008: 18). This revamping enabled P&G to prosper again. With their various brands, they attracted academic and practitioners' attention to see how they retrieved their former position. The P&G case shows that FMCG brands can still grow and incorporate new areas – design service brands, user experience, consumer interaction, etc. – to create salience.

However, there has been comparatively little independent research on FMCG brands, despite their long history in terms of development to cope with changing contexts: innovation, design, interaction with customers, etc. The challenging problems they confront are worthy of understanding and

discussion. Therefore, first, FMCG brands are defined; afterwards, situations where the FMCG sector is – characteristic – are explored.

"FMCG" is an abbreviation for Fast Moving Consumer Goods and also called consumer packaged goods (CPG). Gough (2003: 2) defines FCMG products as 'used at least once a month, used directly by the end-consumer, non-durable and sold in packaged form'. He segments FMCG categories into personal care, household care, branded and packaged food and beverages, spirits and tobacco articles. Menke (2007: 3) cited Bulmer's (1998) definition whereby 'FMCG is a synonym for supermarket packaged goods and ranges from cosmetics through household products to comestible goods' and offers her notion of 'commodities, which on the one hand are produced in great quantities with a minimum of costs, but on the other hand are supposed to achieve a maximum of consumer appeal and maximum profit'. Economy Watch (2010) illustrates FMCG categories differently: 'some common FMCG product categories include food and dairy products, glassware, paper products, pharmaceuticals, consumer electronics, packaged food products, plastic goods, printing and stationery, household products, photography, drinks, etc.'.

Recent FMCG brand categories are much broader than early ones. Since all markets are changing rapidly as companies adopt new technologies, categories can be ambiguous. Some consumers buy electronic products following FMCG purchase patterns. In addition, as some FMCG brands shift to "mastige" brand strategy, from mass and prestige, Menke's maximum profit and commodity definition is no longer relevant. FMCG sales sites are not limited to supermarkets in Bulmer's definition; they sell on the Internet, even in pop-up stores. In this thesis' context, FMCG articles are defined and discussed as, typically, manufactured products sold in supermarkets and drugstores; P&G and Unilever typify FMCG corporations (Roscam-Abbing, 2010), expanding Gough's definition (2003).

Through the rest of this subsection, it is discussed in terms of what FMCG characteristics are. FMCG brand circumstances differ from two decades ago. One milestone in changing circumstances is the purchase environment changing from salespeople to self-selection and Internet purchasing systems. Specifically, what the first change – self-selection – triggered relates to a packaging-centred world (Kathman, 2002), driving P&G to adopt the "first moment of truth" concept whereby consumer's

decisions are made 3-7 seconds after encountering products. Thus, packaging design is crucial to increasing brand awareness (Meyers and Gerstman, 2005; Vazquez et al., 2003; Underwood et al., 2001; Meyers and Lubliner, 1998; Southgate, 1994). According to Dyfed "Fred" Richards, global executive creative director for CPG at Interbrand, CPG brands are 'communicating the brand's value position across all touch points, starting with the package on-shelf' (Interbrand, 2011: 54). However, despite the importance of packaging, a side effect means that the role of packaging is limited to differentiation and aesthetics (Meyers and Gerstman, 2005). The FMCG sector – or CPG – is criticised by academia and practitioners for failing to develop new opportunities and suggestions (Olins, 2007; Gough, 2003). Therefore, current concerns and challenges of FMCG according to their product characteristics and suggestions for how corporations respond to those challenges are discussed below.

First, according to Gough (2003), FMCG brands appertain to consumers' low involvement cluster, whose characteristics are "variety-seeking buying behaviour" and "habitual buying behaviour" (Kotler, 2000). It means consumers have little product knowledge and spend little time choosing. FMCG articles can be interchangeable and substitutable, so these seek better brand awareness (Olins, 2007). In addition, FMCG brands, especially new ones, are vulnerable to copycat competitors (Trott, 2008; Meyers and Gerstman, 2005). These characteristics are an antecedent of the following phenomena. As market competition increases, price consciousness influences sales. Consumers' purchase decisions are often determined by FMCG pricing (Sinha and Batra, 1999). The FMCG industry is deemed to allocate big budgets to advertising to increase brand awareness (Meyers and Gerstman, 2005; Southgate, 1994) instead of investing in R&D and innovation. Consequently, a price strategy is a shortterm strategy to increase sales and R&D is perceived not as an investment but a cost (e.g. Clifton and Ahmad, 2009; Heding et al., 2009; Olins, 2007; Keller, 2000). Therefore, researchers consider it imperative that all brand development activities and management are integrated mutually to develop a competitive brand beyond price strategy (e.g. mostly in every modern branding textbook).

Secondly, market phenomena are subordinate to evolving consumer needs (Gobé, 2001): now consumers' needs are changing and population is decreasing. Burnett and Hutton (2007) state that, in the developed world, as necessities diminish, consumers purchase brands based on knowledge,

authenticity and personal experience. Therefore, Burnett and Hutton (2007) assert the necessity of understanding new consumers' needs and desires facilitates the development of new brands with anthropological perspectives. Regarding decreasing population, companies must shift brand strategies from sales to delivering added value, 'creating a brand to fulfil customer value is a bold but obvious goal to achieve' (Boatwright et al., 2009: 38).

Thirdly, promotional media are fragmented so broadcasting benefits are declining, but FMCG brands still spend heavily on broadcast advertising to increase brand awareness (Menke, 2007; Olins, 2007; Meyers and Gerstman, 2005; Southgate, 1994). On 4 April 2010, the Financial Times reported, according to research by Nielsen, that consumer goods brands increased their advertising spending more than any other industry during the recession, propelled by growth in Asia, even as the rest of the global media market plummeted. FMCG companies such as Unilever and P&G rose 10.6% in 2009 from the previous year (Bradshaw, 2010).

Therefore, the 360° communication channel in FMCG must be explicated. The Internet and cable channels decrease TV and mass advertising benefits (Menke, 2007; Hine, 1997). According to Menke (2007) on FMCG brand communication, on-line and new interactive technologies (blogs, mobile phones, search engine marketing, etc.) are not mobilised well. Communication is for both increasing brand awareness and consumers' co-creation (Boyle, 2007). Hence, FMCG corporations seek opportunities to communicate and interact with consumers (Menke, 2007).

Finally, since FMCG brands are vulnerable, they seek value and equity creation methods for brand saliency; besides, they do not spoil already established brand equity. Within the FMCG industry, there is a 'lack of respect for brand equities as brands move forward in their design development' (Interbrand, 2009: 53): change to packaging design without sufficient articulation of brand value results in isolated packaging design and damage to brand value. Therefore, researchers' response to brand revitalisation needs to be carefully integrated with existing brand equity and activities for new propositions.

To sum up, FMCG definitions and its characteristics, discussed in the literature, are explored and concerns and challenges arise here corresponding to the FMCG features identified above. Afterwards,

this subsection suggests ways to overcome these challenges. These FMCG characteristics need to be considered when conducting primary research, especially interviews, and when developing a DDA model for the FMCG industry.

2.4.2 Identifying (FMCG) brand development

This subsection explores understanding and identifying FMCG brand development in the literature. This thesis focuses on investigating brand development rather than encompassing all the activities of branding: brand management, brand communication, etc. However, approaches to brand development remain diverse, depending on researchers' views on brands. This implies that brand development has also evolved, corresponding to the evolution of brand definitions; and there is copious brand development literature. Hence, this subsection concentrates on current approaches arising.

This subsection comprises two main parts: 1) brand development approaches: understanding conventional approaches to new branding paradigms which focus on organisational commitment and internal and external culture, and 2) FMCG brand development: understanding common/different features between general brand and FMCG brand development.

2.4.2.1 Understanding brand development approaches

Brand development is a complicated mechanism involving various activities, which are organic and integrated at the strategic level (see Figure 2.13). For example, Wheeler (2009) illustrates the complex relationship between brand identity development stakeholders.

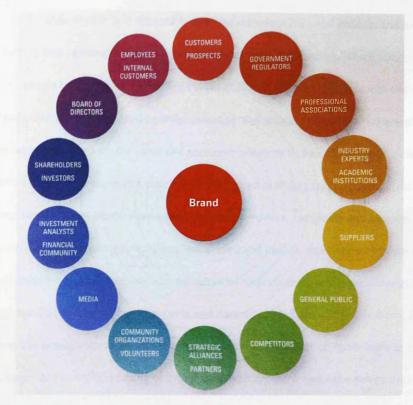


Figure 2.13 Key stakeholders in brand development: as the process unfolds, stakeholder research informs a range of solutions from brand messages to launch strategies and plans (Wheeler, 2009: 9).

Aaker (1996) stresses that all of a company's resources are allocated to creating brand equity through developing brand identity: all divisions are affiliated and organic, so isolated and separate processes and divisions cannot create brand salience or awareness. Hence, the current brand development paradigm shifts from developing a product to enhancing the relationships with employees, customers and society as the role of brands has evolved. Postmodern branding tends to perceive a brand as a company per se, thus customers access all touch points and even the latent experiences which a company provides (Goodyear, 1996); afterwards, post-post branding perceives a brand as a culture (Holt, 2004). Hence, three main emerging branding paradigms are discussed here: 1) integrated/holistic branding approach, 2) organisational alignment to branding: "living the brand", and 3) cultural branding approach. These views assert that branding can be achieved through organisational culture and understanding users (customers/citizens in terms of macro-level of culture).

1. Integrated/holistic approaches: This concept is also called total brand development; they commit all resources, indicating that all activities in brand development must be interlocked

so for the organisation it is necessary to transform capacities and entities and develop brands internally and externally. This still incorporates classic approaches, which concentrate on developing a brand per se. LePla and Parker (2002: 2) support this demand, the 'organisational strategy used to drive company and product direction – where all actions and messages are based on the value the company brings to its line of business'. Schmitdt and Ludlow (2002) also support a concept of integrated branding by illustrating a model which comprises six intertwined dimensions: culture, behaviour, products and services, market and customers, design, communications. Integrated and holistic development processes emphasise integration between brand activities to provide a consistent concept and implementation framework (e.g. LePla and Parker, 2002; Schmitdt and Ludlow, 2002).

- 2. Living the brand approach: All the employees in the organisation contribute to brand development and the meaning of brand development permeates the entire organisation as a cultural entity. Thus, an important role of organisations and companies hinges increasingly on recognising human intellectual capabilities as the empowering driving force in brand management to catalyse employees to inherit a brand-driven mindset (e.g. Ind, 2007; Ind and Bjerke, 2007; Grant, 2006).
- 3. **Cultural branding approach:** This concept is coined around 2000 (Heding et al., 2009) and aims to develop "brand icons" by being close to and investigating a macro-level cultural approach: understanding cultural transition and contradictions (e.g. Holt, 2002, 2004).

Figure 2.14 illustrates where the six stances are situated in relation to micro-level and macro-level cultural approaches. The first two stances account for the integration of branding activities with support at the strategic level. In the next three stances, organisational transformation toward brand development is focused on and is the antecedent of brand integration. The last one focuses on identifying socio-culture to create narrative myths. These views have different interventions to substantiate their claims, but all of them aim to achieve internal and external brand-driven approaches and culture in business in order to sustain brands and change employees and furthermore consumers' behaviours.

	Author / Notion	Aims	Interventions
Micro-level cultural approach (Organisational culture contexts)	• LePla and Parker Integrated branding	Brand-driven model Organisational strategy used to drive company and product direction	Organisation driver, brand driver, brand conveyor Positioning brands
	• Schmidt and Ludlow Inclusive branding	Enable organisations to tackle each dimension in turn to devise and implement ways and means to bring the vision to life, using all available resources	Holistic positioning and model
	• Ind Living the brand	Achieve brand leaders and brand champions in an organisation	Humanistic approach and organisational transformation
	• Grant Brand innovation	New fresh ideas, new media channels and fresh thinking revolutionise the customer experience	 Nature of cultural ideas / find appropriate ideas depending on a strategy of a company
level cultural ch(Sociocultural ts)	• Ind and Bjerke Branding governance	Fuse together the elements of the assemblage to deliver values to customers and other stockholders	Assemblage model and assemblage thinking participatory market-oriented model
Macro-level cultura approach(Sociocult contexts)	• Holt Cultural branding	Build brands into cultural icons	Iconic brands and myths Target advantageous contractions in culture

Ultimate goal

Achieve internal and external brand-driven approaches and culture in business in order to sustain brands and change (influence) employees' and consumers' behaviour

Figure 2.14 Summary of the selected emerging literature

To achieve the ultimate aims described above, transformation of organisations is required to adapt to new branding frameworks, such as interacting with consumers and diverse external resources. These are also a consequence of the demands for a new brand paradigm to get close to consumers and their lives (Roscam and van Gessel, 2008). Interacting with consumers and external resources enables corporations to understand sociocultural aspects and find unrevealed needs and desires because engagement with consumers is underlined as an important attribute within branding. This is determined by organisational vision, values and approaches which represent a commitment to how organisations encompass branding activities. Since 'vision and values are the primary drivers of difficult-to-imitate differentiation' (Heding et al., 2009: 72) – organisational culture for brand development, corporations also strive to align organisational culture to brand development as well as seek a successful launch.

Internal and external benefits for integrated branding are illustrated in Table 2.2. LePla and Parker (2002: 105) add five advantages of creating integrated brands along with the benefits described below: 1) aligning company actions and messages for greatest strength; 2) allowing a company to create direction to launch new products and features that synchronise with customer needs; 3) leveraging marketing dollars to best advantage; 4) brand drivers are constant, so advertising and communications derived from them have a cumulative effect on customer relationships; 5) building high levels of customer affinity.

Internal benefits	External benefits
1) A consistent and accurate compass for R&D and	1) The ability to charge a 15-20 per cent premium
market and product development	above the market average price for a product and
A clear and defensible strategic direction,	maintain that price delta even as a market matures
regardless of market changes	2) A shorter customer repurchase decision cycle
3) Consistent messaging	3) Higher levels of customer loyalty
4) High levels of employee loyalty and esprit de corps	5) Customer evangelists
	6) A platform for ensuring new product successes
The second state in the second state of the	7) Higher company financial valuation and less share
	price volatility.

Table 2.2 Internal and external benefits of integrated branding (LePla and Parker, 2002)

Previously, emerging brand development approaches were discussed; now, two traditional approaches to brand development are briefly discussed. Since the integrated and holistic approaches stem from a conventional stance – Aaker, Keller and Kapferer's views highlight branding systems rather than the culture or organisation – basically, an evolved branding paradigm encompasses conversational approaches to undertaking brand development.

- 1. Brand positioning and architecture: Since most corporations have multiple brands, adopting a brand architecture strategy contributes to financial and strategic (marketing) advantages (Riezebos et al., 2003). According to Aaker's (1996) note, powerful brands' advantages provide clarity about offering a brand, leveraged brand assets and platforms for future growth options. Thus, if corporations have powerful brands, brand stretching and extension are relevant to brand strategies within brand architecture and brand portfolios. 'A critical consideration in developing brand stretching strategies is the level at which a brand chooses to be positioned' (Elliott and Percy, 2007: 182). Brand architecture types endorsing brand, independent brand, umbrella brand, etc. (Kapferer, 2008) are determined by strategies. No brand architecture type can surpass another, so each must be articulated and implemented depending on the branding strategy (general branding claims) with long-term vision.
- 2. Market-driven or market-driving approaches: This relates to developing brand saliency and breakthrough products. Beverland et al. (2009) classify four brand types: followers, category

leaders, craft-designer led and product leaders. To be category or product leader brands, he indicates several challenges: customer orientation, speed to market, risk aversion, R&D and big concept. Above all, the managerial challenge is to overcome the tensions between concept consistency and integrity. Beverland (2005) claims that integrating making and designing is a competitive necessity for firms seeking market-driving brands. On the other hand, Verganti (2008) asserts that breakthrough products and market-driving brands can be achieved by interpreting meaning from users (consumers) rather than vigorous user-centred approaches. Consumers' needs in a new market environment demand providing consumers with experience via knowledge, and authenticity. This implies that consumer research is imperative to interpreting what they want.

To sum up, this subsection focuses on studying different approaches to develop salience and competitive brands. Ways of brand development determine competitive brands and influence company survival. Currently, approaches to brand development are heading towards developing an integrated organisational system whereby all activities and employees align with brand development. Since branding, or brand development, is not a single activity but an integrated process and range of activities, a single activity change for brand development cannot achieve the development of a competitive brand. Organisational transformation enhances initiatives for developing brands at the strategic level.

2.4.2.2 FMCG brand development

This subsection intends to investigate the packaging development process to get clues as to how FMCG brands are developed and what features are considered in FMCG brand development. Olins (2007) notes that FMCG produced imaginative and innovative products to change social habits between 1880 and 1970, but they have now failed to develop it due to their self-congratulatory hype. The changing environment for brands previously discussed similarly affects FMCG brand development.

Since the FMCG sector is also perceived as the CPG sector, packaging is important to FMCG brand development; it reaches consumers' emotions, it communicates 'its status and implies level of taste

and quality, working hard on the shelf to get your interest' (Meyers and Gerstman, 2005:69). As previously noted in Dyfed "Fred" Richards's citation, the main problem is to communicate a brand proposition across a brand value position, given the diverse touch points. He pinpoints how all communication activities are wasted, 'if they [communication activities] do not lead the consumer to engage with the brand on the shelf, at the check-out, and in the home. [...] Brand messaging should be led first by packaging and then reinforced by all other communications' (Interbrand, 2011: 54), since consumers' purchasing decisions are made in store, in seconds (Silayoi and Speece, 2004). Therefore, a brand's shelf impact is critical for FMCGs, implying that brand recognition and awareness are important point-of-sale attributes. Shelf impact can distinguish a brand from its competitors, thus 'relevant brand values should be discernible to consumers directly from the packaging' (Riezebos et al., 2003: 137).

However, there is little research in terms of FMCG brand development processes as encompassing a packaging development process, though some research is to be found in specific contexts: category management in the wine industry (Chimhundu and Hamlin, 2007); promotion and communication with technology advances (Gough, 2003); the relationship between brand leadership and innovation in the food industry (Gehlhar et al., 2009). Instead, the packaging development process is discussed independently with little integration with the entire brand development and management process.

Therefore, the role of packaging in the FMCG sector is clarified first. Three main roles of packaging are discussed in the literature: 1) communication to lure consumers, 2) emotional engagement and 3) navigating customers.

First, Pilditch (1961) states that packaging is the "silent salesman" on the shelf, drawing attention and luring consumers. Its design plays an important role in brand identity development to offer brand propositions (e.g. Meyers and Gerstman, 2005; Meyers and Lubliner, 1998; Hine, 1997; Doyle, 1996; Stewart, 1994; Behaeghel, 1991; Rouffignac, 1990). 'The combination of graphics and structure achieves a more effective whole total package, helping the marketers to build equity that will grow and expand the brand' (Meyers and Lubliner, 1998: 3). Brand development within packaging is grounded in three key components: brand frame (how brands function in shopping environments);

category dynamics (shelf activities, given current product and category trends); brand equity (contribution of packaging development to brand equity) (Meyers and Lubliner, 1998). Therefore, packaging development is considered at the strategic level for its contribution to: brand personality, positioning, extension, new development and revitalisation (ibid.).

Secondly, in terms of the emotional engagement of packaging, Gobé (2001) affirms that, to keep consumers, emotional connectivity with consumers is imperative in branding. Packaging is intrinsic to designed products having presence so that integrated sensory messages can be delivered through proprietary visual expression. Synergy with advertising in packaging will have more impact on brand assurance and connect with consumers. Hence, finding emotional connections between brands and consumers, to communicate assurance through brands, is compelling. Instantly, consumers are lured into purchasing packaged goods which communicate to or have a relationship with them. Consumer judgement is driven by emotional factors (Elliot and Percy, 2007). Conjunct emotions in brand can achieve consumers' brand association, comprising components of brand equity.

Lastly, researchers claim (Lincoln and Thomassen, 2007, 2008; Kumar and Steenkamp, 2007) that packaging design can play a key role in educating, navigating and inspiring consumers or visitors, to communicate vision and change stores, especially for retailers' own brand packaged goods.

Walter Landor claims 'packaging is brand', and equates packaging design with branding and products (Meyers and Gerstman, 2005: 160). This view supports the claim for integrating packaging development process into brand development, but the perception in reality is that packaging is "undervalued" and "unappreciated" within marketing (ibid.). Southgate (1994: 31) asserts the importance of packaging within brand development, introducing "total branding": 'using the whole pack deliberately and actively to communicate brand values trying to use every aspect of a brand's packaging to give it a memorable identity. It is about engaging the consumer's sense of touch as well as the sense of sight'.

Next, since the role of packaging is pivotal in the FMCG industry, packaging needs to be executed and integrated within brand development. As illustrated in Figure 2.15, the packaging development process – part of FMCG brand development – is complicated. Besides, Page and Thorsteinsson (2011)

indicate constraints to FMCG brand development: 1) a complicated manufacturing and product development mechanism due to the relationship to logistics and detailed regulatory requirements, and 2) the limited capacity for the integration of internal and external parties into the brand development process.

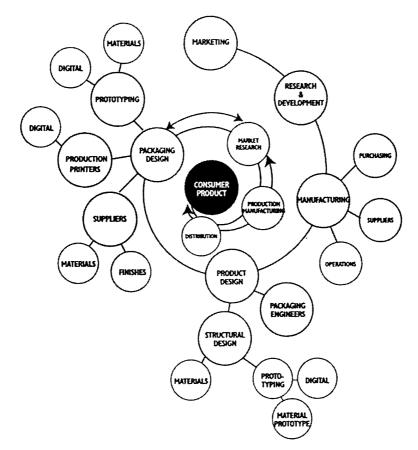


Figure 2.15 Consumer product (FMCG) development process, stakeholders and resources (Klimchuk and Krasovec, 2006: 55)

Therefore, by studying the packaging development process, some understanding of its relation to FMCG brand development is explained. However, there are still contradictory views between business and design over the packaging development process. While marketing or branding views packaging as a part of building brand identity, design or packaging practitioners (especially packaging designers or consultancies) view packaging as the kernel of FMCG brand development. Packaging design and development often play a large part of new product development (Page and Thorsteinsson, 2011). Since product attributes can be strongly differentiated, especially for technological innovations, developing a product owes much to brand development (Mozota, 2003). This is mostly appropriate for durable product brand development and some FMCGs (e.g. some household or personal care products). FMCGs are mainly presented in packaged form; a package per se is perceived as a product.

Figure 2.16, below, views a product as content inside a pack. This stance is different from the view that a pack is a product. In this flow, packaging design is illustrated separately without explaining how this process is integrated into the whole brand development process.

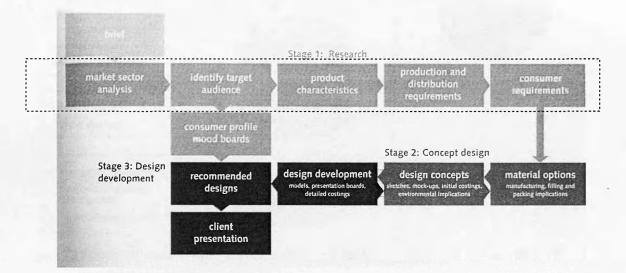


Figure 2.16 Typical sequence of events during a packaging design project (Stewart, 2007: 61)

Figure 2.17 (Meyers and Lubliner, 1998: 57) does not show a broad notion for integrated branding, i.e. how this model integrates with other activities of brand development, but it explains the activities within brand development which packaging/brand design development has to consider in order to emphasise the package design's integration into brand development.

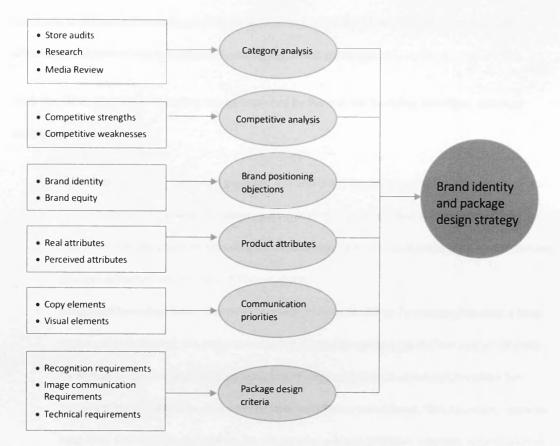


Figure 2.17 Brand identity and packaging design development model (Meyers and Lubliner, 1998: 57)

To sum up, despite the prosperous period of the FMCG industry, it is currently failing in its attempts to develop products and brands which can change customer's behaviours and lives. Above all, they rarely integrate all the activities in brand development with packaging development (package design, package manufacture, etc.), even though packaging development is the epicentre of FMCG brand development and involves complicated activities. The FMCG industry still seems not to emulate current emerging brand development approaches: integrated brand development and "living the brand".

2.4.3. Summary of FMCG brands and brand development

This brand literature review part seeks to elevate comprehension of the features of FMCG branding through understanding the overarching branding paradigm. Hence, this subsection recaps features of the emerging paradigm in brand development after the post-modern period, corresponding to changes in industry, human behaviour and socio-culture. This summary subsection is threefold: 1)

summary of the current branding paradigm, 2) challenges to FMCG brand development, and 3) afterwards this subsection is enclosed by noting the FMCG challenge.

First, the three features in branding can be captured by the current branding paradigm, as brand definitions have evolved:

- New brand meaning beyond a product: A brand is a living entity and a manifestation of our age with associations that consumers perceive thorough integrated branding activities. Therefore, the paradigm of branding shifts to customer-based approaches and understanding changes in human behaviour and socio-culture;
- Integrated branding with customers, organisation and society: To manage/develop a longterm successful brand, it is imperative to transform the whole organisation so that all units contribute to developing and managing brands. Broadly, brands also need to reflect the present culture and elicit a new culture from customers and citizens. This paradigm requires long-term strategic-level planning, i.e. developing a brand platform whereby organisational commitment is underlined to resonate with consistent concepts in corporate and product brand development;
- Customer-based approach emphasis: The brand's relationship with customers is found in two ways: marketing-driven and market-driving ways. The first way mostly leans on customers, whereas the latter views the customer as a constituent of social culture by interpreting various mutual interactions between customers and brands from a cultural. aspect. In this view, it is perceived that customers are projecting changes in human behaviour.

Secondly, the challenges identified from FMCG brand development literature are recapped:

FMCG behind the new branding paradigm: There is little literature solely on FMCG branding which copes with the current brand paradigm – brands as organisational culture or social culture. On top of that, the FMCG industry is criticised in terms of developing new, innovative and imaginative products and brands, and successfully offering brand propositions across touch points;

- Complicated mechanism for developing a brand: There are many stakeholders and processes involved in developing a brand – a product inside a pack and the packaging to launch it; thus, FMCGs are deemed to have difficulty in integrating all the activities in FMCG brand development;
- Important role of packaging development: It is found that the role of packaging development is perceived importantly by marketing and design, but there is little research into how packaging development can play a pivotal role.

A summary of the current branding paradigm entails some directions to overcome the challenges which the FMCG industry faces, as shown below.

- Justifying integrated and living the brand approaches: Mainly, the FMCG industry is deemed to have endorsing or independent architecture types. Marketers and brand managers generally manage each brand and chase fast-changing markets, compared to other industries. So the structure of the organisation may be different from other disciplines. Therefore, before embedding integrated and living the brand approaches into companies, explication of an organisation's structure is required first;
- Clarifying the relationship between FMCG branding and packaging: Through a brand literature review, depending on perspective, some say packaging is part of brand identity and some state branding lies within packaging. However, no research clarifies this relationship between FMCG and packaging. Thus, it is necessary to explicate this.

Ultimately, the FMCG industry needs to develop a new mechanism to develop innovative and imaginative products and brands which can influence customers' behaviours and lives.

2.5 Chapter summary

This chapter reviews two areas: an expanded role for design – design thinking and design driven innovation – and FMCG brand development. Via a literature review, exploring the criteria of design thinking and FMCG brand development, and the analysis of selected commentaries (see Section 2.3), this chapter is able to identify the characteristics of DDA and to obtain an appropriate understanding of FMCG brand development as the foundation for primary research.

Each part's summary is provided in Subsections 2.2.5 and 2.4.3. Both literature reviews address challenges and suggestions, and then call for organisational transformation:

Organisational transformation for a brand or designerly way (application): The identified challenges from the literature review demand organisational change for each branding and design approach in order to embed them into organisational performance. There are some intersecting or incorporated perspectives between DDA and the current brand paradigm: internal and external collaboration and participation; user- or customer-centred approaches; strategic integration (engagement); strategic decision-making and leadership; HR role (a matter of intellectual capabilities).

Amongst them, user- and customer-centred approaches have the same objective, to get closer to users (customer) and unleash their needs and desires. However, different views underlie tackling those approaches between DDA and branding (marketing).

- From a design perspective: A user- (customer-) centred approach mostly includes latent consumers – users and customers – to explore ideas;
- From a branding perspective: A consumer-centric approach focuses on targeting consumers (pre-determined group in ideas exploration).

Even though the right direction to a consumer-centred approach includes untargeted user research (Grant, 2006), the branding literature still uses the term "consumer-centred approach": the FMCG industry tends to confine itself to the notion of "consumers" who use goods in terms of developing a brand and product rather than customers' who have the ability to choose between different products and use them.

Despite the different aims for organisational transformation, the current brand paradigm is configured to develop an innovative and leading product and brand. From the (FMCG) branding literature, creativity, comprehensive research and finding latent ideas are already pinpointed to unleash the

unlocked meaning of brands and develop unique values and experiences from a pervading innovation stream. Roscam-Abbing (2010) supports a compelling brand promise being created by combining insights from users' aspirations with organisational ways to capitalise on these aspirations through DDA and innovation: design plays a vital role in business and brand. DDA is also keen to be embedded into organisational activities, going beyond the classical role of design. Therefore, corresponding to current demands from DDA and branding, it can be suggested that:

• DDA integration into the current branding paradigm (integrated brand development and "living the brand"): it can be assumed that the FMCG industry creates synergy to develop innovative products and brands by embracing DDA elements and calibrating an organisation for DDA. Furthermore, by adapting the current branding paradigm, DDA might be promoted as minimising the tension between design and business in the FMCG industry.

3.1 Introduction

This chapter provides evidence identified from a preliminary stage – pilot research – before developing a research framework and propositions for primary research; meanwhile, this research was conducted along with secondary research (literature review). To develop a research framework in tandem with a literature review, it is imperative to develop appropriate research questions and commit to these from a pragmatic viewpoint (Tashakkori and Teddlie, 1998).

Therefore, initial research questions and propositions need to be explored by comparing design's integration and collaboration in practice with the literature, via pilot research. This pilot research aims to: 1) embody the research area in terms of an industry and a region (country) to investigate, and 2) understand the difference between practice and initial literature to explicate the research framework. The pilot research investigates industries which produce branded packages in order to understand how diverse branded packaging is developed and design is employed in this development, and here it focuses – in two countries, South Korea and the UK – on three groups of stakeholders: 1) corporations which produce FMCG brands, 2) retailers which produce their own brands, and 3) design consultancies which help corporations and retailers to develop their packaged brands. This chapter is structured as illustrated in Figure 3.1.

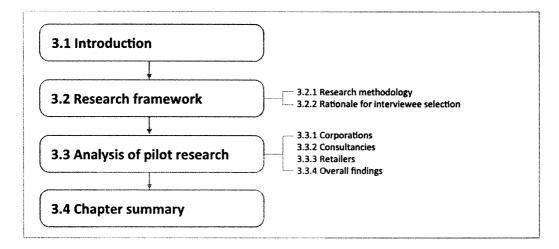


Figure 3.1 Map for pilot research

3.2 Research framework

Pilot research was conducted as a preliminary phase before the main research, so this research framework was configured to exploit it efficiently within a short time frame.

3.2.1 Research methodology

A qualitative research methodology was employed to explore and study diverse views via a series of semi-structured interviews with three groups of stakeholders in branded packaging development in South Korea and the UK: FMCG corporation, consultancy and retailer. Since the interview method intends to explore ways of utilising new roles for design – design thinking/design-driven innovation – in different industries and two countries, this research framework is closer to a data-driven approach rather than a concept-driven one, in order to develop the research framework. Thus, developing a questionnaire focused on encouraging interviewees to respond proactively and relating their design experience and organisational approaches through a packaged brand development process (see Appendix 2).

During the interviews, current claims – design thinking and design-driven innovation in the literature – were not yet broadly understood in practice, so other terms associated with design thinking (design,

design approaches, creative design, design collaboration, etc.) excluding the term "design thinking" itself were used.

3.2.2 Rationale for interviewee selection

Purposive and convenience sampling techniques (see Subsection 4.5.1) were employed in view of the time limitations and for efficiency in the research. Three stakeholders were extracted as per the following strata. First, in the South Korean case, the interviewees of a corporation and a retailer were selected based on a "Best Brand Award" and "Brand of the Year" from the Korean Advertising Society. Consultancy respondents were selected based on "Design of the Year" from "Design" magazine, which specialises in packaging design, or those consultancies which have an independent team for packaging design. Secondly, the same as in South Korea, consultancies in the UK were selected from amongst those receiving DBA's (Design Business Association) "Design Effectiveness Award". A corporation was chosen from clients' lists of selected consultancies.

Above all, in the pilot research, the researcher sought to find ways of utilising design and understanding design thinking in order to set up a research region by making comparisons with the researcher's experience. In both the Korean and British cases, the researcher made efforts to interview individuals with enough experience of and deeper opinions about packaged brand development. A summary of the respondents, their positions and organisational characteristics is shown in Table 3.1.

Table 3.1 Summary of respondents' organisations and roles: K=Korean; Consultancy K1=1st interviewee from a Korean consultancy; UK=United Kingdom; Consultancy UK1=1st interviewee from a British consultancy

	In South Korea		In the UK	
Consultancy	Consultancy	CEO	Consultancy	CEO
	K1	S. Korea-based consultancy	UK1	UK-based consultancy
			Consultancy UK2	Co-founder and creative director
			Consultancy UK3	Senior client team manager Global networked consultancy
			Consultancy	Director of brand valuation
			UK4.1	Global networked
			Consultancy	consultancy
			UK4.2	Creative director of FMCG
				Global networked

				consultancy
Corporation	Corporation K1	Manager for design planning and packaging design A leading Korean FMCG corporation with many brands in different businesses.	Corporation UK 1	Head of creative department Started as an SME and now a leading corporation in the category section
Retailer	Retailer K1	Brand manager for furniture and storage, also developing their own brand	None	

3.3 Analysis of pilot research

The research data were analysed thematically utilising codes to link together features that arose from the interview data and concepts from the literature: after initial open coding, axial coding was applied. Thematic analysis is appropriate to provide a potentially rich and detailed account of data via a theoretical and epistemological approach (Braun and Clarke 2006). In addition, as referred to above, since this research was configured to study ways of undertaking design/design thinking in branded packaging design – FMCG and own brand packaging design – this analysis of the pilot research also adopted the approaches of grounded theory. Flexibility in thematic analysis bestows no limits, so a researcher can find essential and flexible themes from complex data without bias.

Through reviewing the data, latent codes arose and these provided the following themes. Overall, three themes were distilled from the corporation and consultancy interviews: 1) features impacting design integration and collaboration in FMCG brand development: encouragement and barriers, 2) features impacting FMCG brand development: encouragement and barriers, and 3) features considered in FMCG and own brand development. Two themes arose from the retailer approaches: 1) features impacting on design in organisations and 2) features impacting on own brand development.

3.3.1 Corporations

First, corporation K1 has various brands in different business areas and all design activities relating to their brands are carried out in-house in a design centre. The design centre team works under a CEO in the hierarchy of their organisation and seeks to develop its own design programmes, such as a colour

library, a packaging process and so forth, to help designers develop brand design effectively and consistently. Also, they regularly send their own designers to other design studios or companies in the UK and USA to learn about advanced design systems which can be adapted to their own system. However, the role of the design centre seems to be limited in the corporation's strategy, such that design thinking and design activities are not pervasive to other departments (e.g. the marketing department). In most cases, the design team starts projects and takes charge of the limited role of brand development after a brand manager completes the brand strategy. The brand manager is primarily a project manager, and if a large profit is made, the brand managers can be rewarded for their success, but not the designers. The role of the design team tends to be to help other departments make profit.

In terms of organisational collaboration for design, since the corporation is a big organisation, and in the interests of time and financial efficiency, every stage is executed through systematised computer processes, rather than through physical or personal interaction: there seems to be a lack of communication through which to share ideas and opinions. Especially in the case of packaging design development, decisions are often made by a brand manager or salesperson who is wary about losing brand loyalty or impacting on sales adversely. Thus, designers must always choose the right moment to convince the person leading a project of the reason why some packaging design has to be changed. The role of the design team is relegated to supporting the marketing team.

Secondly, corporation UK1 was started by an entrepreneur and went on to have a leading brand in the beverage category. Within this organisational culture, in contrast to the previous one, the interviewee emphasised entrepreneurship: the challenge is to find new opportunities, rather than to adopt a cautious attitude, and have flexible communication flows; ideas and problems are easily shared across the organisation. A horizontal organisation structure is deemed to facilitate such a culture. Another positive feature is their way of engaging with consumers. The interviewee explained how they try to find a solution to a problem by engaging with consumers or gathering information from consumers: they organise a separate team to field all questions and requests from consumers and then respond to them.

In terms of brand development, instead of emphasising branding and marketing aspects, the corporation seeks to achieve satisfactory quality for a product and then starts to develop a brand to attract people to enjoy the product. Thus, a design team keeps reflecting brand values in new products: it is simple and natural rather than shouting the brand's voice. Since mostly their new product development comprises line extensions of existing category lines, the most important role of the design team is to implant established brand values into new products. Therefore, in terms of external collaboration with consultancies, the most important criterion is how consultancies understand interviewees' problems and brand assets. Primarily, developing overall ideas takes place internally so that an understanding of their brand values influences their working style.

Interestingly, the corporation UK1 emphasises that people (employees) are the main driver enabling the corporation to move forward, so the corporation needs to provide the right atmosphere to motivate them and encourage them to perform well; this is not limited to design tasks. Although corporation UK1 does not know about the role of design (design thinking) beyond making artefacts, ways of performing and encouraging collaboration to solve problems are similar to what design researchers claim for design thinking or design-driven innovation. This corporation unconsciously utilises some of these features to encourage design integration.

	Encouragement	Barriers
Corporation	+Seek to update new knowledge for design and	-Sales-oriented structure: powerful sales
K1	design management	team and incentives for big profits
	+Send designers to other countries to research	-Salesperson attitudes: cautious about
	design output and learn how other companies	changing design so as not to lose brand
	manage design	loyalty
	+Design team supported by CEO within	-Stage-gate process between departments
	organisational hierarchy	-Brand managers and category managers
	+Confidence in their design outputs	handle design projects
	+Developing a design toolkit or library	-Complicated process system: silo operation
	+Developing a process for design	for brand development
		-Every stage costed

Table 3.2 Summary of corporation interviews: features impacting on design integration within brand development and organisation

Corporation UK1	+Entrepreneurship culture +Open space and mixed placement +Horizontal hierarchy: simple decision-making process +Collect problems and ideas from consumers: find what consumers want and then engage with them +Commercially intelligent: applicable ideas +Find suitable external consultancies: consultancies' ways of understanding problems is an important criterion +Free communication flow for ideas and problems +Keep finding great people as an organisational asset	- Limited role of consultancies in brand development: have rarely engaged with consultancies

As illustrated in Table 3.2, despite the size difference – e.g. different numbers of brands (categories) – between the above corporations, performance within the latter corporation in the UK is close to the features of design thinking and design-driven innovation: collaborative problem solving, free flow of ideas, ways of eliciting consumers' insights, etc. The latter corporation also stresses commercial success, like the first one, but the difference is their view of failure and their challenging attitude: the latter corporation encourages employees to seek new business and apply lessons from failure to the next project.

3.3.2 Consultancies

Within this pilot research, an important intention was to decide on a research region between South Korea and the UK, thus the researcher purposefully concentrated on recruiting and interviewing more participants from the UK in order to understand ways of undertaking design/design thinking in branded packaging development from another country (the UK) before deciding which country was suitable for a study of new roles for design.

There are four cases and five interviewees from consultancies; features of encouragement and barriers to design integration and collaboration are illustrated in Table 3.3. The consultancies from both South Korea and the UK show similar opinions about the barriers to design integration and collaboration: all the features relate to a lack of understanding of what consultancy/design can do, and how. Thus, in this subsection, a narrative explanation of each consultancy delineates the findings which might constitute evidence for selecting research criteria.

First, in the case of K1, the interviewee pointed out that a significant barrier, compared to "designadvanced countries" (e.g. USA, the UK, etc.), is that in most projects there is a request to develop a visual identity in the last stage of brand development, hindering design's integration into the client's development process. This tendency also results in a lack of time for projects; a consultancy rarely suggests an entire strategy for brand development or misinterprets a prescribed strategy. Mostly, consultancies just focus on finishing on time and delivering the best alternative they can in the allotted time.

Secondly, the interviewees from the UK consultancies draw more on approaches (proprietary methods) to build a good relationship and integrate more with clients' brand development, going beyond making a visual identity, or to deliver a better outcome/solution by communication between consultancy and client. For example, consultancy UK1 has its own visualisation tool to generate and share ideas with clients, consultancy UK2 encourages holding informal meetings with clients to seek consensus for a project, while consultancies UK3 and UK4 also have their own (trademarked) methods to communicate and develop brand strategy. The UK consultancies tend to develop their own proprietary processes more or to use more methods to enhance understanding about what design/design thinking can do and how they can be exploited.

Comparing two regional cases, South Korea and the UK, the UK interviewees indicated that these efforts influence the workflow between consultancy and client and eventually lead to better delivery (outcomes). In common and substantial stances in both regional cases, every interviewee from South Korea and the UK emphasised consultancy/design's role of integrating with a better collaborative attitude: early engagement. Above all, since consultancies' approaches depend on clients' requests, consultancy UK4 responded to the questions with "it depends on the client/case"; the extent of clients' understanding of design/new roles for design is a critical feature which determines consultancies' performance and better delivery.

Table 3.3 Summary of consultancy interviews: features impacting on integration and collaboration in FMCG brand development

FINCO	brand development	
	Encouragement	Barriers
Consultancy K1	+Better client understanding of design +Consensus about what consultancies and clients are doing +Early engagement in clients' brand development +Long-term relationships with clients +Better communication with clients	-Clients' lack of understanding of design -Lack of money (client's investment) -Lack of project time
Consultancy UK1	+Consensus about what consultancies and clients are doing +Combining strategy and execution +Better communication with clients +Working together as a team with clients +Early engagement in clients' brand development +Building relationships: long-term relationships and strategic partnerships +Integrated work processes with clients +Understanding consumers +Consultancy's own proprietary processes to communicate and develop ideas +Key decision-maker involvement +Clients' attitude towards working with consultancies +Well articulated design brief +Keep producing good work	-Clients' lack of understanding about design -Clients' mindset: cautious about going in new directions -Clients' attitude to working with consultancies -Lack of money (client's investment) -Poor design brief -Consumer reaction -Wrong ways of utilising focus groups
Consu	+Better understanding of person who handles projects +Clients' mindset: challenging attitude	
Consultancy UK2	+Consensus about what consultancies are doing and how ideas work + Better internal communication and collaboration: working in the same place for better communication and inter- disciplinary placement +Early engagement: early involvement in product development +Integrated work process +Building relationships: offering good experiences to clients +Understanding consumers +Holistic brand development: seek to cover the whole spectrum of brand development, including brand campaigns +Working with the right people who are ready to undertake design +Consistently creative ideas +Clients' mindset: challenge and design leadership	-Clients' lack of understanding about design -Clients' mindset: anxious about change -Clients' internal politics -Wrong ways of utilising consumer research -Recruiting systems: not concerned with creativity and challenging attitude
Consultancy UK3	+Consensus about what consultancies and clients are doing +Understanding consumers: observing consumers' lives +Building relationships: trust, long-term relationships, partnerships and credibility +Early engagement with client's process +Integrated thinking and process +Key decision-maker's involvement +Holistic brand development: cover the whole spectrum of brand development +Consultancy's own proprietary processes to communicate and develop ideas +Structures and processes of clients' companies for design exploitation +Collaborative work processes for strategic design +Agility to tailor consultancies' processes according to clients' needs +Part of global-networked corporation +Clients' mindset: respect a consultancy and value design and design thinking +Consultancy's attitude: passionate (rigour for creativity), confident and strong rational arguments	 Poor clients' understanding of design Clients' mindset: nervous about failure Structures and processes of clients' organisations Mostly operational role after setting up strategies and consultancies' late involvement

.

Consultancies UK4.1 and UK4.2	+Consensus about what consultancies and clients are doing +Better communication/interaction with clients +Integrated approach and processes +Better clients' understanding of design +Better/right way to understand consumers +Flexibility +Designers' intuition and inspiration: environment, materials, etc. +Correct diagnosis of clients' situations +Consultancy's attitude: passionate about projects	-Poor clients' understanding of design -Rigid structure and processes -Insufficient knowledge -Incorrect clients' project information -Time-consuming convincing stages
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From the features in Table 3.3, six common features can be distilled that encourage design integration and collaboration: 1) better client understanding of design and what consultancies can do; 2) approaches – methods and processes for design integration; 3) building a good relationship between consultancy and client: partnership and credibility enhancement; 4) internal and external collaborative attitudes: open, flexible structure, etc.; 5) ways of accessing consumers: observing and finding insights from consumers' lives; 6) positive clients and consultancies' mindsets: challenging, passionate, etc. Each common feature has different details, depending on the interviewees.

The features encouraging design integration and collaboration identified in the above are interlinked and depend on each other. For example, communication between client and consultancy is necessary to build a strong relationship and achieve consensus about overall aims. In other words, a better relationship means that consultancies and clients communicate well with each other and consultancies can have more engagement with clients at the strategic level. This leads clients and consultancies to build strategic partnerships based on trust and credibility. The interviewees indicated that, by working with integrated consultancies, design can be embedded into clients' businesses which results in more chances to identify consumers' needs and desires. It can be assumed that internal and external communication is key factors in fostering design within branded packaging development.

In terms of the differences between national (FMCG) brand and own brand development, interviewees mentioned emotional engagement and a holistic approach when considering the features of national brand development, because national brands have to attract consumers to make purchases in an instant. However, all the interviewees referred to the potential of own brands to grow and threaten national brands with their own distribution and vendors. However, although consultancy K1 has delivered branded packaging design, it has little experience of own brand development. The interviewee indicated that few own brands in South Korea have penetrated the market using their advantages, they tend to communicate the price rather than value of a product or brand to consumers. On the other hand, the UK interviewees show diverse opinions about developing own brands; details are shown in Table 3.4. For example, consultancy UK 1 indicated difficulties with retailers due to a lack of understanding of invisible brand value and consultancy UK2 indicated that, despite having a complicated structure and a lack of understanding of design value, retailers run less risk when developing their own brands because they have their own distribution networks and manufacturers who want to sell products rather than pay for brand production, so retailers have more possibilities to move in new directions.

As demonstrated below, most interviewees noted that there are different design integration and collaboration approaches because the goals of brand development and associated organisational structures are different. Whereas national brand development is a matter of independent brand development and is normally handled by a design manager, designer or marketer, own brand development is a matter of developing the brand architecture of a category and is handled by a marketer. Some features of own brand development overlap with features of national brand development.

	Features considered in FMCG brand development	Features considered in own brand development
Consultancy K1	 Emotional rather than marketing approach Time-consuming marketing research 	Communicating value rather than price
Consultancy UK1	 Providing new opportunities to consumers and changing consumers' perceptions Developing independent brands Defining what a brand stands for Design development for building brand equity Macro and micro consumer research Projects handled by a design manager, a designer or a marketer on the client side 	 Understanding own brand development differently from general brand development (national (FMCG) brand development) Developing the architecture of categories rather than for each independent brand Different structure from national brand companies Valuing a product (category) not a brand Mostly in-house design team involvement Projects handled by a marketer
Consultancy UK2	 Providing new opportunities Implant wit and humour into brand development Higher risk than own brand development Developing independent brands 	 Low risk in own brand development Developing own brands with corporate statements Tactical advantages Challenge through innovation

Table 3.4 Summary of consultancy interviews: features considered in FMCG brand development and
own brand development

Consultancy UK3	 Providing new opportunities Holistic approach with other activities Brand engagement Emotional residence Decisions based on sales effects 	 Different creative approaches but similar brand development processes Brand architecture process: communicating hierarchy of architecture on packaging Navigating consumers to find own brand
	 Different approaches depending on project type: new brand development and existing brand development 	products: providing category cues • Changing consumers' perceptions: letting consumers feel pride in buying good quality
Consultancy UK4	 Holistic approach with other activities Broad consumer targets (no specific targets) Getting maintenance on shelves Providing new opportunities 	Localisation: understanding what local consumers want

3.3.3 Retailers

Through the consultancy interviews, it is clear that retailers have started to value design for its competitive advantages. They develop new ways to bring design into their organisations and own brand development, such as collaborations with star designers and developing premium brands. However, they encounter barriers, e.g. complicated decision-making systems, insufficient resources (budgets and people), etc. Retailers seek to adapt design to compete with competitors. They employ design to develop own brands that are differentiated from those of other retailers and to take a leading position in a market.

Unfortunately, only one Korean retailer was contacted and interviewed. This retailer has started to employ design: it has hired a designer who manages and supervises design and product development, and collaborates with the star designer to develop new product lines with the star designer's name label. However, their system is not yet ready to underpin design across the entire organisation's activities. For example, although there are in-house packaging design and interior design teams, they are only integrated with marketing and buyer teams when asked to execute the operational part of design, i.e. not at the beginning of developing products. The other difficulty is that, due to a joint enterprise, this retailer has to follow the partner retailer's design guidelines, including their packaging system. However, the brand manager commented that their capacity to exploit design projects is different from the partnership organisation, where over a hundred people are involved in design activities.

Table 3.5 Summary of retailer's interview: features impacting on design in organisations and features impacting on own brand development

Features impacting on design in organisations	Features impacting on own brand development
+Collaboration with a star designer +Values design for competitive advantage by shifting to a premium line	+Brand development guidelines +Packaging guidelines +Use consumer panels and data
+Starting to hire designers for each different category line	+Benchmarking -Guidelines and policy without considering capacity
+Own brand test room -Complicated organisational structure and decision- making stage	

3.3.4 Overall findings

All interviewees perceived the value of design and that design can offer competitive advantages in South Korea and the UK. However, there are differences from the initial literature in employing new roles for design and applying them to organisational activities. Below, the foremost findings are identified through pilot research.

- The role of design in branded packaging is not to act as a catalyst and facilitator for design thinking but to support other departments and add the final aesthetic touches: Especially, the role of a consultancy is limited to developing brand identity and final artefacts. Thus, collaboration and integration between companies and consultancies tend to take place in the latter stages of brand development. However, there is some movement within corporations and retailers to adopt design thinking consciously and unconsciously. Moreover, amongst the UK corporations and consultancies, design roles beyond making artefacts are appreciated and exploited more than is suggested by the findings from the interviews in South Korea and the researcher's own experience.
- Client's understanding of design determines design collaboration and integration (Table 3.3): As can be seen in the consultancy interviews, most interviewees pointed out that clients' understanding and valuing of design has an impact on collaboration and on the integrated design process between companies and consultancies, hence consultancies need to build good working relationships to foster new roles for design.
- Consultancies are deemed to be satisfied with their approaches, despite a gap between literature and reality: Unlike what was found in the literature review, consultancies can

hardly foster new roles for design within client projects and, more broadly, their strategic planning processes. It might be assumed that consultancies are preoccupied with pleasing clients rather than engendering creativity and questioning the status quo. However, there is another stream of design consultancies. Consultancy UK2 was the smallest in this study but it is broadening its business activities from packaging design to brand campaigns in order to provide holistic brand experiences.

• Retailers have the potential to create new ways to develop own brands: Retailer K1 collaborates with "star designers" to reinforce its brands and infuse them with creativity. The consultancy interviewees demonstrated that retailers have considerable potential to develop own brands in innovative ways, though there are some barriers, namely a lack of understanding about the value of design, rigid hierarchies, a focus on sales and profit.

3.4 Chapter summary

It can be concluded from the interviews that a new role for design is not yet a core aspect of branded packaging development, but there are instances where its value is recognised and its use increasing in the UK cases. The literature provides evidence of the value of design thinking across the functions of an organisation, though there is little empirical evidence of its adoption by organisations involved in branded packaging development. Thus, it is noticeable that the ongoing debate regarding new roles for design – its meaning, value and role in both design process and, more broadly, business contexts – contributes to this communication challenge. There is a need for stakeholders involved in using the roles of design (in its various guises) to provide concrete examples to stakeholders in the branded packaging development process. Therefore, grounded in the pilot research, the primary research phases and research questions can be embodied and the following issues clarified:

• **Research industry:** Instead of concentrating only on branded packaging development per se, since a holistic approach or integrated packaging design are substantially referred to enhance new design roles, the primary study will expand the research boundary to FMCG brand

development, including diverse industries which carry packaging design to lure consumers to the shelves.

- Research region: Since UK and global FMCG brand development show better appreciation and exploitation of new roles for design compared to the designerly ways in South Korea, the primary research is keen to study new roles for design in FMCG brand development within the UK, including global FMCG corporations.
- Contribution to embodying research aims: It is necessary to frame new roles for design
 within FMCG brand development and organisational support by aligning with findings from
 the literature review. Without organisational support and commitment to DDA, it is hard for
 an expanded role for design to defy its conventional role.

Thus, further work is planned that will seek to develop an empirical guidance in this study by engaging with a much larger audience of stakeholders in order to fulfil new roles for design in FMCG brand development and FMCG organisations: at strategic and project levels. The findings in this chapter converge with other findings from primary research to form a DDA model.

4.1 Introduction

This chapter explains a strategy for enquiry and a methodology to achieve the research aims and objectives by understanding diverse research methods.

To achieve the research aim, objectives and propositions for primary research, it is important to develop a determined strategy for the methodology. Different research approaches entail different types of knowledge about phenomena (Blaxter et al., 2006) so that appropriate research method selection can facilitate finding answers to the research questions (Kumar, 2005). However, Arbnor and Bjerke (1997, cited in Blaxter et al., 2006) point out that since it is impossible to find "the best research approach", grounded in research questions (assumptions), a research framework needs to be manifested by selecting detailed methods (Creswell, 2009).

Thus, as shown in Figure 4.1, Sections 4.2 and 4.3 present an overall understanding of elements of the research methodology and methods, and also briefly explain the research approach by illustrating elements of the methodology and methods. Along with the findings identified from the literature review and pilot research, Section 4.4 illustrates the rationale for a research framework and then, by aligning the research framework, Section 4.5 offers a rationale to justify the research methods in order to achieve the aim and subordinate objectives (see Section 1.3).

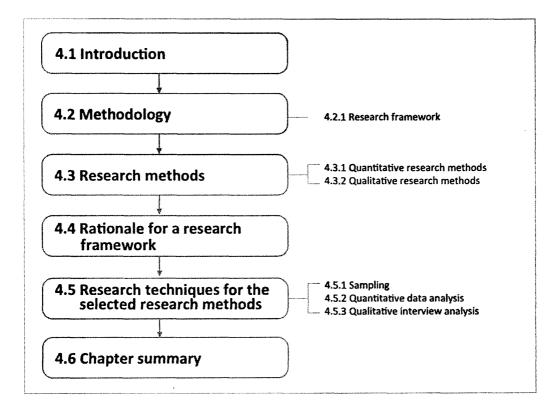


Figure 4.1 Map for methodology and research framework

4.2 Methodology

Research paradigms – philoshopical and theoretical views (world view) layers – underlie the research, but "in the form of [an] unrecognised assumption" (Gilbert, 2008: 6). Nevertheless, determining the research paradigm is the premise for conceptualising the subsequent research framework.

Sarantakos (2005) stresses how epistemology and ontology together construct the research framework within the diversity in research approaches, rather than just illustrating each of them (see Figure 4.2). The first two philosophical views relate to ways of identifying interests/defining the research problem and remit: identify the research interest in terms of design employment in FMCG brand development from the researcher's experience, then generate initial research questions to obtain knowledge of design employment and enhancement in FMCG brand development.

Ontology	The nature of reality ASKS: What is the nature of reality? Is it objective (out there), constructed, subjective? OR BETTER: What does research focus on?	
Epistemology	The nature of knowledge ASKS: How do we know what we know? What is the way in which reality is known to us? OR BETTER: What kind of knowledge is research looking for?	
Methodology	The nature of research design and methods ASKS: How do we gain knowledge about the world? OR BETTER: How is research constructed and conducted?	
Research	The execution of research design	

Figure 4.2 Theoretical foundations of social research: adapted from Sarantakos (2005: 30).

Theoretical foundations are varied and stem from each philosophical layer: ontology and

epistemology. However, there are inconsistent views on the usage of the theoretical terminology

applied to philosophical stances. Nevertheless, a common view of the foundations of social research

might be instilled, as illustrated in Table 4.1.

Table 4.1 Theoretical foundations of social research: adapted from Gray (2009), Sarantakos (2005) and Bryman (2008)

Ontological view	Objectivism	Constructionism
Epistemological view	Positivism	Interpretivism/phenomenology
Research approach	Deductive	Inductive
Research methodology	Quantitative: Experiment survey	Qualitative: Grounded theory, ethnography, heuristic enquiry
Research	Fixed design	Fixed/flexible design
Data collection methods	Sampling, secondary data, observations, interviews, questionnaires, unobtrusive measures	

Since the research methodology stems more directly from the determination of epistemological theory, representative theoretical perspectives in epistemology are discussed in detail, as follows:

Positivism (deductive approaches): "Positivists saw the natural sciences as progressing

through the patient accumulation of facts about the world in order to produce

generalisations known as the scientific laws" (Gray, 2009: 19);

Interpretivism (inductive approaches): It is predominantly a counter perspective to

positivism. "There is no, direct, one-to-one relationship between ourselves (subjects) and the

world (object). The world is interpreted through the classification schemes and the world" (Gray, 2009: 21).

These two theoretical views entail different research directions, so researchers are required to define the theoretical background. Since this research topic relates to cross-disciplinary brand development and design integration (procurement) within a specific FMCG industry, the nature of this research demands the use of inductive and deductive approaches together, in order to identify current DDA and interpret features which underlie the identified phenomena with an objective view: the nature of knowledge in the FMCG industry.

4.2.1 Research framework

This subsection discusses research approaches and methodologies in detail, corresponding to the combination of two theoretical views: positivism (deductive approach) and interpretivism (inductive approach).

Predominantly, there are three types of research: quantitative, qualitative and mixed methods. Of these three research methods, quantitative and qualitative research cannot be viewed as opposite procedures for undertaking a project (Creswell, 2009): these are adjuncts to support the methodology. The detailed differences between qualitative and quantitative research are illustrated in Table 4.2.

 Table 4.2 Perceived differences between quantitative and qualitative methodologies: adapted from

 Sarantakos, 2005: 47

 Feature
 Quantitative methodology

 Qualitative methodology

Feature	Quantitative methodology	Qualitative methodology
Nature of reality	Objective; simple; single; tangible;	Subjective, problematic, holistic, a
	sense impressions	social construct
Causes and effects	Nomological thinking; cause-effect	Non-deterministic; mutual shaping;
	linkages	no cause-effect linkages
The role of values	Value neutral; value-free enquiry	Normativism; value-bound enquiry
Nature and the social	Deductive; model of natural sciences;	Inductive; rejection of the natural
sciences	nomothetic; based on strict rules	sciences model; ideographic; no strict
		rules: interpretation
Methods	Quantitative, mathematical; extensive	Qualitative, with less emphasis on
	use of statistics	statistics; verbal and qualitative
		analysis
Researcher's role	Passive; distant from the subject:	Active; equal; both parties are
	dualism	interactive and inseparable
Generalisations	Inductive generalisations; nomothetic	Analytic or conceptual
	statements	generalisations; time and context

These typical stances are not entirely straightforward in their application to each research framework and are not always clear-cut in reality and practice. In many cases, researchers adjust their methods to meet opposing methodological standards: for example, researchers who employ a qualitative or quantitative methodology may use an interview method with different extents of a structured questionnaire (Sarantakos, 2005).

As illustrated in Table 4.2, the pros of qualitative methodology are incompatible with those of quantitative methodology. Thus, these pros and cons have been argued in terms of there being sufficient methodology to resolve research problems such that, alternatively, a combination of the two research methodologies – mixed methods research – started to be considered as a response to this argument (Creswell, 2009; Bryman, 2008). Mixed methods research – multiple method approaches or method triangulation – was developed from the 1980s onwards, but there was also a debate about whether mixed-methods research was desirable or feasible (Creswell and Plano Clark, 2010; Bergman, 2008).

In this thesis, mixed methods research is adopted in order to diagnose current ways of undertaking DDA within the FMCG industry via a combination of two views – positivism and interpretivism. Amongst the various definitions of "mixed methods research", Tashakkori and Teddlie's definition (1998: 19) is chosen here: 'These are studies that are products of the pragmatist paradigm and that combine the qualitative and quantitative approaches within different phases of the research process'.

Hammersley (1996, cited in Bryman, 2008) indicates three different benefits to conducting mixed methods research: 1) **triangulation**: to corroborate the antecedent method; 2) **facilitation**: to help one employed method use another method; 3) **complementarity**: to dovetail different aspects in a research project. These benefits are also reasons for the emergence of mixed methods research. Along with this, four key decisions which relate to a strategy for developing a framework are involved in mixed methods research: 1) the level of interaction between the processes of methodologies; 2) the relative priorities of the processes of methodologies; 3) the timing of the processes of methodologies; 4) the procedures for mixing methods (Creswell and Plano Clark, 2010). Greene et al. (2011) indicate that the nature of enquiry development reflects on the mix of paradigmatic assumptions and stances. Such a combination constructs four key decision factors and three approaches and influences the characteristics of mixed methods research.

These approaches and decisions elicit different types of mixed methods research. Creswell (2009) illustrates three general strategies, and these are described as follows:

- Sequential mixed methods: 'Elaborate on or expand on [the] findings of one method with another method' (Creswell, 2009: 14), thus the initial interpretation of results informs the way to use the next method;
- **Concurrent methods:** Different research methods are conducted in parallel, and then two datasets are integrated in the interpretation of results;
- Transformative mixed methods: Within a theoretical perspective, a research framework is determined afterwards, a method applied first calls for a sequential or concurrent method within the established framework.

Creswell and Plano Clark (2010) illustrate six typological versions of mixed methods research strategies (Figure 4.3).

1) The convergent parallel design

programme

objective

Quantitative data collection and analysis	Compare or r	elate	terpretation	
Qualitative data collection and analysis				
ne explanatory sequent	ial design			
Quantitative data collection and analysis	Follow up with	Qualitative data collection and analysis		Interpretation
ne exploratory sequent	ial design			
Qualitative data collection and analysis	Builds to	Quantitative data collection and analysis		Interpretation
ne embedded design			1.00	
Quantitative (or Qual Qualitative (or Quant collection and analys	itative) data	Interpretation		
Qualitative (or Quantit and analysis (before, o				
ne transformative sequ	ential design			
Quantitative data collection and analysis	Follow up with	Qualitative data collection and analysis		Interpretation
	Transform	native framework		
ne multiphase design				

Figure 4.3 Typological versions of mixed methods research: Creswell and Plano Clark (2010: 69-70)

Quantitative

Informs

Quantitative

Informs

Qualitative

Amongst the six versions of a mixed methods framework, a transformative strategy is here adapted as a primary research methodology to achieve the research aims. A transformative strategy has a similar concept to an explanatory sequential strategy but its significance is to formulate mixed methods within the theoretical framework: in this thesis, design-driven perspectives. After the pilot research, its findings inform and help to outline the transformative sequential design. The researcher uses a quantitative method - online survey - to identify the current ways of employing DDA in the FMCG industry by denoting variables relationships between two stakeholders - corporations and consultancies and between specific contexts: by size, departments, etc. Afterwards, the researcher uses a follow-up qualitative method - interview - to explain unexpected results and underlying factors which are influential on prior results to eventually corroborate antecedents. Above all, while

conducting mixed methods research, researchers have flexibility in mind as a substantial attitude to

enquiry research in order to solve problems by framing research problems (Bergman, 2008).

4.3 Research methods

This section intends to understand diverse quantitative and qualitative methods, because a mixed methods research framework is adapted for the primary research methodology, as illustrated in Table 4.3. This table illustrates the related features of both methods and justifies the selection of research methods for this research.

Quantitative methods	Mixed methods	Qualitative methods
 Pre-determined Instrument-based questions Performance data, attitude data, observational data, census data Statistical analysis Statistical interpretation 	 Both pre-determined and emerging methods Both open- and closed-ended questions Multiple forms of data drawing on all possibilities Statistical and textual analysis Across databases interpretation 	 Emerging methods Open-ended questions Interview data, observation data, documentary data, audio-visual data Text and image analysis Themes, patterns interpretation

Table 4.3 Quantitative, mixed and gualitative methods: Creswell (2009: 15)

4.3.1 Quantitative research methods

By understanding the pros and cons of different quantitative methods and also considering timeframe, budget and subject context, this subsection aims to identify suitable methods. Thus, this section will briefly discuss different types of surveys and questionnaires; afterwards, it will describe how to determine the specific quantitative methods applied in the thesis.

4.3.1.1 Types of survey

'A survey is a detailed and quantified description of a population – a precise map or a precise measurement of potential' (Sapsford, 2006, cited in Gray, 2009: 219). This method relies on statistical results in this thesis to explain why current phenomena occur.

It is necessary to explicate the detailed ways of different survey methods in order to find suitable methods depending on research constraints: time and budget limitations, participants' availability,

etc. The categorisation of survey methods may be dependent on the way respondents complete a survey: self-completion (self-administration) data collection or interviewer-administered data collection. Depending on such categorisation, Table 4.4 illustrates the advantages and disadvantages of various survey methods. One of the important advantages not addressed in online surveys is the possibility to ask sensitive questions anonymously; on the other hand, one of the important disadvantages missed in online surveys is the limited information about respondents. In addition, there are two types of online survey: 1) E-mail surveys: questions are found in the body of an email and 2) Web surveys: questions are found and completed online.

	Туре	Advantages	Disadvantages
Se	Postals, mail	Low cost	Low response rate
- F		 Wide geographic reach 	 Lengthy response period
ÖT		 No interviewer bias 	 Contingency questions not effective
nple		 Anonymity allows for sensitive 	 Don't know who is responding to the
Self-completion data		questions	survey
nd	Online	Can be low cost	Coverage bias
lata	survey	• Fast	 Reliance on software
		• Efficient	 Too many digital surveys, resulting in
collection		 Contingency questions effective 	overload
ctic		 Direct data entry 	
ň		 Wide geographic reach 	
Inter data	Telephone	 Limited coverage bias 	 Fewer landlines
ta o	survey	Fast response	 Confusion with sales calls
olle		 Can ask complex questions 	Intrusive
viewer-ad collection		 Wide geographic reach 	Call screening
on	Face-to-face	 Good responses rates 	 Limited geographic reach
nini	survey	 Can ask complex questions 	 Time-consuming
Interviewer-administered data collection		 Longer interviews may be tolerated 	• Expensive
e d			 Susceptible to interviewer bias
			 Sensitive topics difficult to explore

Table 4.4 Advantages and disadvantages of survey methods: adapted from Sue and Ritter (2011: 5)

In this thesis, an online survey method, with ways of self-completion data collection, was selected, whilst considering the constraints of the research context for primary research. This research deals with people who are working in the FMCG industry and consultancies, so it is hard to apply a way of interview-administered data collection due to the difficulty in making time for it. In addition, since four types of surveys – corporation and consultancies in each of FMCG industry and other industry – have to be conducted and responses collected from diverse industries, it is appropriate to prioritise an online survey to facilitate it simultaneously and efficiently compare it to other survey methods illustrated in Table 4.4.

4.3.1.2 Types of questionnaires

Developing a questionnaire is one of the most important parts of survey research (Gilbert, 2008). The selection survey type relates to the types of questions: 1) open-ended questions and 2) closed-ended questions. Open-ended questions relate to questions in qualitative interviews seeking to elicit deeper insights within minimal guidelines, and closed-ended questions are associated with quantitative data; most surveys use a mix of the two types of questions to be compatible with each type. Oppenheim (1998) illustrates the advantages and disadvantages of open-ended and closed-ended questions, as shown below. Since an online survey is applied to find differences and similarities within different contexts – different FMCG industry, different size of organisation, etc., closed-ended question types were predominantly used, though open-ended questions were added at the end of the survey to compensate for the disadvantages of closed-ended questions.

Table 4.5 Advantages and disadvantages of question types: adapted from Opp	enheim (1998: 115)
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Open-ended questions				
Advantages	Disadvantages			
 Freedom and spontaneity of answers 	Time-consuming			
 Opportunity to probe 	 In interviews: cost of interviewer time 			
 Useful for testing hypotheses about ideas or 	 Coding: very costly and slow to process, and may be 			
awareness	unreliable			
Closed-ended questions				
Advantages	Disadvantages			
Require little time	Loss of spontaneity			
 No extended writing 	Bias in answer categories			
• Low cost	Sometimes too crude			
Easy to process	May irritate respondents			
Make group comparison easy				
 Useful for testing specific hypotheses 				
Less interviewer training				

Amongst closed-ended questions, six types are illustrated in detail: dichotomous questions; list questions; multiple-choice (categorical) questions; ranking questions; rating-scale questions (ordinal); contingency (sequencing) questions (Sue and Ritter, 2011; Gray, 2009).

- List questions: Ask participants to select all those which are applicable;
- Dichotomous questions: Offer only two possible responses, e.g. yes/no, male/female;
- Categorical (multiple-choice) questions: List all possible answers;
- Rankings: Rank listed indications; it is advised to use this efficiently because there are often

difficulties (errors) in software analysis and giving correct instructions about rankings;

- Rating-scales (ordinal): Select a response from a presented scale in order to measure a variable (e.g. five-point (Likert) scale, 10-point scale, etc.);
- **Contingency (sequencing) questions:** Use to check respondent's qualification to answer a following question or to follow a predetermined flow for a sequence of questions.

Along with understanding types of questions, it is necessary to explicate different levels of measurement to analyse data, which is affected by the above types of questions: nominal, ordinal, interval and ratio data.

- Nominal data: Measurement of a name value or the results of categorical questions with no order or ranking;
- Ordinal data: Measurement of ordering or ranking values, used for rating quality or agreement;
- Interval data: Measurement of values with equal intervals, but there is no zero point if the trait being measured does not exist;
- Ratio data: Similar measurement to interval data but there is a zero point that represents some meaning.

To sum up, the researcher seeks to formulate appropriate types of questions by understanding the above advantages and disadvantages of the different closed-ended question types and levels of measurement. Specifically, in the quantitative research, predominately categorical and rating scale question types are employed; and at the beginning of the survey, a contingency question type is employed to filter participants, to determine whether they are corporations or consultancies. Therefore, nominal and ordinal data types are elicited for statistical data analysis.

4.3.2 Qualitative research methods

Researchers (Gray, 2009; Silverman and Marvasti, 2008; most qualitative researchers claim similarly) have addressed how qualitative research obtains underlying meanings of phenomenology rather than data from purely quantitative research. Various qualitative methods can be adopted to qualitative research: interviews, observation, focus groups, documents, videos/photographs, unobtrusive measurement, research diaries, etc. While these methods can be conducted in isolation, via an established research framework, methods can be amalgamated at multiple levels of data collection in a qualitative case study: e.g. many qualitative cases use a combination of observations and interviews (Silverman and Marvasti, 2008).

Hence, qualitative methods can hardly be explained as being confined to a specific method because qualitative research amalgamates research methods differently, depending on the research objectives and theoretical frame (Gray, 2009; Silverman and Marvasti, 2008). Each method is altered by the model (framework) of social phenomena as illustrated in Table 4.6. In this thesis, a method of interviewing is employed to understand the current ways of using design in pilot research and to interrogate findings from the online survey by fabricating interviews' DDA experience in a narrative manner. Also, along with the interviews following the online survey, visual data are applied to see the interaction between departments. Hence, the methods selected here are explained in more detail: interviews and visual data.

Table 4.6 Methods and models of qualitative research: adapted from Silverman and Marvasti (2008:147), Silverman (2005: 112)

Method	Model 1	Model 2
Observation	"Background" material	Understanding "subcultures"
Texts and documents	"Background" material	Understanding of these and other sign systems
Interviews	Understanding "experience"	Narrative construction
Audio- and video-recording	Little used	Understanding how interaction is organised

4.3.2.1 Interviews

Interviews are widely used in a qualitative strategy to investigate why things happen that incorporate people's behaviours, attitudes and preferences (Gilbert, 2008); they can also be conducted either face-to-face or with a group. Broadly, this method is used as the main instrument of the research or conducted with visual sources, documents, observations, etc. Gray (2009) points out the benefits of an interview approach: 1) obtain highly personalised data; 2) gain opportunities for probing; 3) good return rate; 4) good for people who have difficulty with written language.

A questionnaire structure and question types that are applied in quantitative research are used to construct an interview structure (Sarantakos, 2005). This is commonly illustrated as three different interview structures which relate to questionnaire types: structured, semi-structured and unstructured (in-depth) interviews. A structured interview poses the same questions each time and is mostly used to collect data for quantitative analysis. A semi-structured interview does not seek standardisation and asks only the same *major* questions each time, but ensures flexibility via a further sequence of questions in response to the interviewees' answers. Gray (2009) stresses a role for semi-structured interviews which involves respondents giving extended views and opinions for probing. An unstructured interview entirely relies on the interviewee's responses within certain guidelines and the research topic. The latter concept starts with a general question, with 'subsequent direction of the interview being determined by the respondent's initial reply' (Collins, 2010: 134).

Structured	Semi-structured	Unstructured	
Rapid data capture	Slow and time-consuming for data capture and analysis	As semi-structured	
Use of random sampling	The longer the interview, the more advisable it is to use random sampling	Opportunity and snowball sampling often used. In organisations, targeting of "in key informants"	
Interview schedule	Interviewer refers to a guide containing a mixture of open and closed questions. Interviewer improvises using own judgement.	Interviewer's aide-mémoire for topics for discussion and improvising	
Interviewer led	Sometimes interviewer-led, sometimes informant-led.	Non-directive interviewing	
Easy to analyse	Quantitative parts ease analysis	Usually hard to analyse	
Tends towards a positivist view of knowledge	Mixture of positivist and non- positivist view of knowledge	Non-positivist view of knowledge	
Respondents' anonymity easily guaranteed	Harder to ensure anonymity	Researcher tends to know the informants	

Table 4.7 Characteristics of interviews: cited from Gray 2009: 374, originally adapted from Arksey and Knight, 1999

As illustrated in Table 4.7, while structured interviews might be more easily understood from a quantitative research perspective, other interview approaches – semi-structured and unstructured interviews – are understood from a qualitative perspective/qualitative interviews (Boeije, 2009). Such qualitative interviews 'require more competence on the part of the interviewer and higher ability on the part of the respondents to verbalise views, opinions and ideas' (Sarantakos, 2005: 271). In this thesis, a semi-structured interview type is employed for the pilot research in order to probe the understood for the pilot research in order to probe the design integration and collaboration within FMCG brand development and for

qualitative research subsequent to an online survey in order to triangulate prior survey results and find latent meanings for these phenomena.

4.3.2.2 Visual data

'Visual data is a very broad category which can encompass anything from videos to photographs to naturally occurring observation' (Silverman, 2005: 162). Visual data can be used in stand-alone form or be combined with other methods to generate meaningful findings: e.g. interviews, observation, focus groups, etc. Visual data are generated from broadly four categories: "1) researcher created (video, photographs or drawings); 2) researcher discovered (taken from comics or magazines); 3) participant generated visual data; 4) representation and visual research" (Collins, 2010: 138). Commonly, visual data are obtained from or are used in interviews, focus groups and other methods, rather than being used independently. In this thesis, visual data were created during interviews following on from the survey, by asking respondents to draw their opinions and uses in a validation phase.

4.4 Rationale for a research framework

A transformative method is selected as a suitable mixed methods type in this thesis context because it is appropriate to use this method when researchers recognise the need to challenge the status quo, develop a solution, and have sufficient knowledge of the theoretical frameworks used to study underrepresented or marginalised populations (Creswell and Plano Clark, 2010). Therefore, via transformative mixed methods research employing multiphase design research somewhat, the researcher intends to investigate the ways of employing DDA claimed in the design/design-related literature, and afterwards identify underlying current phenomenological issues. This research will be formulated to achieve the research aims within a DDA theoretical framework taken from the literature.

Behind this selection, predominantly pragmatism as a philosophical view underpins transformative research. Pragmatists place more value on research questions than philosophical perspectives and

instrument methods for research, and seek methods to provide meaningful answers to research questions by bearing in mind "what works?" (Tashakkori and Teddlie, 1998). That is to say, developing research questions is more important than the philosophical view, because the selection of methods is likely to be driven by a practical view in order to undertake empirical investigation and answer research questions (Plowright, 2011; Creswell and Plano Clark, 2010).

Thus, in this research, a preliminary stage – pilot research and selected literature analysis – is important to frame the research questions before embodying them. Thereafter, the research framework is developed by imposing a practical and empirical approach to answer the research questions developed from the research interest.

Figure 4.4 describes the overall structure of this research: three levels in the research stages and five different methods construct the research structure. The first preliminary stage involves a literature review and pilot research to develop the research questions and research frame. Within the second stage, the primary research framework – a mix of quantitative and qualitative research – is developed to answer the research questions by undertaking subordinated objectives. This stage is the primary route to propose a model to overcome/transform current design employment and empower DDA. The last stage is to finalise the developed DDA model via a validation process.

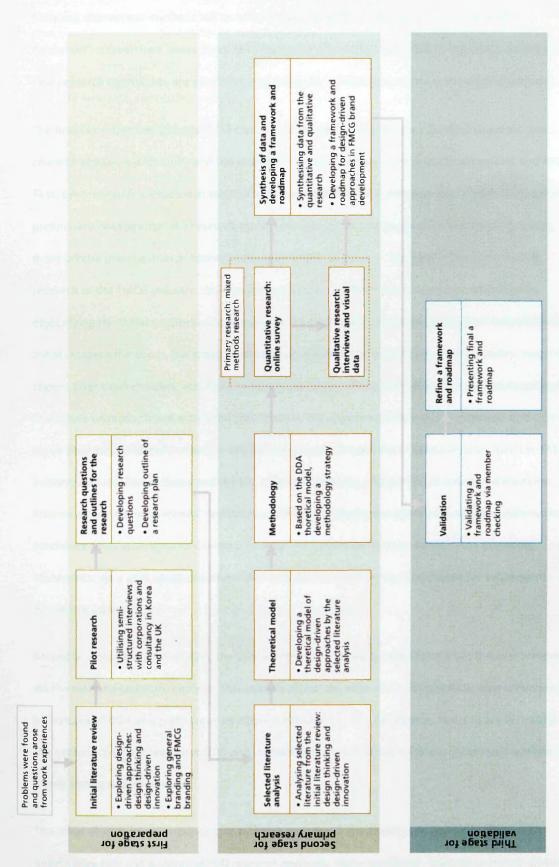


Figure 4.4 Overall structure of the research

Selecting appropriate methods will be affected by "the degree of structure" and "the level of mediation" – researchers' assessment of the research issues (Plowright, 2011). Figure 4.5 illustrates how research approaches are employed whilst aligning with the objectives at three different levels.

The first two objectives (O1 and O2) which stem from research question 1 were achieved via two research phases: a pilot study and the selected literature analysis (two research phases: R1 and R2). First, pilot research is situated at the first level. Collins (2010: 264) indicates that a 'pilot study permits preliminary investigation of a research question or testing of your proposition that leads to testing more precise investigation or testing in the main research project'. Since there has been limited research of the FMCG industry, the research questions and framework need to be embodied by objectifying the initial problems and questions via a pilot study. Literature exploration formulates the initial research questions, but these need to be consolidated by framing the research remit: research region, target stakeholders, etc. Thus, to obtain the objective in a short time frame, semi-structured interviews were employed within the pilot study to set up regional and industry research, and other research remits to identify what is a role for design in the branded packaged goods sectors: the FMCG industry and retailers in Korea and the UK. Despite employing a form of semi-structured interview, the interviews rely on interviewees' responses and flexibility during the interviews, which is close to the procedure of an unstructured interview, in order to explore broad boundaries in the beginning. Meanwhile, via a pilot study, the researcher was able to check practical problems for subsequent primary research.

Secondly, within the second level, the primary research started by identifying DDA; this was achieved via the selected literature analysis. This analysis allows the objective and systematic characterisation of features of DDA as a preliminary to mixed methods research. Afterwards, features are identified by the analysis of what constitutes DDA and is grounded in undertaking subsequent research methods: online survey and interviews.

The other objectives corresponding to research question 2 are directly and indirectly linked with quantitative (R3) and qualitative (R4) research methods. More specifically, Objectives 3-5 are directly linked with quantitative research (R3) (online survey research) and indirectly with qualitative research

(R4) (qualitative interviews) to identify FMCG's needs and ways to embed DDA into the organisation's attitudes for its exploitation. In detail, an online survey was employed to identify the current ways of using DDA across the FMCG industry. Afterwards, due to the disadvantages of an online survey – the difficulty in finding underlying and profound grounds concerning current phenomenology – sequentially, semi-structured interviews were utilised to seek complementary information.

Four overarching and subordinate propositions are explored in these research phases (see Section 1.3). The findings identified needed to be elicited from multiple conceptual schemes, which calls for multi-faceted data from mixed methods research (Lesniewski, 1992, cited by Bergman, 2008). Therefore, this method was employed to solve epistemological problems by securitising the underlying grounds, and interesting and ambiguous results from various perspectives were obtained from the online survey results.

Thirdly, Objectives 6 and 7 indirectly link with R5 and R6 to develop a model which is proposed for the FMCG industry to help it to employ DDA. The initial parts of O6 and O7 were achieved by developing a DDA model grounded in a synthesis of quantitative and qualitative results; meanwhile, other parts of the objectives gain credibility from the use of a member-checking method. Member checking is frequently used to confirm the credibility of qualitative research; a researcher asks the participants to check whether the findings reflect their experience (Creswell and Plano Clark, 2010). Since a DDA model was developed by synthesising two datasets, from quantitative and qualitative research, this could be validated by a member-checking method by asking structured questions to confirm participants' opinions statistically (Spradley, 1979, cited in Tashakkori and Teddlie, 1998).

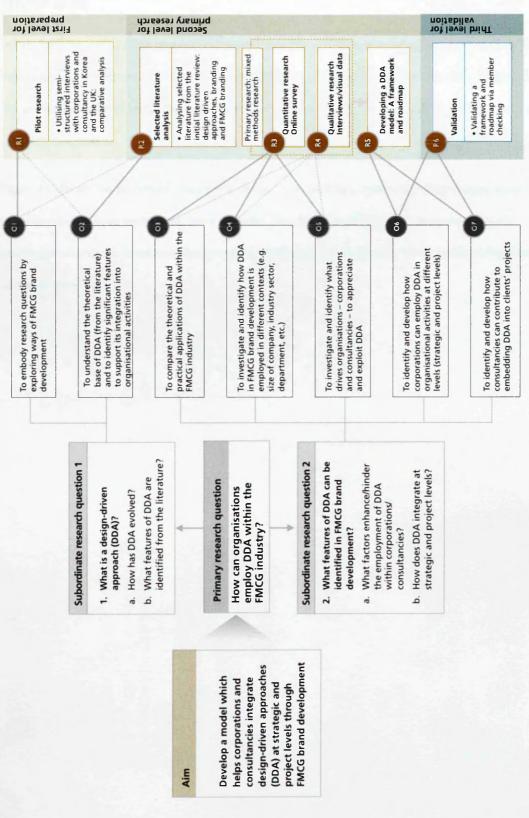


Figure 4.5 Rationale for selecting the research approach: solid line: primary method to the linked objective, dotted-line: secondary method to the linked objective

4.5 Research techniques for the selected research methods

In the previous sections, the research framework and its methods are reviewed and the rationale for selecting them is explained, i.e. how these are justified as research objectives. Thus, this section will discuss the rationale to select the methods for data collection and analysis in different phases of the research framework.

Figure 4.6 details the procedures for each method; boxes with blue lines and in grey indicate data collection and analysis techniques. Since R1 in the pilot study and R4 in the primary methods use qualitative interviews, these specific approaches will be explained together for qualitative interviews and qualitative analysis.

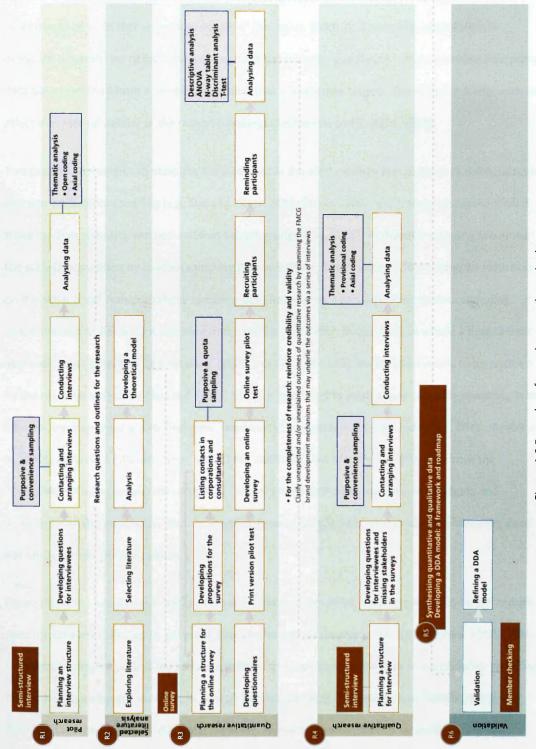


Figure 4.6 Procedure for each research method

4.5.1 Sampling

'A unit (sometimes called element, or case) is the smallest object of study and a *population* is the collection of all units that we wish to consider' (Antonius, 2003: 7). A sampling procedure will designate a specific set of individuals (or units of some kind) – population – and determine how survey data are generalised from a sample population that a researcher targets. The sampling framework can affect the internal validity of the research findings (Tashakkori and Teddlie, 1998).

Two general approaches to sampling are discussed in the methodology literature: probability sampling and non-probability sampling (e.g. Sue and Ritter, 2011; Fowler, 2007, etc.), some researchers label these random sampling and non-random sampling (e.g. Gray, 2009). Probability sampling saturates the sample population by random sampling (Sue and Ritter, 2011), which is formulated by statistics; on the other hand, non-probability sampling does not involve a procedure for random sampling: 'when the researcher lacks a sampling frame for the population in question, or where a probabilistic approach is not judged to be necessary' (Blaxter et al., 2006: 165). Instead, this needs to be justified by the research objectives (Sue and Ritter, 2011). It is advised to apply non-probability sampling in an exploratory project for a statistical view. However, some researchers (Sue and Ritter, 2011; Blaxter et al., 2006) propose a different view, against the statistical one; researchers often confront the infeasibility of using probability sampling in real practice: limitations on time and budgets and assessment of the population data. In addition, Bryman (2008) notes that probability sampling does not always attain generalizability.

Especially, when using mixed methods research, there needs to be consideration of different sample sizes for datasets collected by different quantitative and qualitative methods (Bergman, 2008). With regard to employing probability sampling methods, researchers are likely to mix probability sampling methods with purposive sampling in non-probability sampling (Tashakkori and Teddlie, 1998). It is hard to determine a statistical population in this research because there is no specific category relating to FMCG corporations (and consultancies have FMCG clients) in UK National Statistics or other

appropriate publications. Therefore, non-probability sampling is employed in this thesis; to assist the understanding of non-sampling methods, four common non-probability sampling methods are shown:

- Purposive sampling: a selection of respondents to specific research questions/objectives;
- Quota sampling (stratified non-random sampling): selection of respondents by non-random stratifying sampling until each stratum satisfies criteria the research sets;
- Convenience sampling: a selection of respondents at the researcher's own convenience;
- Snowball sampling: via a first small selection of respondents, they are asked to suggest others who are suitable for the research.

Silverman (2005) points out that decisions about sampling the data have been made by underpinning the research from the start. In this thesis, different non-probability sampling approaches are adopted in three phases: pilot study, online survey and qualitative interviews.

First, within pilot research as a preliminary to primary research, purposive and convenience approaches are employed in order to achieve Objective 1: designate the remit of the research region and industry and, furthermore, explore ways of using design in corporations and consultancies to complete the research questions development. Secondly, within quantitative research, as per the above indications of population: there are no available statistical population data for employees in the FMCG industry or other related stakeholders, so mainly a mix of purposive and quota sampling is employed. A sampling frame was carefully developed for representativeness of the survey case. In addition, a snowballing sampling approach is also partially employed to enhance participation in the survey. In the last qualitative research, purposive sampling based on findings from prior results (Creswell, 2009) is mainly applied, combined with convenience sampling.

4.5.2 Quantitative data analysis

This subsection seeks to explain the methods applied in the quantitative data analysis and validation phases in order to clarify the terminology and justify the ways of data analysis. Most of the analysis methods discussed here are techniques regarding online quantitative analysis, because methods in the validation phase are less complicated than the ones for the online survey.

All the analysis methods are broadly categorised into three types: univariate, bivariate and multivariate analysis. Bryman (2009) explains that whereas 'univariate analysis refers to the analysis of one variable at a time' (p.322), bivariate analysis refers to 'the analysis of two variables at a time in order to uncover whether the two variables are related' (p.325), and multivariate is 'the simultaneous analysis of three or more variables' (p.330).

Analysis methods have to be selected by considering the following two grounds: 1) the type(s) of data collection – size of sample and type of scale – and 2) the intentions of the survey research – the propositions of this thesis. Those attributes limit the choice of analysis methods. Table 4.8 shows the analysis methods applied here.

Table 4.8 Analysis methods

	Analysis methods
Univariate analysis	Descriptive analysis
Bivariate analysis	ANOVA (Analysis of Variance), N-way table, T-test
Multivariate analysis	Discriminant analysis

Two types of scale are used: rating scale questions: RSQs (interval variables) and categorical scale questions: CSQs (nominal variables) in the thesis. Statistical association (Antonius, 2003) refers to variables being observed and measured objectively and depends on the levels of measurement of the variables (Table 4.9).

Levels of measurement of variables	Levels of measurement of the variables in the thesis	Procedure for establishing association
Nominal vs. Nominal	Profiling vs. CSQ	Cross Tab (N-way table)
		Compare the row percentages across categories of
		the independent variables
Nominal vs. Numerical	Profiling vs. RSQ	T-test, ANOVA, discriminant analysis
(interval) scale		Compare the mean of the quantitative variable
		which is categorised by the nominal variables

Table 4.0 Managements	af anationiant		a damata di fuana	Antonius 2002, 157
Table 4.9 Measurement	of statistical	association:	adapted from	Antonius, 2003; 157

Since different propositions (questions) constrain the methods to find them (Colman, 1995), different statistical analysis methods are employed in the qualitative research to understand and examine multi-facets of current phenology. Hence, in terms of rating scale (interval variables), diverse statistical techniques, from univariate analysis to multivariate analysis in table 4.8, were carefully chosen by aligning with research propositions and considering the sample size and questions types. While interval variables are appropriate for utilisation with diverse statistical techniques, categorical

variables are limited to utilising statistical techniques. However, N-way techniques enable examining propositions properly and identifying what DDA features are taken account of. The analysis methods adopted in the thesis are illustrated in detail in the following subsections.

Finally, some terminology issues need to be elucidated: independent and dependent variables vs. predictors and outcomes. Depending on the statistical technique, e.g. independent variables in ANOVA are dependent variables in discriminant analysis, Field (2009: 198) addresses how 'correlational research by its nature seldom controls the independent variables to measure the effect on dependent variables'. Thus, instead of using the terms "dependent and independent variables", "predictors and outcomes" are used.

The SPSS program in PASW Statistics 18 was used for the data analysis.

4.5.2.1 Descriptive analysis

Preliminary descriptive analysis: this is the first step in further data analysis and shows whether the data meet the researchers' intentions (Clark-Carter, 2009). Even though most researchers undervalue exploratory data analysis, 'statisticians see an increasing importance for this stage and have described it as exploratory data analysis' (Turkey, 1977, cited in Clark-Carter, 2009: 116). Thus, by adopting this method, the researcher screens data and help to find central tendencies in the screened data (e.g. mean, data, mode etc.): the tendency of the FMCG industry to utilise DDA.

There is another substantial aim in examining how the FMCG industry employs and utilises DDA, which derives from the selected literature analysis by applying the previous types of measures. Therefore, in order to understand the information and study the concurrence between FMCG practice and the literature, measures of central tendency and dispersion are applied.

Antonius (2003) notes that 'descriptive statistics aim at describing a situation by summarising information in a way that highlights the important numerical features of the data' (p.34). Also, he categorises three types of measures in descriptive analysis: central tendency, dispersion and individual entry position. The measure of central tendency explicates the distribution of values and there are three different forms of average: 1) mean, 2) median and 3) mode. Mean is the literal average of the data, Median is 'the mid-point in a distribution of values', and Mode is the value that 'occurs most frequently in a distribution' (Bryman, 2009: 325). There are two typical measures of dispersion: 1) range and 2) standard deviation (SD). *Range* is the score for dispersion and is found by taking the smallest score and subtracting from it the largest score (Field, 2009); and SD is the average amount of variation around the mean, so that a small SD indicates that the data points are close to the mean. Relatively, a large SD indicates variability in the data and that such variables require further investigation to find the latent attributes which intervene in that variability.

When checking the distribution of data, symmetric distribution is regarded as ideal but, mostly, data are asymmetrical in real situations. This asymmetrical distribution is called skewness. Negatively skewed data refers to data stretched on the left side, while positively skewed data refers to them being stretched on the right. Kurtosis is another measure of distribution; it refers to how peaked the distribution curve is. 'A positive value indicates that the data is clustered around the centre, and that the curve is highly peaked' (Antonius, 2003:67) and a negative value has the opposite meaning.

The above measures are only valid for interval variables and this indicates that the above measures should be applied to rating scale questions, whereas the categorical scale questions use percentages for the indicator or distribution for statistical data analysis.

4.5.2.2 ANOVA

ANOVA – analysis of variance – is used when data need to compare more than two categories (subgroup of indicators), while a T-test –explained in the following – compares means between two groups, 'ANOVA is an omnibus test, which means that it tests for an overall experimental effect' (Field, 2009: 349). Hence, if there are two subgroups, the result of this ANOVA is similar to the results of a T-test. In this thesis, one-way ANOVA was applied to calculate the mean score for each group and how much each group mean varied around the overall mean (Kent, 2004) to identify whether there are differences in employing DDA depending on specific contexts: different FMCG industry, size of

organisation, ownership of brand development, etc. This data analysis method is applied to examine Propositions 1 and 2.

To understand ANOVA techniques, it is necessary to understand some important terms. *F*-ratio is the ratio of the model to its error. This indicates whether the means of subgroups within predictors are different or not. Here, ANOVA uses a cut-off point of 0.1 as a significance value for *F*-ratio in this thesis, because it is important to see how predictors correlate with outcomes. If the significance of *F*-ratio is less than 0.1, the means of subgroups are different.

ANOVA has to satisfy the homogeneity of variance to account for the statistical difference between groups; this is an important assumption of ANOVA. ANOVA assumes that extracted data have the same variance. If Lavene's test of significance is less than 0.05, it indicates that the variance of the subgroups is statistically different and violates the assumption of ANOVA. In this case, Welch and Brown-Forsythe's *F*-ratio is utilised to rectify the violation.

If *F*-ratio shows significance, it implies that there is at least one difference amongst the subgroups. Thus, to identify the difference, a *post-hoc* test is conducted to identify the difference in subsequent analysis. A *post-hoc* test is to compare all subgroups of predictors. The test is utilised when there are over three subgroups within predictors. Table 4.10 illustrates *post-hoc* test techniques. Amongst them, Scheffé and Tukey's HSD is used in this thesis.

Table 4.10 Post-hoc test techniques: adapted from Clark-Carter (2009:268)

Test	When to use				
Bonferroni	A small number of planned and or unplanned contrasts				
Dunnett	Comparing one particular mean against others				
Scheffé	Any post hoc contrast				
Tukey's HSD	A set of <i>post hoc</i> pairwise contrasts, equal sample sizes				
Tukey-Kramer	A set of post hoc pairwise contrasts, unequal sample sizes				

4.5.2.3 Discriminant analysis

ANOVA analysis provides a bivariate contrast of outcomes' variables, but this does not investigate the multivariate relationships that determine the categories (subgroups). Field (2009) notes that discriminant analysis is the best way to illustrate the relationship and effects between multivariates.

Clack-Cater (2009: 368) comments that discriminant analysis can be applied in two situations: 1)

'when a difference is presumed in a categorical (or classificatory) variable and more than one predictor variable is used to identify the nature of that difference, or 2) when a set of predictor variables is being explored to see whether participants can be classified into categories on the basis of differences in the predictor variables'. Both usages aim to identify which variables determine the profile of respondents and what variables contribute to categorising the respondents' group. Quite easily, outcomes (dependent variables) and predictors (independent variables) in ANOVA are applied in opposite ways. This analysis aims to generate the discriminant function to predict which predictors classify the outcomes. Thus, through this method, this thesis seeks to identify what DDA variables most influence categorising subgroups: e.g. size of organisation, different disciplines, etc. and to reflect on developing a DDA model.

There are three types of discriminant analysis: 1) direct discriminant analysis, all the variables enter the equation at once; 2) hierarchical discriminant analysis, predictors are entered according to a schedule set by the researcher; 3) stepwise discriminant analysis, statistical criteria alone determine the order of entry. In this thesis, a stepwise discriminant analysis method was applied to extract the variables that contribute to categorising the group significantly.

The following terms will help to interpret discriminant data. Wilks lambda (Λ) is the proportion of total variance within the groups. If the significance of Wilks lambda is less than 0.05, the variate is discriminate in the groups. Since lambda is the proportion of total variance within the groups, it is related to effect size: eta squared $\eta^2 = 1$ - Λ . Eta squared ($\eta^2 = 1$ - Λ) close to zero indicates a large variance amongst the groups and a large separation amongst the means. Canonical correlation and eigenvalue are the other discriminant functions to discriminate between the groups.

Canonical correlation is the correlation between the scores of a discriminant function and the scores of coding variables defining group membership. Eigenvalue is another measure of the separation achieved by a discriminant function. It is more informative when converted to a proportional measure by dividing it by the sum of the eigenvalues of all the discriminants (Kinnear and Gray, 2006: 464).

4.5.2.4 N-way table

ANOVA and T-test are utilised to compare the means for RSQ depending on the subgroups of the profile questions. On the other hand, for the same reason of selecting these methods, in order to compare the means for CSQs, an N-way table – multiway contingency and cross tabulation – is appropriate. Since three indicators per person are acquired and this indicates each case has three values, it is hard to utilise other statistical analysis. However, as all respondents are forced to select three indicators, these data give consistent values. This provides each distribution for the subgroups.

4.5.2.5 T-test

A T-test is appropriate to compare two group means, thereby this method is applied to identify the difference mean (different attitudes to DDA variables) of RSQ between primary stakeholders – two data sets: corporations and consultancies within brand development.

There are two ways of T-testing:

- Independent-means T-test: This is used when there are two experimental conditions and different participants are assigned to each condition: this is sometimes called the independent-measures or independent-samples t-test.
- Dependent-means T-test: This test is used when there are two experimental conditions and the same participants take part in both conditions of the experiment: sometimes referred to as the matched-pairs or paired-samples t-test.

Since two different groups – corporations and consultancies – were assigned to each survey: after the contingency question, each group is designated to follow a predetermined flow of questions; an independent-means T-test is employed here to obtain the objective of the intention between two alternatives. Like ANOVA, a T-test needs to satisfy a homogeneity test. If the significance value is less than 0.05, analysis violates the assumption of homogeneity of variance. In this case, the *t*-value is perceived as 'Equal variances not assumed'.

4.5.3 Qualitative interview analysis

This subsection discusses the ways of analysing qualitative interview data in research phases 1 and 4 in Figure 4.6: pilot study and qualitative research which is sequential to the online survey. Depending on the research objectives, qualitative data analysis is used to find underlying latent meaning for the phenomena of survey results which is unable to be identified with quantitative research methods.

There are three approaches to qualitative data analysis: 1) theory driven (concept-driven), 2) prior data or prior research driven, and 3) inductive or data-driven (Boyatzis, 1998). Theory-driven and data-driven approaches lie on a continuum of qualitative research approaches (see Figure 4.7). Meanwhile a concept-driven approach uses theory or prior data to develop code within theory, a data-driven approach constructs codes from raw data collection. However, Boyatzis (1998: 30) points out that 'the approach of developing a code on the basis of the prior research places the researcher approximately in the middle of the continuum'. Both R1 and R4 are subsequent to the initial literature review and online quantitative research so that they are influenced by the prior research. In detail, since R1, a pilot study, was involved in exploring and defining the remit of the overall research frame after an initial literature review, despite applying semi-structured interviews to R1, it is closer to a data-driven approach. On the other hand, R4, qualitative interviews adopted a type of semistructured interview, but this is closer to a deductive concept-driven approach and a complementary part of the research's achievement.

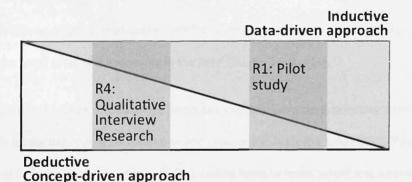


Figure 4.7 Qualitative research approaches continuum: adapted from Boeije (2009:120) originally cited from Mays and Pope (1995:184)

Grounded in the approaches to data analysis, next, more specific steps are considered. Creswell comments that 'an ideal situation is to blend the general steps with the specific research strategy steps' (2009: 184) in order to proceed to analysing data. Thus, as a general qualitative step, overall thematic analysis is employed within both R1 and R4. However, the way to exploit coding in thematic analysis is altered by the research objectives and prior research.

To execute data analysis, specific coding techniques are applied via constant comparison as an iterative process: iterative cycles of coding. A code in qualitative research means 'a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data' (Saldaña, 2009: 3), so coding is a process to develop codes. Similar codes to the researcher's view of a phenomenon are turned into a category.

In the methodology literature, the three coding techniques, shown below, are predominantly discussed in the literature.

- **Open coding:** 'The process of breaking down, examining, comparing, conceptualising and categorising data' (Strauss and Corbin, 2007: 61). This process is to fragment data into concepts;
- Axial coding: 'A set of procedures whereby data are put back together in new ways after open coding, by making connections between categories' (Strauss and Corbin, 2007: 96). The primary purpose of this coding is to reorganise the dataset depending on the importance of phenomena (Boeije, 2009);
- Selective coding: A procedure to 'look for connections between the categories in order to make sense of what is happening in the field' (Boeije, 2009: 114).

As already discussed, coding is not a single phase but a cyclical procedure, selecting a number of techniques is totally dependent on the nature and goals of the study (Saldaña, 2009). Thus, above all, it is necessary to find appropriate mixed-method coding types to reveal latent and meaningful themes by segmenting and reassembling data within iterations (Boeije, 2009). In this thesis, the coding process will be discussed within two stages: initial and secondary (reassembling).

First, within the pilot study, open coding was adopted in the initial stage to extract raw data into a meaningful concept: to explore emerging codes to understand how participants utilise classical/new roles of design in FMCG brand development. Afterwards, axial coding was applied in the second stage. 'Axial coding extends analytic work from initial coding and, to some extent, focused coding. The purpose is to reassemble data that were "split" or "fractured" during the initial coding process' (Saldaña, 2009: 159).

Secondly, within the qualitative interviews, provisional coding was adopted in the initial stage to split or extend predetermined categories. This is because provisional coding is appropriate to respond to anticipated categories or types of responses in compliance with previous research outcomes (Saldaña, 2009): predetermined categories are also based on research intentions. Since, in this thesis, the framework of analysis is a combination of describing predetermined themes and finding interpretive themes for the initial ones, new codes are produced whilst generating interpretive codes (Miles & Huberman, 1994). Afterwards, axial coding was applied to reassemble the codes during provisional coding and generate holistic themes by integrating predetermined themes with newly emerging themes.

Due to the advantage of modifying the codes themselves and the coding system within an iterative process, computer-assisted data analysis – N-VIVO – was used in the qualitative interviews analysis. N-VIVO is appropriate to fracture and retrieve codes (Bazeley, 2007), so this program was selected as suitable for the framework illustrated and to achieve the objectives. However, before beginning to codify categories via N-VIVO, written transcriptions of the interviews were classified into predetermined categories and used to allot embryonic categories to predetermined themes by hand. Nevertheless, within the pilot study, data analysis was done by hand because of the objective to develop a research framework and questions, so data analysis needed to be done quickly.

4.6 Chapter summary

This chapter has concentrated on explaining the rationale for selecting the most suitable methods for this research. Since mixed methods research is employed as the primary research framework,

quantitative and qualitative methods are reviewed and appropriate methods are justified for each stage to complement each other and achieve the research aims.

Multi-phases of research were employed to overcome the current limited investigation into the FMCG industry in terms of design and to analyse the current phenomenon of DDA employment within various contexts where FMCG brand development takes place. That is, all the research phases have been carefully outlined to develop a model which enhances/proposes ways of employing DDA at strategic and project levels.

To recap, a pilot study facilitated the embodying of research questions and a framework while blending an initial literature review regarding new roles for design and personal experience. Afterwards, various research methods were employed to obtain multi-faceted perspectives on current DDA integration via FMCG brand development.

5.1 Introduction

This chapter seeks to explain the online survey procedure and find evidence of how the FMCG industry, which operates businesses in the UK, employs DDA in brand development within two entities – corporations and consultancies – by aligning with the propositions for the primary research (see Section 1.3 and Figure 1.2). Therefore, all the analyses in this chapter seek to explicate underpinning attributes which impact employing and utilising DDA within FMCG brand development.

In detail, Section 5.2 explains a preliminary step to conduct the online survey. Overall, sections are divided depending on the question types (the way of composing the survey questionnaires) and analysis methods corresponding to question types:

- Section 5.3: Profiling respondents to identify the characteristics of survey results for further analysis along with substantiating these with the reliability and validity of the survey;
- Section 5.4: Identifying attitudes to DDA approaches within FMCG, depending on subgroups in the profiling, with descriptive analysis, ANOVA, discriminant analysis and T-test;
- Section 5.5: With descriptive analysis and an N-way table, aiming to identify the exploitation of DDA approaches in FMCG depending on subgroups in the profiling;
- Section 5.6: With descriptive analysis and an N-way table, aiming to identify the involvement of DDA approaches in FMCG brand development process depending on subgroups in the profiling.

Afterwards, Section 5.7 captures the findings to substantiate evidence for the propositions. Finally,

within Section 5.8, a summary of this quantitative research is encapsulated and notes the reasons for

conducting subsequent qualitative research.

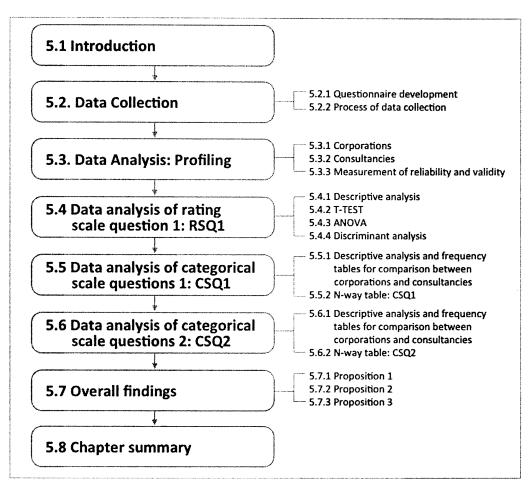


Figure 5.1 Map for quantitative research

5.2 Data collection

This section illustrates all the steps taken before analysing the survey data: from survey framework to data collection. It shows how the questionnaire was developed and how the online version of the survey assessed feasibility.

The survey is divided into two groups – targeted and untargeted– in order to understand FMCG and non-FMCG industry brand development together; meanwhile, to investigate the differences between FMCG and other industries, Olins (2007) criticises the FMCG industry for losing its initiative to find new directions in branding without indicating which industries are better than the FMCG industry. Hence, a questionnaire for the FMCG industry and non-FMCG industry was prepared to address two subsets – corporations and consultancies – in order to triangulate corporations' views with those of consultancies so that a total of four types of questionnaire were developed for the thesis: 1) corporations and 2) consultancies within FMCG brand development; 3) corporations and 4) consultancies outside the FMCG industry. The targeted subset takes priority over the corporations and consultancies in the FMCG industry.

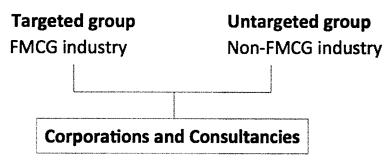


Figure 5.2 Structure of the online survey

5.2.1 Questionnaire development

All the content in the questionnaire(s) was developed and grounded according to the framework derived from the selected literature analysis and pilot research. Each set in the FMCG and non-FMCG industry has the same questionnaires for corporations and consultancies, and just the general "brand" term is used for the untargeted set, instead of "FMCG brand" as used for the targeted set. Since all the intentions and composition of questionnaire are the same, only the questionnaire for the targeted set will be discussed in this section.

The corporations questionnaire's intent is to identify how FMCG corporations currently employ DDA. Meanwhile, the consultancies' questions – paired questions for the corporations and for the consultancies – have two intentions, to confirm the corporations' results and to identify how consultancies employ DDA in work with their clients. Thus, the consultancy questions are reworded and differ from the corporation ones, and some questions are added to ask about consultancies' own activities. Since, throughout the DDA framework from the selected literature analysis, the features of DDA are categorised into three levels under each cultural theme – strategic and project levels, and mindset – each type of scale is selected to fulfil the intentions of the relevant questions. Questions are generated to identify attitudes to DDA, specific approaches to the exploitation of DDA and involvement of DDA in the process. Table 5.1 illustrates the constituents of the questionnaire(s): types, scales, intentions and labels. The following paragraph illustrates the way of using scales in this chapter.

Two types of scale are applied – categorical scale (nominal variables) and rating scale (ordinal variables) - and open-ended questions appertain. First, a rating scale - Likert scale, one of the most frequent formats for measuring attitudes (Bryman, 2008) – is applied to identify attitudes. On the other hand, even though attitudes are important determinants of behaviour, culture and society, they are abstract and subjective (Oppenheim, 1998). Therefore, applying methods and approaches identified from the selected literature analysis as an indicator of categorical scale questions and openended questions at the end of the survey can obtain respondents' replies in their own words (Kent, 2004), which is another way to probe to determine respondents' attitudes. Rating scale questions are split into two parts: rating scale questions 1 (RSQ1) to identify attitudes and RSQ2 to evaluate overall performance. The rating scales use five levels in this research. Secondly, as can be seen in Table 5.1, the first categorical scale questions intend to profile the respondent's organisation, and the second categorical scale questions are split into two parts: the first categorical scale questions (CSQ1) intends to find out what DDA approaches are utilised or considered in the FMCG industry and brand development, and CSQ2 calls for identification of DDA engagement in the brand development process. Primarily, questions about attitudes toward employing and utilising DDA draw on a rating scale, and questions about specific approaches and involvement draw on a categorical scale.

	Corporations	Consultancies	Intention(s)	Labels of questions	
Categorical scale	Qs 1-9	I-9 Qs 1-10 Profile the respondents and their organisations		Profile questions	
Rating scale	Qs 10-27	Qs 12-36	Attitude toward utilising DDA	RSQ1	
_	Qs 45-46	Qs 56-58	Evaluation of overall performance	RSQ2	
Categorical scale	Qs 28-37	Qs 37-48	Methods of and approaches to exploiting DDA	CSQ1	
	-Qs 38-44	Qs 49-55	Engagement of DDA in brand development	CSQ2	
Open-ended	Qs 47-48	Qs 59-60	Opinion in respondents' own words	Open-ended	

Table 5.1 Composition of the questionnaire

	·····		
questions			questions

Finally, along with the DDA themes indicated in Section 2.3, two primary themes – designerly applications, design endorsement – and two booster themes – collaboration and human resources – new labels for all the questions for consultancies and corporations are illustrated in Appendix 3, along with full questionnaires. Instead of reporting questions as full sentences, applying a new label simplifies communication in the thesis, but full questionnaires for FMCG corporations and consultancies are provided in Appendix 4.

There are some separate questions that do not pair up with those to corporations or consultancies: Qs 14 and 15 are only applicable to corporations, and Qs 24, 25, 28, 30, 31, 33, 35, 42, 48 and 57 are only applicable to consultancies. The first two questions cannot be triangulated with asking for the opinions of consultancies – the extent of collaboration with an external network and a designer's placement outside the design department – because consultancies already work with corporations and have limited contact to answer these variables. The only questions applicable to consultancies are about the activities they are generally involved in in the brand development process.

The questions were put into the appropriate forms for the paper and online versions. Even though the online version is the primary method, the paper version was prepared in case respondents requested it.

5.2.2 Process of data collection

The previous subsection deals with conceptualisation of the survey, whereas this subsection illustrates the procedure for data collection. This is affected by the characteristics and background of the group being investigated (Bryman, 2008), as well as by the previous identical structure. Thus, other considerations underpinning the survey process before analysis are discussed in the following subsection.

5.2.2.1 Listing the corporations and consultancies

To ensure representative sampling, quota sampling (see Subsection 4.5.1) was chosen for this research from amongst non-probability sampling methods. Then, two strata are elicited to conduct a survey as the sampling plan. Within the first stratum, there are two groups to list organisations within the targeted group: corporations and consultancies by criteria (e.g. size of organisation and industry). The last accounts for the individuals in organisations (e.g. respondents' positions and disciplines).

To satisfy the above sample criteria for targeted the FMCG industry, first, corporations were identified by reviewing brands available in the UK in supermarkets and drugstores. This list encompasses various FMCG industries and sizes of organisations and is categorised into two subsets: global and EU/UK. In total, 162 FMCG corporation headquarters and/or UK/EU regional offices were contacted. Consultancies with FMCG clients were selected from the directory of two UK associations: the Design Business Association, which promotes design through partnerships between commerce and the design industry; and the Institute of Practitioners in Advertising, the professional body for advertising and related agencies. Eighty consultancies with strong relevance to FMCG were identified. Employing the same extraction method, advertising consultancies were also listed. The last tier seeks to identify what positions and disciplines exist within corporations and consultancies. This identification is obtained and transferred into the indicators of profiling questions.

5.2.2.2 Pre-testing

The pre-testing stage ensures that the survey instrument is incorporated into the research objectives as well as checking that all the questions are instructive and operate well (Bryman, 2008). There are two pre-testing stages in the survey: for the paper and online versions. First, two paper versions within the targeted set were pre-tested on four staff members and four postgraduate students who have experience of FMCG brand development in the Design Department at Lancaster University. Throughout the initial stage, it was important to look at the ease of understanding the questionnaire(s), the adequacy of instructions and the initial patterns of results. By combining the feedback and results, all the questions were adjusted to reach the final versions for the survey(s).

Throughout the first pre-testing, the questionnaire was improved for better understanding of questions' intentions.

The second pre-test was conducted after developing the online version of the survey. With existing online survey tools (e.g. Survey Monkey) it is hard to customise the survey view on the Web, and there can be poor legibility, so a custom website was built and tested. It focused on testing the legibility of questions, ease of understanding of the questionnaire(s) and adequacy of instructions in a Web environment. In addition, it was necessary to examine whether the website operated well and without any programming issues. Throughout the second pre-testing, the questionnaire was visually improved for participants' navigation of the online survey and use when conducting the online survey.

5.2.2.3 Developing the survey website

As addressed in Subsection 4.3.1, there were some challenges to overcome the disadvantages of the survey: respondents' cooperation, triggering interest, etc. Hence, it was imperative to develop a website to capture respondents' interest. However, as indicated above, due to the difficulty in customising existing online survey sites, an online survey tool was developed to trigger participants' interest: Collins (2010) observes that the professional appearance of a survey encourages participation in it.

Two websites were developed separately for the targeted and untargeted groups. After agreement via a consent form, respondents are led to the first page to select the second tier: corporations and consultancies (Figure 5.3). For the respondents' convenience, all questions are divided into two sections, which is different from the categorisation of questions: first section: RSQ1 and second section: CSQ1 and 2 (Table 5.2).

Respondents are asked to follow all the instructions and tick the right number of indicators. If respondents violate an instruction, e.g. do not select three indicators in CSQ or skip a question, a popup message is displayed and asks them to answer properly. These devices prevent missing (skipping) variables and leverage the credibility of the survey.

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	INTRODUCTION FIRST SECTION SECOND SECTION	
	Survey – Use Design-Driven Approaches in FMCG Brand Development	
	Your responses will be used for research purposes only and contributions will be anonymous. This research is being conducted as part of a PhD. This survey aims to collect data about how design is employed in FMCG (Fast Moving Consumer Good) brand development within your organisation. Your individual response will be compiled to create a design-driven brand development tool.	
	Design-driven approaches can be defined as the combination of conceptual and practical designerly approaches. These can apply not only to design projects but also to entire corporate activities. If you have any questions regarding this survey, feel free to contact me. You can enter into drawing for a £50 Amazon voucher.	
	Please complete each question. Thank you for your cooperation.	
	Researcher: Younjoon Lee / E mail: y.lee1@ lancaster.ac.uk	
	What type of organisation do you work in?	
	Corporation (Internal brand development within corporation) Design consultancy (External brand development)	
		-
	NEXT	

Figure 5.3 Sample of the targeted group's website.

5.2.2.4 Contact

Contacting the clustered sample group was a challenge to this survey. Considering their profit-driven propensity, corporations and consultancies do not want to get involved in surveys. This research seeks to study not only design and marketing departments but also other departments (e.g. HR, sales, finance, etc.). This caused more difficulties in accessing and asking them to participate in the survey.

Thus, access to the sample was carefully articulated in order to overcome the above challenge. Different techniques were adopted for the targeted and untargeted groups, according to the extent of importance; the targeted group was primary. First, both official (public) and personal access techniques to the sample were employed within the targeted group: 1) direct phone calls and emails to the organisation and 2) personal contact through social networks, such as Linkedin contact e-mail. Secondly, to contact potential survey respondents in the untargeted group, public access techniques were employed: circulating via post-graduate e-mail at Lancaster University and posting recruitment notes on social network group sites: Linkedin and Facebook. More vigorous access was adopted for the targeted group, given the limited time available. After contacting companies by phone, e-mails were sent to consultancies and companies in the UK, including an information sheet (see Appendix 5) The survey was open from 22 November 2010 to 14 January 2011. Reminder e-mails were sent twice, between 10 and 15 December, and between 5 and 7 January.

5.2.2.5 Ethical issues

Ethical issues are easy to neglect but researchers have to deal with those that arise in a survey (Hasse-Bieber and Leavey, 2006, cited in Creswell, 2009). This survey research involves collecting data from people, so possible ethical issues were reviewed before the data collection stages.

First, in terms of developing questions, the questions do not ask for a company name directly, or even for other information to identify a company or personal details. Also, the research does not ask for any sensitive personal information (e.g. health, sexuality, ethnicity, etc.).

Secondly, in the data collection stage, personal contact only occurred if participants agreed and left messages. Participants were informed that the study was voluntary and were asked to consent to participate in the survey at the outset; they were assured that they could cease participation at any time, simply by closing the Web page. All responses to the questions were to be considered public information and would form an anonymous source within the thesis. Therefore, there was little possibility of offending participants and minimal ethical risk when conducting the survey.

Finally, in consultation with the supervisors, the risk was assessed as "Low Risk With Potential Ethical Concerns" in the Self-Assessment procedure of the Lancaster Ethics Research Committee. Ethical issues in the survey research were reviewed by the Lancaster Ethics Research Committee and duly amended.

5.3 Data Analysis: Profiling

This section aims to identify the respondents and categorise subgroups for subsequent analysis. Each profile enables us to characterise the survey data and to draw on criteria for categorisation.

Subordinate subgroups of each profiling question can be considered before discussing the subsequent analysis. This section deals with targeted group data and delivers findings interpreted from the online survey.

Unfortunately, the untargeted group's number of respondents was insufficient to analyse the data (corporations (n=9) and consultancies (n=12)). Since this is not main research in the primary research, the untargeted group was excluded from generalisations. Besides, there was no one to ask about the paper version of the survey. Thus, this section deals with targeted group data and delivers findings interpreted from the online survey. Table 5.2 shows the respondent numbers and details in each section of the targeted survey. A total of 61 respondents participated in the corporation survey and 53 in the consultancy survey.

	Valid in Section 1	Valid in Section 2		
	RSQ1	CSQ1	CSQ2	
Corporations: 61	40 (65.6%)	Q28-32 (N=30, 49.2%), Q33-37	Q38-44 (N=27, 44.3%)	
participants		(N=27, 44.3%)		
Consultancies: 53 participants	33 (62.3%)	Q37-48 (N=27, 50.9%)	Q49-55 (N=26, 49.1%)	

%: The ratio of participant number

The questions are categorised into two sections via the following rationale. Primary question clusters are RSQ and CSQ in the categorisation of questions (see Table 5.1). However, it is practicable that questions are split into two sections – CSQ1 and 2 – after RSQ1 in the survey. This criterion also relates to ways of analysing the data. In terms of handling missing data, cases that are not complete, at least in section 1 (RSQ1), are excluded from the analysis. Since RSQ1 is capable of subsequent analysis (e.g. ANOVA, T-test etc.), handling cases with this rationale eases coping with missing data. However, some missing data are included in section 2 (CSQ1 and 2), because an N-way table, which is applied to CSQs, is capable of handling missing data easily by handling each question separately. Since the RSQ2 group is to cope with another intention, it will be discussed separately.

The following subsections – profiling questions analysis for corporations and consultancies – provide a summary of each profiling question. Meanwhile, detailed tables are presented in Appendix 6. Amongst the profiling questions, except for Q1 within both corporations and consultancies, respondents were asked to tick only one indicator in answer to the other profiling questions. Thus, except for Q1, the values of percentages and valid percentages are exactly the same, so valid percentages are illustrated.

First, corporations' profiling is described; afterwards, those of consultancies are explained.

5.3.1 Corporations

Q1 Respondents by industry: Food & Beverages, personal care, households – which are known as typical FMCG industries – cover the majority of the respondents (74%). Hence, this profile shows that this survey can reliably represent the FMCG industry. However, multiple modes exist in this question and there are seven respondents who selected more than two indicators.

Q2 Number of countries where businesses operate: The majority of the respondents' corporations (67.5%) operate their businesses over 10 countries. This means that the majority of the respondents' corporations have branches across the EU or globally. It can be assumed that, mostly, the respondents in the survey operate at the global level.

Q3 The size of corporations: The parameter for indicators is adopted from the categories and definitions of SMEs used by the EU (cited in Krake, 2005): Micro-size company: less than 10; Small-size company: 10-49; Medium-size company: 50-249; Large-size company: over 250 employees. In this survey, the criterion number for medium-size companies is divided into two groups: 51-100 and 101-250 employees, because the number range for medium-size companies is bigger than the others. Even though diverse sizes of companies were contacted, the majority of respondents (87.5%) were working in large-size corporations. This survey will argue over the boundary of how large and established corporations employ DDA.

Q4 Department of respondent: The majority of respondents (52.5%) were based in marketing departments and the number of respondents working in design departments was 8 (20%). Interestingly, respondents who chose "other" specified their department. Even though they were working in departments that are related to design or innovation, they put them into the "other"

group. Hence, this "other" group could be considered or re-classified into the "design" group. This new cluster can be argued as another cluster merging two groups: branding and marketing.

Q5 Position of respondent: The majority of respondents (57.5%) were at a senior level within their organisation. It is practical and rational to re-categorise them into two groups for subsequent analysis: junior & senior levels within the department, and director of department & board member.

Q6 Typical time frame for brand development: The majority of respondents' typical time frame for brand development (62.5%) was 6-12 months (25.0%) or 1-2 years (37.5%). Interestingly, 11 respondents (27.5%) indicated that their typical brand development was over 2 years. This evidence is different from the preliminary assumption that pilot research for typical FMCG brand development is under one year.

Q7 Time frame necessary for exploratory brand development: For the majority of respondents, the necessary time frame for exploratory brand development (40%) was 6-12 months and 62.5% of respondents considered that exploratory brand development needs a time frame of up to 12 months.

Q8 Proportion of exploratory (innovative) projects: The majority of respondents (45%) account for "less than 20%" in Q8. According to O'Connor and DeMartino (2006), radical innovation has to be separated from physical projects. O'Connor (2008) also claims that exploratory processes enhance effective dynamic capability and imbue inspiration for dynamic change into organisational culture. However, in spite of the benefits of an exploratory process, this profiling indicates that the FMCG industry (75% of respondents) tends to conduct less than 40% of exploratory projects within entire projects.

Q9 Ownership of FMCG brand development: The majority of respondents (72.5%) answered that FMCG brand development is managed by people with marketing (business) perspectives: brand managers (50.0%) and marketers (22.5%). This implies that the FMCG industry maintains a businessdriven organisational structure and brand development processes. Designers rarely have ownership of FMCG brand development, thus it can be assumed that the role of the designer is separate from the

main development process. 20% of respondents indicated that FMCG brand development is managed by an interdisciplinary team.

Summarising the profiling of corporations, the majority of respondents answered that:

- They are from food & beverages, personal care, and household typical "FMCG industry" (74%);
- 67.5% of them account for operating businesses in over 10 countries;
- 87.5% of them account for over 250 employees: large and established corporations;
- 52.5% of them account for marketing departments;
- 57.5% of them account for senior levels within departments;
- 62.5% of them account for 6-12 month and 1-2 year time frames for brand development;
- 67.5% of them account for 6-12 month and 1-2 year time frames for exploratory brand development;
- 75% of them account for less than 40% exploratory projects of entire projects;
- 72.5% of them account for marketers or brand managers with ownership of brand development.

A summary of the profiling results represents the characteristics of the descriptive analysis. Especially, it can be asserted that descriptive analysis presents the characteristics of large corporations within the FMCG industry. Approximately, 60% of respondents account for 6-12 months and 1-2 year time frames within typical and exploratory time frames. However, some indicator values do not have sufficient respondents to conduct further analysis – ANOVA. Hence, it is necessary to regroup variables to find differences or similarities according to the questions' intentions. Table 5.3 illustrates how to regroup indicators and set up new subgroups in the profiling questions. These subgroups will be used in subsequent analysis.

	Regrouping Indicator	Section 1	Section 2
		n=40	Q28-32: n=30 (Q33- 44: n=27)
Q1	Food & beverages .	18	13 (12)
	Multiple answers	7	6 (4)
	All other groups	15	11 (11)

Table 5.3 Corporations regrouping

Q1_1	Food & beverages	18	13 (12)
	All other groups	22	17 (15)
Q2	One country, 2-5 & 6-10 countries: up to 10 countries	13	9 (8)
	Over 10 countries	27	21 (19)
Q4	Design department & "other" group (selected "other"): Design	15	11 (10)
	Branding & marketing	22	16 (14)
	All other groups	3	3 (3)
Q5	Junior & senior levels	28	19 (17)
	Director of department & board member	12	11 (10)
Q6	Less than 6 months & 6-12 months: Less than 12 months	14	11 (10)
	1-2 years	15	12 (11)
	2-3 years & over 3 years: Over 2 years	11	7 (6)
Q8	Less than 20%	18	13 (10)
	20-40%	12	10 (10)
	40-60%, 60-80% & over 80%: Over 40%	10	7 (7)
Q9	Brand manager	20	11 (11)
	Marketer	9	8 (6)
	Designer & interdisciplinary team	9	9 (8)
	All other groups	2	2 (2)

This survey will argue over the boundary of how large and established corporations (87.5%) employ DDA. The other SME indicators in Q3 do not have sufficient values to regroup the indicators, so Q3 is excluded from regrouping indicators. There is not enough data for other sizes of corporations to find out how different sizes of corporations employ DDA.

5.3.2 Consultancies

Q1 Respondents by industry: Consultancies work across the FMCG industry so that their industry profiles cannot be defined as a specific characteristic. Except for three respondents, most respondents selected more than two indicators and four people specified "other", at the same time, which do not belong to the FMCG industry. It means that consultancies do not set a limit on working on diverse industry projects. This survey of consultancies provides overall views of the FMCG industry, but does not indicate any specific characteristics of it.

Q2 Number of countries where businesses operate: The majority of respondents (57.6%) operate businesses in 6 or more countries: 6-10 countries (6.1%) and over 10 countries (51.5%). It is interesting to compare respondents in 5 or less countries with others in 6 or more countries to investigate how the global reputation of a consultancy impacts brand development and whether there is a different impact depending on the size of consultancy.

Q3 Specialty of consultancy: The majority of respondents (60.6%) are branding consultancies. Advertising consultancies did not seem to want to contribute their opinions to the survey. It can be assumed that the reasons are twofold: 1) advertising consultancies are not interested in the FMCG industry, and 2) business circumstances do not allow respondents to participate in surveys. Four respondents chose "other" and specified the specialty of their consultancy. Three respondents' consultancies are interdisciplinary (e.g. branding and advertising, or structure design and branding).

Q4 Consultancy size: The parameters of employee numbers are different from those of corporations, because the nature of a consultancy's organisation's size tends to be much smaller than corporations. Consultancy size does not fall within the previous SMEs definition. Approximately, each variable in this item is distributed evenly.

Q5 Department of respondent: The majority of respondents (45.5%) work in a design department. Even though consultancies are design-driven, the other three indicators – strategic, brand valuation and client service departments – can be re-clustered to investigate how different disciplines consider clients' activities.

Q6 Position of respondent: The majority of respondents account for senior level (42.4%). Hence, these data will be argued in terms of the involvement in strategic decision-making within organisations as justifying re-categorising into two groups: junior & senior levels within a department, and director of department & board member.

Q7 Typical time frame for brand development: The majority of respondents account for less than 12 months (81.8%): "less than 6 months" (33.3%) and "6-12 months" (48.5%).

Q8 Necessary time frame for exploratory brand development: The indicator "less than 6 months" accounts for high frequency (42.4%) and indicator "6-12 months" accounts for 36.4%.

Q9 Proportion of exploratory (innovative) projects: The majority of respondents (66.7%) answered that less than 40% of projects are exploratory brand development: "less than 20%" (33.3%) and "less than 20-40%" (33.3%).

Q10 Proportion of long-term relationships: The majority of respondents (39.4%) answered that 40-60% of projects are long-term partnerships. 69.7% of respondents accounted for less than 60% of long-term partnerships.

Q11 Ownership of FMCG brand development: The majority of respondents (75.8 %) account for brand managers (45.5%) and marketers (30.3%). This concurs with Q9 in corporations. Thus, FMCG brand development is managed by people with business disciplines, and this implies that consultancies are controlled by business people.

Summarising the profiling of consultancies indicates that:

- Respondents are working with diverse FMCG industries;
- 60.6% of respondents account for branding consultancy;
- 57.6% of them account for operating businesses in 6 or more countries;
- They work in diverse-sized consultancies;
- 45.5% of them account for design departments;
- 42.4% of them account for a senior level within a department;
- 81.8% of them account for less than a one-year time frame for brand development;
- 78.8% of them account for less than a one-year time frame for exploratory brand development;
- 66.7% of them account for less than 40% of exploratory projects;
- 39.4% of them account for 40-60% of long-term relationships;
- 75.8% of them account for a marketer or a brand manager for ownership of brand development.

This summary delivers the characteristics of descriptive analysis for consultancies. It can be asserted that this survey represents consultancies' perspectives at the global level and that the variables of this survey are characterised by less than a one-year time frame for brand development and exploratory brand development; less than 40% are exploratory projects; 40-60% are long-term relationship projects.

As for the profiling of consultancies, some variables do not have sufficient respondents to conduct further analysis. Hence, it is necessary to regroup such variables in order to find differences in intentions and interrogate how consultancies view these. Thus, Table 5.4 illustrates how to regroup indicators and set up new subgroups in the profiling questions. These subgroups will be used in subsequent ANOVA analysis. Throughout the consultancy results, Q1 is excluded due to the nature of consultancies: dealing with diverse industries.

	Regrouping Indicator	Section 1 n=33	Section 2 n=27 (Q49-55: 26)
Q2	One country	6	5 (5)
	2-5 countries & 6-10 countries: 2-10 countries	10	8 (8)
	Over 10 countries	17	14 (13)
Q3	Branding	20	18 (17)
	Advertising	6	4 (4)
	All other groups	7	5 (5)
Q4	Less than 10	10	7 (7)
	10-50	8	7 (7)
	51-100	6	5 (5)
	Over 100	9	8 (7)
Q5	Design department	15	14 (14)
	Strategic, brand valuation and client-service departments: Business- related departments	9	8 (8)
	All other groups	9	5 (4)
Q6	Junior & senior levels	17	14 (14)
	Director of department & board member	16	12 (13)
Q7	Less than 6 months	- 11	9 (9)
	6-12 months	16	14 (13)
	1-2 years and 2-3 years: Over 1 year	7	4 (4)
Q9	Less than 20%	11	8 (8)
	20-40%	11	11 (11)
	40-60%, 60-80% & over 80%: Over 40%	11	8 (7)
Q10	Less than 20% & 20-40%: Less than 40%	10	9 (9)
	40-60 %	13	11 (10)
	60-80% & over 80%: Over 60%	10	7 (7)
Q11	Brand manager	15	14 (13)
	Marketer	10	6 (6)
	Designer & interdisciplinary team	5	5 (5)
	All other groups	3	2 (2)

Table 5.4 Consultancies regrouping

5.3.3 Measurement of reliability and validity

It is essential to measure the act of standardising or generalising findings throughout quantitative research. Validity and reliability are essential for the measurement of research and important attributes in data generation (Oppenheim, 1998). 'Validity refers to the issue of whether an indicator (or set of indicators) that is devised to gauge a concept really measures that concept' (Bryman, 2008: 151). Hence, a validity measure is required for the delivery of unbiased and relevant research data.

Validity measures need to be considered when developing the survey concept. There are five types of

validity measurement: 1) content validity (face validity): measures the content of a concept by asking whether the concept of research reflects the concept concerned; 2) concurrent validity: by employing a criterion on which cases are known to differ, it measures whether research is relevant or not; 3) predictive validity: uses a future criterion measure for predicting the future level of content; 4) construct validity: shows how research substantiates the theory on which the concept of the research is grounded; 5) convergent validity: measures the same concept through other methods (Bryman, 2008). Content and convergent validity types were checked whilst testing the survey.

Reliability is a prerequisite for validity. If the research is not consistent and cannot be replicated in future work, this implies it is not stable, which implies that it is not reliable. Thus, measurement of reliability is part of a procedure of standardisation for a survey (Sapsford, 2006). A classic measure of reliability is the *test-retest* method to measure one occasion and another occasion with the same sample. Then, a strong correlational relationship between different occasions proves the stability of the research. However, some problems arise with this approach, because the first test may influence the second test. Moreover, other factors may intervene between the two tests and break the degree of consistency (Bryman, 2008). Therefore, currently, in order to measure internal reliability, Cronbach's alpha is commonly used. 'It essentially calculates the average of all possible split-half reliability coefficients' (ibid.: 151) and can be computed in SPSS. The alpha coefficient varies between 1 (perfect internal reliability) and 0 (no internal reliability). Kline (2000, cited in Clark-Cater, 2009) notes that the alpha coefficient should ideally be around 0.9 and never below 0.7. In contrast, Berthoud (2000, cited in Bryman, 2008) suggests that an alpha coefficient of 0.6 is good enough to cite the case.

Since reliability is underpinned by validity, Cronbach's alpha values are discussed. Cronbach's alpha tests are conducted in two directions. However, in the questionnaire, questions that ask respondents to select all that are applicable are excluded because the informants' data were not input evenly enough for this type of question. These are: corporations Qs 1, 33, 34, and CSQ1; and consultancies Qs 1, 43, 44 and CSQ1. Therefore, it is hard to measure the alpha coefficient accurately. Table 5.5, below, shows the degree of reliability depending on the type of question. The first and second in consultancies seem to show low reliability, but questions are clustered differently for substantiating

propositions, as shown in the table. Moreover, since this reliability cannot reflect all questions, the alpha coefficient values below reflect partial variables. Afterwards, corporations' values are higher than those of consultancies.

Table 5.5 Reliability me	asurement
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	Question Criteria	Cronbach's alpha
Corporations	Qs 2-32 and 35-37 (Profiling, RSQ1 and CSQ1)	0.709
	Qs 2-32, 35-37 and 45-46 (Profiling questions, RSQ1, CSQ1 and RSQ2)	0.786
	Qs 2-27 and 45-46 (Profiling questions, RSQ1 and RSQ2)	0.830
Consultancies	Qs 2-42 and 45-48 (Profiling questions, RSQ1 and CSQ1)	0.689
	Qs 2-42, 45-48 and 56-58 (Profiling questions, RSQ1, CSQ1 and RSQ2)	0.637
	Qs 2-36 and 56-58 (Profiling questions, RSQ1 and RSQ2)	0.812

Depending on the quantitative analysis method, reliability is retested. Table 5.6, below, explains the alpha coefficient value equivalent to each method. These values show considerable satisfaction in terms of reliability. Overall, corporations' values are higher than those of consultancies.

Table 5.6 Reliability measurement depending on statistical methods

	Question Criteria	Cronbach's alpha
ANOVA	Corporations (Profiling questions, RSQ1)	0.863
	Consultancies (Profiling questions, RSQ1)	0.809
T-test	Corporations and consultancies (RSQ1)	0.858

5.4 Data analysis for rating scale question 1: RSQ1

This section will discuss RSQ1 to identify how the attitudes to DDA are employed within/between corporations and consultancies and also depending on the subgroups which are re-categorised in

Tables 5.3 and 5.4 via descriptive analysis, T-tests, ANOVA and discriminant analyses.

5.4.1 Descriptive analysis

This preliminary stage allows a fundamental understanding of FMCG attitudes to DDA and also helps to find the concurrence of DDA between the FMCG industry and the literature. The entire frequency tables of descriptive analysis are attached in Appendix 7.

Attitudes to DDA were explored via 18 variables for corporations and 16 variables for consultancies (note: two questions related to the collaboration theme were not appropriate for consultancies and so were omitted). The results presented in Table 5.7 indicate for the four themes that:

- Designerly application (DA): The variables in this theme show moderate (middle) means and most of them – except for two variables "using an iterative approach" and "regarding constraints as challenge in consultancies" – account for negative kurtosis values (distribution is flatter than a normal distribution). From both corporations and consultancies, the "regarding constraints as challenges" variable's mean is comparatively higher than for other variables in the designerly application theme. This implies participants from corporations and consultancies consider adopting challenging attitudes to overcoming constraints.
- Design endorsement (DE): "Adopting a stage-gate process" in both corporations and consultancies shows the highest mean amongst all the variables, indicating that the FMCG industry has a bias towards using that process in brand development. Petrie (2008) indicates that the success of a stage-gate process stems from a formal structure in which the delivery of product is a priority within business. Based on this stance, it can be interpreted that the FMCG industry concentrates on delivering artefacts via a stage-gate process. Interestingly, although corporations do lean toward stage-gate processes, they report that they also use flexible organisational processes. In other words, they account for higher values for two contradictory variables "flexible organisational process and stage-gate process". However, reflecting on the situation that consultancies also account for the lowest value in clients' flexible organisational process, it might be interpreted that a flexible flow is not underpinned within external collaboration. Interestingly, consultancies believe their clients have an understanding of design's contribution and benefits at the strategic level, but the corporation result accounts for a lower mean value than the one for consultancies.
- Collaboration (CO): Except for one variable, "designer placement outside of design department", all the variables for the collaboration theme within the corporation category show comparatively higher means than the variables in the other themes. However, the consultancy responses show lower means for corporations' collaboration — implying that their view of client collaboration is tinged with scepticism.
- Human resources (HR): Except for "evaluation of project", other variables in this theme have comparatively lower means than the variables in other themes. Thus, genuinely educating

employees about DDA is not a key feature for either corporations or consultancies, indicating that education about DDA rarely takes place in the FMCG industry.

Overall, in the corporations, Qs 11, 12, 17 and 26 account for moderate means as well as greater SD and negative kurtosis, so, comparatively, these variables have variability in respondents' opinions. In consultancies, Q21 shows the same result as the previous ones. Attitudes toward collaboration are higher than attitudes toward other themes, while, conversely, attitudes to human resources are weaker. Consultancies show higher means than those of corporations in terms of variables relating to conceptual approaches of DDA usage at the strategic level: e.g. embracing DDA, management of design impact on brand development, etc. Corporations show higher means for variables, which might be assumed to be obstacles when consultancies collaborate with clients.

			Corporations (n=40) Consultancies (n=33)			
	Variables (Question numbers displayed in order of corporations/consultancies)	Mean	SD	Mean	SD	
	Q10/Q12 Embracing DDA	2.90	1.215	3.24	0.830	
D	Q11/Q13 Using an iterative approach	3.03	1.310	3.12	0.857*	
A	Q12/Q15 Completing all phases of exploratory projects	3.10	1.081	2.82	0.950	
	Q13/Q17 Regarding constraints as challenges	3.40	0.982	3.18	0.808*	
	Q16/Q18 Adopting a stage-gate process	4.38	0.774*	3.52	0.906*	
- 1	Q17/Q19 DDA's contribution at the strategic level	3.08	1.309	3.42	1.032	
D	Q18/Q20 Consideration that design is a core driver	3.00	1.219	3.48	0.939	
Е	Q19/Q21 Leadership support for the integration of DDA	2.90	1.128	3.00	0.866	
- 1	Q20/Q22 Management of design impact on brand development	3.23	1.025*	3.73	0.977	
	Q21/Q23 Flexible organisational process	3.45	1.154	2.82	0.846*	
	Q14 Utilising external experts	3.78	0.947*			
~	Q15 Designer placements outside the design department	2.75	1.149			
С	Q22/Q26 Working across departmental boundaries	4.25	0.927*	3.33	0.816*	
0	Q23/Q27 Designers working across departmental boundaries	3.78	1.050	3.12	0.992	
	Q24/Q29 Communicating with consultancies	4.05	0.846*	3.70	0.951*	
н	Q25/Q32 Educating employees on DDA	2.43	1.152	2.42	0.902	
	Q26/Q34 Creative capability in recruitment	2.98	1.387	2.70	1.262	
R	Q27/Q36 Evaluation of projects	3.60	1.033	3.03	0.951*	

Next, nine questions only for consultancies in RSQ1 will be discussed (Table 5.8). The variables which are influenced by clients have comparatively lower means than those of other variables: "using an iterative approach"; "undertaking exploratory approaches"; "tailoring clients' brand development process"; "consultancy as a long-term partner". The other variables which account for higher means show the approaches which can be undertaken independently according to consultancies' willingness.

Table 5.8 RSQs on	ly for consultancies: '*	' indicates positive kurtosis
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		Consultancies	(n=33)
	Variables	Mean	SD
DA	Q14 Using an iterative approach	3.09	1.071
DA	Q16 Undertaking exploratory approaches	3.03	0.918*

	Q24 Tailoring clients' brand development process Q25 Understanding of client's design policy	3.00	0.935 1.083*
со	Q28 Communicating with each other	4.00	1.000*
	Q30 Own brand development process for communication	4.06	0.788
	Q31 Consultancy as a long-term partner	3.33	0.816*
HR	Q33 Educating employees on DDA	3.64	0.895
	Q35 Continuously developing new directions	3.79	0.927*

Summarising the descriptive analysis of RSQ1 (see Table 5.7), the DA variables have comparatively moderate means compared to the variables in the other themes. The DE variables show a different range of means. Especially, aside from "leadership support for the integration of DDA", means in DE theme between corporations and consultancies differences are apparent. For example, in terms of "flexible organisational process", while corporations show a comparatively high value, consultancies show a lower value. While most of the CO variables account for comparatively higher means, except for "designer placement outside the design department", comparatively, the HR variables have lower means, except for "evaluation of projects" which is directly related to project activities. Therefore, especially, the attitudes to the DA and HR themes are not yet concurrent with the claims identified from the literature review within both corporations and consultancies opinions. On the other hand, variables show different opinions in terms of viewing DDA endorsement and collaboration. Hence, in the following subsection 5.4.2, T-test, the differences identified in the descriptive analysis are statistically interrogated.

Besides, consultancies are deemed to account for comparatively high value in terms of their attitudes to DDA utilisation, which are less involved in or determined by the client's approach. So it can be interpreted that they consider their attitudes to DDA to be well undertaken.

5.4.2 T-Test

As descriptive analysis, at a glance, between corporations and consultancies some variables have different values; thus by triangulating each variable, this sub-subsection intends to examine the different attitudes to DDA approaches.

A T-test method is appropriate for two experimental conditions and different participants to compare two group means: corporations and consultancies. Nineteen paired questions were subjected to a T-

test. Of these, three questions were extracted from the profiling questions: corporations Qs 6, 7 and 8, and consultancies Qs, 7, 8 and 9 – "typical time frame for brand development", "necessary time frame for explorative brand development" and "proportion of exploratory brand development". Amongst the 19 paired questions, eight questions (variables) which show significant differences are explained here. This will suggest which variables hinder collaboration between corporations and consultancies in FMCG brand development. In this test, two-tailed probability was applied to make specific predictions (difference or similarity).

As shown below, only a Levene test for Q 21/23 is significant (p=.015 which is less than 0.5) so that the *t*-value is perceived as *Equal variances not assumed*. The other seven questions below show a Levene test is not significant (P>.05), so the *t*-values in other questions are perceived as *Equal variances assumed*. Overall, corporations' distributions are wider than those of consultancies. This means that corporations' variability with regard to variables is diverse.

The eight questions are reported individually and illustrated in Table 5.9; detailed explanations of significant variables are illustrated in Appendix 8.

		N	Mean	SD	df	t
Q06/Q07 Typical FMCG brand	Corporation	40	2.88	1.042	71	4.289
development time frame	Consultancy	33	1.91	.843		
Q07/Q08 Necessary time frame for	Corporation	40	2.25	.927	71	2.060
exploratory brand development	Consultancy	33	1.82	.846		1. A.
DE Q16/Q18 Adopting a stage-gate	Corporation	40	4.38	.774	71	4.374
process	Consultancy	33	3.52	.906		
DE Q20/Q22 Management of design	Corporation	40	3.23	1.025	71	-2.128
impact on BD	Consultancy	33	3.73	.977		
DE Q21/Q23 Flexible organisational	Corporation	40	3.45	1.154	70.112	2.695
process	Consultancy	33	2.82	.846		
CO Q22/Q26 Working across	Corporation	40	4.25	.927	71	4.436
departmental boundaries	Consultancy	33	3.33	.816		
CO Q23/QQ27 Designers'	Corporation	40	3.78	1.050	71	2.714
engagement with other departments	Consultancy	33	3.12	.992		
HR Q27/Q36 Evaluation of projects	Corporation	40	3.60	1.033	71	2.430
	Consultancy	33	3.03	.951		

Table 5.9 T-test: Variables which show significant difference between corporations and consultancies

*p<0.05, **p<0.01, ***p<0.001

In summary, the variables which show significant difference do not fall into the DA and HR themes: these variables similarly show low or moderate values. Mostly, variables for DE and CO themes show significant differences. The dichotomy between corporations' and consultancies' observations of corporate activities seems to be driven mostly by the previous two themes. The following two findings from this test enable inferences to be drawn.

First, the initial two variables in the profiling – typical time frame for brand development and necessary time frame for explorative brand development – indicate that consultancies do not engage with the entire brand development process, i.e. corporations' time frame is longer than those of consultancies. Secondly, amongst the variables which show significance in the T-test, the corporation means are greater than those of consultancies (except for "management of design impact on brand development").

Hence, it can be assumed that since consultancies evaluate variables from a design-oriented viewpoint, consultancies' evaluation of clients' attitudes are lower than corporations, or actual corporate attitudes to DDA might be stronger than those of consultancies engaged in clients' organisations. Regardless of other points, since consultancies work with departments or respondents who are closest to design, consultancies' lower means indicate that corporations may overestimate their attitudes to DDA. In contrast, the other low variable in corporations – management of design's impact on brand development – indicates that design-driven consultancies might overestimate design's contribution to corporations.

Each different attitude implies that there is a lack of consensus on the value of DDA's contribution to business. Thus, these different perceptions of attitudes may result in difficulties which affect the collaboration between corporations and consultancies.

5.4.3 ANOVA

Previously, descriptive analysis has explained the extent to which variables are employed as features of DDA, but this does not inform whether there is a contrast between the subgroups of profiling variables. Hence, ANOVA analysis enables finding the contrast in variables, depending on the subgroups. Regrouping indicators of profiling is a predictor to see the contrast outcomes. To diagnose contrast, *F*-ratio represents the ratio "between group variance" and "within group variance". *F*-ratio value shows that the contrast between groups is significantly greater than within groups. However, *F*- ratio does not inform the subgroups' ranking when the number of subgroups of predictors is over three. Thus, in this case, in order to see which subgroup is greater than the other, a *post-hoc* test is conducted.

The variables in RSQ1, which are addressed in this section, indicate the statistical significance between subgroups within each RSQ1 variable. As noted in Subsection 4.5.2.2, target significance here, at 0.1, is accepted in an ANOVA test to see the contrast between the subgroups in profiling.

5.4.3.1 Corporations – ANOVA

Before conducting ANOVA, analysis has to stratify a homogeneity test (Levene test), one of the assumption of ANOVA. Q2/Q14, Q5/Q21 and Q6/Q27 - in orange in the table in Appendix 9 - are significant (p<0.05) in Levene tests, so these tests violate the assumption: the variances are different. Hence Welch and Brown-Forsythe F-ratios are provided in Appendix 10. The first two sets show significance in Welch and Brown-Forsythe ratios (p<0.05) and this means there are statistically significant differences between the groups. Since, in the last set, Q6/Q27, a Brown-Forsythe ratio shows significance (P<0.05), Games-Howell can be used when violations of Levene test assumptions occur. Despite violation of the assumption, the first two sets are discussed to see the mean difference of "within group". In Appendix 9, "between groups" within indicators (profiling Qs 1_1, 2, 4, 5, 8 and 9) shows significantly different means for outcome variables. 'Between groups' within independent variables regarding Q1 does not show any significant differences. Grey highlighted cells – Q12 completing all phases of exploratory projects; Q22 working across departmental boundaries; Q25 educating all employees on DDA - indicate that there is no statistical significance for any regrouping of profiling variables. Besides, profiling of Q3 and Q7 is excluded from the ANOVA test. Since, as mentioned in Table 5.3, the major respondents (87.5%) account for large companies, regrouping indicators is not possible for the subsequent analysis. Also, Q7, necessary time frame, is excluded from this analysis to diagnose current approaches.

After the ANOVA test, a *post-hoc* test is conducted to contrast the means with each subset. This test informs the differences between subgroups which are categorised by regrouping the profiling

questions. Questions that have only two subgroups are excluded (Qs 1_1, 2 and 5) from a *post-hoc* test, because an ANOVA test already informs the contrast between the two subgroups. Tukey HSD and Scheffé Significance are mostly used, except for some cases which violate the assumption. If only target significance shows differently, each significance is separately indicated. Details of the ANOVA tests which show significance and *post-hoc* are provided in Appendix 10. Thus, here, outcome variables (RSQ1) will be discussed in detail *post-hoc*:

Q1 Industry difference: The "food & beverage group mean" (N=18, M=3.11, SD=.963) is smaller than "all other groups" (N=22, M=3.64, SE=.953) in terms of "regarding constraints as challenges". Thus their attitude towards constraints is less challenging than all other groups and it can be interpreted that the food & beverage group is hard to break from its own regime.

Q2 Number of countries where businesses operate: Seven outcome variables (Qs 13, 14, 15, 16, 18, 19 and 20) show statistical significance between "up to 10 countries" and "over 10 countries". Except for Q15 "designers' placement outside the design department", over 10 countries mean is greater than for the up to 10 countries group. Thus, it can be interpreted that the over 10 countries group utilises DDA features within designerly application, design endorsement and collaboration themes, but larger corporations ("up to 10 countries" group) hinder designers' placement outside the design department.

Q4 Department of respondent: Q23 "designers working across departments" in the CO theme shows significant contrast. The contrast of the subset, design department & others vs. branding & marketing, shows significance (P<0.05) in a *post-hoc* test. Design-related departments account for a greater mean than that of business-related departments. It can be interpreted that people in design consider that they engage with other departments more than other departments expect or manage to.

Q5 Position of respondent: Four outcome variables in the DE theme show significant contrast: Q17 DDA contribution at the strategic level; Q19 leadership support for integration of DDA; Q20 management of design impact on brand development; Q21 flexible organisation process. Directors of departments & board members, who are more involved in strategic decisions, consider that their organisations have more DE attitudes than the other group.

Q6 Typical time frame for brand development: Five outcome variables show significant contrast.

- Q14 utilising external experts: "Less than 12 months vs. 1-2 years" shows significance (p<0.1) in a *post-hoc* test and the 1-2 years group accounts for a greater mean than that of less than 12 months.
- Q16 adopting a stage-gate process: "Less than 12 months vs. 1-2 years" shows significance (Tukey HSD Sig. p<0.05, Scheffé Sig. p<0.1) in a *post-hoc* test and the 1-2 years group accounts for a greater mean than that of less than 12 months. Thus, it can be interpreted that depending on the increasing typical time frame in the groups, the extent of adopting a stage-gate process is influenced. In other words, corporations that have a longer typical time frame for brand development have a strong tendency to utilise a stage-gate process.
- Q21 flexible organisational process: "Less than 12 months vs. over 2 years" shows significance (p<0.05) in a *post-hoc* test and the less than 12 months group accounts for a greater mean than that of over 2 years group. It can be interpreted that a flexible organisational process enables reducing the time to develop a brand.
- Q26 creative capability in recruitment: "Less than 12 months vs. over 2 years" shows significance (p<0.05) in a *post-hoc* test and the less than 12 months group accounts for a greater mean than that of the over 2 years group.
- Q27 evaluation of projects: Due to the Levene test violation, Welch and Brown-Forsythe
 ratios are calculated and a Games-Howell test applied for a *post-hoc* test. The "less than 12
 months vs. 1-2 years group" shows significance (Games-Howell Sig. p<0.1) in a *post-hoc* test
 and the less than 12 months group accounts for a greater mean than that of the 1-2 years
 group. This implies that an organisation with a shorter time frame has more tendencies to
 evaluate projects and future work.

By synthesising these outcome variables, corporations with less than 12 months account for less stage-gate approaches and less use of external experts but more evaluation of projects in comparison with the 1-2 years group. On the other hand, these corporations account for more attitudes to flexible organisational processes and creative capability in comparison with the over 2 years group. Hence, in FMCG industry, a longer time frame does not account for a better attitude towards DDA employment. Q8 Explorative proportion: Four outcome variables show significant contrast.

- Q10 embracing DDA: "Less than 20% vs. 20-40%" shows significance (p<0.01) in a *post-hoc* test and the 20-40% group accounts for a greater mean than that of less than 20%.
- Q11 using an iterative approach: "Less than 20% vs. 20-40%" shows significance (p<0.1) in a *post-hoc* test and the 20-40% group accounts for a greater mean than that of less than 20%.
 Also, "20-40%" vs. over 40%" shows significance (p<0.01) in a *post-hoc* test and the over 40% group accounts for a greater mean than that of 20-40%.
- Q23 designers working across departments: "Less than 20 vs. over 40%" shows significance (p<0.05) in a *post-hoc* test and the over 40% group accounts for a greater mean than that of less than 20%.
- Q24 communicating with a consultancy: "Less than 20 vs. over 40%" shows significance (p<0.05) in a *post-hoc* test and the over 40% group accounts for a greater mean than that of less than 20%.

Significant contrasts are shown in the outcome variables for the DA and CO themes. The corporations with less than 20% of exploratory projects account for less employment of DDA in comparison with the 20-40% group and account for fewer designers working across departments and communicating with a consultancy in comparison with the over 40% group. The over 40% group accounts for more use of iterative approaches in comparison with the 20-40% group. The proportion of exploratory projects influences the outcome variables above: the more exploratory projects that corporations have, the better the DDA attitude they account for.

Q9 Ownership of brand development: Three outcomes variables show significant contrast.

- Q11 using an iterative approach: Despite significance in ANOVA test, there is no significance in a *post-hoc* test, but the brand manager group shows a greater mean than the other subgroups.
- Q14 utilising external experts: "Brand manager vs. all other groups" and "designer & interdisciplinary team vs. all other groups" shows significance (p<0.05) in a *post-hoc* test, but the value of the "all other groups" is small (n=2). Thus, this is not considered here, instead

design & interdisciplinary team and brand manager account for a greater mean than that of the marketer group.

 Q21 flexible organisational process: Despite significance in ANOVA test, there is no significance in a *post-hoc* test, but design & interdisciplinary team accounts for a greater mean than that of marketer group and brand manager: the mean values of marketer and brand manager groups are similar.

The lowest means account for the marketer group in Q11 and Q14, and the designers & interdisciplinary team group accounts for the somewhat greater mean values than that of other groups.

The corporations' summary is illustrated as follows. Table 5.10 shows the ranks between subgroups by ANOVA test. Qs 12, 22 and 25 – grey-coloured cells – do not have any significant contrast in an ANOVA test. Thus, from this pattern, it can be interpreted that corporations in "over 10 countries" with "over 40% of exploratory projects", a "high level position group (director of department & board member)" and designers (or design related people) with ownership of brand development have better attitudes to DDA. On the other hand, the subgroups of typical time frame show differently, depending on outcome variables: while a longer time frame is better for utilising experts and adopting a stage-gate process, a shorter time frame is better for flexible organisation, creative capability and evaluation of projects. In another way, flexible processes enable decreasing the project time frame but a stage-gate process needs a longer time frame for brand development.

	e 5.10 Summary										_	<u></u>								-				
	Regroup Indicators	10 embracing DDA	11 using an iterative approach	12 complete all phases of exploratory projects	13 regarding constraints as challenges	14 utilising external experts	15 designer placements outside design dent	16 adopting a stage-gate	1	1/ UUA 5 contribution at the strategic level	18 consideration that design is a core driver	19 leadership support for	20 management of design	110 21 flexible organisational	process 22 working across	departmental boundaries	23 designers working across	departments	24 communicating with a	consultancy 25 educating emplovees on	A	26 creative capability in	recruitment	27 evaluation of projects
		DA				CO	_	DE								0				H	IR			
Q1 _1	Food & beverages All other groups				2			-	_														_	
Q2	Up to 10 . countries				2	2	1	2			2	2	2											
	Over 10 countries				1	1	2	1			1	1	1											

Table 5.10 Summary of corporations' ranks between subgroups

Q4	Design											1			
	department & "others"														
	Branding & marketing											3			
	All other groups											2			
Q5	Junior & senior levels							2	2	2	2				
	Director of department & board member							1	1	1	1				
Q6	Less than 12 months				3		3				1			1	1
	1-2 years				1		2				2			2	2
	Over 2 years				2		1				3			3	3
Q8	Less than 20%	3	3				[3	3		
	20-40%	2	2									2	2		
	Over 40%	1	1									1	1		
Q9	Brand manager		1		2						3				
	Marketer		3		3	1					2				
	Designer & interdisciplinary team		2		1						1				
	All other groups			 											

5.4.3.2 Consultancies – ANOVA

Consultancy questions are divided into two groups: paired questions for corporations (clients) and questions only for consultancies. In questions for consultancies, Q4/Q14 and Q11/Q31 are significant (p<0.05) in a Levene test so Welch and Brown-Forsythe *F*-ratio tests are conducted. However, these two groups do not satisfy a significance level (p<0.05). Thus, these are not addressed here, because these variables still violate the assumption of ANOVA: though these are provided in Appendix 12. Only a variable which shows significance at 0.1 level in an ANOVA test is addressed here. Within the paired questions to corporations, "between groups" with the following profiling predictors, Qs 4, 6, 7, 9, 10 and 11, shows significantly different means; and in the questions for consultancies, "between groups" with the following profiling profiling profiling predictors, Qs 4, 6, 7, 9, 10 and 11, does. In other words, the subgroups Q2, the "number of countries where businesses operate", and Q3, "specialty of consultancy", do not show any significant contrast in the outcome variables (RSQ1). There is no significant contrast between the subsets of outcome variables Qs 13, 15, 19, 22, 23, 34 and 36 within the paired questions to corporations, or Qs 24, 30 and 33 in the questions for consultancies (see the grey-coloured cells in the table in Appendix 11).

After the ANOVA test, a *post-hoc* test is conducted to contrast means with each subgroup. Q6, which has two subsets, is excluded from the *post-hoc* test, because this already informs the contrast between two subgroups in ANOVA.

Q4 Size of consultancy: Only one outcome variable, Q32 "flexible organisational process", shows significant difference between the subgroups. There is no significance in a *post-hoc* test and it is hard to discuss contrast or patterns between subgroups.

Q6 Position of respondent: The "director of department & board member" group considers clients as buoyant in their Q21 "leadership support for DDA" and Q27 "designers working across departments": this group shows a greater mean than that of the junior & senior levels group in Q21 and Q27. But they are not hands-on workers and mostly communicate with someone in a high position at their clients. Thus, since a high position in corporations has a positive evaluation on the attitude to DDA, this perception seems to transfer to the consultancies.

Q7 Typical time frame for brand development: There is one significant contrast. Q26 "working across departments" shows significant difference between the subgroups. "6-12 months vs. over 1 year" shows significance (p<0.1) in a *post-hoc* test and the over 1 year group accounts for a greater mean than that of the 6-12 months group.

Q9 Proportion of exploratory projects: Two outcomes variables show significant contrast.

- Q12 embracing DDA: "Less than 20% vs. 20-40%" shows significance (p<0.05) in a *post-hoc* test and the 20-40% of exploratory projects group accounts for a greater mean than that of the less than 20% group.
- Q21 leadership support for integration of DDA: Despite significance in ANOVA test, there is
 no significance in a *post-hoc* test but a certain pattern is found: the greater the proportion of
 exploratory projects that consultancies have, the better their attitude to undertaking
 exploratory approaches they show.

Accordingly, the consultancies with less than 20% of exploratory projects consider that their clients are not good at employing DDA or offering leadership support for DDA.

- Q17 regarding constraints as challenges: "Less than 40% vs. 40-60%" shows significance (p<0.1) in a *post-hoc* test and the 40-60% of long-term relationships group accounts for a greater mean than that of the less than 40% group. Also "less than 40 vs. over 60%" shows significance (p<0.05) in a *post-hoc* test and the over 60% of long-term relationships group accounts for a greater mean than that of the less than 40% group. The greater the proportion of long-term relationships that consultancies have, the better their attitude to regarding constraints as challenges they show.
- Q20 consideration that design is a core driver: Despite significance in ANOVA test, there is no significance in a *post-hoc* test but the 40-60% group shows a greater mean than that of other subgroups.
- Q21 leadership support for integration of DDA: "Less than 40% vs. 40-60%" shows significance (p<0.05) in a *post-hoc* test and the 40-60% of long-term relationships group accounts for a greater mean than that of the less than 40% group. Also "less than 40 vs. over 60%" shows significance (p<0.1) in a *post-hoc* test and the over 60% of long-term relationships group accounts for a greater mean than that of the less than 40% group. The less than 20% group shows a smaller mean than that of other subgroups.
- Q29 communicating with each other: "Less than 40% vs. 40-60%" shows significance (p<0.1) in a *post-hoc* test and the 40-60% of long-term relationships group accounts for a greater mean than that of the less than 40% group. Also "less than 40 vs. over 60%" shows significance (Tukey HSD Sig. p<0.01, Scheffé Sig. p<0.05) in a *post-hoc* test and the over 60% of long-term relationships group accounts for a greater mean than that of the less than 40% significance (Tukey HSD Sig. p<0.01, Scheffé Sig. p<0.05) in a *post-hoc* test and the over 60% of long-term relationships group accounts for a greater mean than that of the less than 40% group. The greater the proportion of long-term relationships that consultancies have, the better their attitude to communicating with each other they show.
- Q32 educating employees on DDA: "Less than 40% vs. 40-60%" shows significance (p<0.1) in a *post-hoc* test and the 40-60% of long-term relationships group accounts for a greater mean than that of the less than 40% group. The 40-60% of long-term relationships group show a greater mean than other groups.

Qs 17 and 29 show a certain pattern: the greater the proportion of long-term projects that consultancies have, the better their attitude to these outcome variables they show. On the other hand, for Qs 20 and 32, the 40-60% of long-term projects group accounts for the greatest mean. Within Q21, the less than 40% of long-term projects group accounts for the lowest mean. As for these results, consultancies with over 40% of long-term relationships consider that their clients have better attitudes towards utilising the features of DDA, but consultancies with over 60% of long-term relationship show the best attitudes in terms of clients' regarding constraints as challenges and communicating with a consultancy but show poorer attitudes in consideration of design being a core driver and educating employees on DDA.

Q11 Clients' ownership of brand development: Three outcomes variables show significant contrast.

- Q18 adopting a stage-gate process: Despite significance in ANOVA test, there is no significant contrast in a *post-hoc* test but the brand group accounts for the greatest mean amongst the subgroups, except for "all other groups".
- Q27 designers working across departmental boundaries: "Brand manager vs. marketer" shows significance (p<0.05) in a *post-hoc* test and the brand manager group accounts for a greater mean than that of the less than 40% group. Also "Marketer vs. designer & interdisciplinary team" shows significance (Tukey HSD Sig. p<0.05, Scheffé Sig. p<0.1) in a *post-hoc* test and the designer & interdisciplinary team group accounts for a greater mean than that of marketers. The marketers group accounts for the smallest mean amongst the subgroups.
- Q32 educating employees on DDA: "Brand manager vs. marketer" shows significance (Tukey HSD Sig. p<0.05, Scheffé Sig. p<0.1) in a *post-hoc* test and the brand manager group accounts for a greater mean than that of the less than 40% group. While the marketer group accounts for the smallest mean, the brand manager group accounts for the greatest mean amongst the subgroups.

In Q18 and Q32, clients' organisations where brand managers take charge of projects accounts for the highest mean. Consultancies consider that brand development that is managed by a marketer is restrained from utilising DDA.

The summary of paired questions to consultancies can be seen in the following Table 5.11. Qs 13, 15, 19, 22, 23, 34 and 36 – grey-coloured cells – do not have any significant contrast in ANOVA tests. In the consultancies summary of paired questions, there is no significant contrast in the Q5 predictor of ANOVA but there is in the consultancies' analysis.

	Regrouping Indicators	12 embracing DDA	13 using an iterative approach	15 complete all phases of exploratory projects	17 regarding constraints as challenges		19 DDA's contribution at the strategic level	20 consideration that design is a core driver	21 leadership support for integration of DDA	22 management of design impact on BD	23 flexible organisational process	26 working across	27 designers working across	29 communicating with	32 educating employees on	34 creative capability in recruitment	36 evaluation of projects
		DA				DE						со			HR		
Q4	Less than 10														2	ļ	
	10-50														1		
	51-100														3		
	Over 100														4		
Q5	Design department																
	Strategic department, brand valuation & client service department																
	All other groups																
Q6	Junior & senior levels								2				2				
	Director of department & board member								1				1				
Q7	Less than 6 months											2					
	6-12 months											3			<u> </u>		
	Over 1 year											1	1				
Q9	Less than 20%	3							3				1	1	1		
	20-40%	1							2				1	1	1		
	Over 40%	2						· · · · ·	1	1					1		
Q	Less than 40%				3			2	3				1	3	3		
10	40-60%				2			1	1				1	2	1		
	Over 60%				1			3	2					1	2		
Q	Brand manager					1							2		1		
11	Marketer					2							3		3		
	Designer & interdisciplinary team					3							1		2		
	All other groups												1				

Table 5.11 Summary of paired questions to consultancies

Secondly, the questions for consultancies will be discussed:

Q5 Department of respondent: Two outcome variables show significant contrast.

- Q25 understanding clients' policies: "Design department vs. all other groups" shows significance (p<0.1) in a *post-hoc* test and "all other groups" accounts for a greater mean than the design department.
- Q28 "communicating with each other: Despite significance in ANOVA test, there is no contrast in a *post-hoc* test but the strategic department shows a greater mean than the other groups.

Design-related departments account for the lowest mean in Qs 25 and 28. It can be assumed that designers are segregated from the rest of a consultancy's organisation in the guise of credit for creativity.

Q6 Position of respondent: Four outcome variables show significant contrast. The "director of department & board member" group shows a greater mean than that of "junior & senior levels" in Q14 "using an iterative approach", Q16 "undertaking exploratory approach", Q28 "communicating with each other" and Q35 "continuously developing new directions" within consultancies.

Q7 Typical time frame for brand development: Q16 "undertaking exploratory approaches" shows significant difference between the subgroups. "Less than 6 months vs. over 1 year" shows significance (p<0.1) in a *post-hoc* test and the over 1 year group accounts for a greater mean than that of the 6-12 months group.

Q9 Proportion of exploratory projects: Q16 "undertaking exploratory approaches" shows significant difference between the subgroups. "Less than 20% vs. 20-40%" shows significance (p<0.1) in a *post-hoc* test and the 20-40% of exploratory projects group accounts for a greater mean than that of the less than 20% group. In addition "Less than 20% vs. over 40%" shows significance (p<0.01) in a *post-hoc* test and the over 40% of exploratory projects group accounts for a greater mean than that of the less than 20% group. In addition "Less than 20% vs. over 40%" shows significance (p<0.01) in a *post-hoc* test and the over 40% of exploratory projects group accounts for a greater mean than that of the less than 20% group. The greater the proportion of exploratory projects that consultancies have, the better their attitude to undertaking them.

- Q16 undertaking exploratory approaches: "Less than 40% vs. 40-60%" shows significance (p<0.05) in a *post-hoc* test and the 40-60% of long-term relationships group accounts for greater a mean than that of the less than 40% group. Also "less than 40% vs. over 60%" shows significance (p<0.01) in a *post-hoc* test and the over 60% of long-term relationships group accounts for a greater mean than that of the less than 40% the better is found: the greater the proportion of long-term relationships that consultancies have, the better the attitude to undertaking exploratory approaches they have.
- Q28 communicating with each other: "Less than 40% vs. 40-60%" shows significance (p<0.1) in a *post-hoc* test and the 40-60% of long-term relationships group accounts for a greater mean than that of the less than 40% group. Also "less than 40% vs. over 60%" shows significance (p<0.05) in a *post-hoc* test and the over 60% of long-term relationships group accounts for greater mean than that of the less than 40% the best than 40% group. A pattern is found: the greater the proportion of long-term relationships that consultancies have, the better the attitude to communicating with each other in consultancies they have.
- Q31 consultancies as a long-term partner: Less than 40% vs. 40-60%" shows significance (Tukey HSD Sig. p<0.01, Scheffé Sig. p<0.05) in a *post-hoc* test and the 40-60% of long-term relationships group accounts for a greater mean than that of the less than 40% group. Also "less than 40% vs. over 60%" shows significance (Tukey HSD Sig. p<0.05, Scheffé Sig. p<0.1) in a *post-hoc* test and the 40-60% group has a greater mean than that of other groups.

Qs 16, 28 and Q31 show significant contrasts in two subsets in a *post-hoc* test. The lowest proportion group (less than 40%) accounts for the lowest mean from three outcome variables. It indicates that consultancies with more than 40% of long-term partnerships maintain better attitudes to the outcome variables illustrated above. Besides, it can be assumed that accomplishing more than 40% of long-term partnerships entails better utilisation of DDA features.

The summary of questions for consultancies can be seen in the following Table 5.12. Qs 24, 30 and 33 - grey-coloured cells – do not have any significant contrast in ANOVA tests.

	Regrouping Indicators	I				1	10			
		14 using an iterative approach	16 undertaking exploratory approaches	24 tailoring clients' brand development process	25 understanding clients' policy	28 communicating with each other	30 own brand development: process for communication	31 consultancy as a long-term partner	33 educating employees on DDA	35 continuously developing new direction
		DA		СО					HR	
Q4	Less than 10									
	10-50									
	51-100									
	Over 100									
Q5	Design department				3	3				
	Strategic department, brand valuation & client service department				2	1				
	All other groups				1	2				
Q6	Junior & senior levels	2	2			2				2
	Director of department & board member	1	1			1				1
Q7	Less than 6 months		3							
	6-12 months		2							
	Over 1 year		1							
Q9	Less than 20%		3							
	20-40%		2							
	Over 40%		1							
Q10	Less than 40%		3			3		3		
	40-60 %		2			2		1		
	Over 60%		1			1		2		
Q11	Brand manager									
	Marketer									
	Designer & interdisciplinary team									
	All other groups									

5.4.4 Discriminant analysis

Discriminant analysis is subsequent to ANOVA. As mentioned in Chapter 4 (see Subsection 4.5.2.3), ANOVA does not investigate the multivariate relationships which determine the categories (subgroups in profiling), thus conducting discriminant analysis entails a multivariate relationship between predictor subgroups and outcome variables (RSQ1). A stepwise discriminant method was applied to extract the variables which contribute to categorising the groups significantly. A multivariate relationship is not generated in every single profiling question. Only statistical significance for Wilks' Lambda will be illustrated here and detailed tables are provided in Appendix 13.

5.4.4.1 Corporations – Discriminant analysis

Profile questions Qs 2, 5, 6 and 8 can be altered by the extracted predictor variables. There is no extracted feature in the HR theme, so HR features do not determine the profile, but some variables make a moderate contribution to the profile, as illustrated in the ANOVA test. The extracted variables from the predictors (RSQ1) throughout the discriminant function may be interpreted as having a substantial impact on categorising subgroups. Hence, these extracted features can be interpreted as an ignition point for resonance with DDA attitudes

- Q2 Number of countries where businesses operate: Q20 "the management of design impact" (*p*=0.002) and Q16 "adopting a stage-gate process" (*p*=0.001) are extracted and subjected to discriminant analysis. These variables contribute to determining the profile of the subgroups in Q2. One discriminant function is generated: Chi-square test X²(2)=14.349 (*p*=0.001), Wilk's Lambda (Λ)=.679. However, although a stage-gate process is not a way for a design-driven corporation, larger corporations inevitably avoid utilising a stage-gate process due to the bigger size of the organisation.
- **Q5** Position of respondent: Q21 "flexible organisational process" (p=0.008) from the DE theme and Q12 "completing all phases of exploratory projects" (p=0.005) from the DA theme are extracted and subjected to discriminant analysis. These variables contribute to determining the profile of the subgroups for Q5. One discriminant function is generated: Chi-square test $X^2(2)$ =10.715 (p=0.005), Wilk's Lambda (Λ)=.749. It can be assumed that organisations start at these two points in order to decrease the gap between two groups: junior & senior levels and director of department & board member.
- **Q6 Typical time frame:** Q21 "flexible organisational process" from the DE theme is extracted and subjected to discriminant analysis. This contributes to determining the profile of the subgroups of Q6. One discriminant function is generated: Chi-square test: X^2 (2)=13.355 (*p*=0.001), Wilk's Lambda (Λ)=.697. To reduce the time frame may require Q21 flexible organisation pre-emptively.

Q8 Proportion of exploratory projects: Q11 "using an iterative process" (*p*=0.004) and Q23 "designers' engagement with other departments" (*p*=0.001) impact on the proportion of exploratory projects. These variables contribute to determining the profile of the subgroups of Q8. Two discriminant functions are generated: Chi-square test X²(4)=18.617 (*p*=0.001), Wilk's Lambda (Λ)=.600 for function 1 and Chi-square test X²(1)=1.152 (*p*=.283), Wilk's Lambda (Λ)=.969. The *P*-value for discriminant function 2 is not satisfied at p<0.05, so there is no need to extract the discriminant function. Organisations with a strong attitude to employing an iterative process have the chance to utilise more exploratory projects.

In summary, the features extracted in this analysis have to be considered in FMCG brand development with regard to expanding the size of the company, reducing the time frame for brand development and increasing the exploratory proportion to prevent corporations from selling mediocre brands. Especially, the extent of flexibility in an organisation accounts for two gauges of profiles. This may be the cornerstone for attaining corporate institutionalisation and elevating the manner of using DDA. In the summary of discriminant analysis for corporations, Table 5.13 provides the overall results for discriminant corporations analysis.

Independent	Designerly applications	Design endorsement	Collaboration	Human
question (profile of the group)				resources
Q2 Countries where		*Q20 Management of design		
businesses operate		impact		
		Q16 Adopting a stage-gate process		
Q5 Position of	Q12 Completing all	*Q21 Flexible organisational		
respondent	phases of exploratory projects	process		
Q6 Typical time frame		Q21 Flexible organisational		
for BD		process		
Q8 Proportion of	*Q11 Using an iterative		Q23 Designers'	
exploratory	process		engagement with	
approaches			other departments	

 Table 5.13 Summary of discriminant corporations analysis: '*' is more contribution to determining the profile

5.4.4.2 Consultancies – Discriminant analysis

As previously addressed, there are two criteria: paired questions to corporations and questions for the consultancies.

In contrast to the corporations' discriminant analysis results, these results do not show any features in design endorsement themes. These extracted features are consultancies' evaluations of corporations' (clients') attitudes. For some profiling subgroups it is hard to address the contribution to determining the subgroups, but these hint at different perceptions or strong relationships within collaboration with clients. Even though these extracted features may be objective or subjective in terms of a client's attitude, it is still worth discussing them.

- **Q6** Position of respondent: Q27 "designers' engagement with other departments" (p=0.031) from the DE theme and Q34 "creative capability in recruitment" (p=0.009) from the HR theme are extracted and subjected to discriminant analysis. These variables contribute to determining the profile of the subgroups of Q6. One discriminant function is generated: Chi-square test X^2 (2)=9.418 (p=0.009), Wilk's Lambda (Λ)=.731. Strong evaluation for Qs 27 and 34 accounts for a higher position within consultancies.
- Q9 Proportion of explorative projects: Q12 "embracing DDA" (*p*=0.025) is extracted and subjected to discriminant analysis. Q12 contributes to determining the profiles of the subgroups of Q9. One discriminant function is generated: Chi-square test X²(2)=7.340 (*p*=0.025), Wilk's Lambda (Λ)=.783. This indicates that a corporation's strong attitude to embracing DDA, amongst the other features of DDA, tends to work with consultancies which have a willingness and capability to exploit exploratory projects.
- Q10 Long-term partnerships: Q29 "communication with consultancies" (p=0.010) is extracted and subjected to discriminant analysis. Q29 contributes to determining the profiles of the subgroups of Q10. One discriminant function is generated: Chi-square test X²(2)=9.237 (p=0.010), Wilk's Lambda (Λ)=.735.
- Q11 Ownership of projects: Q27 "designers' engagement with other departments" (p=0.011) is extracted. Q27 contributes to determining the profiles of the subgroups of Q11. One discriminant function is generated: Chi-square test X²(3)=11.190 (p=0.011), Wilk's Lambda (Λ)=.684.

Summarising the paired questions to corporations, Table 5.14 illustrates the extracted variables that determine the subgroups of profiling. Q27 "designers' engagement with other departments"

determines the categorisation of different positions in consultancies and clients' ownership of brand development. Hence, it can be interpreted that, overall, consultancies consider that design-related people's ownership in the client's organisation enhances designers' engagement, but hands-on workers in consultancies think their clients do not appreciate designers' engagement. Besides, a high proportion of exploratory approaches and long-term partnerships determines attitudes towards "embracing DDA and communication with consultancies". These variables extracted by discriminant analysis need to be considered in order to increase the proportion of long-term partnerships or influence the undertaking of DDA approaches. Therefore, corporations consider these variables to enhance exploratory approaches and long-term relationship with consultancies.

Table 5.14 Summary of paired questions to corporations: '*' means more contribution to determining the profile

Independent question (profile of the group)	Designerly applications	Design endorsement	Collaboration	Human resources
Q6 Position of respondent			*Q27 Designers engagement with other departments	Q34 Consideration of creative capability in recruitment
Q9 Proportion of	Q12 Embracing			
exploratory approaches	DDA			
Q10 Proportion of long-			Q29 Communication with	
term partnerships			consultancies	
Q11 Ownership of brand			Q27 Designers	
development			engagement with other	
			departments	

The next summary discusses the questions to the consultancies.

- Q6 Position of respondent: Q16 "clients' allowance for undertaking exploratory approaches" (p=0.011) is extracted and subjected to discriminant analysis. This variable contributes to determining the profile of the subgroups of Q6. One discriminant function is generated: Chisquare test X²(1)=6.463 (p=0.011), Wilk's Lambda (Λ)=.809.
- **Q9 Proportion of exploratory projects:** Q16 "clients' allowance for undertaking exploratory approaches" (p=0.005) is extracted and subjected to discriminant analysis. This variable contributes to determining the profile of the subgroups of Q16. One discriminant function is generated: Chi-square test $X^2(2)$ =10.652 (p=0.005), Wilk's Lambda (Λ)=.701.
- Q10 Proportion of long-term relationships: Q16 "clients' allowance undertaking exploratory approaches" (p=0.003) and Q31 "consultancy as a long-term partner" (p=0.001) are extracted and subjected to discriminant analysis. These variables (Qs 16 and 31) contribute to

determining the profiles of the subgroups of Q10. Two discriminant functions are generated: Chi-square test $X^2(4)=19.618$ (p=0.001), Wilk's Lambda (Λ)=.514 for function 1 and Chi-square test $X^2(1)=1.791$ (p=.181), Wilk's Lambda (Λ)=.941 for function 2. The *P*-value for discriminant function 2 is not satisfied at p<0.05 so there is no need to extract the discriminant function.

Q11 Ownership of brand development: Q31 "client's consideration of a consultancy as a long-term partner" (*p*=0.015) is extracted and subjected to discriminant analysis. This contributes to determining the profile of the subgroups of Q11. One discriminant function is generated: Chi-square test X²(3)=10.522 (*p*=0.015), Wilk's Lambda (Λ)=.700.

Overall, only two variables – Q16 "client's allowance for undertaking exploratory approaches" and Q31 "client's consideration of a consultancy as a long-term partner" – make a strong contribution to equivalent profiling questions. Summarising the consultancies, the extracted variables in the consultancies analysis may be regarded as features enhancing the collaboration with corporations. Above all, it can be assumed that ways of undertaking approaches in consultancies are a substantial feature that elevates the proportion of exploratory approaches and long-term partnerships. Therefore, consultancies seek to underpin DDA approaches in order to utilise exploratory approaches and enhance their credibility with clients (long-term relationship) through projects.

Independent question (profile of the group)	Designerly applications	Collaboration	Human resources
Q6 Position of respondent	Q16 Undertaking explorative approaches		
Q9 Proportion of exploratory approaches	Q16 Undertaking explorative approaches		
Q10 Proportion of long- term partnerships	*Q16 Undertaking explorative approaches	Q31 Consultancy as a long- term partner	
Q11 Ownership of brand development		Q31 Consultancy as a long- term partner	

profile	Table 5.15 Summary of questi	ons for consultancies: "	*' means more contribu	tion to determining the
	profile			

To sum up, these analyses – corporations and consultancies – were conducted separately: however, these extracted variables needs to be considered as an important commitment to manage a certain proportion of exploratory approaches and long-term relationships in both corporations and consultancies: e.g. flexible organisational process, undertaking an iterative process, undertaking an exploratory process, etc. These might relate to determining organisational types and characteristics. Also, through these analyses, design management strongly relates to the size of an organisation:

bigger corporations draws more on design management impact. This variable might be arguable, i.e. whether a certain size of organisation enables utilising design management or design management to helps the organisation grow. Nevertheless, it can be interpreted in two ways: first, within bigger corporations, literally, the role of design management is important; and secondly, design management influences corporate growth. From either the first or second interpretation, this finding suggests that corporations need to establish their own design management and increase its impact.

Above all, as mentioned at the beginning of this subsection, these extracted features need to be considered in order to take action and initiate change towards DDA.

5.5 Data analysis of categorical scale questions 1: CSQ1

Categorical scale data 1 seek to find what features are employed to exploit DDA within the FMCG industry. In this section, as mentioned previously, due to the type of question scale, descriptive analysis, frequency and N-way tables will be used to discuss what features are utilised to exploit DDA in the FMCG industry, between corporations and consultancies, and depending on subgroups from the profiling.

All the indicators in the CSQ1 (Qs 28-37 for corporations and Qs 37-48 for consultancies) are driven by the selected literature analysis and respondents are asked to select three indicators for each variable. Thus, any indicators that respondents select adhere to the variables to find out what methods are employed or needed and what factors influence brand development.

5.5.1 Descriptive analysis and frequency tables for comparison between corporations and consultancies

This subsection intends to identify: 1) how FMCG industries utilise DDA and 2) simultaneously what features are different between corporations and consultancies, because the types of questions scales – for categorical scale questions – are unable to use a T-test and the same frequency tables are used to fulfil the above intentions. Thus, the first indicators which are ranked as high or low frequency are indicated afterwards; indicators which account for over 10% of the variance between the two datasets - in bold type - are explained in Appendix 14. Within CSQ1, frequency is based on the percentage of each number of participants from corporations and consultancies.

Q28/Q37 Design methods in brand development (DA): First, the indicators selected most frequently might be considered classic customer-/consumer-driven methods – in some instances referred to as designerly, e.g.: customers acting as a trigger for brand development; brainstorming for ideas; consumer-journey mapping. Indicators selected less often reflect what design research currently finds to be ways of exploiting designerly activity. For instance prototyping, claimed to be an important designerly approach (Brown, 2009), is not rated highly.

Secondly, four indicators show over 10% of difference between corporations and consultancies: visualisation; open-end process; iterative process; cultural probes. Visualisation shows the greatest difference (35.2%) and consultancies' scores are higher than those for corporations. Although "visualisation" – concept visualisation (Fraser, 2009) or visual practice (Kimbell, 2009b) – enables the instigation of designerly approaches, this might be a critical approach by consultancies in brand development, rather than prototyping. On the other hand, the other methods – open-end process and iterative process – are drawn on more by corporations than consultancies. As illustrated in Table 5.9 (T-test), since consultancies are not involved in the entire brand development process, it can be assumed that consultancies might have a preordained project and so these methods are rarely

Q29/Q38 Approaches to exploratory brand development (DA): First, highly rated indicators relating to direct feasibility and the possibility of impacting on tangible outcomes are: emphasis on finding a new direction for brands; challenging constraints; responding to new technology; responding to new trends. The idea of encouraging mindsets – of organisational culture or of employees (stakeholders) – toward conducting exploratory projects scored lower. For example, the idea that there is value in self-confidence and curiosity within a project did not score highly. Feasibility and the possibility of delivering tangibles are regarded as a determinate feature to conduct exploratory approaches. They are not interested in enhancing mindsets to undertake exploratory projects. This can be interpreted in two ways: 1) mindsets for exploratory projects are already fixed, and 2) without cultivating prerequisite mindsets, approaches for exploratory projects are utilised.

Secondly, three indicators show over 10% difference between corporations and consultancies: iterative process; challenge constraints; responsive to new trends. An "iterative process" (20%) shows the biggest difference and there is no one who draws on this indicator. Along with this, respondents in corporations draw more on "challenge constraints". These findings imply that consultancies might be more restricted to utilising these indicators when conducting exploratory brand development. On the other hand, respondents in corporations draw less on "responsive to new trends".

Q30/Q39 Approaches to design integration at the strategic level (DE): First, highly-rated indicators relate to a fundamental need for an attitude change to viewing design integration before taking specific action: perception that design can create value; view design as an investment not a cost; balance between design and business. In other words, other indications which are drawn on less are about actionable triggers for design integration: risk-taking for new approaches; pride in your organisational culture of design; employees' willingness to embrace DDA.

Secondly, four indicators show over 10% difference between corporations and consultancies: legitimate commitment to design; employees' willingness to embrace DDA; view design as investment not a cost; visionary leadership. Amongst them, "view design as investment not a cost" shows the biggest difference (17.1%). While corporations draw more on "legitimate commitment to design" and "employees' willingness to embrace DDA", consultancies draw more on "view design as investment not a cost" and "visionary leadership of design". This implies that consultancies are more concerned about limited design investment and lack of visionary leadership of design than indicators which ignite design's integration with the client's organisation.

Q31/Q40 Approaches for designers to collaborate with other departments (CO): First, highly-rated indicators include features that are physical and/or environmental (i.e. co-location, multidisciplinary teams, and so on) rather than initiative features which trigger collaboration, for instance, a motivational mindset (i.e. trust each other and confidence in own discipline, and so on) in corporations.

Secondly, four indicators show over 10% of difference between corporations and consultancies: foster free flow of ideas; co-location; multi disciplinary team. Amongst them, "foster free flow of ideas"

shows significant difference (33% difference gap). Consultancies regard fluid and flexible ideas generation as an important aspect of collaboration, rather than interaction between different disciplines. It can be interpreted that corporations elicit features which do not influence existing organisations.

Q32/Q41 Human resources (HR): First, financial incentives, an open workspace and empowering design performance are not regarded as important factors for enhancing employees' creativity in either corporations or consultancies. Highly-rated indicators need to be interrogated in a N-way table in order to find whether there is any difference between disciplines: design and business departments. The low-rated indicators imply that the FMCG industry does not consider DDA transfer via projects.

Secondly, one indicator shows over 10% of difference between corporations and consultancies; only "financial incentives" shows over 10% of difference (12.6%) and corporations draw more on it. It can be presumed that due to the profiling of corporations (52.5% of them work in marketing departments), people from business disciplines tend to be motivated by financial rewards.

Q33/43 Necessary mode of thinking and Q34/44 Necessary mode of thinking for exploratory

projects: First, within Q33/43, the indicators selected most frequently might be considered as a mode of thinking which combines two (or more) different modes of thinking: holistic and integrated thinking. Also, analytical thinking is still highly rated by both corporations and consultancies. Abductive thinking and parallel thinking, which are regarded as a substantial thinking mode in design thinking, are not considered in the FMCG industry. In terms of Q34/44, the modes of integrated and holistic thinking are also drawn on. However, interestingly, while corporations indicated collaboration – consumer insights/interaction, etc., consultancies emphasised research ways – interactive workshops, out of box thinking, etc.

Secondly, within Q33/Q43, seven indicators show 10% of difference and "holistic thinking" shows the biggest difference (25.9%). "Visual thinking" also shows a big difference (18.5%). Although both groups – corporations and consultancies – draw highly on theses modes, comparatively, corporations draw more on such indicators. It can be interpreted that, due to the disadvantage of organisational

modularity, corporations call more for holistic thinking to overcome such disadvantages. In a similar way, visual thinking can be understood to change an existing organisational context controlled by business disciplines: initiating designerly ways. Within Q34/Q44, four indicators below show more than 10% of difference. Amongst them, "integrated thinking" accounts for the biggest difference (18.2%). "Holistic thinking" also shows a big difference (14.8%). While corporations draw more on integrated thinking, consultancies draw more on holistic thinking as a necessary mode of thinking for exploratory projects. Both indicators pinpoint towards an integrative attitude to desegregating actions, processes and stakeholders. Thus, it can be assumed that the FMCG industry emphasises integrated ways – congruous ways which do not replace an existing ways – rather than designerly thinking for exploratory approaches.

Q35/Q45 Factors to terminate exploratory projects (DE): First, the indicators which are highly ranked are assumed to be typical in both corporations and consultancies: market change, lack of project funding and uncertainty of outcome. On the other hand, "project never terminated" and "team composition" are rated low. The indicators ranked highly are regarded as typical challenges to be overcome to undertake exploratory projects.

Secondly, five indicators show more than 10% of difference and, amongst them, "uncertainty of outcome" accounts for the biggest gap (26.7%). Including this indicator, consultancies draw more on indicators – senior member resigning from a project and lack of infrastructure of organisation – which relate to endurance of uncertainty and investment. This difference implies that from a consultancies' aspect, this might be regarded as a lack of consistency for a project and fundamental investment for project deployment.

Q36/Q46 Results from external collaboration (CO): First, corporations draw more on indicators which are generated through collaboration at the operational level: new concepts of products and special skills for undertaking projects. Both corporations and consultancies do not elaborate indicators from strategic collaboration, e.g. initiatives to transform organisational strategy and new directions of brand development, but they consider drawing highly on "partnership".

Secondly, four indicators show more than 10% of difference and amongst them, "new concepts for brands" accounts for the biggest gap (29.7%), which consultancies draw more on, rather than "new concepts for products". As indicated in Subsection 5.3.2, since 60.6% of consultancy respondents account for branding consultancies, this result might be predictable. However, this implies that branding consultancies are rarely involved in or execute product development which can be appreciated as being a part of brand development within a concept of holistic/integrated branding.

Q37/Q47 Situation when undertaking external collaboration (CO): First, this variable shows a similar result to Q36/Q46. Both corporations and consultancies draw more on indicators of external collaboration to operate a project due to a lack of special expertise and internal skills, and insufficient time. Secondly, two indicators – sufficient time and lack of internal skills – show more than 10% of difference, but the ratio of difference is not big.

The following are only for consultancies, so there is no comparison between corporations and consultancies. However, the two variables below focus on collaboration with clients.

Q42 Approaches when consultancies collaborate with clients (CO): Consultancies are keen on developing methods to communicate with their clients. However, prototyping still falls into the lowranked group. It can be interpreted that visualisation may be more considered than prototyping in FMCG brand development. Also, this relates to consultancy profiling and the Q36/Q46 finding: branding consultancies rarely manage the product development phase.

Q48 Barriers when collaborating with clients (CO): The indicators highly ranked come down to clients' lack of design understanding, funding to invest and clients' bureaucratic structure, which are fundamental and substantial supports to fulfil DDA.

In summary of CSQ1, the features that fall into the highly-rated category for corporations show actionable or myopic approaches which directly or rapidly impact on the development of a product or brand: an emphasis on finding new direction(s) for brands or products. Indicators that encourage a design-driven culture or day-to-day motivational mindsets toward DDA (for example, employing . curiosity as part of projects) are rated lower. Besides, the findings show that the FMCG industry relies

heavily on consumers/customers. Unfortunately, while consumers can trigger ideas generation they are not so helpful in developing breakthrough products or brands (Beverland, 2010; Verganti, 2009). This implies that the FMCG industry is deemed to confine them to developing status-quo/incremental products or brands.

Especially for corporations, the indicators that score more highly describe very conceptual but conventional approaches (e.g. "design can create value" and "using brainstorming"), rather than explicit or specific approaches such as visualisation and prototyping. In addition, results from the CSQ1 analysis indicate that some DDAs (e.g. prototyping, open-end processes, personas, etc.) are not reported by respondents from either corporations or consultancies as being central to FMCG brand development. It is interesting to note that prototyping does not fall into the highly-ranked group for either corporations or consultancies; but visualization is mentioned often by consultancy respondents. This indicates that prototyping and visualisation methods — making an idea visible and tangible, as described in design research (e.g. Brown, Martin, Berger, etc.) — are rarely used in the FMCG industry, or only occur during external collaboration with consultancies.

Regarding the mode of thinking, rather than employing "designerly thinking" (e.g. abductive or intuitive thinking), corporations and consultancies draw more on holistic or integrated thinking, though a blend of diverse modes of thinking can vary depending on the corporation's values and mission (e.g. design, sales, efficiency, etc.). Thus, it is important to define how the FMCG industry embraces designerly thinking and then fabricates diverse modes of thinking. However, by associating with another highly-ranked indicator, analytical thinking, it can be assumed that the other two highly-ranked indicator.

Briefly, regarding the results of the comparison between corporations and consultancies, corporations account for variables that facilitate the growth of brands or the company directly. On the other hand, consultancies elicit more value in the variables for flexible ideas generation and ideas fulfilment. However, both corporations and consultancies draw less on variables for action in DDA exploitation or attitudes which motivate employees to be ready for DDA as the foundation of a culture within the FMCG industry. Interestingly, visualisation, iterative process and foster free flow of ideas show bigger

gaps (over 20%) between corporations and consultancies. These indicators are frequently claimed to be substantial constituents of attaining DDA culture.

Synthesising two findings from a descriptive analysis and a comparison between corporations and consultancies, the FMCG industry is deemed to draw more on actionable and myopic approaches, rather than on design-led (designerly) applications/methods. On top of that, corporations show more this propensity more and rarely consider the following DDA approaches: visualisation, an iterative process or fostering the free flow of ideas – which are emphasised in the literature review.

5.5.2 N-way table: CSQ1

An N-way table is useful for identifying the relationship between two categorical variables: profiling questions and CSQ1. Throughout the N-way table, this analysis helps to understand the similarities and contrasts between bivariate variables like the intention to do ANOVA analysis. Since an N-way table does not provide statistical significance (*p*-value, etc.), arbitrary parameters are applied in each of CSQ1. The ways of responding to the variables alter the parameters of CSQ1. Since the variables in CSQ1 are chosen to select three applicable indicators, the gaps in variables' frequencies depending on the profiling subgroups are examined with the parameters, the 33.3% frequency gap between the subgroups within CSQ1. However, instead of illustrating each CSQ1 variable depending on the profiling subgroups, in another way, each profiling subgroup's characteristics identified from the N-way table are summarised. In addition, the subgroups with low respondents, under five, are excluded from identifying difference.

5.5.2.1 Corporations: N-way table

Summarising corporations' N-way tables, higher values in subgroups' contrasts can be interpreted in two ways: 1) respondents' organisations do not employ these features literally so that they demand them; 2) their organisations truly employ these features. Regardless of this, a high value for a subgroup's contrast can be asserted as important current considerations. The table in Appendix 15 displays the profiling characteristics corresponding to the indicators' contrast by synthesising each of

the CSQ variables' analyses in Appendix 16. These profiling characteristics are explained in the following:

- Q2 By size of corporation (number of countries in which businesses operate): This profiling does not have a strong impact on employing DDA features. Smaller-size corporations (operating business in up to 10 countries) draw more on "iterative processes" for DDA employment (Q28), "lack of special expertise" and "insufficient time" for situation of for collaboration (Q37) than larger-size corporations (over 10 countries). It may be obvious that small corporations tend to have a less rigid structure and insufficient infrastructure. Larger-size corporations draw more on holistic thinking for a necessary mode of thinking.
- Q4 By department of respondent (discipline): The contrasts of indicators' variables inform different mindsets between design and business disciplines. Business disciplines draw more on "challenging constraints" for exploratory brand development (Q29), "view design as investment not a cost" and "balance between design and business" at the strategic level (Q30), "open debate" for designers' collaboration (Q31) and "new concepts for products" for situation for the collaboration (Q37). On the other hand, design disciplines draw on more "mutual interaction" for designers' collaboration (Q31) and "visual thinking" for a necessary mode of thinking (Q33). Thus, it can be interpreted that business discipline calls for authority in design utilisation and takes account of developing visible final output. In particular, to cultivate DDA features, it is necessary to resonate indicators for business disciplines to understand DDA features.

- Q5 By position of respondent: This profile shows only two contrasts. A higher position draws on more "new concept of brands" from the result for external collaboration (Q36) and "lack of internal skills" in terms of external collaboration (Q37) than a lower position.
- Q6 By brand development time frame: A time frame of less than 12 months draws more on: "iterative processes" for DDA methods (Q28); "fostering the free flowing of ideas" for designers collaboration (Q31); "empower design performance" for enhancing employees' creativity (Q32); "visual thinking and integrative thinking" for a necessary mode of thinking (Q33); "lack of infrastructure of an organisation" to terminate exploratory projects (Q35); "new concepts for brands" from the results of external collaboration (Q36); "insufficient time, lack of facilities and facing a new business climate" in situations for external collaboration (Q37). A 1-2 years time frame draws more on: "prototyping" for DDA methods (Q28) and "market change" for factors to terminate exploratory projects (Q35), but less on "lack of ideas for projects" in the situations for external collaboration (Q37). A time frame of over 1 year draws more on "being responsive to new trends" for exploratory brand development (Q29) and "systematic thinking" for a necessary mode of thinking (Q33). A time frame of up to 2 years draws more on "view design as an investment not a cost" for exploratory brand development (Q29), "open debate" for designers' collaboration (Q31) and "slow progress" to terminate exploratory projects (Q35). A time frame of over 2 years draws more on "iterative process" for DDA methods (Q28), like a time frame of less than 12months draws on, and "new climate change and lack of ideas for projects" for the situation for external collaboration (Q37). The features within the less than 12 months group are close to the results for smaller-size corporations employing DDA, especially in regard to the situation for external collaboration.
- Q8 By proportion of exploratory projects: Less than 20% draws more on "respect for other disciplines" for designers' collaboration (Q31), "lack of funding" to terminate exploratory projects (Q35), "lack of special expertise and insufficient time" in situations for external collaboration (Q37); 20-40% draws more on "financial incentives" for enhancing creativity" for enhancing employees' creativity (Q32), "analytical thinking" for a necessary mode of thinking (Q33), "corporate policy" for the situation for external collaboration and

"uncertainty of outcomes" for factors to terminate exploratory projects (Q35), but draws less on "lack of funding" in Q35; **20% or more** draws more on "balance between design and business" for design integration at the strategic level (Q30); **up to 40%** draws more on "being responsive to new trends" for exploratory brand development (Q29), "mutual interaction" for designers' collaboration (Q31), "interdisciplinary collaboration" for enhancing employees' creativity (Q32), and "intuitive thinking" for a necessary mode of thinking (Q33); **over 40%** draws more on "prototyping" for DDA methods (Q28), "view design as an investment not a cost" for exploratory brand development (Q29), "mutual interaction" for designers' collaboration (Q31), "lack of facilities" in situations for external collaboration (Q36) and "slow progress of projects" to terminate exploratory projects (Q35), but draws less on "uncertainty of outcomes" for Q35. In corporations with less than 20% of exploratory projects, the organisation is beginning or recognising to employ DDA features. Organisations with 20% or more are starting to cultivate DDA features. Hence, it can be interpreted that corporations with at least 20% have a basic ground for utilising DDA features.

Q9 By ownership of brand development: Brand managers draw more on "visionary leadership" for design integration at the strategic level (Q30), "interdisciplinary collaboration" for enhancing employees' creativity (Q32) and "lack of internal skills and corporate policy" in situations for external collaboration (Q37); Ownership of marketers draws more on "responsive to new technology" for exploratory brand development (Q29), "legitimate commitment to design and visionary leadership" for design integration at the strategic level (Q30), "inspiring workspace" for enhancing employees' creativity (Q32), "analytical thinking and systematic thinking" for necessary mode of thinking (Q33), "slow progress of project development" to terminate exploratory projects (Q35) and "lack of special expertise for situation" for external collaboration (Q37); Designer & interdisciplinary team draws more on "out of box thinking" for DDA methods (Q28), "iterative process" for exploratory brand development (Q29), "perception that design can create value" for design integration at the strategic level (Q30), "interdisciplinary collaboration" for enhancing employees' creativity (Q32), "holistic thinking, analytical thinking and visual thinking" for a necessary mode of thinking (Q33) and "new concepts for brands" from the results of external collaboration

(Q46). It can be asserted that the brand managers group shows an intermediate characteristic between marketers and designers.

The indicators which a subgroup of profiling draw more on in corporations CSQ1 variables simultaneously indicate opposite results to the other subgroups, e.g. if the brand managers group draws more on visualisation for design methods, this implies that the other subgroups that draw less draw on this indicator. The findings of each variable (profiling questions: a certain context) indicate a certain tendency for DDA applications (one of the DDA themes). Hence, a certain pattern of utilising DDA applications depending on the context – profiling questions – is explicated in Subsection 5.7.1 as corresponding to Proposition 1 by synthesising with an ANOVA test (Subsection 5.4.3.1).

5.5.2.2 Consultancies: N-way table

Most questions are paired to those of corporations, and Qs 42 and 48 are questions only for consultancies' performance. The consultancies N-way table process is the same as the previous corporations one and respondents who account for "if not in the list" will not be counted when identifying the contrasts between subgroups. Since subgroups' values are too small to compare – only one subgroup has enough value to compare – Q3 will be excluded from the discussion here. Another exceptional situation occurs when analysing the variables in Qs 2, 4 and 11. Q2 will be addressed when contrasts arise between "2-10 countries" and "over 10 countries", and it is assumed that the "one country" group is regarded as part of "2-10 countries". In Q4, the "51-100" (n=5) group is regarded as part of a sequence, with the assumption that the size of consultancies relates to the influence of variables. In Q11, only the contrast between brand managers and marketers will be discussed. N-way tables for the questions are provided in Appendix 18.

The N-way table for consultancies' CSQ1 can suggest some criteria for consultancies' style and their perceptions of clients. However, the criteria for consultancies are less significant than those for corporations, because the nature of consultancies is to carry out projects without any bias over the size of corporations. Moreover, this is the overall impression they give to their clients, so a less meaningful pattern is found. In terms of the paired questions to corporations' CSQ, subgroups'

characteristics of profiling are narratively delineated and the detailed contrasts are described in Appendix 17.

First, the paired questions to corporations' CSQ1 are reported:

- Q2 Size of consultancies (number of businesses): Corporations which collaborate with consultancies with up to 10 businesses partially utilise DDA features at the operational level, but recognise organisational support (e.g. view design as investment not a cost for exploratory brand development (Q38) and visionary leadership for design for integration at the strategic level (Q39)). In contrast, the corporations that collaborate with consultancies with over 10 businesses have started employing DDA dynamically and call for external alliances as partnerships in initiatives to transform organisational strategy.
- **Q4 Size of consultancies (number of employees):** As noted above, "51-100" is small so the results make it hard to describe the characteristics of this subgroup, but, this group is perceived as an interval of another subgroup sequence. Thus this subgroup needs some arbitrary interpretation, depending on where it is situated. "50" as the number of employees here is one criterion to identify the types of consultancies.

Consultancies with **up to 50 employees** perceive, comparatively, that their clients have not yet started embedding DDA methods, and their lack of infrastructure does not enable the fulfilling of exploratory projects (e.g. sufficient budget, lack of special skills, etc. for external collaboration (Q47)). Hence, consultancies think clients need certain features to ignite DDA features (such as visionary leadership (Q39)): to convince clients about what DDA methods draw out (e.g. visualisation); to encourage employees to experience or employ DDA methods (e.g. foster the free flow of ideas for designers' collaboration (Q40)); empower design performance to enhance employees' creativity (Q41)).

In contrast, consultancies with **over 50 employees** perceive that their clients have started applying DDA: they draw more on actions or mindsets for DDA collaboration (open debate for designers' collaboration (Q40), inspiring workspace for enhancing employees' creativity (Q41), etc.) but encounter difficulties in integrating DDA into the entire organisation (e.g.

finding a balance between design and business for design integration at the strategic level (Q39), integrated thinking for necessary mode of thinking (Q43), etc.).

The size of consultancies influences approaches to collaboration with clients: smaller consultancies work with clients who recognise DDA but have not started taking actions for DDA integration at the strategic level, but larger consultancies are deemed to work with clients with better exploitation of DDA.

- Q5 Department of respondent: The respondents from design departments consider that
 their clients employ "visualisation" as a DDA method (Q38), see "a new concept for brands"
 as using DDA in more than strategic departments (Q46), and tend to consider that their
 clients utilise collaboration because of "corporate policy" (Q47). Also, they think clients need
 to view design as an investment not a cost for design integration at the strategic level (Q39).
 Strategic departments note that their clients utilise more abductive thinking and intuitive
 thinking (Q43) than design departments, so respondents from strategic departments
 appraise these more as necessary modes of thinking. Furthermore, what they draw more on
 is an attitude which influences organisational actions (e.g. hire creative people to enhance
 employee's creativity (Q41), respect for other disciplines for designers' collaboration (Q40),
 etc.).
- Q6 Position of respondent: The lower level group, who are at hands-on working level, criticises clients' uncertainty over outcomes and call for holistic thinking as clients' necessary mode of thinking (Q43). These indicators can be interpreted as difficulties which respondents at working-level encounter during collaboration.
- Q7 Typical time frame for brand development: There are four subgroups but two higher interval indicators are excluded due to low values. Two subgroups – less than 6 months and 6-12 months – are applied to identify contrasts. Consultancies with less than 6 months consider that their clients are deemed to "empower design performance" to enhance employees' creativity (Q41), "trust each other disciplines" for designers' collaboration (Q40), collaborate with external partners for "new concepts of products" (Q46) and criticise clients who terminate exploratory projects due to "slow progress" in project development (Q45). On the other hand, consultancies with 6-12 months consider that clients account more for "a

multidisciplinary team and co-location" for designers' collaboration (Q40), "holistic thinking" more as a necessary way of thinking (Q43), "partnerships and new concepts of products" for external collaboration (Q46). Thus, it might be assumed that consultancies with less than 6 months time frame consider that their clients seek to involve design or designers in brand development within a long-term strategic design plan.

- Q9 Proportion of exploratory projects: Consultancies with less than 20% of exploratory projects consider that clients account more for the brainstorming of ideas (Q37), "challenging constraints" on exploratory projects (Q38) and "lack of infrastructure" to terminate exploratory projects (Q45). Consultancies with 20-40% of exploratory projects consider that clients take "customer's act as a trigger" for brand development (Q37), contextual mapping (Q37), systematic thinking (Q43), etc. Consultancies with over 40% of exploratory projects consider that their clients call for more DDA integration, such as visualisation (Q37), being responsive to new technology (Q38), having confidence in your own discipline (Q39), new concepts of brands for external collaboration (Q46), etc. It can be assumed that consultancies with less than 20% of exploratory projects have more chances to work with clients who adhere to classical approaches.
- Q10 Proportion of long-term relationships: 40% or 60% as a proportion is a yardstick to categorise the indicators. Consultancies with less than 40% of long-term relationships point to "challenging constraints" on exploratory brand development (Q39), an "inspiring workplace" to enhance employees' creativity (Q41) and "lack of understanding of projects" for external collaboration (Q47). Consultancies with 40% or more long-term relationships point to an emphasis on "customer's act as a trigger" for design methods (Q37) and the "slow progress of project" to terminate exploratory projects (Q45) but draw less on constraints challenging exploratory brand development (Q39). Consultancies with up to 60% of long-term relationships point to "analytical thinking" as a necessary mode of thinking (Q43), and consultancies with over 60% of long-term relationships point to "a lack of internal skills and corporate policy" in situations of external collaboration (Q47). Thus, it can be assumed that consultancies with at least 40% of long-term relationships draw on designerly application methods, but consultancies with a proportion of over 60% work with clients who do not have

internal skills; clients do not have internal infrastructure due to corporate policy or being start-up corporations.

Q11 Ownership of brand development: By working with a brand manager, consultancies draw on "customer's act as a trigger" for brand development (Q37), open debate (Q40), empower design performance (Q41), new concepts for brands (Q46), etc. as DDA features for clients' organisations. In contrast, by working with a marketer, consultancies draw more on responsive new trends (Q38), trust each other (Q40), have an inspiring workspace (Q41), financial incentives (Q41), special skills for understanding projects (Q47), etc. From the findings, it can be interpreted that a brand manager understands designerly approaches more and consultancies are asked to utilise design briefs and to audit brand development tools.

Overall, larger-size consultancies with a larger proportion of exploratory projects and more long-term relationships seem to work with clients that have more capability to utilise DDA features. It can be interpreted that better DDA integration by consultancies is pertinent to better corporate performance of DDA. However, over 60% of long-term relationships sometimes restrict DDA features, challenging constraints, so that consultancies with over 60% of long-term relationships try to avoid integrating routine jobs in a partnership.

Next, CSQ only for consultancies (Qs 42 and 48) are more applicable results in terms of collaboration by the subgroups.

Summarising Q42 approaches when consultancies collaborate with clients: Qs 4, 7, 10 and 11 have an impact on consultancies' approaches to collaboration. Except for Q4, the other profile questions are determined not only by consultancies' willingness but also by their clients' style. Hence, it can be interpreted that the profiling questions are determined by the interaction between clients and consultancies. Consultancies which collaborate with a brand manager call for more "regular meetings, manifest design briefs and auditing clients' brand performance", but consultancies with a marketer call for "proprietary development tools and contextual mapping". It can be assumed that a brand manager has a better understanding of the design process. Larger-size consultancies call for a "manifest design brief and regular meetings". **The consultancies with a longer time frame** for brand development call for a "manifest design brief and auditing clients' brand performance"; on the other hand, consultancies with a shorter time frame use "visualisation and prototyping". The indicators in a longer time frame are the same as the ones for consultancies with over 60% of long-term relationships. It can be inferred that more long-term relationships results in a longer time frame for brand development.

Summarising Q48 barriers when collaborating with clients: It is obviously addressed that a design department points to a "lack of undertaking design" and that a strategic department points to "funding to invest" as barriers to collaboration. Larger-size consultancies point to a "lack of undertaking design", smaller-size consultancies point to a "sales-driven model and lack of communication between consultancies and client". Consultancies with over 60% of long-term relationships point to a "lack of undertaking design" and consultancies with a proportion of less than 60% of long-term relationships point to "funding to invest". The "junior & senior levels" and "marketer" groups point to more "clients' bureaucracy".

Briefly, it can be inferred that larger-size consultancies utilise formal DDA methods to work with corporations, such as manifest design brief, regular meetings, etc. Especially, since consultancies with a time frame of less than 6 months draw more on prototyping and visualisation, it is necessary to clarify whether the difference in time frame relates to the size of corporations. In addition, the definition of prototyping needs to be explicated. Sine consultancies with a time frame of less than 6 months and less than 40% of long-term partnerships draw more on prototyping indicators, inferring from the results, prototyping is not applied for ideas generation or sharing but as approval of their delivery from key decision-makers.

To sum up for consultancies CSQ1, except for Qs 42 and 48, consultancies' opinions of variables are similar to those of corporations. Above all, from these N-way tables, the consultancies' characteristics can be categorised depending on the size of their organisation, their pursuit of DDA (the extent of exploratory approaches) and the extent of long-term relations. A certain pattern of utilising DDA

applications depending on the context – profiling questions – is explicated in Subsection 5.7.2 as corresponding to Proposition 2 by synthesising with an ANOVA test (Subsection 5.4.3.2).

5.6 Data analysis of categorical scale questions 2: CSQ2

Categorical scale data 2 – Q38-Q44 for corporations and Q37-Q48 for consultancies – seek to find in which stage DDA is employed within the brand development process within the FMCG industry. Descriptive analysis, a frequency table and an N-way table are used here.

5.6.1 Descriptive analysis and frequency tables for comparison between corporations and consultancies

This subsection intends to identify: 1) DDA involvement in the brand development process and 2) what features are different between corporations and consultancies amongst Qs 38-44 in corporations and Qs 49-55 in consultancies. The brand development process has to start from the ideas exploration stage and progress to the stages of evaluating projects. Figure 5.4 describes the indicators for CSQ2: brand development process. Respondents are asked to select all stages which are applicable to the intentions of the variables.

Thus, first, indicators (stages in Figure 5.4) which are ranked as high – over 33.3% – or low frequency within the process are indicated; afterwards indicators which account for over 10% of the variance between the two datasets are explained. Within CSQ2, frequency is based on a percentage for each number of participants from corporations and consultancies. The figures for each variable are presented in Appendix 19.

	Generating ideas			Product devel	opment	Brand development
1 Researching socio-culture trends	2 Researching how people live	3 Researching competitors	4 Developing overall idea of a product or a brand	5 Developing a product strategy	6 Developing a product	7 Developing a brand strategy
Brand development		Brand implantation		Evaluation and feedback		
8 Positioning a brand	9 Developing the name of a brand	10 Developing brand identity	11 Developing brand communication (e.g. advertising, campaign)	12 Developing brand experience (e.g. retail customers brand experience)	13 Evaluation of brand development process	14 Re-establishing a strategy of brands from the evaluation

1. Researching socio-culture trends; 2. Researching how people live; 3. Researching competitors; 4. Developing the overall idea of a product or a brand; 5. Developing a product strategy; 6. Developing a product; 7. Developing a brand strategy; 8. Positioning a brand; 9. Developing the name of a brand; 10. Developing brand identity; 11. Developing brand communication, 12. Developing brand experience; 13. Evaluation of brand development process; 14. Re-establishing a strategy of a brand from the evaluation; 15 Not applicable.

Figure 5.4 Indicators in a brand development process

Q38/Q49 Stage of utilising DDA: First, corporations draw on indicators (stages) 4, 6, 9 and 10, and consultancies draw on stages 5-12, being over 33.3%; and these indicators are related to the stages where tangible products and brands are directly affected, rather than overarching "generating ideas and evaluating feedback" stages. It can be interpreted that the FMCG industry regards DDA as an approach to developing tangibles.

Secondly, two stages show over 10% of difference: stage 7, developing a brand strategy (16.4% gap), and stage 8, positioning a brand (12.7% gap). Consultancies draw more on value for these indicators than corporations. By aligning with external collaboration, below, consultancies are mostly involved in these two stages. Consultancies draw on more stages than corporations in terms of utilising DDA.

Q39/Q50 Stage of considering customer is a priority: First, corporations draw on every indicator by over 33.3%. The FMCG industry weighs customers heavily throughout the entire process. On the other hand, consultancies draw on indicator stages 1, 2, 4 and 8 regarding generating ideas and positioning a brand. Corporations lean heavily on customers throughout the entire process.

Secondly, except for five stages – the initial four stages and stage 8 "positioning a brand" – all the stages show a gap of 10% or more. Since corporations have a consistently high rate (over 33.3%) compared to consultancies, this difference might obstruct collaboration between corporations and consultancies when corporations access customers.

Q40/Q51 Stage of engaging with customers: Corporations draw on stages 2, 4, 6 and 8 by over 33.3%. It can be asserted that even though corporations acknowledges that customers are important across all stages, they engage with customers in selective stages. Consultancies draw on stages 1, 2, 9 and 11 in order to understand customers and provide experience.

Secondly, the early stages – 1-5 – show difference. While stages 1-3 in consultancies show a rate more than 10% less than that of consultancies, stages 4-5 in corporations show a rate more than 10% higher than that of consultancies. This indicates that consultancies account more for customer engagement in two stages: developing an overall idea for a product and brand, and developing a product strategy.

Q41/Q52 Stage of exploring to find new opportunities for a brand: First, corporations draw on stages 1, 2, 3 and 5 by over 33.3% in the generating ideas and developing product strategy stages. Seeking new opportunities seems to be allowed at the generating ideas stage; afterwards, the FMCG industry sticks to findings until launching products. However, consultancies draw on only one indicator, stage 3, "researching competitors".

Secondly, corporations show more than a 10% higher rate in stages 1, 2, 5, 6, 13 and 14, and more than a 10% lower rate in stages 8 and 9. Consultancies perceive that corporations seek to find opportunities in the positioning a brand or developing naming stages, rather than at the beginning of the process. This pattern can be assumed as reflecting the profiles of respondents: mostly, consultancy respondents are from the branding consultancies, consultancies are deemed to draw more on the stages they take part in.

Q42/Q53 Stage of collaboration between design and other departments: First, corporations draw on indicator stages 4, 5 and 6 by over 33.3%, which are related to developing products. Also, consultancies show a similar pattern, stages 5, 6, 7, 8 and 10. These indicate that the role of a design department is limited in conventional design activities. Hence, despite the literature's claim that the early involvement of different disciplines enhances the possibility of developing differentiated brands, a design department is regarded as creating tangibles and design departments do not even participate in the development of brands.

Secondly, corporations show more than a 10% higher rate in stages 2 and 6, and show more than a 10% lower rate in stages 7, 8 and 10. The more than 10% lower-rated stages are about brand development. This indicates that consultancies consider design collaboration during overarching product and brand development, and brand implementation stages more than corporations do, except for the naming development stage.

Q43/Q54 Stage of collaboration with an external consultancy: First, corporations draw on stages 6 and 10 by over 33.3%, which enable the development of final output. Corporations call for special expertise (e.g. skills for developing the visual identity or structure of a package) to develop tangible outputs through external collaboration, rather than developing strategies and ideas. On the other

hand, consultancies draw on all stages, except for three indicator stages: developing a product and two evaluation stages. Thus, it can be interpreted that consultancies' involvement does not concur with corporations' opinions and this difference influences the explanation following a comparison between corporations and consultancies.

Secondly, consultancies reveal a higher rate than corporations, except for stage 6, developing a product. Stages 5, 6 and 14 show less than a 10% gap but most stages show more than 10% of difference: a bigger gap than those in other CSQ2. This shows a big difference in perception in the involvement between corporations and consultancies. While consultancies perceive that they take part in most stages, corporations work with consultancies in developing a product, a brand and communication: developing tangible outputs. This may cause consultancies to overestimate their activities and hinder their initiative towards new directions for collaboration.

Q44/Q55 Stage of key decision-maker's engagement: First, corporations draw on stages 4, 5, 7, 10 and 11 for developing a strategy or final output. It means that one role of key decision-makers is to act as gatekeepers to allow a project to move to the next stage, though they are not involved from the beginning. Consultancies draw on indicator stages 4, 5, 6, 7, 8 and 10, and this indicates that in the view of consultancies, a key decision-maker takes part in a similar pattern to Q53, the stage for collaboration between design and other departments.

Secondly, stages 1, 2, 3, 4, 7 and 11 show more than 10% of difference. While corporations perceive that key decision-makers participate more in the early stages and in developing the brand communication stage, consultancies perceive that key decision-makers participate more in developing a product, strategy and brand. This indicates that consultancies tend to draw on the stages where they participate.

Summarising DDA involvement, the overall involvement of DDA features shows different opinions between corporations and consultancies. Amongst these differences, there are two main variables that show different rates in important stages: Q39/Q40 "the stage of considering the customer is a priority" and Q43/Q54 "the stage of utilising external collaboration". First, corporations draw on consistently higher values in "considering the customer is a priority", but corporations' considerations draw more on stages regarding executing the product and brand development, rather than exploring and initiating an idea. In contrast, consultancies account for most value in the initial two stages: "researching socio-culture trends" and "investigate how people live".

Secondly, as seen in consultancies' Q43/Q54, consultancies reckon that they take part in almost the entire process; but from a corporation's view, corporations employ external experts in the developing a brand and product stages, in terms of developing tangibles. These results may be influenced by partnerships and collaborations with external consultancies. By aligning with the previous differences, since corporations rarely work with consultancies in the early stages, it can be interpreted that corporations fail to initiate new ideas by working with an external network. It can be asserted that FMCG needs to ask consultancies to participate at the beginning or to keep track of how people live to initialise a new direction for a brand.

And, furthermore, other differences are found when utilising DDA (Q38/Q49). This can be interpreted in two ways: 1) since corporations perceive DDA as the classical role of design, even though they have already employed DDA, they do not recognise what they are doing with it. 2) Literally, corporations do not employ DDA, but consultancies' evaluation is lenient with clients' operations. The question of finding opportunities (Q41/Q52) is limited in the early stages so that early decisions impact on the entire process. The literature claims that the brand process is a loop: evaluation of project results is fertile ground for future projects. In both the corporations and consultancies' results, re-establishing the strategy of a brand for evaluation is low, thus this indicates a broken loop of brand development.

The difference between corporations and consultancies' perceptions regarding DDA features' involvement is caused by the limited role of consultancies. Even though consultancies can amplify initialising an idea, corporations rarely involve a consultancy from the beginning.

5.6.2 N-way table: CSQ2

This subsection seeks to find out how profiling variables drive organisations to engage more, or not, within a brand development process corresponding to seven CSQ2 variables that are investigated. As explained in Subsection 5.5.2, some subgroups are excluded because of small values. To find bivariate

relationships of CSQ2, by addressing the augmented highlighted cells with over 33.3% frequency, the number of accumulated cells is a parameter to identify the involvement of DDA features. The N-way tables for CSQ2 are attached in Appendices 21 (corporations) and 23 (consultancies), and cells with over 33.3 % frequency are highlighted in yellow. In addition, summary of N-way tables are attached in Appendices 20 (corporations) and 22 (consultancies); instead of accumulating highlighted cell numbers, subgroups can be ranked in tables.

5.6.2.1 Corporations – N-way table

In the following reports, the detail of profiling Q5 "position of respondents" is excluded because, except for Q38, within all the variables, "junior & senior levels" account for more involvement stages.

- Q38 Stage of utilising DDA: Significant frequencies are illustrated in these characteristics: 1) corporations, which operate businesses in "over 10" countries and have an "over 2 years" typical time frame, "20-40%" of exploratory brand development and where brand development is operated by marketers, account for more stages of utilising DDA; 2) respondents who are in the "design department & others" point to more stages. In terms of "by industry", all other groups account for more stages of utilising DDA than F&B industry.
- Q39 Stage of considering that the customer is a priority: This variable presents a large number of gaps between the subgroups of profiling questions. Significant frequencies are illustrated in these characteristics: corporations, which operates business in over 10 countries, have a "1-2 years" typical time frame, have a larger exploratory proportion of projects and where the "designer & interdisciplinary" group takes charge of brand development, account for consistent and strong consideration of the customer thorough all stages.
- Q40 Stage of engaging with customers: There are no big contrasts between subgroups. Significant frequencies are illustrated by these characteristics: corporations, which are categorised in F&B industry, have more exploratory projects and endow a design or interdisciplinary team with ownership of brand development, utilise more customer

engagement in the process. The result of this variable informs that brand development which is managed by marketers needs to formulate a way of using customer engagement.

- Q41 Stage of exploration to find new opportunities for a brand: Mostly highlighted cells fall into two overall stages of exploration for finding new opportunities, generating ideas and product development, so contrasts occur in these stages. Significant frequencies are illustrated by these characteristics: 1) corporations with businesses in over 10 countries, less than 12 months or a 1-2 year typical time frame, 40-60% or over 60% of exploratory branddevelopment projects, and whose FMCG brand development is managed by marketers, 2) respondents who are from "branding & marketing departments".
- Q42 Stage of collaboration between design and other departments: Most high-frequency cells fall into an early process and contrasts between subgroups can be characterised into: corporations with a 1-2 year time frame, more exploratory projects, and marketers or design & interdisciplinary team's ownership of brand development utilise more collaboration between design and other departments.
- Q43 Stage of collaboration with an external consultancy: Highlighted cells fall into the middle of the whole process. Subgroups can be characterised into corporations which are "all other groups" operate businesses in over 10 countries, have a 1-2 years time frame, 20-40% of exploratory projects and endow marketers with ownership of brand development. The "junior and senior levels" group considers more stages of design collaboration with external experts than higher positions do.
- Q44 Stage of key decision-maker's engagement: Q5 "position of respondent" result is in opposition to the preliminary assumption that people who are involved in board meetings may have higher frequencies. Q9 "ownership of FMCG brand development" shows great contrasts between the subgroups. These variables can be characterised into corporations which are F&B, have a 1-2 years time frame, have less than 20% or over 40% of exploratory projects, endow marketers with ownership of brand development.

To sum up, from the profiling of Q1, F&B show less involvement of variables which directly mention "design" in the sentence. Larger-size corporations use DDA variables in more stages except key

decision-maker's engagement. Larger-size corporations might have better involvement for DDA despite a stage-gate approach: key decision-makers are deemed to be involved in limited and selective stages. There is no significant difference between departments: "design department & others" and "branding & marketing department". The respondents in lower positions account for more DDA features engagement than those in higher positions. It might be assumed that DDA involvement in higher positions is reflective when they take part in brand development afterwards; this interpretation entails higher positions' involvement being limited. Except for one variable in Q6 – Q38 utilising DDA – and two variables in Q8 – Q38 utilising DDA and Q43 design collaboration with external experts, corporations which have a 1-2 years time frame and over 40% of exploratory projects account for more stages. These subgroups can be assumed to have better conditions for DDA involvement. Lastly, the corporations which endow marketers with ownership of brand development account for more stages, except for two variables: Q39 stage considering customer is a priority and Q40 stage of engaging with customers. However, this cannot be addressed as marketers' ownership of brand development being beneficial for DDA involvement because of the low value of marketers (n=6): but by synthesising with other findings from other quantitative analyses, this result might be more explicated more by regarding customer involvement in brand development.

These elicited subgroups of profiling might be assumed to represent a condition to enhance DDA engagement in a brand development process. Corporations might use these conditions as a yardstick to form a system for DDA or to justify the extent of DDA utilisation.

5.6.2.2 Consultancies – N-way table

From Q49 to Q55, CSQ2 intends to find out whether subgroups of profiling questions drive contrasts or not. Two of the subgroups in Q3 – speciality of consultancy – are too small to compare. Thus, this will be provided in Appendix 23 but will not be addressed below. Also, profiling Q5 – department of respondent – is excluded in the following explanation, because non-design-related departments draw on more stages for each variable's involvement than design departments. In terms of profiling Q2, since the "one country" group value (n=5) is small, this characteristic is better perceived as a sequence of the "up to 10 countries" group within some variables. Regarding Q4, number of employees in the

organisation, the cases in which the "51-100" group accounts for most accumulated cells for involvement of the variables are not delineated due to the low value of participants in this subgroup.

- Q49 Stage of utilising DDA: Consultancies, which operate business in 2-10 countries and have a time frame less than 6 months, less than 20% of exploratory projects, less than 40% of long-term relationships and ownership of marketers in clients' organisation, and junior & senior levels account for most stages for the involvement and utilising of DDA. Interestingly, consultancies with the least proportion of exploratory projects and long-tem relationships show the most significant cells amongst the subgroups.
- Q50 Stage of consideration that the customer is a priority: Consultancies, which operate business in 2-10 countries (if perceived as the "up to 10 countries" group), have 10-50 employees, a time frame of less than 6 months, 20-40% of exploratory projects, less than 20% of long-term relationships and work with brand managers for brand development, consider that clients account for the most cells within this variable, Q50.
- **Q51 Stage of engaging with customers:** Consultancies, which operate businesses in between 2 and 10 countries, have a time frame of less than 6 months and less than 40% of long-term projects, draw on more stages. Respondents who are from director & board members draw on more stages too.
- Q52 Stage of exploration to find new opportunities for a brand: Overall, this variable
 accounts for a smaller value than other variables of consultancies' CSQ2 and contrasts are
 not significant when comparing within CSQ2. Q5, department of respondent, has a significant
 contrast; design departments draw on fewer stages than the other group.
- Q53 Stage of collaboration between design and other departments: Profile Qs 5 and 7 show significant contrasts and other profiling variables show similar accumulated numbers of cells.
 Two subgroups, a strategic department and a time frame of 6-12 months, draw on more cells.
- Q54 Stage of collaboration with an external consultancy: Respondents ticked more stages compared to other consultancies' CSQ2 variables. Consultancies, which operate businesses in up to 10 countries and have a 6-12 months time frame, over 40% of exploratory projects and less than 40% of long-term relationships, account for most involvement for collaboration

with external consultancies. Respondents from "junior & senior levels" account for more involvement.

Q55 Stage of key decision-maker's engagement: Qs 6, 9 and 10 show contrasts between the subgroups. Consultancies which have an exploratory proportion of 20-40% and less than 40% of long-term relationships draw on more engagement stages. Respondents who are directors of departments & board members draw on more engagement stages.

In summary of consultancies' CSQ2, consultancies with up to 10 countries for their business operations consider that their clients draw on more stages for DDA features, but consultancies with only one business account for less involvement in terms of clients' DDA utilisation, engagement with customers' engagement and key decision-maker's engagement. It might be interpreted that larger or global-network consultancies may have better conditions to conduct DDA futures, but they do tend to show a similar pattern, like larger-size corporations: a fragmented process, and limited and selective engagement. A strategic department accounts for a higher rank in the stages of clients' DDA involvement than a design department. This indicates that design departments criticise clients' DDA involvement and this may entail fractures within consultancies' collaboration due to the different perspectives between strategic and design departments. Thus, it might be assumed that clients' DDA involvement in brand development is not satisfied with designers' views yet.

Consultancies with less than 6 months tend to have a more positive evaluation of a client's DDA involvement, except for features of internal and external collaboration. This indicates that consultancies with shorter time frame are better to undertake DDA but have a difficulty in collaboration due to the short time frame. Consultancies with over 40% of exploratory projects do not account for the first rank in any features of DDA involvement. This indicates that these consultancies tend to criticise clients' DDA involvement more. A similar pattern is found in terms of the proportion of long-term relationships; that is to say, consultancies with over 60% of long-term relationships do not account for the first rank in any features of DDA involvement. In addition, as consultancies have more long-term relationships, they tend to draw less on clients' DDA involvement. It can be interpreted that since consultancies have more chances to encounter clients' organisations deeply,

they may provide objective or precise opinions on clients' DDA involvement. In another way, since consultancies have a structured process of involvement or know each other's processes, it can be assumed that they already have the right spot for involvement. In terms of ownership of brand development, when a marketer has ownership, consultancies draw on the highest values of utilising DDA, design collaboration with external experts and key decision-maker's engagement. Brand manager ownership draws on the highest values in the other variables.

Throughout the consultancies' CSQ, since some profiling questions – 7 and 9, "typical time frame and exploratory projects", respectively – are determined depending on the characteristics of consultancies and their projects.

5.7 Overall findings

All variables are scrutinised against the research questions and sub-questions throughout diverse quantitative methods in order to substantiate the propositions. Each table below explains the research questions or propositions, types of questions – RSQs and CSQs – and intervening methods that correspond to questions and propositions. Along with each table, the findings that are pertinent to the questions and propositions will be embodied. However, RSQ2 – evaluation of respondents' overall process and organisation – is not indicated in the chapter because these were devised to support the questions – RSQ1, and CSQs 1 and 2. However, the detail results of RSQ2 are included to distil findings from quantitative research and provided in Appendix 24.

By briefly presenting the results of open-end questions, respondents' opinions about them show how design is perceived and embedded into further DDA involvement in organisations. To the consultancies, instead of asking the role of design, the role of consultancies is asked. These opinions augment this quantitative data to provide useful insights. Corporations take account of the roles of design; however, these are limited to developing tangibles (e.g. products, brands, etc.) and enabling brands to compete in alluring customers directly (e.g. brand experience, communication). Respondents suggest that design (DDA) shows the competitiveness of efficiency in sales or contributions to the efficiency of operating directly in terms of embedding design into the process and

organisation. Consultancies tend to limit defining their roles in developing final output but suggest that long-term relationships, communication and co-learning development will help clients to employ DDA.

Overall, the foremost finding equivalent to the research question (Table 5.16) is that:

- The ways of appreciating and utilising DDA in the two primary stakeholder groups
 (corporations and consultancies) do not concur with the features identified from the selected
 literature analysis via descriptive analysis: Especially, the features in the DA theme are not
 underpinned in both stakeholders' brand development; nevertheless, they consider that the
 features in the DE theme are utilised to a certain extent.
- Specifically, DDA features are abstractly appreciated and are not embodied for utilisation as an organisational culture. The majority of the variables that show high concurrence with the literature are not solely designerly in manner but rather interveners or boosters which are identified as helping DDA integrate with the organisation from the selected literature analysis: DE and CO themes.
- This indicates that the major respondents in corporations from a large-size organisation (over 250 employees: major respondents in the corporation survey) accomplish corporations' growth without articulating designerly applications or implementing specific actions (e.g. prototyping, visualisation, etc.). It is asserted that the FMCG industry has not substantially recognised DA features' capability to metamorphose into a design-driven organisation.

Table 5.16 Summary of research questions

Question	Type of question	Intervening methods
Primary question: What features of DDA can be identified in	All questions in the	Descriptive analyses,
FMCG brand development?	survey	all the analyses which
Subsequent questions		are used in the
1) What factors enhance/hinder the employment of DDA?		propositions
2) How does DDA integrate at strategic and project levels?		

This research question is briefly substantiated by descriptive analyses and is, in detail, informed by the

four propositions in the following subsections.

5.7.1 Proposition 1

The first proposition is to identify what differs in the appreciation and utilisation of DDA features in the FMCG industry. Equivalent types of questions and intervening methods are illustrated in Table 5.17 below. Proposition 1 and its subordinate propositions can be substantiated by the following analyses: ANOVA and N-way tables. Discriminant analysis assists in identifying which variables strongly impact on categorising the subgroups by reinforcing ANOVA results. As illustrated in Table 5.3 for different contexts of organisations – subgroups of profiling questions, the ANOVA tests entail how the subgroups appreciate DDA attitudes, discriminant analyses entail which variable in the RSQ1 contributes to categorise the subgroups most, and the N-way table entails how subgroups account for DDA features and are utilised in brand development stages. Hence, the series of analyses substantiates Proposition 1: corporations' contexts (characteristics) alter their ways of using DDA features.

Sub propositions	Type of question	Intervening method	
P1-1: The effective employment of DDA can result in corporate growth.	Profiling questions, RSQ1	ANOVA, discriminant analysis and N-way tables	
P1-2: The value placed upon design-driven culture affects FMCG brand development	Profiling questions, RSQ1, CSQ 1 & 2	ANOVA and N-way tables	
P1-3: Depending on the positions and departments (disciplines) in an organisation, the way(s) of employing or perceiving DDA will be different	Profiling questions, RSQ1, CSQ 1 & 2	ANOVA and N-way tables	

Table 5.17 Summary of proposition 1

Detailed substantiations of the subordinate propositions are discussed below.

P1-1. The effective employment of DDA can result in corporate growth: Amongst the corporations' profiling questions, two questions – Q2 number of countries where businesses operate and Q3 number of employees – indicate the relationship between the employment of DDA and corporate growth. However, most respondents account for a large-size corporation (87.5%), so that Q2 is more relevant to be applied to identify the relationship. From the ANOVA tests, seven outcome variables from RSQ1 show contrasts between the subgroups (predictors) in Q2 and, except for two variables, "designers' placement outside a design department" and "adopting a stage-gate process", the

corporations that operate businesses in over 10 countries account for a better attitude towards DDA features. Amongst those variables which show contrasts, appreciation of "the management of design's impact on brand development" and "employing a stage-gate process" are important criteria to the number of operating businesses from discriminant analysis. In the N-way table, it shows quite small contrasts in features for DDA utilisation between the subgroups of Q2 (see Appendix 15), but in terms of DDA involvement, corporations with business units in over 10 countries are involved in more stages than corporations with business units in fewer than 10 countries, except for one variable, "key decision-maker's engagement" in a brand development process.

Therefore, it can be assumed that corporations that seek to employ DDA have more opportunities to underpin corporate growth or to be global corporations, but to underpin DDA features in brand development, corporations may employ DDA features within a stage-gate process. Thus, regardless of the contribution of a stage-gate process, it is necessary to reformulate a stage-gate process by fusing it with DDA features which are more relevant in smaller corporations (e.g. iterative process, designer placements outside the design department, etc.). Besides, corporations need to place designers in other departments beyond their typical their role – developing artefacts – or to empower designers to engage with other departments to blend designerly ways across diverse activities in brand development within larger organisations which employ a stage-gate and fragmented process.

P1-2. The value placed upon design-driven culture affects FMCG brand development: From the corporations' quantitative analysis: ANOVA, and N-way of CSQ1 and CSQ2, a certain pattern is identified in the profiling questions 6, 8 and 9 – typical time frame, exploratory proportion, and ownership of brand development: in terms of DDA attitudes, exploitation (employment) and involvement. For example, as the "less than 12 months time frame" group of Q6 has negative attitudes towards Q14, "utilising external experts", this time frame subgroup results in the least external experts' involvement within CSQ2. In contrast, the "less than 12 months time frame" group shows the best attitude to iterative processes in RSQ and also draws more on iterative processes as a method for exploiting DDA within CSQ1.

Thus, some conditions which mostly draw more on DDA utilisation often show an adverse result for a specific variable: For example, within a certain time frame, corporations overall show better attitudes towards DDA, but they show a negative attitude towards DDA exploitation. So it can be assumed that there is no absolute condition to underpin every DDA features extracted from the selected literature analysis.

Therefore, as illustrated in Figure 5.5, overall, it can be assumed that the more positive attitudes to DDA features fall into a certain subgroup and, by being grounded in this group, the more positive DDA features and involvement are driven. Nevertheless, since there is no absolute condition for these profiling questions, corporations also acknowledge an opposite impact within a certain condition of these profiling questions.

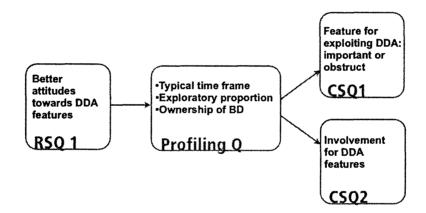


Figure 5.5 Values (attitudes) resonating with the exploitation of, and involvement in, brand development

In short, these findings can be substantiated that the way of exploiting and being involved in DDA features is associated with values and attitudes towards DDA. However, this association is insufficient to find an underlying trigger to form a positive attitude in corporations. Therefore, this proposition needs to be interrogated in later interviews.

P1-3. Depending on position and disciplines, the way(s) of employing or perceiving DDA will be different: Amongst the profiling questions, the analyses of three questions – Q4 department of respondents, Q5 position of respondent and Q9 ownership of brand development – indicate the contrasts in perceiving and exploiting DDA features.

First, in terms of respondents' disciplines, contrasts between disciplines are not significant. Both business and design disciplines tend to have statistically similar attitudes, but in terms of regarding "designers working across departments", the design discipline accounts for better attitudes than the business discipline. By scrutinising the contrasts between business and design disciplines in the N-way table for CSQ1, business discipline calls for features legitimately employing DDA in the organisation, but also calls for more challenging constraints, open debate and new concepts for products. It can be interpreted that business discipline calls for organisational commitment or legitimacy to transform the ways of utilising DDA identified from the selected literature analysis. In terms of involvement in DDA features: CSQ2, contrasts are not significant expect for one comparison; the business discipline considers external collaboration more than the designer discipline does. It can be interpreted that designers are not involved in the business department's external collaboration or that designers less prefer external collaboration than the business discipline does. Either way, it might be assumed that designers in the FMCG industry do not belong to the mainstream of a project.

Secondly, higher positions – director of department & board member – show more positive attitudes towards DDA features. FMCG organisations need to be interrogated as to why employees in lower positions show differences. In contrast, employees at lower levels think that DDA features are involved in more stages of brand development. Briefly, it can be assumed that higher positions acknowledge the importance of DDA and their organisations have such attitudes to DDA. Nevertheless, since they account for less DDA involvement, it can be interpreted that they reflect situations they take part in or, despite having better attitudes to DDA, in practice, they utilise DDA efficiently. On the other hand, despite a comparatively lack of attitudes to DDA, it can be assumed that lower positions utilise DDA throughout the process more than higher positions do.

Lastly, from an ANOVA test, three outcome variables are found in "ownership of brand development": using iterative approaches, utilising external and flexible organisational processes. Within the first two outcome variables, marketers' ownership shows a smaller mean than those of other groups, whereas design-related ownership shows a greater mean than those of other groups in the last outcome variable. From the N-way table for CSQ1, reflecting on what marketers' ownership draws on, corporation with marketers' ownership of brand development comparatively less consider actionable

indicators: e.g. visualisation, iterative process, interdisciplinary collaboration, etc. Within another Nway table for CSQ2, the marketer's ownership groups involvement shows the least number of cells in terms of customer-related variables: Q39 consideration that the customer is a priority and Q40 engagement with customers. The brand manager's ownership group shows some characteristics of large-size corporations: corporate policy for external collaboration, structured process for brand development (showing least involvement of CSQ2 variables in brand development), etc.

Therefore, in terms of ownership of brand development, it is difficult to undertake DDA within marketers' ownership of brand development. Thus, in the following interviews, it is necessary to interrogate what features cause marketers to embark on different DDA employment in the FMCG industry.

Summarising Proposition 1, subsequent analyses substantiate the evidence about the overall proposition, but there are different extents to which each proposition is supported. Subgroups which have better appreciation (value) of DDA associate with better DDA utilisation and involvement. However, even though better appreciation is constituted into corporate growth and larger-size corporations draw on more DDA involvement, there are still flaws in DDA utilisation (e.g. iterative processes): most subgroups of the profiling variables show pros and cons in terms of appreciating and utilising DDA.

There are different extents of DDA appreciation and exploitation in the subgroups, and these entail the initial criteria of organisational characteristics for DDA features and demands for DDA enhancement.

- Size of corporations: Large-size corporations (over 10 countries) have better appreciation of DDA, but there are also pros and cons: e.g. a larger corporation is a better environment for DDA but it is hard to underpin flexibility in organisational processes;
- Position of respondent: Different positions entail different attitudes and different
 perceptions of DDA's involvement. Higher positions (directors and board members) have
 better appreciation of DDA but lower positions draw on more stages of variables'
 involvement. This indicates that there is a different understanding of DDA utilisation between

higher and lower positions. These contrasts lead employees working at low levels to feel frustrated when they seek to utilise DDA features;

- Brand development time frame: Subgroups show pros and cons in utilising DDA: for example, a 1-year time frame offers better appreciation of DDA but draws more on the similar indicators for DDA which smaller corporations draw on;
- Proportion of exploratory brand development: A greater proportion of exploratory projects offers better appreciation of DDA: corporations prefer to have at least 20% of exploratory projects;
- Ownership of brand development: Corporations which have brand manager ownership show a balanced stance between business and design. Ownership by a marketer represents worse appreciation of DDA. Thus, if corporations seek to underpin DDA within the organisation, they need to encourage marketers to undertake DDA or hand ownership of brand development to brand managers or design-related people.

5.7.2 Proposition 2

Proposition 2 intends to identify specifically how consultancies' characteristics influence their performance in terms of utilising DDA features (Table 5.18). Two sub propositions are constituted to substantiate the main one.

Main proposition: Consultancies' characteristics influence their perfo	rmance when utilising DDA fea	tures in brand development	
Sub propositions	Types of questions	Intervening methods	
P2-1: Consultancies' characteristics influence the way(s) of understanding clients' performance of DDA.	Profiling questions, RSQ1, CSQ 1 & 2	ANOVA, discriminant analysis and N-way tables	
P2-2: Consultancies' characteristics determine ways of collaborating with clients.	Profiling questions, RSQ1, CSQ 1 & 2	ANOVA, discriminant analysis and N-way tables	

Table 5 18 Summary of proposition 2

P2-1 Consultancies' characteristics influence the way(s) of understanding clients' performance of

DDA: The same ways of analysing findings as Proposition 1 are applied here and reveal a pattern of consultancies' perceptions of the DDA performance of clients. From the ANOVA tests, higher level positions tend to evaluate clients' performance more highly, and a perception of Q27 "designers working across departments" leads to different perspectives between lower and higher positions from

the discriminant analysis: the way of evaluating on clients' ways of having "designers working across departments" determines the categorising of positions in consultancies. It might be interpreted that there is different appreciation of clients' DDA approaches between higher and lower positions: fewer hands-on or more hands-on workers. Consultancies with at least 20% of exploratory projects and 40% of long-term projects tend to evaluate clients' attitudes toward DDA features most highly. From the discriminant analyses, depending on how consultancies form opinions about "embracing DDA" and "designers' engagement with other departments", Q9 "subgroups' proportions of exploratory projects evaluations to clients for three outcome variables in ANOVA. It can be assumed that consultancies with at least 20% of exploratory projects and 40% of long-term relationships have clients who show a better DDA attitude. Consultancies have bad evaluations of clients' organisations where marketers manage brand development and, overall, consultancies prefer working with brand managers in the evaluation of clients' attitudes.

From the N-way tables for identifying methods (CSQ1), the clients of consultancies with less than 50 employees are starting to appreciate DDA features, but their design performance is not empowered yet. Thus, projecting the corporations results: overall, larger-size corporations account for better DDA employment, it can be presumed that smaller corporations tend to work with smaller consultancies and larger corporations tend to work with larger consultancies. Interestingly, strategic departments draw on abductive and intuitive thinking more than design departments, so it can be interpreted that strategic departments appreciate their clients need to benefits from designerly ways of thinking. In terms of time frame, it is hard to determine to what extent of time frame the subgroups of consultancies categorise clients ways of utilising DDA methods. By considering the features which show contrasts, consultancies with "over 40% proportion of exploratory projects and long-term relationships" seem to work more with clients who utilise DDA features better. When consultancies evaluate clients' DDA utilisation, corporations where brand managers have ownership of brand development seem to be on the way to becoming design-driven corporations.

Regarding DDA involvement (CSQ2), smaller-size and branding consultancies draw on more stages of DDA engagement. Respondents from strategic departments and higher positions evaluate their clients as being engaged in more stages. Consultancies with a shorter time frame and a smaller proportion of exploratory projects and long-term relationships evaluate their clients as engaging in more stages of brand development. Consultancies evaluate clients' organisations where brand managers have ownership of brand development as engaging in more stages.

In summary of Proposition 2, Profiling Qs 7, 9 and 10 cannot be determined solely by the exertion of consultancies, but by interaction between clients and consultancies. Thus, it is hard to identify clients' style by the category of typical time frame or the proportions of exploratory projects and long-term relationships. In addition, depending on consultancies' delivery style, sometimes size does not matter when consultancies work with small- or large-size corporations, but it is quite clear that bigger consultancies have more opportunities to work with clients which employ DDA in their organisations: larger corporations identified in Proposition 1.

However, some profiling variables can be applied to develop identical categorisations. Design departments criticise clients' DDA attitudes and the involvement of DDA features in brand development. This indicates that design departments are partly involved in projects or are not satisfied with clients' performance. Respondents from higher positions draw on better evaluation of clients' DDA appreciation, utilisation and involvement. Consultancies do not give a positive evaluation of a client's organisation where designers and an interdisciplinary team manage brand development. This raises the question of whether internal designers in clients' corporations are enemies of consultancies or if consultancies are not comfortable with internal designers who know the design process.

P2-2 Consultancies' characteristics determine ways of collaboration with clients: In RSQ1, nine variables are about questions only for consultancies. The respondents from design departments and lower positions account for the lowest values in their DDA attitudes, and this implies that they encounter difficulties when consultancies fulfil designerly ways with other departments and higher positions. Consultancies with less than 40% of long-term relationships account for the lowest rank in

"undertaking exploratory approaches", "communicating with each other" and "consultancies as a long-term partner". It can be interpreted that consultancies with a larger proportion of long-term relationships have better conditions for undertaking exploratory approaches and for employees to communicate with each other.

From the discriminant analyses, Q16 "undertaking exploratory approaches" contributes to categorising the subgroups of position of respondent and the proportions of exploratory approaches and long-term relationships: consultancies with a less typical time frame for brand development and a smaller proportion of exploratory projects and long-term relationships account for the lowest rank. It can be interpreted that the extent of the attitude to exploratory approaches impacts critically on the characteristics of consultancies. Hence, it is important to find a way for consultancies to enhance their attitudes towards exploratory approaches.

The questions for consultancies in CSQ1 are a matter of collaboration features within consultancies. Bigger consultancies account for workshops, design briefs and regular meetings and this indicates that they are able to formulate design methods for communication and collaboration. The consultancies with a shorter time frame (less than 6 months) for projects account for more prototyping and visualisation, whereas consultancies with a longer time frame (6-12months) account for more manifesting a design brief and auditing brand performance. This indicates that prototyping and visualisation help consultancies to decrease the project time and that a longer time frame can process documented and rhetorical methods to convince clients about their directions. In this case, it is hard to determine which time frame is appropriate for DDA utilisation. Rather than emphasising either way, it is more pertinent to supplement their deficiencies. In addition, consultancies with more longterm relationships tend to use formalised (systematic) methods (e.g. design brief and auditing brand performance). Consultancies which work with a brand manager also tend to utilise formalised methods. These two findings indicate that consultancies need formalised ways to enhance relationships and to work with a brand manager; such formalised ways help business-oriented clients understand DDA approaches.

In terms of barrier features, consultancies with less than 40% of long-term relationships draw on clients' investment funding and bureaucracy as barriers to collaboration, whereas consultancies with over 60% of long-term relationships account for a lack of design understanding. While consultancies with a lower proportion of long-term relationship criticise physical and systematic sources, those with a larger proportion criticise the fundamental issue of initiating DDA. In terms of other contrasts between the subgroups in the consultancies profiling questions, it is hard to elicit a pattern (criteria), so these are not indicated in this subsection.

Summarising Proposition 2, this is substantiated, but the consultancies' criteria for the evaluation of clients' performance are not obvious in the way they were in the corporations survey results. However, there are some clear patterns of the subgroups about the evaluation of client performance.

- Respondents' disciplines and positions: Respondents from the design discipline and lower
 positions are not engaged in entire projects and criticise clients' performance more. It can be
 assumed that this causes difficulties for designers and hands-on staffs collaborating with
 clients. Hence, they need to be educated in better collaboration or in modifying
 consultancies' mechanisms for exploiting DDA projects.
- Size of consultancies: Since larger consultancies generally work with larger corporations, they tend to use systematic DDA methods to communicate with corporations and deliver intermediate processes for final output in a certain form.

To utilise formalised methods, from the analysis, projects require more time. When consultancies have a longer time frame and more long-term relationships with clients, the working style becomes more systematic. Thus, this consequence cannot be addressed as being opposite to DDA, but it needs to be ensured that all processes are not treated as rituals and that consultancies prohibit employees from spending too much time preparing work documents.

While the previous points fall under consultancies, regarding corporations' stances, if corporations contact consultancies, then they need to consider what proportions of exploratory projects consultancies should have. Consultancies with a greater proportion of exploratory projects have more experience in working with corporations that seek to utilise DDA.

In proposition P2-1, consultancies' evaluation of clients' attitudes and exploitation entails the relationship between consultancies and clients, as shown below:

- Position of respondent: Higher positions have positive evaluations of clients' attitudes to DDA and clients' involvement of RSQ2 variables;
- Time frame: Consultancies which have the longest time frame group have positive evaluations of clients' attitudes towards DDA but negative evaluation of clients' involvement with RSQ2 variables;
- **Proportion of exploratory projects:** Consultancies which have less than 20% of exploratory projects have negative evaluations of clients' employing DDA from different analyses;
- Proportion of long-term relationships: Consultancies with over 40% of long-term relationships have positive attitudes towards clients' utilising features of DDA, but consultancies with over 60% of long-term relationships account for clients' least involvement in RSQ2.

5.7.3 Proposition 3

This subsection seeks to investigate the main proposition by substantiating the following propositions via the subsequent analyses illustrated in Table 5.19.

Main proposition: Corporations and consultancies appreciate and exploit DDA diffe	erently in FMCG bran	d development.
Proposition	Type of question	Intervening method
P3-1 Corporations do not consider external collaboration when developing overall ideas of brand and product development.	RSQ1, CSQ 1 & 2	T-test and frequency tables
P3-2 Consultancies' contribution to brand development is limited to operational activities.		

Table 5.19 Summary of proposition 3

P3-1 Corporations do not consider external collaboration when developing overall ideas of brand

and product development: Overall, corporations draw on more stages than consultancies do; that is to say, corporations consider that they engage with DDA features broadly. In contrast, consultancies point to stages where they are developing tangibles. It can be interpreted that consultancies tend to view stages as reflecting where they take part and what they experience, since consultancies do not take part in the entire brand development process. Especially, two variables – stages for considering the customer is priority and external collaboration – show different views. First, while corporations consider customers in the entire process, consultancies point to the beginning of the process in terms of the stage for considering the customer as a priority. Secondly, while consultancies consider that they are engaged in the entire process for clients' external collaboration, corporations point to the stages relating to developing products or brands. This shows that each organisation accepts what it is doing well, but the counter-organisation does not correspond to what it is doing. That is, there is a gap in external consultancies' involvement between corporations and consultancies. Thus, both stakeholders – corporations and consultancies – need to reshape their appreciation of and approaches to external collaboration: consultancies should seek a way to be involved in early stages – overall ideas generation for a project – and corporations should enhance their external collaboration in the early stages.

P3-2 Consultancies' contribution to brand development is limited to operational activities: From the T-test, the typical and necessary time frames for FMCG brand development for corporations and consultancies are different; the corporations' time frame is longer than that of consultancies. This already instils that consultancies' engagement is limited. This finding lays an impact on interpreting the findings below.

First, regarding corporations' (clients') attitudes, six of 18-paired variables in RSQ1 show statistical difference from the T-test, so that it can be asserted that overall attitudes are not significantly different. Within the both corporations and consultancies surveys, there is no variable that shows significance in the DA theme, because, aligning with the descriptive analysis, the DA theme is not yet predominantly considered in the FMCG industry. Amongst the variables which show significance in a T-test, corporations evaluate their attitudes more highly than consultancies do, except for one variable, the management of design's impact on brand development. Thus, it can be interpreted that from a design (consultancies) perspective, clients' (corporations) attitudes do not attain a satisfactory degree; corporations might be deemed to overstate their attitude to DDA.

Secondly, in terms of how to utilise DDA features, corporations rarely utilise visualisation but consultancies consider that their clients utilise it more than corporations draw on. In another way, corporations draw more on visual thinking as a necessary mode of thinking than consultancies do. This indicates that, actually, visualisation and visual thinking are not widespread in corporations but are applied when consultancies collaborate with clients. Interestingly, corporations consider that they utilise more iterative processes and legitimate design in organisations than consultancies do. This indicates that corporations still ask for legitimacy in DDA integration because of the lack of DDA integration. Thus, it can be interpreted that utilising iterative methods is overestimated. Regarding collaboration, corporations take account of physical space and a team for collaboration; on the other hand, consultancies take account of ideas flow. In summary, corporations appreciate DDA methods and the role of DDA, but they overestimate their exploitation; on the other hand, consultancies for granted. Hence, this dichotomy hinders the exertion or transfer of DDA methods in both corporations and consultancies.

In summary of Proposition 3, the extent of perceiving DDA in corporations is different from a design perspective (consultancies' view). Hence, it is necessary to audit their performances with a parallel view and to refine their own mechanisms to integrate with each other. Corporations, in particular, need to audit the extent of appreciating and utilising DDA features from a designerly view. Corporations and consultancies have different opinions of internal and external design collaboration: corporations utilise these collaborations to develop tangibles. Accordingly, it can be asserted that DDA features are rarely utilised for exploring an idea at the beginning. Hence, corporations seek to refine the mechanisms to enhance exploring ideas with external network (consultancies) in order to avoid mundane products and brands.

5.8 Chapter summary

The previous section summarises the findings from the online survey by aligning them with the propositions and these are grounded in a DDA model for the FMCG industry.

These overall findings, which form an outline for a DDA model, are recapped below:

DDA theoretical model from the literature vs. DDA employment within the FMCG industry:

DDA – attitude to the exploitation and involvement of DDA – is not underpinned in a manner of actionable or day-to-day methods: instead, the importance of DDA is acknowledged in an abstract and conventional manner. Therefore, it is necessary to develop a system and/or process to instigate actionable DDA methods, which are much referred to in the literature analysis, into brand development and to enhance DDA attitudes in organisations: for example, visualisation, prototyping, customer engagement beyond conventional ways, etc.

- Especially, DA features are not articulated and exploited in brand development compared to other themes. This can be interpreted as DA features not being perceived as vital entities in FMCG brand development.
- Actionable DDA features (visualisation, co-location, etc.) are limited in current FMCG brand development and classical design stages: making things tangible. Although mostly FMCG products are packed in a rigid or flexible container, interestingly, prototyping is rarely used in the FMCG industry.
- Due to the proportion of larger-size corporations, the FMCG industry is here deemed to employ a stage-gate process or to show a fragmented process; thus it is necessary to explicate whether this pattern is elicited due to the size of the organisation or not in order to decide whether a condition of the stage-gate process is excluded or not.
- There is no absolute context to employ and undertake DDA features: There are differences in employing and undertaking DDA within corporations and consultancies depending on organisational context. Except for the Maginot line illustrated below as a yardstick, a subgroup might show better conditions for DDA but in other ways be an impediment to utilising it. Hence, these findings can be parameters to form a system for DDA. Nevertheless, people who lead an organisation and mechanism to be design-driven need to bear in mind that there may be an adverse reaction to change and may need to avoid restraints and optimise the given conditions instead.
 - These differences (see Propositions 1 and 2 in Section 5.7) elicit certain criteria for better DDA employment (e.g. larger-size corporations account for better DDA

employment, larger-size corporations are deemed to work with larger consultancies, etc.).

- However, these criteria cannot promote the "absolute" direction to follow in undertaking DDA, because there are pros and cons within each subgroup of profiling questions. Nevertheless, both organisations – corporations and consultancies – seek to conduct over 20% of exploratory projects (a kind of Maginot line) to underpin DDA in brand development and organisations.
- Overall, marketers' ownership of brand development shows quite opposite attitudes to and utilisation of the DDA features identified in the selected literature analysis.
- A client's (corporation's) attitude to DDA is not on the same level as a design (consultancy) perspective: Consultancies are deemed to draw more on what they (design) can do, and draw less on what corporations support in brand development (e.g. foster free flow of ideas, customer engagement in brand development, etc.). Therefore, it is necessary to narrow the gap between the different appreciation of DDA utilisation between corporations and consultancies to seek congruence with each other; for example, to enhance a designerly view of brand development, corporations should commence working with external consultancies throughout the entire process; on the other hand, consultancies need to find ways to convince clients and involve them in the entire process.
 - Due to the limited involvement within the entire FMCG brand development,
 consultancies find it hard to take DDA utilisation by clients for granted or they do
 not integrate DA features into corporations' (clients') brand development.
 - Specifically, within a comparison between corporations and consultancies, consultancies' role is limited to developing artefacts rather than being involved in early overall ideas generation: corporations' views on consultancies' involvement are different from those of consultancies.

As indicated at the beginning of this section, the findings for the propositions and initial directions corresponding to the findings above constitute an outline of a DDA model. However, there are limitations to fully substantiating the evidence of the propositions due to the disadvantages of

quantitative research methods and dissatisfaction with the research intentions during collecting data. Therefore, subsequent to the online survey, a follow-up phase – interview – was configured to resolve the following issues:

- Since quantitative results per se are insufficient to explain the underlying features of these identified phenomena, a follow-up phase was configured to complement substation of the propositions.
- Some ambiguous results from the online survey are also interrogated, e.g. although
 "challenging constraints" is a substantial element of DDA, the marketer and brand manager
 group draws more on it for brand development than the designer group.

Besides, in this chapter, all the propositions are scrutinised by different analysis methods, except for proposition 4, *"Four themes extracted from the literature are interdependent: the effective employment of designerly application will result in collaboration, strategic endorsement, intellectual capability (human resources), or vice versa"*. Due to the difficulty of finding a statistical relationship between the themes in CSQ 1 and 2, only RSQ1 was tested by correlation and regression analysis. On top of that, due to insufficient respondents for regression analysis, the results of regression are not enough to substantiate the proposition, so the proposition's substantiation is excluded here. Instead, it will be investigated in the following qualitative research.

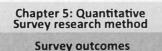
Therefore, via follow-up research, the findings of quantitative research can be consolidated to identify what features help the FMCG industry to employ DDA and develop outlines for a DDA model.

Chapter 6 Qualitative Research: Interview Analysis

6.1 Introduction

This chapter triangulates and complements the previously identified substantiation of propositions via a series of interviews to clarify the limitations of the survey research method (see Figure 6.1), and indeed to aim for quality research by combining different ways of looking at previous outcomes (Silverman, 2005) in order to develop a map for DDA.

As indicated in Section 5.8, due to the limitation of quantitative research and the dissatisfaction with the intention of the survey whilst collecting data, this chapter seeks to inform the evidence for proposition 4, and the unexpected and/or unexplained outcomes of quantitative research by examining the FMCG brand development mechanisms that may underlie the survey outcomes.



Chapter 6: Qualitative Interview research method Interview outcomes

Triangulate and complement

Synthesis to develop a conceptual model

Figure 6.1 Chapter aim

Therefore, sections are configured corresponding to a qualitative research procedure as illustrated in Figure 6.2. Overall, sections are divided into two – before and after data collection. Sections 6.2 and 6.3 capture how qualitative research is outlined and collect information. Sections 6.4 and 6.5 explain how interviews are analysed and findings described by aligning with extracted themes.

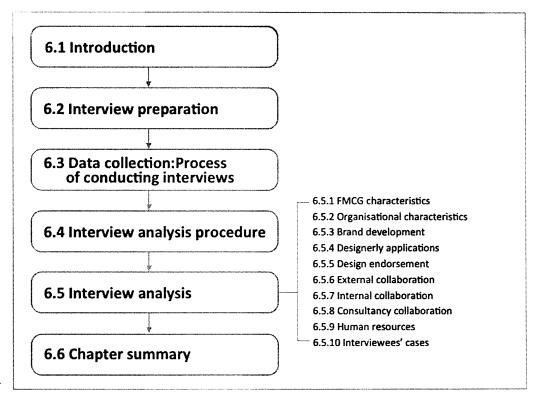


Figure 6.2 Map for qualitative research

6.2 Interview preparation

This section describes two tasks before conducting interviews: 1) choosing a method for interviews and 2) a way to develop a questionnaire. First, a semi-structured interview method was applied to identify underlying and ambiguous issues which had already indicated from the survey outcomes (see Sections 5.7 and 5.8). Semi-structured interview skills are framed with chapter intentions and flexibility to ask further questions in response to participants' replies in significant contexts (Bryman, 2008). Secondly, based on the survey outcomes, the following issues in Table 6.1 were transferred into interview questions and these questions were altered depending on interviewees' responses. As an interviewer, the researcher also seeks to interrogate the denotation of their responses.

	Corporations	Consultancies						
Overall	 Difficulties (vulnerability)/enhancement in employing DDA in terms of overall FMCG industry and specific organisational contexts. 							
	• The current design relationship with branding and organisational management.							
DE	Ways of undertaking flexibility in a stage-gate	Willingness to enhance clients' design employment beyond project scope						
	processWays of decision-making processes							
	• Preferences and stages in key-decision makers'							

Table 6.1 Issues arising from the survey outcomes

	engagement	
DA	 Contexts of unformulated prototyping and visualisation Ways of ideas generation Ways of engaging with customers Ways of undertaking exploratory approaches 	 Ways of transferring designerly knowledge to clients Contexts of unformulated prototyping and visualisation Ways of ideas generation: clients' involvement
		 Ways of engaging with customers Ways of undertaking exploratory approaches
со	 Ways of Internal design team collaboration Ways of collaboration across different disciplines/departments (non-related design 	 Internal collaboration: a role of the design team External collaboration: long-term
	collaboration) Ways of external design collaboration 	relationships, ways of dealing with different types of clients and projects
HR	• Training programme for design or creativity	 Internal and external training programmes for design or creativity

To enhance the interaction between interviewer and interviewees, the interviewees were asked to indicate where DDA features (need to) fit within the brand development process provided (see Appendix 25) and to draw the current design relationship with marketing and organisational management on paper. The latter visual data are used to associate participants' interviews and elicit their actual DDA utilisation.

6.3 Data collection: Process of conducting interviews

Interviewees were contacted from amongst those participants in the survey who left an email address for further research, and new participants with over five years of experience were also recruited to obtain an overview of undertaking DDA in the FMCG industry. Two participants from the survey and three new participants were recruited for each cluster – corporations and consultancies – to crosscheck the participants who took part and cover the majority of respondent groups in the survey. Thus, the way of sampling interviewees was based on subgroups for ANOVA, specifically to cover opinions from design and business, pan-Europe and global (size of corporations), and different industries (food & beverages and household), from where most participants were recruited for the survey; the personal care industry was investigated via a consultancy interviewee who works in the pharmaceutical (personal care) industry (CON-2 in Table 6.2). In the consultancy case, sampling was based on the size of consultancy, the background of interviewees (design, engineering, marketing) and the specialty of design (structural and graphic design). Detailed participants' profiles are shown in Table 6.2.

Table 6.2 Interviewees' profiles

Corporations		Consultancies	
Participant	Position, size of organisation & previous experience	Participant	Position, size of organisation & previous experience
COR-1 Food industry, survey participant Duration: 41:14	 Innovation practitioner Large-size corporation Previous job position was as a marketer 	CON-1 Marketing and packaging, survey participant Duration: 1:32.53	 Owner & CEO Small-size consultancy Marketing and packaging, engineering background, worked in the pharmaceutical industry (personal care)
COR-2 Food industry, survey participant Duration: 2:48:17	 Innovator at the strategic level Large-size corporation Manufacturing and marketing background 	CON-2 Retail design Duration: 3:49:18	 Owner Small-size consultancy Graphic design background
COR-3 Household industry, survey participant Duration: 1:27:08	 Marketing director Medium-size corporation in the UK, the local office of a large corporation based in France Marketing background 	CON-3 Product design, survey participant Duration: 1:05:51	 Co-founder Small-size consultancy Product design background, worked in a large-size consultancy
COR-4 Spirits industry Duration: 1:32:34	 Digital brand manager in the vodka category (junior level) of global marketing management Large global corporation Marketing background 	CON-4 Graphic design, survey participant Duration: 1:25:06	 Business development director Three offices in the UK and one international branch Graphic and digital design background, worked in a marketing consultancy
COR-5 Retail industry (Own brand) Duration: 1:46:14	 Head of catalogue production Large-size corporation Design background 	CON-5 Product design Duration: 1:48:16	 Senior product designer Large-size consultancy

All the interviews were conducted in person and audio-recorded, and later transcribed. After transcribing the data, some interviewees were contacted by email to ask about data missing from their outcomes and any underlying influences (pre-existing force).

6.4 Interview analysis procedures

This section illustrates a way of interpreting the corpus of interviews in order to validate outcomes from the survey and reveal their underlying features. Creswell comments that 'an ideal situation is to blend the general steps with the specific research strategy steps' (2009: 184) in order to proceed to analyse data. Thus, as a general qualitative step, thematic analysis was used to extract main and subthemes corresponding to the determined categories (Table 6.1). To elicit themes (categories), a specific framework was applied to segment interview data. Since analysing qualitative data can reveal latent and meaningful themes via a coding process, segmenting and reassembling within iterations (Boeije, 2009), it is important to choose a suitable coding technique for a research strategy step to align with a general step: initial and secondary (reassembling) stages. The intention of this qualitative research is to intervene between concept-driven and data-driven approaches. Specifically, the modified framework in this chapter is close to concept-driven approaches (see Figure 4.7).

As illustrated in Subsection 4.5.3, N-VIVO program was used for qualitative analysis in the following coding procedure. The predetermined categories – 27 themes under 10 clusters – were developed through coding by hand as a preliminary process; afterwards, first, the provisional coding was adapted at the initial stage to split from or extend the predetermined categories. In the initial stage, over 100 fractured or extended codes were identified. Even though this is the nature of coding, they needed to be cut down to between 50 and 60 codes to keep the number within the capacity of the researcher's memory (Miles and Huberman, 1994) and then to reassemble similar patterns.

Afterwards, axial coding was applied to the second stage. Axial coding extends analytic work from initial coding and to, some extent, focused coding. Thus, throughout reassembling fractured (detailed) codes, eventually, 32 main themes and 38 subthemes were extracted (see Appendix 26). Cluster 10 – interviewees' specifications – will discuss interviewees' opinions in terms of aligning collected visual data with other themes. Visual data will also be explained regarding how they perceive design incorporated with branding and organisational management.

Table 6.3, below, only shows main themes under 10 clusters extracted from the interviews; the themes in bold are added after axial coding.

Clu	ster	Themes						
1.	FMCG business (F)	1.1. FMCG industry context (FIC)						
2.	Organisation (ORG)	2.1. Organisational characteristics depending on size (ORG-SC)						
		2.2. Enhancement for BD and DDA (ORG-S-ENHANCE)						
		2.3. Hindrance to BD and DDA (ORG-S-ENHANCE)						
		2.4. Roles of packaging and design (ORG-ROPD)						
3.	Brand development process	3.1. Approaches of BDP (BDP-AP)						
	(BDP)	3.2. Important features that impact on BD (BDP-IF)						
		3.3. Role of design in BD (BDP-RD)						
		3.4. Cases for DDA (CC-DDA)						
4.	Designerly application (DA)	4.1. Prototyping (DA-P)						
		4.2. Visualisation (DA-V)						
		4.3. Undertaking exploratory projects (DA-UXP)						
		4.4. Ways of consumer engagement (DA-WCE)						
		4.5. Ways of embedding/facilitating innovation and design (DA-WEID)						

Table 6.3 Main	themes under	10 clusters
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		4.6. Ways of generating ideas (DA-WGI)
		4.7. Roles of a facilitator for innovation and design (DA-RFID)
5.	Design endorsement (DE)	5.1. Flexibility and iteration in a stage-gate process (DE-FIGS)
		5.2. Brand development ownership (DE-BO)
		5.3. Key decision characteristics (DE-KDMC)
6.	External collaboration (CO-EX):	6.1. Enhancement of external collaboration (CO-EX-ENHAN)
	corporations side	6.2. Hindrance to external collaboration (CO-EX-HIND)
		6.3. Roles of consultancy (CO-EX-RC)
7.	Internal collaboration (CO-IN)	7.1 Enhancement for collaboration (CO-IN-ENHAN)
		7.2 Hindrance to internal collaboration (CO-IN-HIND)
8.	Consultancy collaboration	8.1. Difficulties in working with clients (CONCO-DC)
	(CONCO)	8.2. Ways of working with clients (CONCO-WWC)
		8.3. Preferences for whom consultancies work with (CONCO-PWW)
		8.4. Ways of transferring designerly experience (CONCO-WWE-WTDE)
9.	Human resources (HR)	9.1. Continuing professional development (HR-CPD)
ļ		9.2. Training for creativity and innovation (HR-CPD-CI)
		9.3. Consultancy training offer (HR-CRT)
10.	Interviewees' specifications (IS)	10.1. Interviewees' case names

6.5 Interview analysis

This section points out important interpretive and descriptive findings in each cluster (10 clusters), based on Table 6.3, aligning with the aims of the qualitative research. The quotes used here to substantiate each extracted theme are presented in Appendix 27.

6.5.1 FMCG characteristics

Interviewees were asked about features in brand development that differentiate the FMCG industry from other industries (e.g. electronic consumer goods industry), which fails to recruit participants from non-FMCG industry in Chapter 5; other characteristics about the FMCG industry emerged from responses to other questions in order to justify or criticise their actions. In the interviews, five industries – food & beverages, health/personal care, household, spirits and retail (own brand) – were discussed, which produce consumer packaged goods and are regarded as typical of the FMCG industry. The findings will be delineated as follows: 1) overall FMCG findings, 2) contexts specific to different FMCG industries, and 3) the disassociation between interviewees' descriptions and the researcher's interpretations.

First, two common features are revealed in terms of hindrance to brand development and employing designerly approaches in an overall FMCG context. Interestingly, no one indicated any positive FMCG

context affecting brand development; every interviewee indicated hindrances to FMCG brand development.

- Focusing on a short-term plan due to a sales-driven/cost efficiency-driven approach results in a risk-averse attitude and less investment in new approaches for brand development: Interviewees pinpointed "low margin and high volume product" as important characteristics in FMCG. This characteristic has a connection with sales-driven/cost efficiency-driven approaches, which lead to a risk-averse attitude and less investment, when developing a new product/brand. The degree of investment and risk-taking also relates to the market size of a brand. COR-2 indicated that their market was not big enough to wait for a return from risktaking. Thus, the FMCG industry has great difficulty in embracing exploratory approaches or undertaking new category development without concrete (analytic) evidence. In contrast, interviewees indicated that global FMCG corporations (e.g. P&G) might cope with investment in new brand development or processes because of their capability to wait for a return on investment. Sales-driven/cost efficiency-driven approaches entail a short-term attitude, which results in a tendency for brand revitalisation or brand-line stretching, rather than taking up the challenge of new brand/category development. This scenario causes consultancies to take a limited role in brand-line stretching and be part of the entire brand development process.
- Brand development ownership of marketers: Mostly, marketers adopt a role in developing brands in FMCG. Marketers' brand development ownership per se is not problematic, but their attitudes to the profession cause hindrance. This career-path concern/interest influences a risk-averse or swanky attitude towards finding a new/exploratory way for brand development/management. Thus, two downsides might be assumed, in that: 1) it does not work on new development for a new category and 2) without elaboration of the existing brand or brand portfolio, it seeks to modify an existing brand to display personal achievement for a better position or promotion.

The mix of the two findings inflames risk-averse investment in employing new approaches within the FMCG industry and this might be linked to a finding in the survey: marketers' ownership of brand

development accounts for poorer DDA performance. Hence, it can be asserted that there needs to be an education system for marketers to acknowledge DDA attitudes and approaches or a legitimate system to involve designers in overcoming marketers' restraints in DDA performance.

Secondly, the characteristics of specific FMCG industries are illustrated. These might be limited only to consideration of interviewees' organisations, though these characteristics were also addressed in the corpus of consultancy interviewees so that these might be assumed to be influential characteristics specific to FMCG brand development. These findings below need to be considered in order to implement DDA in brand development.

- Food industry: Tends to have the most conventional and sales-driven approaches;
- Pharmaceutical industry: Considers strict regulations and this results in more time and iterations within a process before launch;
- Household industry: Concerned more with the feasibility of technology and manufacturing: function of a product rather than emotional engagement;
- Spirits industry: Considers emotional engagement with consumers more to maintain the heritage of a brand.

Lastly, while consultancies criticised ways of operating external consultancies in FMCG as a difference or difficulty compared to other industries, silo operations in external collaboration were described by interviewees from consultancies: as a hindrance to holistic development between external consultancies and even between corporations and consultancies. This can be associated with the findings from the survey: stage-gate process. Such a process is found in not only larger-size organisations but also in smaller-size ones. Thus, it can be asserted that a stage-gate or fragmented process prevails in the FMCG industry and hinders DDA utilisation. Especially in large organisations, such a process may be inevitable. However, this mechanism for brand development needs to be revamped in order to decrease its downside for DDA.

To sum up, the findings in this cluster are associated with the following themes: brand development and DDA employment. Thus, these need to be seen together as framing the following specific contexts.

6.5.2 Organisational characteristics

Four main themes are extracted here: 2.1) organisational characteristics by size of corporation and market; 2.2) enhancement for brand development and DDA; 2.3) hindrance to brand development and DDA; 2.4) roles of packaging and design. From the previous survey outcomes, since 87.5% of respondents were from large-size corporations (over 250 employees) and 67.5% respondents operate businesses in over 10 countries, the number of operating businesses was used as a parameter to conduct ANOVA: two subgroups which operate businesses in up to 10, or over 10, countries. The subgroup "over 10 countries" shows a better attitude to and exploitation of DDA. Therefore, it is necessary to explicate what the parameter of "over 10 countries" means.

First, corporate issues about organisational characteristics mostly emerged when addressing the difficulties in or enhancement of brand development and employing designerly applications. Although all the corporation interviewees fall into large-size organisations (over 250 employees), except for COR-4, they commented that their corporations are not big enough to take risks and invest more in innovation and design, compared to the big global corporations. So it can be interpreted that the definition of size of an organisation – cited in Krake (2005) – might be relevant to categorise difference; meanwhile, it is necessary to consider the market size of a business. In the same manner as the survey outcomes for the number of operating businesses, pros and cons are identified in brand development and DDA as follows:

Global market corporation (larger-size corporation): Enhancement: It has better

infrastructure in terms of finance and other physical/intangible support (e.g. incubators for new brands and products, inspirational space for creativity enhancement, training programmes, etc.); and in terms of external collaboration, it has more integrated approaches with external partners via team workshops, corporate conferences, etc. **Hindrance**: More layers of a structural hierarchy result in difficulty for the free flow of communication and making decisions. Eventually, these complicated layers of structure delay the progress of projects too.

• Local market-based corporation (smaller size): Enhancement: Such organisations have more flexibility and make decisions more quickly. It is easy to discuss a problem agilely across

departments when compared to the ways of a global corporation. **Hindrance**: It has a smaller budget, lack of infrastructure, and focuses more on revenue growth than a global corporation does. This type of organisation is limited in selecting a consultancy due to its limited budget.

 Private equity corporation: Two corporation interviewees (COR-3 and 4) were classified under this category. Their approaches to brand development and DDA show differences because of other features: leader's appreciation of DDA, investment in brand development, etc. It was found that this type of organisation tends to be flexible in its decision-making processes because stakeholders have better access to board members for decision-making.

CON-3 explicated the hindrance of new challenges in larger-size corporations when such organisations are expanding (see Appendix 27-1). Due to the layers of complexity, larger-size corporations do not focus on growth but on perpetuating the status quo.

However, the characteristics of size – risk-averse attitude – can be appreciated differently. Although both COR-3 and 4 are private equity organisations, the attitudes or actions for risk taking are appreciated and undertaken differently in each organisation, depending on the leadership in design/innovation. While COR-3 is still mostly concerned with revenue growth and a failure to engage in risk taking within the limited market of the pan-European region, COR-4's concerns shift to creativity and design to reinforce the consumer relationship with the heritage of a brand. Hence, COR-4's organisation invests in finding ways to underpin design and creativity by collaborating with internal departments and external experts. While other corporation interviewees perceive design in a classical manner – techniques of functional and aesthetical modification – COR-4 seeks to implement design in terms of creativity (actually DDA) so as to be competitive and sustain a brand. Especially after a new chief marketing director was appointed in COR-4, they strived to reinforce creativity. An organisation which has leadership in DDA seeks to integrate all phases and activities into better brand delivery to customers.

Therefore, instead of stressing the characteristics of private equity itself, it is necessary to understand an organisation in terms of leadership and market size (size of the organisation) as important

constituents of organisational characteristics. It can be asserted that **organisational size (structure)** and leadership in design/innovation together determine organisational characteristics and eventually entail better approaches to DDA in brand development.

Secondly, in terms of FMCG clients and the characteristics of a consultancy's organisation, consultancy interviewees criticised the organisational rigidity of FMCG characteristics as a difficulty: rigid hierarchy and bureaucratic structure. Regarding the characteristics of size of a consultancy, a similar pattern is found to that of the characteristics of different sizes of corporations.

- Smaller-size consultancy: Advantage: It is easy to build close relationships with clients direct communication between designers and clients – and it might be more passionate about solving problems. Disadvantage: It has less chance to work with big-budget projects and big-name clients.
- Larger-size consultancy (global-networked consultancy): advantage: It has more chances to
 work with big-name clients and big-budget projects. Disadvantage: It has a more fragmented
 organisational structure, like a larger-size corporate organisation. Thus, clients are likely to
 communicate with other members of consultancies via an account manager.

By considering the above corporations' and consultancies' opinions together, local market-based (smaller size) corporations seek to find the right scale of consultancy, rather than wanting to work with large-size consultancies. If they keep working with large consultancies, they might not receive the best service from them, as substantiated by COR-3' quote (see Appendix 27-2).

In summary, aligning with the finding in the survey: larger organisations are deemed to have a fragmented process and to hinder collaboration, it is suggested that larger-size consultancies seek to avoid/minimise a fragmented structure and to involve designers into not only in design development but also in early strategy establishment. That is, depending on the size of an organisation, consultancies have different chances to work with different budgets so that there is different understanding of designerly approaches.

6.5.3 Brand development

Four main themes are extracted from within FMCG brand development: 3.1) current and necessary approaches; 3.2) important features that impact on brand development; 3.3) ways of undertaking design (roles of design); 3.4) good examples to overcome the difficulties or hindrances of FMCG characteristics within projects.

First, all the interviewees, except for COR-4, indicated their current internal and external silo (fragmented) approaches, as indicated in Subsection 6.5.1. However, the manner of describing brand development was dependent on whether interviewees were aware of them as a hindrance. The following quotes might be exaggerated instances from COR-1 to show the underlying reasons for silo operation (see COR-1 quotes in Appendix 27-3 and 4): e.g. misunderstanding of the role of innovation facilitator (no external network involvement in early ideas generation stage) and no involvement in consultancies work (silo operation of consultancies work). Except for COR-4, every description from corporations and consultancies is similar to COR-1's finding.

Only COR-4 shows different approaches because of the enhancement features augmented from an FMCG context and organisational characteristics: spirits industry which has more interest with consumer engagement, leadership which enables adequate infrastructure for DDA strategic deployment and more investment. In contrast, the other interviewees from corporations and consultancies indicated that FMCG mostly tends to adopt internal silo approaches: a fractured relationship in brand development. This finding concurs with that from the survey. Thus, in terms of a corporation's external collaboration, external experts are rarely involved in up-front ideas generation and external consultancies only play a small part, for special techniques, after important strategic features are predetermined. In more detail, a corporation's operation of diverse external consultancies. Consultancy interviewees criticised how this approach led to inconsistent brand touch points (communication). CON-3 exemplifies the downside of the current silo approaches and their consequence of it (see Appendix 27-5): within a silo operation, when all the activities come together, they are not deemed to fit each other. They also emphasised that despite

the client's impediment to brand development, they sought to integrate their approaches into the client's process for better delivery.

Therefore, all the interviewees called for an integrated approach and other remedies to counter the hindrance of the silo approaches previously mentioned as necessary approaches: leadership for brand development; invest (in infrastructure) for integration; project manager to integrate all phases; sharing progress across departments; collaborative approaches in early ideas generation; etc. Besides, consultancies stressed one more approach, a good relationship with clients (partnership) to overcome difficulties in integration in brand deployment.

Secondly, five subthemes are revealed which impact brand development including what is indicated above. These were not revealed by the direct questions that ask what impacts brand development; instead, these were emerging simultaneously to describe the brand development process as an important consideration or hindrance:

- Operational management: Under this theme, features are indicated above: the degree of flexibility to tailor a process and an integrated process as influential on brand development. The respondents from COR-2 criticised the current utilisation of development process as being stuck with a prescribed mechanism due to concerns about failure. On the other hand, the organisation of COR-4 sought to develop its own process to integrate all the phases within the span of a 2-year project timeframe to explore a better result.
- Customer engagement: The interviewees recognised that customer engagement is substantial in brand development; nevertheless, there was a different tone of voice between corporations and consultancies regarding customer engagement, as indicated in Subsection 5.6.1: consultancies consider customer's participation in overall idea development more, rather than in the research stages where customers are treated as individual objects to be observed and interpreted. The interviewees from corporations criticised the deficiency/vulnerability of their ways of consumer engagement. On the other hand, the consultancy interviewees sought to find consumer insights despite a limited timeframe, budget, and the right access to customers. However, from the researcher's view of COR-1,

there is a deficiency in undertaking consumer engagement but the interviewees did not criticise or give any negative impressions of that.

- Invest and cost efficiency for revenue growth: Except for the respondent from COR-4, all the interviewees addressed cost being the main concern when developing a brand. This is related to investment (leadership) and revenue growth (FMCG context). Interviewees criticised how the overwhelming concern over cost results in limited possibilities for brand development: mostly the focus is on brand revitalisation. CON-1, 3 and 5 raised the other stance of cost, they stressed that manufacturing costs are easily neglected, though these must be considered in brand development.
- New contexts new technologies, new channels, new trends (sociocultural aspects), etc.: The interviewees in consultancies draw on new technologies and new channels to respond to changing trends within brand development: CON-1, 3 and 4 stressed technology or packaging structures; and the corporation interviewees put more emphasis on disassociating themselves from utilising new technologies and channels in FMCG brand development than did the consultancies interviewees. COR-5 specified the importance of new contexts but mentioned difficulties in and disassociation from modifying their ways in terms of new channels (online shopping) in the organisation. COR-3 indicated the lopsided importance of technology interests in brand development, because technology is appreciated as a more objective factor than design, so they can take risks by adopting new technologies. Only COR-4 sought to link the potential of new diverse contexts with brand development by investment in finance and time.
- Project ownership and intellectual capabilities leadership at the project level and other employees' capabilities: The consultancy interviewees stressed that by depending on the characteristics of a project manager, the success of a project is determined. The corporation interviewees – CORs 2-5 – had a certain level of understanding of DDA and sought to apply this to brand development although, except for COR-4, the other interviewees often confront difficulties when working with other stakeholders or colleagues who are unaware of DDA. COR-2, 3 and 5 show that a project manager with design/designerly knowledge may often confront organisational difficulties when undertaking designerly applications. Therefore,

human resources, which have been overlooked in terms of enhancing the intellectual

capability of designerly applications, need to be reformulated to enhance DDA.

Table 6.4 illustrates the current usage of influential features in brand development. In summary, the previous enhancement features in an FMCG context and organisational characteristics affect subthemes' utilisation in brand development. In contrast, the COR-1 case is opposite to that of COR-4: the previous hindrances in an FMCG context and organisational characteristics affect brand development and other projects.

	Corpora	tions				Consultancies				
Subthemes	COR-1	COR-2	COR-3	COR-4	COR-5	CON-1	CON-2	CON-3	CON-4	CON-5
Operational management	NA	-	-	+	0	-	-	0	NA	-
Consumer engagement	0	-	-	+	-	+	+	+	+	NA
Invest (cost) and sales	-	-		+	0	-	NA	-	-	_
New context	NA	-	0	+	0	0	NA	0	0	NA
Project ownership and intellectual capacity	NA	0	0	+	0	0	0	0	0	0

Table 6.4 Subthemes of features impact on brand development

Current usage in participant's organisation: -: negative; 0: neither negative nor positive (mix of positive and negative voices or different views between researcher and interviewees); +: positive; NA: not applicable

Thirdly, In terms of how design is undertaken in brand development, overall, there is no internal design team mentioned in the corporation interviews; meanwhile, the "design" term per se is appreciated as the final delivery from an external consultancy. However, some corporation interviewees are already undertaking DDA without recognition of it and with different terms: innovation and creativity. COR-2, 3 and 5's interest in and appreciation of design, formed by themselves, sought to apply DDA within their remits: using prototyping visualisation in ideas generation, seeking internal and external collaboration, etc. On the other hand, COR-4's organisation already utilises DDA across organisational activities and projects in a form of external collaboration in entire phases, attempts at innovation, customer engagement, etc. Thus, it can be assumed that, from the COR-4' interviews, a high appreciation of design is formed by a combination of self-interest, organisational atmosphere and (un)consciously undertaking DDA during project deployment. From the consultancies' perspective, the interviewees were aware that their role is limited in the FMCG industry and determined by the client's intentions.

Lastly, the interviewees offered good examples to overcome the difficulties or hindrances of FMCG characteristics. These are illustrated in Appendix 27-6, and the interviewees referred to these cases to show how the FMCG industry overcomes restraining boundaries.

To conclude the brand development cluster, it is complicated to define "a feature" which influences design utilisation in brand development and brand development per se. The five subthemes identified are associated with employing designerly applications and impacting on competitive brands. However, design per se is not perceived as an important feature, though classical roles of design are – the functional and the aesthetic.

6.5.4 Designerly applications

Prototyping and visualisation, which are claimed to have substantial significance in design research, did not prevail in the survey outcomes, so this subsection seeks to investigate their latent usage as well as other designerly applications. Seven main themes were extracted from designerly applications: 4.1) prototyping; 4.2) visualisation; 4.3) undertaking exploratory projects; 4.4) ways of consumer engagement; 4.5) way of embedding/facilitating innovation and design; 4.6) ways of generating ideas; 4.7) roles of a facilitator for innovation and design.

First, since a "mock-up" is generally used in FMCG packaging development, using the term "prototyping" brought confusion to the interviewees so that, during interviews, both terms – prototyping and mock-up – were used to identify the use of prototyping. The quote below from CON-3 briefly describes the reasons for using and terminating prototyping in FMCG brand development in Appendix 27-7: since FMCG products are generally contained in a pack, physical mock-ups are important to examine user experience of a pack and reduce mistakes at the end. However, due to the cost of manufacturing them, a prototyping step is often excluded from FMCG brand development.

From the corpus of interviewees, four types of prototyping are noted: 1) for consumer tests; 2) within iterations; 3) presenting a selection to the board; 4) within ideas generation (rapid-prototyping). Table 6.5 summarises four prototyping types which interviewees utilise in brand development. Only CON-3

indicated another type, prototyping for manufacturing; but, despite its importance, this type was not indicated in brand development, so it is not displayed here.

The consultancy interviewees stress the benefits of prototyping, but they did not mention prototyping for presentations to the board. Nevertheless, it can be assumed that this type of prototyping definitely occurs in consultancies to confirm a final suggestion from a key decision-maker. Structural design consultancies – CONs 1, 3 and 5 – are more concerned with rapid prototyping: quick tests and generating initial ideas at the up-front stage. However, rapid prototyping is often modified into a visual format – Illustrator or 3D – because of cost and short time frames. On the other hand, corporation interviewees had less understanding of the benefits of (rapid) prototyping, though in some way they understand that prototyping helps customers or board members understand structural ideas rather than applying prototyping to ideas generation. This stance is far from an important benefit of prototyping: understanding structural usage by prototyping and facilitating ideas generation. Despite this understanding of prototyping, cost as well as a short time frame hinders understanding prototyping. COR-1 and 2's excuse was that they rarely conduct prototyping because of the nature of the food business and project types: use an existing structural form rather than developing a new one.

	Corporations					Consultancies				
Subtheme	COR-1	COR-2	COR-3	COR-4	COR-5	CON-1	CON-2	CON-3	CON-4	CON-5
Prototyping for consumer tests	+	+	NA	+	NA	+	NA	+	+	+
Prototyping within iterations	NA	NA	0	+	NA	+	NA	+	NA	NA
Prototyping for presenting a selection to the board	+	+	NA	+	NA	NA	NA	NA	NA	NA
Rapid- prototyping	NA	-	0	NA	NA	+	NA	+	NA	+

Table 6 5	Subthemes	ofin	rototy	ning	mock
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Current usage in participants' organisations: -: not using; 0: neither negative nor positive (mix of positive and negative voices, or partially using it); +: using; NA: not applicable

To sum up, aligning with the findings from the survey, this quote informs that, overall, prototyping is not proactively utilised in brand development: it is limited to making a presentation to the board for final selection rather than ideas generation, due to a lack of understanding of prototyping, time and cost as well as a propensity to use an existing form. On top of that, a prototyping procedure is mostly. conducted within a consultancy. In case of difficulty in collaboration between corporations and consultancies, it is hard for consultancies to transfer ways of prototyping to clients.

Secondly, visualisation, which was, overall, ranked low and drawn on more by consultancies in the survey, needs to be clarified. Under this visualisation theme, there are nine subthemes, including the benefits and hindrances of visualisation. The other seven subthemes are specific descriptive usages of visualisation identified in the interviews. Due to the concerns over cost and time frame when utilising prototyping, and mostly incremental project types, prototyping is deemed to be replaced by visualisation in FMCG. In addition, thanks to advanced computer-aided programs (e.g. 3D and Illustrator), the FMCG industry prefers visualisation to prototyping to achieve an efficiency perspective: time and cost. Visualisation also tends to be perceived as a medium to enhance the understanding of concepts rather than a medium to facilitate ideas generation like prototyping (see Table 6.6); on the other hand, proposition and consultation sketches – ideas generation/development – are emphasised more within consultancies.

It was hard to cover every type of visualisation during the interviews. However, at a certain level, in consultancies' subthemes indicated as "NA", it might be assumed that these are undertaken in an unstructured manner, in a limited or habitual way. Except for the subthemes primarily indicated – consultation sketches within iterations, proposition sketches and presentation sketches – the other visualisation subthemes are techniques to facilitate rather than understand ideas. These techniques, not referred to, are utilised in an unstructured manner and correspond to internal culture and project managers' understanding. Collective visualisation is to frame an idea's direction after mapping out all the information gathered from research.

Overall, visualisation is perceived as a confined technique limited to design activities and generated by designers in corporations. This result does not concur with what DDA claims: visualisation helps to find more opportunities, going beyond design-related projects by transferring abstract and ambiguous information into a concrete image within a refined or rough (rapid) form. Besides, from the interviews, non-designers are afraid to start rapid visualisation in ideas generation, because they are uncomfortable doing it.

Table 6.6 Subthemes of visualisation

	Corpora	tions	n Norra S			Consulta	ncies			
Subtheme	COR-1	COR-2	COR-3	COR-4	COR-5	CON-1	CON-2	CON-3	CON-4	CON-5
Collective visualisation	NA	NA	NA	NA	NA	+	NA	NA	NA	+
Consultation sketch within iterations	NA	NA	+	+	+	+	+	+	+	+
Diagram	NA	NA	NA	+	NA	NA	NA	NA	NA	NA
Mood board	+	NA	NA	+	NA	+	NA	NA	NA	+
Proposition sketch	+	+	+	+	+	+	+	+	+	+
Presentation sketch to board or consumers	+	+	+	+	+	NA	NA	NA	NA	NA
Stimulus, visual data, photos, illustrations	+	NA	NA	+	+	+	NA	NA	+	NA

Current usage in participant organisations: -: not suing; +: using; NA: not applicable

Thirdly, most interviewees drew more on hindrance features than enhancement features in terms of undertaking exploratory projects, which is similar to how hindrance was addressed in the previous organisational characteristics and FMCG context: 1) the scale of a project related to incremental brand development, and 2) cost-driven approach to brand development: fear of project failure and satisfying the status quo. However, corporation interviewees described their efforts to overcome the difficulties in generating innovation projects (e.g. long-term innovation plans, regular internal innovation meetings, innovation champions, etc.).

In addition, consultancy interviewees emphasised good relationships with clients for consultancies undertaking exploratory projects. Trust between them enables consultancies to break from a predetermined work scope and attempt exploratory approaches to developing a brand. Nevertheless, overall, consultancy interviewees were sceptical about ways of undertaking exploratory projects within the FMCG industry. Hence, it can be interpreted that, to a certain extent, exploratory attitudes in the survey might not reach the radical approach which Verganti (2009) claims.

Fourthly, paradoxical responses emerged regarding customer engagement. Interviewees stressed the importance of finding customer insights for competitive brands, but criticised the ways of finding them. In contrast, there was an opposite opinion of not relying on consumers too much. On the whole, interviewees criticised inappropriate approaches to finding insights. Except for COR-4, customer engagement concentrates on testing the ideas for products, brands, adverts, etc., so that a focus group is primarily conducted under the guise of finding consumer insights. CON-2 criticised the

downside of a focus group: participants' skewed opinions or a question for a particular answer with conventional ways of conducting a focus group (see Appendix 27-8). Thus, a focus group per se is not a problem, but the approach to focus groups can misrepresent the concept of customer engagement. A focus group is criticised as a medium to evaluate customers' responses, modify an idea corresponding to its responses, justify the project manager's thoughts and then get approval (investment) from the board within a fixed process: weight on quantitative research/analytical results.

Therefore, all the consultancy interviewees insisted on developing new ways of finding latent insights: e.g. talk/observe in real situations, extensive qualitative research, mix of qualitative and quantitative research, etc. Unfortunately, in contrast to the claims of design research: a user-centred approach and co-creation, customer engagement or observation at the up-front stage, are undertaken in an unstructured manner or omitted: reflecting the project-manager's observation of daily lives being incorporated into ideas generation. According to the survey results: corporations perceive that a customer is considered a priority and seek to engage with customers throughout the brand development process indicated in Subsection 5.6.1; but from the interviews, except for a few big global corporations, it is revealed that the FMCG industry needs to modify customer engagement to elicit genuine customer insights.

Fifthly, another theme, "attitudes to ideas generation", is extracted separately. Despite the importance of integration between brand and product, except for COR-4, product ideas generation is limited to internal (marketing) people, mostly within corporations, without input from external networks; afterwards, brand ideas development is rarely generated through collaboration between corporations and consultancies; corporations ask consultancies to develop brand design and advertising after establishing a brief or just leave brand design development entirely to consultancies, with little if any involvement. Thus, consultancy interviewees highlighted the importance of early involvement in the client's process and ways of collaborative ideas generation with clients, including manufactures and other suppliers. This substantiates the previous survey finding: the lack of an interdisciplinary approach or external network in the early stages.

Lastly, two themes will be delineated together: ways (efforts) of embedding innovation and design, and the role of a facilitator to embed them, because these two themes are closely related to each other: cause and effect. For example, to embed innovation and design into the organisation and projects, generally, organisations assign a facilitator to achieve this. In another stance, a facilitator, who fully acquaints him/herself with DDA, is placed to embed innovation and design. In a common aspect, interviewees called for a facilitator/integrator to envision the possibilities of uncertain outcomes and research approaches for ideas exploration and generation: a facilitator/integrator provides a panacea for deficiency by capturing phases integration. Furthermore, innovation and design – DDA – need to be instilled into organisational structure and professional management (intellectual capability). Meanwhile, consultancy interviewees explained that designers need to be champions and disseminate designerly ways of conceptualising and exploitation and teach designerly applications for the benefit of clients.

To summarise the DA theme, interviews substantiate the reasons hindering prototyping and visualisation despite their substantial benefits: 1) cost and time, 2) a lack of willingness/commitment. Also, the interview supports the low value of "completing all phases of exploratory projects" in the survey; the FMCG industry is deemed to satisfy the status quo or to focus on incremental brand development. Lastly, the reason underlying differences in customer's engagement between corporations and consultancies in the survey are revealed, i.e. approaches to customer's engagement – focus group interviewing – in the FMCG industry are conventional and prevailing approaches and are often manipulated at the project manager's behest.

6.5.5 Design endorsement

Three main themes are extracted: 5.1) flexibility and iteration in a stage-gate process; 5.2) brand development ownership; 5.3) key decision characteristics. Paradoxical outcomes came from the survey: they account for a "stage-gate process" at the same time as a "flexible organisational process" from corporations' results. All the interviewees pinpointed a prerequisite: the organisation ensures flexibility and iteration in the up-front stages – research and ideas generation. Corporation interviewees to

follow. COR-1 indicated that a process needs to be flexible, although there is a process to follow in Appendix 27-9.

COR-1 and 2 work in the same holding company, but COR-2 criticised there being less flexibility and iteration in the up-front stages for research, and the attitude of sticking to processes and what they have done. COR-1's extent of flexibility and iteration might not be equivalent to that of DDA. Especially, although interviewees stressed the importance of flexibility and iteration in the research stage and ideas generation, these were often vulnerable to being neglected and missed in practice; flexibility is drawn on more in the survey.

On the other hand, the interviewees commented that a certain degree of a stage-gate process was irresistible after testing ideas: overall ideas implementation phases. Therefore, the flexibility and iterations in up-front ideas generation need to be ensured by the organisation's management or board. For example, COR-4 has a 2-year time frame for a project; thus the process is so fluid that iteration and flexibility are inherent in up-front stages. In the next case, since a central team, including the CEO, was involved at every stage (milestone), although COR-3 uses a stage-gate process, they constantly amalgamate one part of an organisational structure with other parts and move things forward to the next stage without intervening decision-making stages. Consultancy interviewees noted that iteration was inherent to the internal development process but it is only possible to iterate within a client's process if a consultancy has a plausible reason of which the client is convinced.

Secondly, marketers' brand development ownership is pre-eminent in the FMCG industry, but marketers were blamed for fulfilling brand development in the interviews: meanwhile marketers' ownership of brand development showed less DDA congruence in the survey. Seven interviewees illustrated faults with a marketer's brand development ownership. CON-1 referred to the lack of production knowledge (disconnection from manufacturing and design). Other deficiencies in marketers' brand development ownership were illustrated during the interviews: 1) concern about career building which is indicated in FMCG characteristics (see Subsection 6.5.1); 2) lack of inclination to employ new methods, e.g. afraid of using visualisation and rapid prototyping in the research stage; 3) cost concerns: value for money (sales), not for the brand itself; 4) disconnection between

marketers and other departments (design, technology, etc.): while designers seek to change customer behaviour through what they develop in tangible form, marketers rely on strategic thinking, perceiving design is a secondary thing in brand development. However, there are also deficiencies in designers' brand development ownership: directing how to develop design outcomes. In contrast to the deficiencies in each brand's development ownership, the interviewees also addressed the advantages of ownership. For example, a consultancy preferred to work with a marketer who has a budget and authority over a project; in contrast, the other consultancy preferred to work with designers who were likely to offer better innovation and design enhancement.

Therefore, it might not be a matter of whom a consultancy deals with but a matter of what capability and mindset a project manager has. Nevertheless, since marketers currently lead brand development within the FMCG industry, marketers need to overcome the deficiencies illustrated in their ownership of brand development.

Lastly, key decision-characteristic themes will be discussed within the design endorsement cluster. Interviewees avoided responding to the question about the preferences of key decision-makers' engagement, because they needed to deal with this differently, depending on the scale and importance of a project. COR-1, 3 and 4 indicated that they were able to rearrange predetermined reporting schedules, depending on progress; e.g., if a project makes progress, they do not have to wait until the next meeting but can organise a meeting for a progress report. Thus, above all, organisational characteristics influence flexibility in decision-making: e.g. private equity and a flexible organisation structure.

COR-3 said that decision-makers and board members gave more consolidated feedback to advertising campaigns rather than packaging design; thus this interviewee assumed that the characteristics of decision-making were dependent on the budget for a task. Mostly, corporation interviewees agreed that it would be ideal for decision-makers to be involved in every stage, but it is virtually impossible in practice. Thus, they indicated that key decision-makers need to take part in certain milestones which were addressed at only two stages here: before starting projects and before ideas implementation.

Therefore, the scale and importance of a project and organisational characteristics determine the decision-making process.

To summarise the design endorsement theme, the findings above reveal the underlying reason why flexibility and a stage-gate process account for a strong attitude. A certain level of flexibility might not be equivalent to that of DDA in the literature and might be limited in early stages; nevertheless, a stage-gate process is strongly employed. Thus, it is necessary to enhance the extent of flexibility and minimise the extent of a stage-gate process. In terms of ownership of projects, depending on the project manager's disciplines there are pros and cons, but marketers' ownership shows deficiencies in undertaking DDA in the survey and in the interviews. Lastly, in both the survey and the interviews, key decision-makers are deemed not to take part in the early stages but mostly to act as gate-keepers. However, from the interviews, depending on the organisational characteristics and importance of projects, the ways of key decision-makers' engagement are altered.

6.5.6 External collaboration

This cluster intends to identify the approach to external collaboration on the corporations' side. Three main themes are extracted: 6.1) enhancement; 6.2) hindrance of external collaboration; 6.3) role of consultancies.

First, the role of consultancies is discussed to explain corporations' external collaboration. Since the organisations of the corporation interviewees do not have the capacity to conduct classical design work – packaging, advertising, campaigns, logos, media, etc. – "design" was not considered within internal collaboration but within external collaboration. However, the role of consultancies is limited to executing what a corporation asks for: silo operation of external consultancies. Except for COR-1, the corporation interviewees recognised that if they involved scattered external consultancies in the early ideas generation stage, this would facilitate the achievement of better results and decrease mistakes. Nevertheless, in reality, it is found that corporations are deemed to ask external consultancies to carry out only predetermined tasks. It also tallies with the findings in the survey: the limited role of consultancies, which relates to developing artefacts.

However, good attitudes to enhancing external collaboration might be captured from the COR-4 case. Although COR-4 assigns design development to an external consultancy, it works closely with design consultancies and even places an external person in its organisation, rather than adopting the silo operation of external consultancies. In addition, COR-4 seeks to collaborate with diverse external consultancies for new input and efficiency (fewer mistakes) by identifying sociocultural trends and consumer insights. Along with these attitudes, they illustrated some different approaches to external collaboration from the organisations of the other interviewees: 1) assign a leading consultancies, as well as between consultancies; 3) a marketing service team to look after the relationship with consultancies (e.g. every 6 months, assessing the relationship between internal teams and consultancies); 4) a yearly-based contact, etc. The quote in Appendix 27-10 illustrates COR-4's external collaboration.

The cultural aspect of COR-4 for collaboration might result in a more integrated relationship internally and externally as part of the daily job. These approaches to external collaboration cannot be epitomised, because they have been adjusted to their business contexts. For example, CON-4 referred to the downside of assigning a leading agency because of misinterpretation of original clients' intentions or a wrong order from a leading consultancy, but COR-4 seeks to minimise the downside of having a lead agency.

A hindrance to external collaboration is opposite to the above indications and derives from organisational attitude and budget support. COR-1 and 2 do not undertake any external collaboration in the research stages; for example, according to COR-1, since they were trained as innovation practitioners to facilitate ideas generation, they view external collaboration as unnecessary for ideas generation. The organisation misled employees about the role of a facilitator for ideas generation: executing ideas generation within an approved process. Some interviewees referred to an exemplar remedy to defy the silo operation of consultancies and the limited role of external outsources: conferences and workshops to enhance understanding of processes and brand vision.

In brief, ways of undertaking external collaboration are determined by organisational support and culture. To defy limited external collaboration, which is identified in the survey, from the corpus of interviews, an FMCG organisation needs to formulate a way to work with external sources – consultancies, universities, suppliers, etc. – in the up-front research stage and throughout the process.

6.5.7 Internal collaboration

This subsection intends to identify current internal collaboration in terms of classical design and DDA's remit. Two subthemes are subordinate to the internal collaboration cluster: 7.1) enhancement, and 7.2) hindrance to internal collaboration. First, corporations' internal collaboration is discussed. The interviewees indicated an organic structure for ideas flow and discussion as a substantial feature of enhancement for collaboration. COR-3 explained that, grounded in this, interviewees gave some examples: 1) all internal and external stakeholders involved in the ideas generation phase, and 2) central team involvement throughout the process or the exploitation of all multiple tasks in tandem. Although the interviewees acknowledged the benefits of collaboration, the extent of internal collaboration was vulnerable or manipulated, depending on project conditions (project ownership, time, budget, project type, etc.).

Consequently, features opposing to enhancement were indicated as hindrances. Thus, corporation interviewees pointed to a rigid organisational culture as a hindrance, as well as the following: 1) difficulty in discussions: e.g. COR-3 indicated that it was more difficult to discuss a "design outcome" with other departments; 2) difficulty in involving diverse stakeholders in ideas generation (logistics, suppliers, etc.); 3) disconnection between the central team for brand development and organisational management (finance, sales, etc.).

Secondly, in terms of consultancies' internal collaboration, consultancy interviewees agreed that running tasks in tandem was important within internal and client procedures for collaboration enhancement. Some of them indicated that open space was better for communication and reducing internal conflicts, and an absence of hierarchy between departments within consultancies is a feature

for internal collaboration enhancement. Besides, within multidisciplinary consultancies, there are always internal conflicts so that they need to agree checkpoints for seamless delivery.

To summarise external collaboration, such collaboration is perceived in brand development; however, depending on the openness and attitude to collaboration, a way of internal collaboration is altered. Especially, despite the importance of collaboration in ideas generation, it is necessary for diverse stakeholders to comply with early engagement.

6.5.8 Consultancy collaboration

As previously noted in the survey and interviews, it was identified that the role of external consultancies is limited to providing what clients have already decided. Thus, this subsection intends to investigate external collaboration on behalf of consultancies. There are four main themes: 8.1) difficulties in working with clients; 8.2) ways of working with clients; 8.3) preferences for whom one works with; 8.4) ways of transferring designerly experience.

All the consultancy interviewees acknowledged the previous deficiencies in corporate ways of external collaboration. These were also referred to as difficulties in integrating consultancies with clients' processes. Along with these, they indicated a lack of understanding of how consultancies develop a project; sudden requests from clients without considering real working time, lack of time to conduct research, etc. Hence, the consultancy interviewees called for a good relationship and clients to change their attitude to external collaboration in order to overcome such difficulties. The latter cannot be achieved via a consultancy's determination but the first can be achieved by itself; building a good relationship allows opportunities to influence a client's brand development and organisational culture. To form a good relationship, the interviewees indicated seamless delivery as a priority and then illustrated their approaches to attaining it: 1) clients' involvement in their process; 2) bringing together all the other stakeholders and suppliers to develop manufacturable product and brands; 3) co-creating a brief and sharing ideas with clients: interim meetings; 4) not letting clients lead a project; 5) delivery which balances creativity with financial aspects for clients (a combination of creative and strategic thinking).

Besides, some interesting attitudes were found for forming a good relationship when dealing with clients: 1) do not have a substantial separate phase for money and 2) do not say you can handle everything. These are related to the attitudes of openness and trust which the interviewees saw as a priority in building good relationships. There is a different opinion about the role of an account manager to build trust. CON-4 indicated an important role for an account manager who can bridge the gap between creativity and client demands; CON-5 acknowledged this importance, though in reality it is hard to find the right person to take on that role. In contrast to CON-4, CON-2 and 3 emphasised a designer having direct communication with clients to avoid misinterpretation and transfer designerly ways. Thus, it is hard to say whether an account manager helps to build a good relationship or not.

Project types – new and incremental brand development – and the budget for a project influence a consultancy's approach to a project, but these do not impact its progress. The progress of and approach to a project are dependent on whom consultancies deal with most and the client's organisational culture. Thus, to develop a project seamlessly, it is important to identify a consultancy's preference for whom they work with.

Four types of preference were checked as subthemes: marketer, key decision-maker (e.g. CEO, director of a department), designer and multidisciplinary team. There is no common preference for this position: it relates to the pros and cons of brand ownership in the design endorsement cluster. CON-2 and 4 drew on the preferences of marketers and key-decisions due to their authority over decision-making and budgets; on the other hand, CON-3 and 5 prefer to work with a designer or design manager who has more understanding of design. Interestingly, the interviewees called for the involvement of diverse client stakeholders but do not prefer to work with a multidisciplinary team due to the complicated decision-making procedure involved. Therefore, common characteristics might be instilled: consultancies prefer to work with a person who has authority over decision-making and the project budget, and better understanding of designerly ways.

Lastly, all the consultancy interviewees pointed out that a good relationship is a prerequisite to transferring designerly applications. In the case of a good relationship with clients, designerly . applications can be transferred via casual and formal conversations. Regardless of whether clients are

existing or new, the interviewees indicated the importance of a preliminary phase to inform or transfer basic design knowledge for a project afterwards; the best way to transfer knowledge is to show and experience designerly applications throughout the project process. To fulfil this, interviewees suggested two examples: 1) find a person who has an open mind to embrace designerly approaches and disperse these into their organisation, and 2) take a trip together to find consumer insights, where brands lure customers, or to enhance creativity in inspirational places. They addressed there being no way to embed and cultivate designerly applications within a client's organisation at one time, thus they started a small project to transfer designerly applications.

In summary, due to the limited role of consultancies, they make efforts to build a good relationship when working with clients. However, to form a good relationship, consultancies formulate an interaction phase in order to assure clients of the consultancy's own or designerly approaches. Thus, it is necessary to develop and exploit approaches to enhance collaboration with clients and form a good relationship: e.g. workshop, co-developing a brief, etc. Indeed, this effort helps consultancies to lead a project their way: in designerly ways. Indications of preferences for whom a consultancy works with might be an indicator for corporations to assign a project manager.

6.5.9 Human resources

The attitudes and activities to increase creativity were fewer than those in other themes in the survey. Thus, it is necessary to interrogate any activities that can enhance knowledge of designerly applications via three extracted themes: 9.1) continuing professional development (CPD); 9.2) training for creativity and innovation; 9.3) the training programmes a consultancy offers.

First, comparatively large corporations – COR-1, 2 and 4 – provide CPD but their programmes only focus on enhancing the skills of each employee to contribute to product development. COR-3 and 5 mentioned that a previous corporation had the capacity to run CPD but the current one did not. COR-2 and 3's organisations might be accessed by self-interest via other colleagues, rather than via the structured form of education which organisations offer. Secondly, amongst the three corporations which run CPD, only COR-4 runs a programme to update staff on new trends, consumer insights,

creativity and new job skills via team-building workshops with external input. However, an overall understanding of HR's role is limited to evaluating employees and is not incorporated into education for current DDA or innovation. Corporation interviewees pointed out that it might be possible for big corporations, such as P&G, Unilever, etc., to run CPD for design enhancement; CON-4 indicated that even big FMCG corporations rarely run CPD for design and creativity, though they do for sales and marketing.

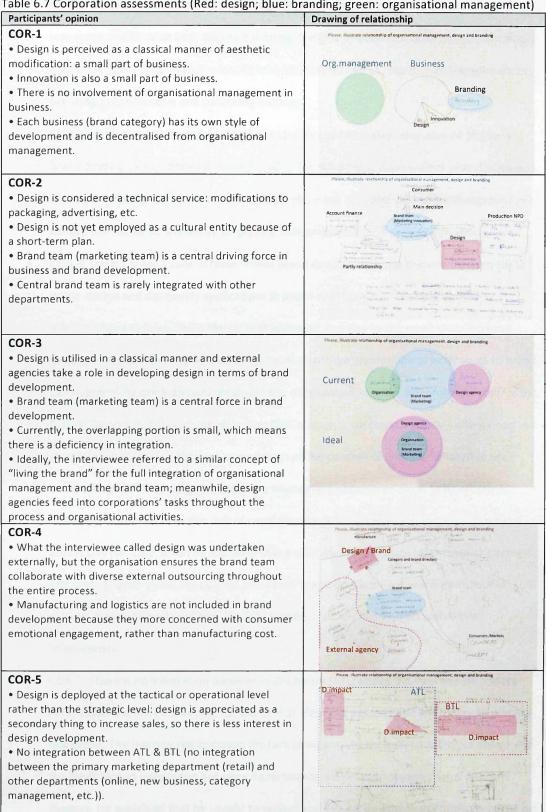
Within consultancies, lastly, there is rarely CPD for internal employees and their clients. Nevertheless, the interviewees stressed that some training programmes (workshops) might help to enhance an understanding of design; and COR-5, who has a design background, addressed how designers need to be educated in dealing with people who are very structured and skewed towards cost efficiency. Consultancies' CPD for clients is undertaken passively only in the case where a clients asks for it or as another business platform.

In summary, the interviewees assumed some reasons why CPD for design and creativity is not underpinned: 1) lack of time and investment in CPD, 2) short stays by employees and 3) lack of understanding of the benefits of design.

6.5.10 Interviewees' cases

The interviewees were asked to draw their current design relationship with organisational management and branding in order to identify their perceptions of the relationship and triangulate their interviews. Unfortunately, CON-2 and 4 were not asked to complete this due to time limitations. The following tables are categorised into two groups: corporations and consultancies. Each table includes interviewees' drawings and summaries of their opinions. All visual data are provided in Appendix 28.

Table 6.7 Corporation assessments (Red: design; blue: branding; green: organisational management)



Based on the interviewees' opinions and drawings in Table 6.7, the assessment of organisational and

personal readiness for DDA is interpreted as follows:

- COR-1: Despite the classical ways of design employment and appreciation, the interviewee
 was content with what their business is doing. It might be seen that both organisational and
 personal readiness for DDA are insufficient, and this readiness results in an impediment to
 breaking the status quo and sustaining business.
- COR 2: Limited design employment and hindrances to integration fragmented phases in brand development, so the interviewee called for more integration with diverse disciplines – design, innovation communities, technology, etc. – but rigid and conventional organisational culture can hardly be shifted by employing DDA and one interviewee's dedication.
- **COR-3:** Design is not a central force within brand development but the interviewees try to utilise design and designerly applications in brand development. The interviewee acknowledged deficiencies in the current approach, but due to the small organisational structure, he, as a director of marketing, could challenge organisational hindrances to brand development by quick discussions across the organisation to solve any problems confronted.
- COR-4: Designerly applications and other DDA elements are comparatively underpinned in a structured manner, but they are unconscious of the concept of whether what they are undertaking is DDA or design related: the interviewee considered them to be creativity. Currently, they overcome this lack of capability via external collaboration throughout the process. In this case, it can be assumed that a combination of design leadership at strategic and project levels yields the current manner of brand development and organisational culture: organisational readiness for DDA is comparatively higher than with other interviewees.
- **COR-5:** There is no integration between mainstream (ATL: above the line) and secondary (BTL: below the line) marketing. On top of that, design is perceived as secondary to primary marketing. The interviewee criticised the lack of organisational understanding of design and the hindrance to integration between departments, rather than organisational financial support. He explained that he sought to embed and exploit designerly applications within his department, but it is hard to integrate DDA within an organisation through personal dedication.

Next, the consultancy interviewees' opinions and drawings are illustrated in Table 6.8. In the

consultancy cases, this does not indicate specific design employment within the organisation but

generally reflects their experience of design whilst working with the FMCG industry. Moreover, they

indicate an ideal relationship.

Participants' opinion	Drawing of relationship	a training an art
CON-1	Please, Illustrate relationship of organisational management, de	tien and branding
Currently:	Current	Ideal Truth
 Design is separate from main brand development or 	Research	Innovation
organisational management.	Detign	
• Within the "current figure", the role of the interviewee	Production Management	Branding
resides in the overlapping space.	Packaging technician	
• External consultancies are separated from the client's	External design	Management
process without any integration.	Branding	
Ideally:	(sen /	
Organisational management needs to encompass	Marketing	
branding and design. In other words, design fulfilment calls		
for organisational endorsement.		
CON-3	Please, illustrate relationship of organisational management,	design and branding
Currently:	FMCGr	
• FMCG organisational management is not integrated with	Current	Ideal
brand development; on top of that, design is separated	Current	ideal
from main brand development and developed separately,	Organisation	Organisation
without involvement.	15	Branding Design
The interviewee asserted that, currently, these three	X	
elements are getting closer but still there are impediments	Str. D	
to their being integrated with each other.	Branding/accounting	
Ideally:		
• This case calls for the same relationship as that of CON-1.	- And Anna a	
CON-5	Please, illustrate relationship of organisational management, d	esign and branding
Currently:	The set of the there are a	
 Design and branding are not integrated but, currently, a 	Current	Ideal
new paradigm to employ design has been found.	Branding Design	relationshi
 External design is on the periphery of the branding 	Candida	: 5
process and joined up with brand development.	and the second	To all all all all all all all all all al
Ideally:	c c	
The interviewee suggested two ideas in a relationship in		leal
terms of organisation for clients and consultancies.	CREITVE CI	onsultancies
 Branding and design are integrated to permeate 		peration
consistent strategies and solutions into organisational		
management		
Regarding managing consultancies, if an account manager	a of the local degree and the local state	
who can intervene between strategy and design leads to a	and the second	
brand developing well, this assures that both strategy and	the alteration of the second	
design can amplify their tasks without losing consistency.	- Section of the section of the	
However, in reality, it is hard to find a person to take on this	and the second	
role.		

Consultancy interviewees criticised the current partial role of design in brand development - without

integration or with impediment to integration. However, consultancy interviewees pointed out they

could find an emerging paradigm to seek design integration.

In summary, overall, design is still perceived in a classical manner, or designerly applications are unconsciously exploited by both corporation and consultancy interviewees. However, from the corporation interviews, it seems clear that a combination of organisational and personal readiness will result in better DDA fulfilment; it is hard for personal readiness to enhance DDA. Thus, it is necessary to find a way of enhancing and combining organisational and personal readiness to employ DDA.

6.6 Chapter summary

This chapter has sought to triangulate and complement the previously identified substantiation of propositions by clarifying unexpected/unexplained outcomes of the previous survey research and the influences that may underlie the survey outcomes. Via interview analysis, a series of issues illustrated in Table 6.1 have been explored. Thus, this section discusses the findings corresponding to these issues and "overall issues" will be discussed last.

Designerly applications:

- Visualisation and prototyping: Mostly, prototyping and visualisation are utilised in a refined and final form to present ideas to the board or test them on customers, but even this type of method is vulnerable, depending on budget, time frame, type of project, etc. Comparatively, diverse ways of prototyping and visualisation and other designerly methods are undertaken in consultancies rather than by corporations. However, since there are impediments to integration between corporations and consultancies, corporations have few chances to experience and combine diverse designerly ways of brand development within corporations.
- Ideas generation stages: The FMCG industry runs two important phases separately: ideas for
 a product inside a pack, and a brand. These stages are undertaken following a linear process,
 rather than run in parallel within ideas generation. Time and financial investment are not
 enough to collaborate with/access external and internal sources in a structured manner in
 the up-front stages. Design consultancies and an internal design team are not considered in
 ideas generation stages and other mainstream activities in brand development.

- Customer engagement: A corporation mostly engages with customers to test concepts, rather than finding insights from the process. Customer engagement in up-front stages is undertaken in an unstructured manner: usually the observations and experiences of stakeholders who take part in an ideas generation session.
- Undertaking exploratory approaches: From the survey, an attitude of "regarding constraints as challenges" accounts for high value; but mostly, interviewees criticised FMCG confining projects to what organisations are used to. Also, the indicators highly ranked in exploratory brand development – e.g. challenge constraints, iterative process, responsiveness to technology, etc. – can be interpreted as FMCG needing a remedy for current brand development.

Design endorsement: Some paradoxical outcomes emerged from the corporations survey: they drew on flexibility as well as a strong state-gate process. Corporation interviewees were interrogated to find the underlying reason(s) for these paradoxical outcomes. Flexibility is adjusted to a stage-gate process which is not strictly formulated for the process itself. In detail, except for pre-established milestones within a brand development process, interviewees indicated they are allowed to underpin flexibility whilst deploying a project. However, from the interviews, the extent of flexibility is dependent on personal readiness and organisational culture for DDA. Ways of making decisions – including a key decision-maker's engagement – are determined by flexibility and pre-determined milestones for a project's progress, depending on the importance of the projects.

Collaboration: This is threefold: internal and external collaboration in corporations, and external collaboration in consultancies.

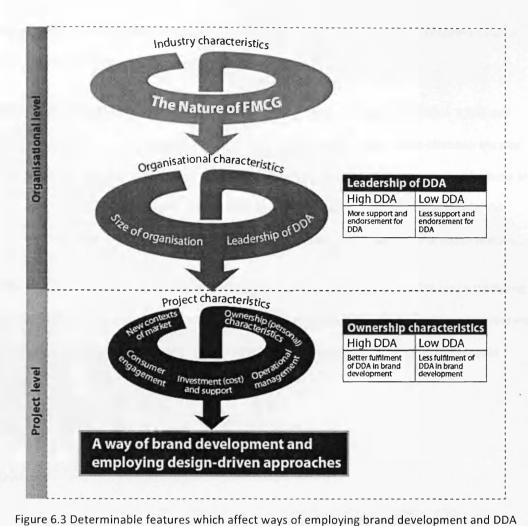
- Internal collaboration in corporations: It is hard to argue for design collaboration because no organisation has a design department. However, the extent of other collaboration is dependent on organisational flexibility and project managers (personal) readiness for collaboration and integration in projects.
- External collaboration in corporations: Mostly, except for COR-4, there is a tendency to . work with consultancies for special techniques: for aesthetics and functions for a product

and brand. Overall, external collaboration within corporations is not undertaken throughout the process, only for special skills that are needed, which concurs with the survey outcomes.

• External collaboration in consultancies: Building a good relationship is important to fulfil projects with designerly applications and instil DDA into clients' strategy. Above all, to build a good relationship, a collaboration phase is imperative to increase credibility which is a precondition for a good relationship.

Human resources: In both corporations and consultancies, some training programmes are limited to selected employees to enhance operation skills. Also, consultancies only provide a training programme when clients ask.

Overall findings: Design is perceived in an outmoded manner and separate from other activities: brand development and organisational management. Throughout the corpus of interviews, appreciation and approaches of the brand development process and DDA are framed by the specific contexts in which the organisation is situated. There are two clusters at the organisational level and five features at the project level, which affect ways of brand development and employing DDA (Figure 6.3).



The above features are discussed in detail. First, two clusters at the organisational level are revealed: the nature of the FMCG industry and organisational characteristics. Overall, the characteristics of FMCG – low margins and high volume – influence organisations to focus on cost/sales efficiency and incremental brand development. However, there are different approaches to cope with cost/sales efficiency for different FMCG product types. Thus, product types are also determinable features when formulating a brand development process and underpinning DDA. Next, the size of a corporation – global/local market, which is related to investment in brand development and DDA – is constituted by organisational characteristics. Global corporations invest in developing new mechanisms for developing brands by employing designerly applications in a manner that elevates creative capability. The other constituent of organisational characteristics is leadership in DDA. The type of leadership determines the readiness to invest in formulating the brand development process and employ DDA. In the case of COR-4, the new global chief marketing director, who emphasises creativity, has sought to embed designerly applications into internal capability by means of a plan to hire a creative director, changing the space for creativity, etc.

Secondly, five elements illustrated in brand development are revealed (see Subsection 6.5.3) and these are related to undertaking ways of DDA element at the project level. These elements are also influenced by features at the organisational level. All the features are interlinked, thus all features are necessary to employ DDA in brand development and organisational management. However, the extent of embracing features is dependent on specific contexts (combination of the above features).

Most of all, two features – leadership and brand development ownership – need to play a catalysing role to restructure an organisation and fulfil projects by employing DDA elements. These two features enable other features to shift to the concept of DDA and ultimately attain a DDA organisational culture.

Chapter 7 Developing a Model for the Integration of Design-Driven Approaches through Brand Development, and for Organisational Culture

7.1 Introduction

Previously, Chapters 6 and 7 discussed the primary research: 1) an online survey: to examine how DDA is integrated into FMCG brand development and organisational culture, and 2) subsequent interviews: to consider what features underlie these current phenomena and motivate stakeholders and employees to employ DDA within FMCG brand development and organisational culture. By synthesising the previous mixed methods research – online survey and interviews – this chapter aims to illustrate how a model for DDA integration has been developed and how this model was ultimately validated in order to propose a pragmatic DDA model for FMCG-specific contexts.

Therefore, this chapter comprises three main sections: 7.2) overall findings: substantiations according to propositions; 7.3) development of a DDA model: framework and roadmap; 7.4) validation of the DDA model (Figure 7.1).

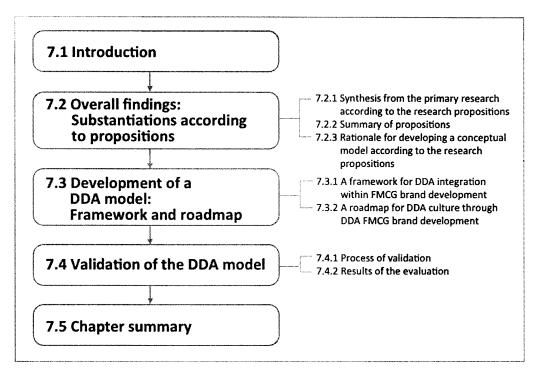


Figure 7.1 Map for methodology and research framework

7.2 Overall findings: Substantiations according to propositions

Chapter 6 captures synthesised views by triangulating unidentified and ambiguous results from the survey. Within this section, the findings from two separate chapters need to be elaborated to identify and deliver synthesised and consolidate views for a DDA model. Thus, this section delineates how the ground for a DDA model is generated and justified. Afterwards, these substantiations of propositions (see Section 5.7) are consolidated by the interviews subsequent to the online survey.

Proposition	Research method(s)	
Proposition1	Online survey: Descriptive analysis, ANOVA a Interviews	analysis, Discriminant analysis, N-way table
Proposition2	Online survey: Descriptive analysis, ANOVA a Interviews	analysis, Discriminant analysis, N-way table
Proposition3	Online survey: Descriptive analysis, T-test Interviews	
Proposition4	Online survey: Descriptive analysis Interviews	

Table 7.1 Research methods according to propositions

7.2.1 Synthesis from the primary research according to the research propositions

The following subsections explain each proposition via two different research methods – online survey and interviews – and include a summary of the proposition.

7.2.1.1 Proposition 1

The overarching proposition, *the way in which DDA is employed is context specific (e.g. size of company, industry sector, etc.),* is substantiated by the evidence from its sub-propositions.

P1-1: The effective employment of design-driven approaches can result in corporate growth.

DDA impacts on the success of a business and is hardly measured by the direct or statistical success of DDA's employment in the short term, or even during a project. However, there are two parameters to gauge the relationship between the employment of DDA and corporate growth: the number of employees and operating businesses in the survey. However, the survey and interviewees (CORs 1-3) who work for large-size corporations (over 250 employees) stated that they are not big enough to take a risk. Thus, it is more appropriate to consider the number of operating businesses, which relates to the market size of corporations. From the interviews, the market size of a corporation is found to be another important parameter to see ways of undertaking designerly approaches. Thus, in the thesis' context, larger-size corporations represent global corporations, whereas smaller-size corporations which penetrate markets in over 10 countries account for better attitudes to DDA, and the interviewees also indicated that only big global corporations can afford to employ DDA.

From the discriminant analyses (see Subsection 5.4.4.1), "the management of design impacts on brand development" and "adopting a stage-gate process" exert strong influence when categorising large and small corporations: larger corporations show a higher means in terms of these variables and the first variable has more significant influence in determining the size of corporations. Specifically, from the interviews (COR-1 and 2), it was found that smaller-size corporations have difficulty in

employing/exploiting DDA because of a lack of understanding of or infrastructure for DDA compared to larger-size corporations. In another way, this finding implies that larger-size corporations may have more capability to employ/exploit DDA and the employment of DDA may influence the growth of corporations. Thereby, the evidence supports that the degree of undertaking DDA relates to corporate growth, which is important and considered a measure for success

This substantiation might generate a controversial chicken-and-egg situation: invest first to employ DDA or employ DDA first due to a lack of DDA. Smaller corporations excuse themselves for their insufficient investment in DDA, but because of these excuses they keep adhering to less investment in DDA and indeed rarely break from the status quo. Thus, the impediments to employing DDA are inflamed by the excuses made for lack of investment.

P1-2: The value placed upon design-driven culture affects FMCG brand development.

From the survey, corporations with a project time frame of less than 12 months have better appreciation of DDA: a more flexible organisational process but less external collaboration. From the discriminant analyses, a "flexible organisational process" significantly determines the project time frame: the more flexibility organisations have, the shorter the project time is. However, when interrogating the survey results in the interviews, the corporations with shorter time frames account for similar features to those of smaller-size corporations; due to their small organisational structure, smaller-size corporations can easily justify a process. Thus, it might be assumed that the interrelationship between a flexible organisational process and a project time frame derives from a smaller organisation's structure as a substantial advantage. Accordingly, it can be assumed that some indicators highly ranked in the CSQs – open debate, view design as an investment, etc. – are literally requests from corporations with a less than 12-month project time frame, rather than having current high usage of DDA exploitation.

Synthesising results from survey and interviews, overall, a project time frame of "one year or more" is more appropriate to fulfilling DDA within an infrastructure of DDA whilst incorporating a long-term strategic pipeline, but there is a lack of organisational flexibility compared to those corporations with a project time frame of "one year or more" (Table 7.2). However, corporations with a project time

frame of less than 12 months are deemed to have characteristics of a smaller structure, so they have an advantage when configuring a mechanism for brand development and undertaking internal collaboration nimbly, due to the short project time frame, despite their high appreciation of DDA. Thus, corporations need to amplify the advantages and reconfigure the disadvantages for DDA facilitation. From the interviews, project time frame and the proportion of exploratory projects also alter depending on different project types: new brand development, brand revitalisation, etc.

Table 7.2 Employment of DDA in different project time frames	Table 7.2 Emplo	oyment of DDA in	different pro	ject time frames
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	A time frame: less than 12 months	A time frame: one year or more
Flexible and iterative process	Higher	Lower
External collaboration	Lower	Higher
Infrastructure for DDA	Lower	Higher

In terms of the relationship between the proportion of exploratory projects and DDA employment, from the survey results, corporations with a greater proportion (20% or more) account for better fulfilment and understanding of DDA and their attitude to an iterative process; on the other hand, those corporations with a smaller proportion of exploratory projects (less than 20%) draw less on indications of designers' collaboration within brand development: mutual interaction, respect for other disciplines, etc. From the discriminant analysis, "using an iterative process" significantly relates to the proportion of exploratory projects. Corporations persist in undertaking 20% of exploratory projects to feed new input to the business and the organisation. Interviewees whose organisations have a separate innovation champion or team indicate better DDA performance, though they do not recognise their performance in the sense of DDA but in the sense of innovation and creativity. For example, in the case of COR-4 (from the interviews analysis), a supportive attitude to DDA – its investment of time and infrastructure in creativity and innovation – elicits a longer project time (2 years) and enables taking a new approach to brand development.

Above all, organisational attitudes/commitment to DDA, which relates to leadership of DDA at a higher level in Figure 6.3, impact the way of implementing DDA at the project level: e.g. exploratory project, timeframe of project and other features at the project level in Figure 6.3.

P1-3: Depending on the positions and departments (disciplines) in an organisation, the way(s) of employing or perceiving DDA will be different.

From the survey, there was a gap in understanding and the performance of DDA, depending on positions and disciplines (departments and ownership of brand development). Higher positions (directors and board members) draw more on indicators relating to internal capability for external collaboration, e.g. new concept for brands, lack of internal skills, etc. From the discriminant analyses, attitudes to a "flexible organisational process" and "completing all phases" can be a parameter to categorise positions; this implies that lower positions have sceptical views of those variables. Unfortunately, due to limitations on research time and scope, different positions in the same corporations could not be investigated during the interviews, but the results of the survey are unsurprising because respondents in higher positions in an organisation generally do not take part in the entire project, so there is a lack of acknowledgement of working-level difficulties.

In terms of different departments – non-design (business: marketing and sales) and design (designrelated) departments – there is one statistical difference in "designers working across departments" from ANOVA: designers presumed that they carry out their jobs across departments. In the CSQs regarding DDA exploitation, non-design departments drew less on indicators for "iterative process", "utilising external experts", "visualisation", "out of the box thinking" and "interdisciplinary collaboration", but more on indicators for "legitimate commitment to design" and "inspiring workplace for collaboration". On the other hand, designers and interdisciplinary teams (categorisation in the survey) drew more on indicators of "utilising external experts", "flexible organisational process" and "new concept of brands for collaboration", and brand managers drew more on attitudes of "iterative process" and "corporate policy for collaboration". The indicators noted above might be interpreted as demands for variables from the survey, but it is hard to determine their accounts of current usage from the interviews.

Instead, along with the differences in DDA between departments, there is one more criterion to see the differences between disciplines: ownership of brand development: corporations with ownership of marketers comparatively account for the least appreciation and exploitation of DDA (see Subsection 5.7.1). Thus, by interrogating differences in ownership of brand development from the interviews, disciplines' difference in DDA is substantiated. In more detail, interviewees' indications about each discipline's characteristics – designers and marketers – have their pros and cons, but the

negative characteristics of marketers mostly arose in brand development: attitudes to brand development are driven by their concern for career-building. This attitude entails quick modification of a brand in the short term and results in difficulties in having consistent evolution within a long-term brand vision. This result from the interviews corresponds with that of the survey. In contrast, while designers or brand managers with a design background have a better understanding of DDA performance, this often leads to difficulties when communicating about design work with other business departments. Thus, it is necessary to enhance the understanding of each other's regime for better collaboration.

Above all, even though the tendencies of disciplines and positions in organisations are identified in the above, via the survey and interviews, the personal attitudes to DDA and the degree of authority for projects are the most important features, regardless of their title or department.

Summary of proposition 1

First, it is recognised that the extent of DDA is indicative of the relationship to the growth of the corporation. However, it is obvious that corporations start to let DDA penetrate the entire organisation by allocating DDA performance or designer placements across other departments. Hence, larger (global) corporations which adapt DDA to organisational management keep elevating DDA, and smaller corporations, whose organisational mechanisms are too vulnerable to undertake DDA for financial reasons, seek the impetus to expand the role of design and imbue DDA into the organisation.

Secondly, it can be asserted that a longer project time frame and a greater proportion of exploratory projects ideally entail better performance of DDA; but within an operational perspective of using DDA (efficiency aspects), the organisation can shorten a project time frame by challenging the constraints to the time frame and budget. Hence, it might be interpreted that such factors – a longer time frame and a greater proportion of exploratory projects – are not mandatory to adapting/exploiting DDA. Most of all, it is important to find the right time frame and proportion of exploratory projects, according to the specific context of a corporation or business.

Thirdly, from the interviews, a few bigger corporations are able to employ internal designers and a design team, but most of the corporations dealing with smaller markets do not have them. Thus marketers, who predominantly have ownership of brand development, need to elevate their understanding and exploitation of DDA to have better opportunities for innovative project development. More importantly, whoever takes on the job of project development – marketer or designer – needs to be a champion to cultivate DDA and a broker to integrate all the phases and deliver a consistent voice and brand image.

Overall, to enhance/elevate the performance of DDA, a starting point might be to adopt the features identified in the discriminant analyses: develop mechanisms for better design management impact and flexible and iterative processes while seeking designers' engagement with other departments (collaborative process).

7.2.1.2 Proposition 2

Proposition 2, *consultancies' characteristics influence their performance when utilising DDA features in brand development,* intends to investigate consultancies' role of reflecting a concept highlighting design discourse with an external network to stimulate corporations to pursue DDA. Specifically, consultancies' characteristics – size of corporation, project time frame, ways of engagement with clients: strategic/operational, etc. – influence the understanding of clients' performance and ways of collaborating with clients. In another way, depending on consultancies' characteristics, corporations decide which consultancy they grant access to and then work with.

P2-1 Consultancies' characteristics influence the way(s) of understanding clients' performance of DDA.

Although there is no difference in the evaluation of clients' attitudes in terms of the size of consultancies: from the CSQs, the number of countries where a consultancy operates or the number of employees, smaller consultancies, i.e. operating businesses in up to 10 countries and having up to 50 employees, show a tendency to work with clients who need to be imbued with design leadership; these clients show similar findings to those of smaller corporations. From the interviews (e.g. see

Subsection 6.5.2), smaller corporations (which concentrate more on smaller markets) work with smaller-size consultancies because, due to the cost of projects, smaller corporations have difficulty in getting a full service from big consultancies.

In contrast to the characteristics of smaller consultancies, from the survey, bigger consultancies – operating businesses in over 10 countries and having more than 50 employees – tend to work with bigger corporations which need to strike a balance between design and business, but with better consultancies' DDA involvement in clients' processes. From the interviews, bigger consultancies are more structured due to the size of the organisation, following their "trademarked" processes. Thus, by synthesising these two views, it can be interpreted that the structured processes of consultancies identified in the interviews relates to consultancies involvement in a client's process.

In terms of other characteristics, overall, from the survey results (see Subsection 5.7.2), consultancies which take on longer time frame projects, i.e. a greater proportion of exploratory projects (over 20%) and long-term projects, have better evaluation of a few FMCG clients' attitudes to and exploitation of DDA. Even though there is an inclination to undertake DDA which corresponds to the increase in proportion and degree, there are pros and cons in the subgroups for each profiling variable (see Table 5.4),

However, the following interview method failed to explicate these relationships between a client's project time frame/proportion of exploratory projects and long-term projects and their evaluation of client performances, because respondents were reluctant to mention their proportion of exploratory projects and indicated that a project time frame depends on a client's needs. However, in terms of the proportion of long-term relationships, interviewees from the consultancies pinpointed that forming a good relationship with clients is important to understand their performance.

P2-2 Consultancies' characteristics determine ways of collaborating with clients.

From the survey, consultancies with a longer time frame, a greater proportion of exploratory projects and long-term relationships with clients account for a better attitude to undertaking exploratory . approaches whilst collaborating with clients (see Subsection 5.7.2). From the discriminant analyses of

the RSQs, "undertaking exploratory approaches" is a determinable factor to categorise participants into the above three subgroups (see Table 5.15). Thus, as consultancies work with clients with a better attitude when undertaking exploratory approaches, they are able to obtain better results for the above subgroups. Nevertheless, there was a barrier to interrogating the exploratory proportions during interviews, since this was perceived as being in relation to developing unique (disruptive) design output.

In terms of consultancies' exploitation of working in collaboration, smaller consultancies (up to 50 employees) drew more on sufficient money when clients called for external collaboration workshops to establish brand goals for a consultancy approach to collaboration, and client's lack of understanding of design as a barrier to collaboration. On the other hand, bigger consultancies (more than 50 employees) drew more on corporate policy as a situation for collaboration, with more structured approaches – regular meetings – as the collaboration approach. From the interview analysis, each different size of consultancy has its pros and cons; bigger consultancies are deemed to be structured like bigger corporations, so this entails difficulties in collaboration and works against DDA. Paradoxically, these structured processes are favourable to business-driven people.

From the survey, long-term relationships show more statistical differences: this is a feature that strongly influences working with clients. However, from the interviews, it was found that a good relationship (credibility) between client and consultancy is more important than having a greater proportion of long-term clients. In another way, it might be assumed that those consultancies which manage good relationships with clients are able to build long-term relationships with them. In addition, larger (global) corporations often have an annual contract with an external consultancy in order to have better involvement, and consultancies with a greater proportion of long-term clients (over 60%) embrace strategic and formal performance (e.g. auditing clients' performance, regular meetings, etc.), which is favourable to bigger corporations.

There is also a difference between design and strategic departments (strategic and non-design departments in the consultancies), and between lower (junior and senior levels) and higher positions . (directors and board members) within consultancies (see Table 5.4). The difference between them

arises like those in corporations. However, consultancies' approaches to projects are not significantly different amongst these subgroups. In terms of different departments' views of DDA, the consultancy interviewees raised an issue: consultancies also confront a difficult moment for DDA integration as an organisation gets bigger.

Summary of proposition 2

A consultancy's relationship with a client is a critical feature influencing the ways of collaboration. In another way, a reputation for having a good relationship with clients is an important parameter for corporations (clients) when selecting a partner (consultancies). Consequently, a good relationship between client and consultancy results in better DDA performance in a project. In detail, consultancies have more possibilities to conduct exploratory (DDA) approaches and generate competitiveness for a brand when they have a long-term relationship and a project with a good relationship. It can be suggested that proprietary competiveness in consultancies – creativity, proprietary methods, etc. – impacts on building a good relationship (elevating credibility). By thinking differently, a consultancy's capability to adopt an exploratory approach might influence building a relationship so that consultancies can also pursue their own ways of coping with an exploratory approach.

Since smaller corporations with comparatively low-value names have constraints when selecting consultancies, compared to bigger corporations, consultancies which work with smaller corporations need to surmount clients' deficiencies in undertaking DDA and to consider ways to stimulate such clients to employ DDA within their organisation. Thus, smaller consultancies start by developing a mechanism to elevate credibility during collaboration. Such attempts to establish a relationship might be worth it for consultancies in order to expand their operational role to a DDA role: it can be a cornerstone for consultancies to become bigger and be able to undertake DDA features during collaboration.

7.2.1.3 Proposition 3

This proposition, *corporations and consultancies appreciate and exploit DDA differently in FMCG brand development*, seeks to identify a gap between corporations and consultancies and to suggest a way to narrow this gap for better collaboration.

P3-1. Corporations do not consider external collaboration when developing overall ideas for brand and product development.

The features in designerly applications exhibit low rates in both stakeholder groups – corporations and consultancies; in contrast, the features of design endorsement, collaboration and human resources themes, show significance in T-tests (see Subsection 5.4.2). From the N-way tables, interestingly, visualisation, iterative process and fostering the free flow of ideas show bigger gaps (over 20%) between corporations and consultancies (see Subsection 5.5.1). These indicators are frequently claimed as being substantial components of attaining DDA culture. Besides, in terms of questions asking about the involvement of DDA features, while consultancies drew on broader stages, especially in collaboration, corporations showed an opposite view on DDA involvement: less participation in up-front stages (see Subsection 5.6.1). From the interview analyses, participants from the corporations, except for COR-4, stated that they do not work with external consultancies in upfront stages because of cost or a lack of understanding of the benefits of external collaboration in the up-front stages, as identified in Subsection 5.6.1 from the online survey.

P3-2. Consultancies' contribution to brand development is limited to operational activities.

By synthesising the primary research, corporations are deemed to involve consultancies in modifying or developing tangible outcomes and, consequently, consultancies' contribution – DDA involvement – is limited to developing structural or visual development (see Subsection 5.6.1). On top of that, due to the corporations' silo operation for each task (see Subsection 6.5.3) and low capability to fulfil designerly applications – visualisation, prototyping, etc. – these are mostly undertaken by an external consultancy (See Subsection 5.5.1). In terms of identifying customers' insights, while corporations rely strongly on customers in ideas testing, as user engagement rather than identifying their insights or cocreating with them (see focus group in Subsection 6.5.4), consultancies autonomously embed themselves into the sociocultural aspect: understanding where customers are situated via conversations with them or observing customers' lives to understand underlying phenomena. Consultancies have a sceptical view of clients' ways of ideas testing, but their low involvement in upfront stages hinders instilling new approaches into customer engagement: since customers prefer a situation that they are used to rather than a situation with which they are not familiar, customerdriven approaches rarely shape new innovation.

Summary of proposition 3

To sum up, designerly applications find limited usage in consultancies, meanwhile corporations' limitations on collaborating with an external network exclude them from ideas generation. Except for COR-1, all the interviewees recognised early collaboration in brand development and this current phenomenon carries more risk by offering consistent brand experience and communication: less chance to develop competitive brands.

Also, the interviewees indicated that an influential way to promote designerly applications is to let people experience them (see Subsection 6.5.8). However, the gap, especially in design endorsement and collaboration themes, might be an impediment to DDA exchange between corporations and consultancies and to DDA experience in corporations and attaining DDA.

7.2.1.4 Proposition 4

The proposition – *four themes extracted from the literature are interdependent: the effective employment of designerly applications will result in collaboration, strategic endorsement and intellectual capability (human resources), or vice versa* – intends to identify which themes affect the employment of designerly applications and suggest how the FMCG industry embarks on or enhances the employment of designerly applications.

However, as noted in Section 5.8, regression and correlation analyses were not appropriate for discussing this proposition because the sample size of the survey was insufficient for regression

analyses and correlation analyses were not enough to approach the propositions. Regardless of these deficiencies, it might be a signpost to indicate how interviews could be conducted along with descriptive analyses from the survey: the features in the four themes are fragmented and there is no interplay between the four themes in either dataset – corporations and consultancies.

P4-1. Strategic endorsement of design influences ways of applying DDA.

COR-4's case shows how strategic endorsement of design influences ways of applying DDA (see Subsection 6.5.5). Organisational commitment to design (often called creativity and innovation) configures the physical environment and the approach to brand development for DDA. In contrast, COR-1 shows a lack of understanding and exploitation of DDA, and according to COR-2, this phenomenon derives from the organisation's short-term attitude. Also, in the pilot research (see Subsection 3.3.1), company UK1 case shows an organisational approach to collaboration which influences ways of solving problems: share and solve a problem.

P4-2. The intellectual capability of stakeholders (employees) influences adapting DDA to brand development.

In COR-3's case, although the design infrastructure and endorsement are insufficient, the participant as a director sought to utilise DDA in his department: share ideas with other departments and use prototyping in ideas generations. How the intellectual capability of stakeholders influences adopting DDA is more obvious when comparing COR-1 and 2 in the same holding corporation: in contrast to COR-1, COR-2 seeks to utilise DDA in projects and their organisation. However, COR-2 highlighted the difficulties to overcoming a predominantly sales-driven organisation and then to disseminating designerly applications across organisational activities.

P4-3. An attitude to collaboration elevates the appreciation (performance) of DDA.

COR-4's case, from a primary interview and a UK company in the pilot research, shows how organisational attitudes to collaboration influence DDA performance. COR-4 collaborates internally and externally in the up-front stages to offer better brand value to customers, and a disposition to collaboration within the UK company in the pilot research enhances internal collaboration to solve problems across the organisation. Both corporations stress the importance of collaboration in early ideas generation so that they are engaged with multi-faceted stakeholders: a wide range of internal collaboration, external consultancies and customers. Thus, it can be assumed that the attitude to early collaboration in ideas generation influences DDA performance within the organisation.

Summary of proposition 4

Predominant business/sales-driven attitudes relate to a deficiency in organisational support and entail stigma in project deployment: a deficiency in design endorsement at the strategic level entails vulnerability/impediment to design application and collaboration during project deployment. Most of all, within internal and external collaboration, there are rare chances to experience DDA, or the rare existing capability for DDA aggravates initiating and administering DDA, not only in project development but also across organisational activities.

The stigma of DDA integration continues to be replicated and there is a propensity to repeat the vicious circle of stigma in design integration and snowballing (Figure 7.2). Such a stigmatic loop affects consultancies' approach to working with clients: consultancies find it is hard to undertake the designerly applications which they are used to do. Accordingly, within this vicious loop, the FMCG industry finds it hard to identify chances to develop new brands and have sustainable competiveness for a business; otherwise, the FMCG industry is disposed to maintain existing brands: line extension or revitalisation of brand development.

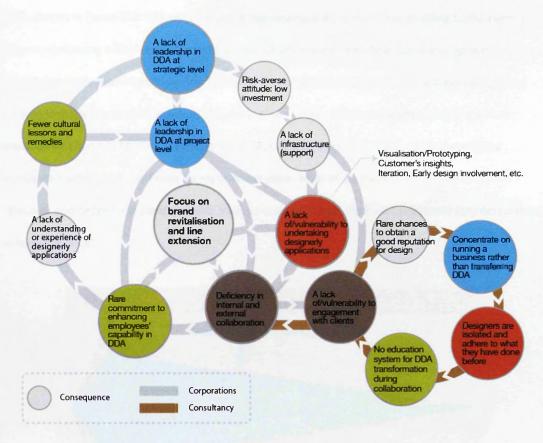


Figure 7.2 Stigmatic flow when undertaking DDA

To break this loop, DDA needs to be ignited in order to unleash employees' intellectual capability for DDA. The analyses of interviews elicited underlying features which are consequences of the current phenomena in DDA usage at strategic and project levels. Most of all, leadership at strategic and project levels is substantial to ignite DDA and interweave four themes within its organisational management whilst challenging constraints (e.g. FMCG characteristics: low margin and high volume).

7.2.2 Summary of propositions

There are two overarching and underlying attributes which are subject to initial implications at the end of this subsection.

First, the FMCG industry sticks mostly to convergent thinking, despite the importance of divergent thinking at the beginning (heuristic approach) in the double diamond model (Design Council, 2006; see Figure 2.5): divergent and convergent thinking (Brown, 2009) and the innovation funnel (Clarkson and Eckert, 2005). However, within FMCG, three types of project development processes are found,

as illustrated in Figure 7.3: 1) Type 1: only one asymmetrical diamond shape pointing to the right: a focus on delivering a final product mostly in revitalisation projects without ideas divergence; 2) Type 2: triple (or more than triple including Type 2-A) diamonds: due to the silo operation of tasks, more diamonds shapes for each task occur; 3) Type 2-A: one or more than one diamond after product development due to FMCG's tendency to focus on line extension. Each diamond is skewed and asymmetric with insufficient time for ideas exploration. Most of all, the exploring ideas stage – "discover and define" – is comparatively short or neglected, and the FMCG process is very determined to launch a brand.

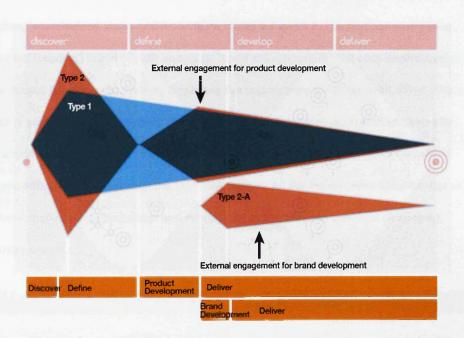


Figure 7.3 Current approach to brand development in FMCG industry

Secondly, there is generally a deficiency in underpinning DDA across organisational activities. From the interviews, it is found that "some big corporations like P&G and Unilever" can afford to employ DDA; from the literature review, those big global corporations embed designer approaches across organisational activities (e.g. Lafley and Charan, 2008). Yet except for those corporations, a role for design is not attained for DDA within the locally-focused FMCG industry.

There is a huge difference in total sales between global and locally-based corporations: while 2011 P&G revenue was 82.6 bn. US dollars (around 50.9 bn. pounds sterling and revenue growth year of 4.6 per cent) from Yahoo Finance, the 2011 total sales of Premier Foods which focused on the UK and operating business in pan-European countries was 2 bn. pounds sterling (and a trading profit of 188 m. pounds sterling) from the 2011 Annual Report. Therefore, in spite of being a well-known big corporation, the nature of FMCG characteristics – low margin and high volume – defies a locally-focused organisation to be concerned with financial aspects: investment and costs. Indeed, there are rare organisational commitments to mobilising DDA into a project and organisational activities as fuel for organisational transformation towards being design-driven: the concern with cost results in a risk-adverse attitude to adopting new directions.

Figure 7.4 illustrates design's relationship with organisational management and branding (business) by synthesising interviewees' views and drawing on Tables 6.7 and 6.8. The FMCG industry uses independent (product) brand or light endorsing brand architecture so that each business often governs its own development system, surpassing the organisation's management. What they consider as design is executed at the periphery of the business, or independently, as outliers: external consultancies are responsible for the delivery of final outcomes. This phenomenon results in systematic difficulties in integrating the four DDA themes. All the interviewees acknowledge that when these shapes are getting closer and overlapping more, they can thrive on developing competitive brands.

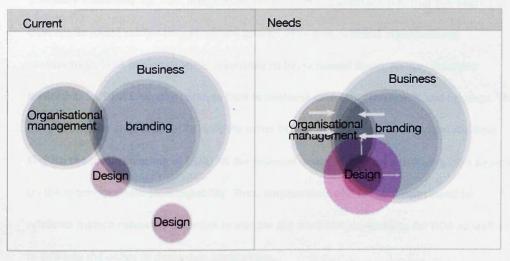


Figure 7.4 Relationship between design and other stakeholders in the FMCG industry

In terms of the influence of specific contexts, a longer time frame and a greater proportion of exploratory projects and long-term relationships account for better performance of DDA in terms of attitudes and exploitation, but they cannot be the absolute context for DDA in every organisation. For example, with a longer project time frame, a corporation keeps coping with fast-changing social culture so as not to launch out-of-date brands, and the investment in exploratory projects cannot exceed a certain amount of money due to business constraints. Thus, each organisation tries to find the right fit which privileges its own situation, though within the FMCG industry, since business-driven approaches are predominant, DDA is first obliged by organisational endorsement to be exploited as a vital entity without vulnerability to budget or time frames during project deployment.

From the findings for consultancies, the capabilities of exploratory projects are vital to sustaining the business of design so that they prevent the business from being inclined to focus on sales. Meanwhile, to transfer their knowledge to their clients, consultancies are keen on building a relationship with clients by offering a preliminary phase and seamless and timely delivery, e.g. workshops, casual conversations, etc.

In conclusion, since features in the DA theme are not embedded into organisational culture and projects, these need to be constructed by underpinning other themes: obliterating the stigma identified in the primary research. Thus, initial implications which form the skeleton of a DDA model are discussed below:

- Visionary leadership for DDA integration: Proposition 1-1 substantiates that the degree of DDA employment relates to corporation growth. However, without organisational commitment, DDA performance is vulnerable to being turned down. Hence, visionary leadership for DDA is vital to catalyse DDA in business-driven organisations and projects. This is a prerequisite step in order to fulfil the other DDA actions and break the stigmatic flow.
- Elevate the understanding of DDA: All the features which impact on employing DDA depend on the extent of intellectual capability. Thus, corporations and consultancies need to reinforce human resources activities to elevate the intellectual capability for DDA as well as to embody the usage of designerly applications.
- **Reformulate stage-gate process for DDA utilisation:** It seems inevitable to keep stage-gate processes in large-size corporations or as corporations are getting bigger. Thus, it is necessary to develop a way of utilising DDA within a stage-gate process: for example, examining how to

utilise flexibility and DDA dynamically at certain stages. Thomke (1997) points out a way to increase flexibility without large investment by systematising flexibility at two levels: 1) focus on robust flexibility in early stages and 2) configure flexibility by task partitioning.

- Configure a collaborative flow: There are two beneficial aspects to forming a collaborative flow: 1) Project level: This enables reducing the mistakes arising from separate tasks and developing consistent meaning and experiences for a brand: an integrated brand. 2) Strategic level: Interviewees indicated that understanding the benefits and actions of designerly applications can be obtained through experiencing them so that a collaboration flow ensures different stakeholders' involvement in such a flow.
- Apply designerly applications to ideas generations: The current use of designerly
 applications has degenerated to a project manager (marketer) adopting a sciolistic manner to
 convince the board members: e.g. focus groups for ideas testing rather than for ideas
 exploration, short-term planning for research, a lack of prototyping and exploration for ideas
 generation, a limited role for external consultancies, etc. Otherwise, they are mostly
 undertaken within consultancies. Thus, it is necessary to underpin designerly applications in
 the early stages in a somewhat obtrusive way: e.g. assigning a catalyst or setting up an
 incubator team.
- Diverse disciplines' (design's) early involvement: Early decisions on brands and products continue so the latest new or diverse DDA methods do not get the chance to be used in the early stages. This seems to prevent corporations breaking with their typical approach. Also, O'Connor and DeMartino (2006), and Verganti (2009) claim that the early involvement of an external network can encourage corporations to maintain radical innovation. Consultancies in FMCG are not engaged from the beginning of projects and collaborate with only limited corporate brand development. Thus, an interdisciplinary team or designer's involvement at an early stage can help to overcome this complication.
- Form alliances with external consultancies: The silo operation of each task increases the possibilities to make mistakes and raises the absence of new fuel for metamorphosing. In addition, alliances with external consultancies stop corporations from adhering to the status quo.

- Ambassador role of consultancies: Even though consultancies stressed the integration of DDA in the open questions and the literature claims, clients seemed not to be initiated by consultancies. On top of that, consultancies take for granted what they do in RSQ2. However, Verganti (2009) claims that in order to achieve design-driven innovation, the role of external networks is imperative for imbuing new inspiration into a corporation. Hence, a consultancy seeks to be portrayed as an ambassador to expand design beyond "conventional design", rather than developing a similar *ad hoc* model to put a trademark on.
- Find balanced features depending on the specific context in an organisation: Each context indicated in the above has its pros and cons, thus via access and auditing ways of DDA, a leader or design catalyst in an organisation amplifies the advantages and complements the disadvantages (e.g. small corporations keep the organisation less structured and discuss problems and issues across departments, and do not consider design to be an investment rather than a cost). Through repeated audit and access, an organisation is able to find the right balance or combination of creative/innovative and commercial perspectives for projects and organisational tasks (Beverland, 2005).

7.2.3 Rationale for developing a DDA model: Framework and roadmap

After distilling the initial implications, it is necessary to examine the literature in order to formulate a scheme which embraces the implications which overcome issues such as deficiencies of DDA. Thus, this subsection notes a rationale to elicit an outline to embrace those implications: a framework and roadmap.

First, a scheme for DDA a framework and roadmap is discussed. Currently, corporations seek ways to develop an action-based mechanism through design within an organisation (Sato et al., 2010; Cooper et al., 2009; Jenkins, 2009; Stevens et al., 2008). Yet, the diverse designerly tools and methods already developed are not proactively utilised and appreciated within business, because of a lack of commitment to a process to exploit these methods and skills (Topalian, 2002). In this research, the FMCG industry shows a similar propensity.

Especially, FMCG organisational management and project approaches tend to be rigid and resistant to change, or do not incorporate enough lead time for designerly applications due to FMCG characteristics: cost-efficiency, short-term planning, etc. Since using tools and methods alters in projects depending on the understanding of and commitment to DDA, within the FMCG industry it is vital for an organisation to experience designerly applications and to embed them into the organisation as a cultural entity. In other words, if employees are inspired by designerly experience and appreciate its benefits, they are willing to adopt designerly methods and tools robustly despite different types of projects: organisations develop their own design mechanisms to be adapted to their conditions (Preddy, 2011) and concurrently find the right balance or combination of creative/innovative and commercial perspectives for projects and organisational tasks (Beverland, 2005).

Since design-driven culture can be embedded into an organisation through practical work (Golsby-Smith, 1996), developing internal and external collaboration flows between design and business disciplines is critical to mutual interaction and creating one's own designerly culture. Ind and Watt (2006) indicate that creative balance is generated through collaboration between personal, organisational, team and client/customer needs. This calls for the transformation of organisational and project processes and the reconfiguration of human resources management in order to embed design thinking/innovation through a (collaborative) learning mechanism (Davenport, 2009; Beckman and Barry, 2007). Jevnaker (2005) reports that since most design activities occur in hidden contexts (e.g. design studio, boardroom, etc.), such tacit entities which are revealed in activities during a project have an impact on the fulfilment of an explicit procedure: communication practice, relationship, coordination, etc. (Sachs, 1995). Above of all, such capability can be obtained by collaboration and by learning through collaboration (ibid.), and thus the stereotypical barrier of continuous interactions via "cross-departmental-project work" can be vanquished (Jevnaker, 2000).

Therefore, first, it is necessary to develop a DDA framework for practical work – FMCG brand development – through internal/external collaboration in order to disseminate DDA concepts and approaches across an organisation. This form encapsulates approaches at the project level and enables organisational mechanisms to underpin DDA. Since 'a framework is a collection of abstract

and concrete classes and the interface between them, and is the design for a subsystem' (Wirfs-Brock and Johnson, 1990 cited in Pree et al., 1995: 95), to activate a framework within a specific context situation, it is necessary to explicate a structural relationship between a framework and its implementation into an organisational structure. Besides, a framework alone hardly solves all the problems of constructing and using a framework due to the complexity involved (Bäumer et al., 1997).

Hence, secondly, it is necessary to develop a comprehensive guide – subsystems –to adapt the framework in FMCG brand development by offering concepts of DDA and approaches and acting on the implications illustrated in the previous subsection in order to overcome the general/specific problems encountered. A roadmap can be defined as a 'description of an anticipated series of developments and milestones that provide guidance on the way forward to an envisioned future' (British Standards Institute, 2008): a mechanism enabling organisations to visualise their critical assets and relationships between these (Macintosh et al., 1998). Such a concept is adopted here to stimulate the FMCG industry to employ/underpin DDA in a project and in other organisational activities, by indicating key drivers (steps) to apply a general framework within a specific context/situation.

In this thesis, this guide follows the form of a roadmap, including a framework, by illustrating underlying concepts and subsequent and specific mechanisms (drivers) and approaches in order to adapt them into each organisational context. Thus, although this guide suggests substantial milestones for DDA employment, these are not guidelines which stipulate exact steps but a type of cookbook source for developing one's own mechanism for DDA: rule-based active guidance and context-sensitive behaviour. A framework role is here equivalent to a roadmap for DDA, rather than a substructure of a roadmap.

On that account, although 'a model is abstraction externalised in a professional language' (Krogstie, 2012: 414) in a simpler form, the term "model" is used to weight a framework and a roadmap equally, and on purpose, to emphasise both professional competencies; these are interrelated but the framework can be used separately. That is, the meaning of the "model" is here manipulated to encompass the framework and roadmap derived from synthesised phenomena – professional language, rather than delivering information in a simple form: e.g. diagrammatic language.

Indeed, the underlying scheme for a framework and roadmap entails organisational transformation via experience of designerly applications and collaboration, for the reasons below:

- Consistently feeding designerly experiences into a project and an organisation is important to it establishing its own DDA culture by decreasing the gap in appreciating designerly applications between different disciplines and positions.
- DDA needs to be accumulated and adjusted practically, through actions, in order to converge into organisational activities and to be autonomously utilised without strong organisational or forceful commitment to DDA.

As indicated above, the DDA framework and roadmap are configured to disseminate, accumulate and inherit DDA by experience of DDA and knowledge transfer into the organisation via a project underpinned by designerly applications. Adopting the concept illustrated in Figure 7.5 – status change when transferring knowledge – a concept for DDA transition is here embodied whilst procuring DDA culture.

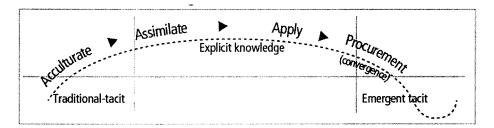


Figure 7.5 Four phases of transferring knowledge: adapted from Kuutti 'Artifacts, activities and design knowledge', from Poggenpohl and Sato, 2009: 73

To imbue designerly ways into business and enhance DDA within an organisation, the organisation starts with projects to acculturate designerly experiences and thus assimilate what designerly approaches can do. Afterwards, an organisation applies what it has experienced to subsequent projects and other cultural activities. The above four phases are abbreviated to AAAP (Figure 7.6) and the AAAP model is developed to pour DDA knowledge into the organisation as emergent-tacit knowledge through collaboration by emphasising the necessity for consistent actions. Through a continuous loop of such activities, organisations eventually achieve their own designerly culture and sustain their business in a fast-changing market by coping with the contradictions encountered between design and business, thus resolving organisational resistance to change and adapting to it.

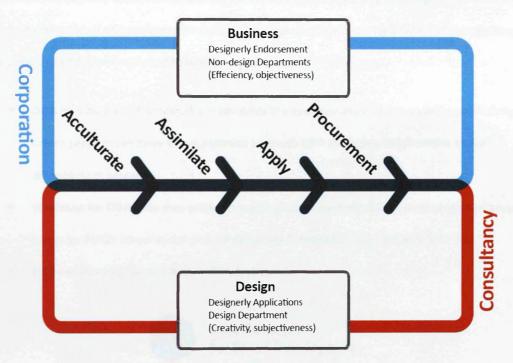


Figure 7.6 AAAP model

Initial implications are elaborated in a framework based on the AAAP model; afterwards, subsystems in a roadmap are embodied to enable an organisation to facilitate the framework. This DDA model is eventually configured to help organisations adapt and embed DDA across other organisational activities through brand development projects applied in the framework.

7.3 Development of a DDA model: Framework and roadmap

Previously, the findings and initial implications identified by synthesising an online survey and interviews, and then a scheme which could embrace the implications, was generated. Thus, briefly, a DDA model was configured to achieve that: grounded in the AAAP model, FMCG industry needs to imbue each employee with DDA and to integrate designerly approaches with day-to-day activities, i.e. going beyond classical design practice, as an organisational entity via a collaborative project mechanism. Accordingly, this thesis proposes a DDA model comprising a roadmap and framework in order to enhance the capabilities and employment of DDA at first, and then, ultimately, to empower the utilisation of designerly applications. As illustrated in Figure 7.7, a roadmap is configured to achieve vigorous utilisation of a framework; the details of the framework are in step 2 (RM2) of the roadmap. The details of DDA framework and roadmap are illustrated as follows:

- DDA framework: A framework encapsulates the essential implications regarding how designdriven projects can drive an organisation to enrich DDA through a collaborative brand development process.
- Roadmap for DDA: This map proposes a way to calibrate mechanisms at strategic and project levels for FMCG corporations and consultancies in order to invigorate and fulfil the framework and achieve a design-driven culture.



Figure 7.7 Configuration of a DDA model

This model targets two primary stakeholders – corporations and consultancies – to procure designerly knowledge and applications (skills) through a collaborative project process. Overall, this model is appropriate for those corporations which:

- Do not yet have a global presence, and their consultancies.
- Perceive DDA as a new driver and embed DDA features across organisational activities so as to make DDA a cultural entity which cannot be replicated by competitors.

Specifically, it should be noted that this model is configured for both parties with needs as follows.

- An FMCG organisation which: 1) Has difficulty in developing a new brand within a new category and needs initiatives to break with the status quo, and 2) Appreciates the benefit of designerly applications but does not know how to implement them: enhances/procures the undertaking of designerly applications at both strategic and project levels. Ultimately, DDA features flourish across organisational activities and are shifted into cultural entities which cannot be replicated.
- A consultancy which: 1) Predominantly works in the FMCG industry, 2) Has difficulties in engaging with the client's process and 3) Lets designerly applications permeate through to its clients.

The DDA model is configured in the form of a booklet, as simulated in Figure 7.8 – the booklet is a concise version of Section 7.3. A full version of the booklet is presented in Appendix 29.



Figure 7.8 A full version of the booklet simulation



7.3.1 A framework for DDA integration within FMCG brand development

As grounded in the concept of the AAAP model, this framework is developed in order to enhance DDA in the organisation through a project, i.e. brand development in a collaborative manner. From the literature review, a FMCG brand per se is not a product but an association of all the internal and external activities around the packaging: brand associations are formed by every customer's experience of packaging.

Therefore, a collaborative mechanism via brand development enables the dispersal of DDA across other organisational activities in the FMCG industry. The framework seeks to encompass every task and enhance the integration between tasks and activities. Within this framework, DDA is ignited by the design leader at the strategic (organisational) level and is nurtured by the design champion at the project level. This interaction between strategic and project levels creates a synergy to enable an organisation to foster a designerly culture: this is more likely to be a combination of top-down and bottom-up implementation. Such a combination creates an "umbrella" which insulates various activities against straying outside DDA integration (Figure 7.9). Indeed, this drives the organisation to obtain DDA which is optimised to its own context by metamorphosing through constant loops.

The DDA framework: This illustrates how the experience of designerly ways flows through organisational management; afterwards, via an evaluation (audit), the organisation reconfigures its organisational infrastructure to ensure designerly applications underpin subsequent projects. These constant flows create the organisation's own designerly cultural umbrella through patronage. Under this umbrella, designerly ways are dispersed throughout the entire organisation as a cultural entity.

Each essential constituent of the framework is delineated, working from top to bottom of Figure 7.9.

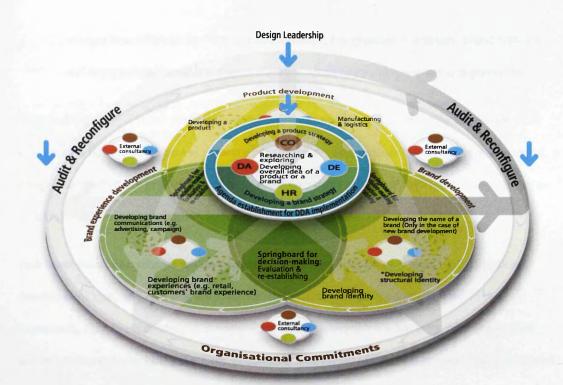


Figure 7.9 DDA framework for brand development

Design (DDA) leadership: DDA can be ignited, enhanced and exploited by two different types of design leadership. Leadership for design at the strategic level has been identified as a substantial trigger from the literature review (Thomke and Feinberg, 2009; Min and Chung, 2008), and this enables an FMCG organisation to encompass DDA from the primary research. Yet, leadership at the project level has often been neglected in the literature. From the primary research, since each business in an FMCG organisation governs its own brand development, a leader at the project level has a strong impact on the way(s) of DDA within project deployment.

Therefore, by combining two types of design leadership, at strategic and project levels, their synergy can be interlocked and amplified. This combination involves robust DDA integration and generates better results for a product, brand or service. Two types of leadership are delineated, as shown below:

- Design leader at the strategic level: Someone who can access and allocate organisational resources ignites DDA and mobilises the capacity of a DDA infrastructure at the strategic level: financial and physical resources, organisational structure and processes, knowledge resources, etc.
- Design champion at the project level: Someone who can boost designerly applications in a project needs the capability to integrate designerly applications into the business and to

amalgamate different departments and methods. For example, marketers, brand managers and designers; whoever is a project manager needs to play this role in the organisation.

While a design leader at the strategic level focuses more on playing a catalyst role to envision DDA employment by employees and to calibrate infrastructure and a mechanism for brand development, a design champion at the project level focuses more on playing the role of facilitator and integrator to accomplish DDA application within a project.

Task implementation schema within brand development: Next, a way of applying DDA to brand development tasks and engaging with internal and external design team is proposed. In this framework, agenda establishment is a primary phase to determine the following DDA applications within subsequent phases (Figure 7.10). From the primary research, the silo operation of product and brand development results in inconsistency in brand experiences and meanings, and impedes collaboration. If all the tasks in brand development are exploited in tandem and through collaboration, a brand can be well integrated which leads to better results: e.g. competitiveness of the brand and business (Ind et al., 2012), when coping with the complexities of operations and finding insights from various layers of customers. Tasks are interlocked so that tasks can be stated together in the ideas generation phase to share the same view of a brand and product. However, in reality, it is impossible to execute every task simultaneously: often to employ a stage-gate process is inevitable.

Therefore, this framework intends to propose a pragmatic way for collaboration and DDA employment: each task can be pared down to converting overall ideas into explicit ideas for implementation and to implementing ideas after completing a previous task. Tasks are represented at two levels of a project. It is essential that all stakeholders – project manager, board members (decision-makers), persons who conduct every task at the second level – participate in agenda establishment at the first level in order to be able to contribute their knowledge and have the same understanding of a project: product development, brand development and brand experience development.

Afterwards, the stakeholders who participate in an agenda establishment session can then guide each task to keep the agenda previously developed on the right track. Stakeholders at the second level can

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be from an internal or external team so that a project manager stimulates them to be incorporated with the agenda. Tasks in the same circle are more interlocked than other tasks within other circles, so that subordinated tasks in the same circle are developed in tandem and call for vigorous interaction; but also, all the tasks in the implementation phase are interrelated to each other so that collaboration between these tasks is also ensured. In addition, while agenda establishment at the first level calls for robust collaboration, collaboration via a springboard in the decision-making phase is justified to facilitate implementing each task.

This framework intends to consolidate the up-front stage – ideas exploration and generation – because this phase is often turned down due to deficiencies and vulnerability in brand development.

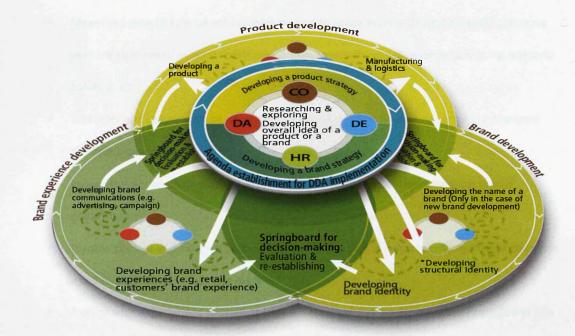


Figure 7.10 DDA usage and tasks deployment in a project: a focal view of the DDA framework for brand development

Agenda establishment for DDA implementation: This phase involves finding ideas for a project and setting the agenda for product development and for different tasks in brand development. Given the nature of the FMCG industry, the term "product development" mystifies people with regard to the collaboration between corporations and consultancies. While FMCG corporations perceive this term as the development of the contents within the packaging, consultancies perceive it as the development of the structure of a pack (industrial design aspect). In this thesis, product development

means developing the content inside the pack. Depending on the type of project – new brand development, brand revitalisation, etc. – the extent of considering a brand and product will be different. Establishing an agenda for both product and brand is critical in this framework. The other important point is that this phase leads to DDA knowledge transfer to the following tasks in a collaborative manner. In a way, this phase develops the direction for subsequent implementation phases, as well as the transfer of designerly knowledge and its benefits via robust collaboration. Hence, in this phase, the project manager or design champion needs to facilitate designerly applications.

The following need to be incorporated into this phase:

- More lead time to engage with customers and to utilise diverse designerly applications for genuine customers' insights: customer-driven approach, visualisation/prototyping, scenario building, etc.;
- Flexibility and iteration to be assured to underpin designerly thinking: ensure a divergent thinking process;
- Ensure the design champion has access to intellectual and physical resources across departments;
- Involve internal and external stakeholders who take part in subsequent implement phases in a collaborative and integrative manner;
- Engage with experienced specialists from external networks who are often neglected in this phase.

Implementation phase(s): Responding to the previous agenda establishment for DDA implementation, different tasks are exploited in each overarching group: product development, brand development and brand experience development. Three overarching activities are here defined as primary scopes for brand development and each overall scope comprises subsequent activities. The details of these groups are as follows:

- Product development: Two tasks developing a product and manufacturing/logistics development – fall into this category. Depending on the extent of brand revitalisation, the product development task is sometimes skipped: reinvigorating the outlook of a brand.
- Brand development: Three tasks developing a visual identity, structural identity and the
 name of a brand fall into this category. Depending on the project type, the extent of each
 task is different. Mostly, except for new brand development or some line extension projects,
 the naming task is often disregarded. On the other hand, a brand's visual identity
 development is mostly conducted in every brand development project. Structural design
 needs to consider pack manufacture: which is easily neglected at the beginning of a task and
 is then a big problem later on.
- Brand experience development: Two tasks developing brand communication and experience – fall into this category. The first relates to ways of communicating a brand to customers (e.g. printing, advertising, blogs, etc.), and the second is a matter of brand experience during customer purchasing (stock display, POP (Point of Purchase), online, etc.). The latter is often neglected because the FMCG industry is rarely able to control the retail environment and because of a lack of new channels for sales and undertaking diverse ways of engaging with customers. However, the moment of purchasing decision occurs when a customer confronts a brand on the shelf or online. Thus, the organisation needs to include this task in brand development.

Ideally, all tasks in the same category (circle) are conducted in tandem whilst collaborating with other tasks in the same category. Between/within tasks, features of the four themes from DDA – designerly application, design endorsement, collaboration, and human resources – need to intermingle along with flexibility and iteration.

Springboard for decision-making: Two activities are highlighted in this phase: evaluation of progress and re-establishing the agenda. The stage-gate process is criticised in terms of integrated and holistic brand development, but it is inevitable in a corporation's operational management. Thus, this framework seeks to minimise the deficiencies of the stage-gate process in order to elevate DDA by justifying a gatekeeper role. This phase does not seek to terminate a project but to help it by offering a reference point with an inclusive view. The springboard for decision-making calls for different milestones for the implementation phases: 1) within a specific task phase and 2) within the overarching development process. Between these two levels, decisions inform each level and the design leader and champion supplement, reconfigure and oversee the direction for development and resources.

- Within a specific task phase: Scheduling adjustments to decision-making is more flexible because much smaller stakeholders are involved and they can easily reach agreement over changes to the schedule. Decisions are made in response to the demands for implementation deployment between stakeholders at the project level. This phase also needs to check whether designerly applications are undertaken as targeted.
- Within the overarching development process (three category circles): Key stakeholders at the strategic level are involved and seek to give consolidated opinions about a task, which are integrated with other implementation phases. During this decision-making, it is vital to check whether all forms of delivery are incorporated into consistent brand touchpoints. Meanwhile, mostly budget and strategic resources are determined in this phase so that the design endorsement of projects needs to be configured.

Role of designers/design team in brand development: Within the framework, the role of design (designerly application) needs to be assured in terms of design integration across all tasks by a corporation leader. Especially, except for big global corporations, there is no internal design team and the designer's involvement is limited to external consultancies' work. Hence, if the design (DDA) ⁻ leadership cannot assign an internal design team, they have to be sure to facilitate external consultancies to be involved in the up-front stage (agenda establishment phase), e.g. by setting up an obtrusive corporate policy to ensure designers' involvement in the early stages.

Internal design team (designers): Needs to integrate designerly applications into the agenda establishment and implementation phases. Simultaneously, they input their designerly knowledge into the collaboration flow to let the organisation experience designerly applications. Indeed, they seek to contribute to DDA's corporate culture establishment.

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 External consultancies: Need to act as satellites in orbit and to transfer their specialties and expertise through good relationships. These enable consultancies to observe what clients do and how, and to engage with clients' projects. Consultancies' involvement is too vulnerable, depending on the corporation and project conditions (attitudes to external collaboration, project budget, time frame, etc.). Nevertheless, corporations seek to involve consultancies in the up-front stages in order to envisage the benefits of employing DDA and to encourage the undertaking of DDA through casual dialogues, workshops, delivery, strategy planning, etc.

Organisational commitment: After conducting a project, an organisation conducts an audit to determine whether the commitment to the four DDA themes interplayed well and then how this needs to be reformed to invigorate designerly applications within subsequent projects. Such organisational actions are a way to foster DDA but, depending on organisational characteristics, organisations will have different extents of undertaking designerly actions. For example, start-up corporations will find it hard to commit fully at once due to lack of investment. Hence, each corporate situation from a designerly viewpoint.

7.3.2 A roadmap for DDA culture through DDA FMCG brand development

This roadmap helps the FMCG industry to embed DDA as a cultural entity by embarking on the framework, moving from brand development across organisational activities, and this comprises four steps to fulfil the DDA framework; the intentions of each step are explained as follows:

Do we understand DDA?: This outlines a concept for DDA identified from the selected literature analysis (see Section 2.3) and AAAP model, the rationale underlying the DDA model (see Subsection 7.2.3). Since the FMCG industry is not yet ready for DDA – predominantly sales-driven and efficient-driven approaches – it is necessary to understand the concept of DDA first.



How do we get DDA?: Two primary stakeholders – corporations and consultancies – need to determine how they will utilise DDA by reflecting on the findings from the primary research.

This step provides both overall and specific findings which relate to current ways of FMCG brand development. Depending on the context, organisations are able to project their situations onto them and then check a "to do" list and exemplars and identify key actions from the next "are we ready" step.

- Are we ready?: Grounded in four DDA themes, this intends to indicate the organisational commitment to endorse and elevate the usage of designerly applications in brand development. Grounded in a combination of two concepts AAAP and DDA the actions of four themes are suggested to procure DDA throughout consistent loops at the strategic level.
- Now, let's implement: If the previous step indicates key actions at the strategic level (organisational commitment to DDA), this step describes suggestions to help fulfil designerly applications for corporations and consultancies and to implement them at the project level. This step indicates two criteria: 1) actions to develop and implement ideas and 2) approaches to fulfil the actions.

The content of the first step – "RM1: Do we understand DDA?" – is indicated in Subsections 7.2.3 and 2.3.3, thus the details of the step are skipped here (the form presented in the DDA model is available in Appendix 29).

7.3.2.1 How do we get DDA?: Overall characteristics and exemplars of a "to do" list – Corporations

At the beginning of this chapter, the summary of propositions was substantiated. Through a summary of the propositions, key findings – overall and specific contexts – are distilled in terms of corporations and consultancies, and "to do" lists are generated in accordance with the findings.

Overall, ten findings are extracted from a synthesis of the primary research, thus corporations need to perceive "to do" actions as key actions and then undertake exemplar actions to fulfil the "to do" actions in "RM 3: are we ready?" (see Section 7.3.2.5). The role of external consultancies does not comply with what is identified in the literature review (e.g. Verganti, 2009), so they step up to contribute designerly knowledge to corporations (clients). Therefore, along with the steps for

corporations, exemplar actions for consultancies are also proposed, but corporations' actions are mainly discussed.

1. Cost-driven approaches result in incremental brand development: The following considerations result in corporations focusing on incremental brand development rather than on new brand development along with FMCG characteristics: low margin and high volume.

- Short-term focus: Yearly revenue growth is a primary parameter to evaluate the success of a brand;
- Cost-efficiency: A small change in structural design leaves impacts as increased costs, so corporations rarely tackle structural modification;
- Marketers-led brand development: Marketers' concern with career-building focuses on short-term success (e.g. promotion, move to a better company, etc.).

This relates predominantly to ways of financing investment and organisational culture in the FMCG industry: risk-averse culture. Thus, corporations need a trigger to imbue designerly applications, and this implies undertaking exploratory projects in order to break the propensity to focus on incremental brand development. Corporations are challenged to break with the status quo by embarking on exploratory projects. For example, this "to do" can be triggered by design leadership at strategic and project levels (•DA1), and by not viewing projects through an analytical lens (•DE5).

Table 7.3 Overall and exemplar actions

To do	Corporations	Consultancies
Undertake exploratory projects to challenge the status quo	•DA: 1	• DA: 1, 2
	•DE: 1, 5	•DE: 1
		•CO: 3

2. Design is perceived as providing aesthetic and functional modifications (project level): What is called "design" is limited to developing/modifying the aesthetic and functional parts of a product and brand. In a word, it is hard for design to be involved in the up-front stages: ideas exploration and generation.

• Design input is limited in structural- and visual-related tasks: design-trained staff is unlikely to lead brand development and rarely work in the corporation's organisation;

 Lack of understanding and appreciation of the value of designerly applications in strategy development.

This finding – awareness of design is limited – calls for dedication to strategic endorsement to shift the current design role to designerly applications (•DE1). For example, this can be supported by designerly education and experience via projects (•DA4).

Table 7.4 Overall and exemplar actions

To do	Corporations	Consultancies
Employ designerly applications for strategic development as well as	•DA: 4	•DA: 3
tangible outcomes	•DE: 1, 4	•DE: 1
		•CO: 3
		•HR: 2

3. Business-driven thinking hinders new ideas generation and project exploitation in terms of

designerly ways: People trained in business display the following characteristics: emphasis on sales growth, predominantly inductive and deductive modes of thinking, rarely challenge constraints, etc. Within the FMCG industry, business people are deemed to govern a process so that:

- Analytical thinking dominates; there is limited use of abductive, intuitive and parallel thinking;
- Design education is not valued within business-focused organisations.

Since design in business is informed and controlled by business-educated people, design rarely evolves into an expanded role – a designerly application at the strategic level. Thus, internal/external designers need to be involved in up-front and strategic decision stages by, for example, feeding in designerly thinking (•DA5) via a leader (•DE1) and institutionalising a collaborative flow and education system to boost designerly applications (•DE4).

 Table 7.5 Overall and exemplar actions

To do	Corporations	Consultancies
Involve internal designers or external design consultancies in projects to	•DA: 4, 5	•DA: 1
provide organisations with experience of designerly applications	•DE: 1, 4	•DE: 1
		•CO: 3

4. Organisational silo structure and operation as a barrier to holistic branding: Efficiency-driven

attitudes drive organisations to adopt a silo structure and operation. This results in a rigid and

complicated organisational structure which hinders achieving integrated (holistic) brand

development:

- Lack of collaboration between departments and disciplines, both internally and externally;
- Only selected employees are involved in initial stages.

Thus, corporations establish a policy for an interdisciplinary approach by, for example, reconfiguring the stage-gate process (•DE2) and developing a collaborative flow (•DE4) in the up-front stages.

Table 7.6 Overall and exemplar act

To do	Corporations	Consultancies
Undertake interdisciplinary (collaborative) approaches with flexibility:	•DE: 2, 3, 4	•DA: 3
especially, ensure a collaborative approach in the up-front ideas	•CO: 1	•DE: 2
generation stage		•CO: 2

5. Consultancies operating via a silo approach results in fewer opportunities for FMCG companies to

gain designerly knowledge: A silo operation hinders DDA integration and this implies that

organisations have less chances to experience and procure designerly knowledge within the FMCG

industry. Hence, DDA knowledge can be experienced through interaction with external consultancies:

except for larger-size (global) corporations, there is no designer or design team. Nevertheless, the

following features can inflame a difficult situation and hinder learning designerly knowledge.

- Less involvement between corporations and consultancies in the initial stages: after developing an overall strategy for a brand, consultancies are asked to take part in a specific phase to develop the functional and aesthetic parts of a brand;
- Except for a project-leading department (marketing department), other departments rarely have opportunities to access development progress until brand launch.

Thus, corporations need to involve external consultancies (internal designers) in the up-front stages so that, for example, a leader at the strategic level can ensure designers' involvement (•DE1) and enhance external interactions across diverse organisational activities (•CO2 and 3).

Table 7.7 Overall and exempl

To do	Corporations	Consultancies
Overarching brand direction needs to be coordinated between external	•DE: 1	•DA: 2, 3
consultancies and corporations	•CO: 2, 3	•CO: 2, 3

6. Visualisation and prototyping are utilised in limited stages of brand development: There is limited

usage of visualisation and prototyping which enable to enrich an ambiguous concept and envision new possibilities of it. Moreover, prototyping is often neglected in the FMCG industry: only some products packaged in blister packs (e.g. shavers, toothbrushes, etc.) utilise prototyping.

- Visualisation and prototyping are mostly utilised for consumer tests or final presentations;
- They are mostly undertaken by consultancies, not on the corporation side;
- They are utilised in an unstructured manner in ideas exploration and are thus vulnerable, depending on project conditions: project manager, time frame, etc.

Despite the competency of these approaches, they are not infused with organisational activities. A design champion seeks to underpin these approaches during project deployment (•DA1 and 3): especially to utilise them in ideas generation rather than testing ideas and presenting these to the board.

Table 7.8 Overall and exemplar actions

_To do	Corporations	Consultancies
Employ visualisation and prototyping through all stages of brand	•DA: 1, 3	•DA: 1, 2
development		•DE: 1

7. The commitment to enhance designerly applications is limited in organisations: Since the

organisation and each business (brand) are rarely interlocked, organisational support to foster employees' capabilities for designerly applications is limited. Each business (brand) is likely to run separately, without support from the organisation.

- HR's role is the evaluation of employees' performance, not the enhancement of their capability;
- Education programmes are limited to operational skills and only for selected employees (e.g. operating programming skills, ideas generation methods, etc.).

Corporations seek to infuse attitudes to designerly approaches into employees in order to obtain accumulated knowledge as well as unprecedented knowledge via knowledge management flow (Hatchuel et al., 2002). Thus, for example, corporations seek to provide education in designerly applications and to run programmes to enhance designerly capability (•HR1 and 2) by auditing employees' capability.

Table 7.9 Overall and exemplar actions

To do	Corporations	Consultancies
Access, audit and develop activities to enhance designerly applications	•DE: 1, 5	•DA: 1, 2
	•HR: 1, 2	•DE: 1

8. Designerly methods to identify customer insights (developing ideas) are not formalised: A project

manager gathers overarching ideas for a product and brand from limited participants' experiences: e.g. inadequate "up-front homework" (Cooper, 1999). Beverland (2010) states that the research into customer's insights does not have to be formal but, in this case, it requires employees' or stakeholders' capabilities to become immersed in customers' lives and to interact with them. However, since most employees lean toward sales- and efficiency-driven attitudes, and are unfamiliar with designerly applications, it requires effort to institutionalise a stage to underpin designerly methods and to conduct in-depth research into customer insights or to apply designerly applications. The following features are identified to cause a difficult situation:

- Conventional ways of exploring and generating ideas dominate, whilst leaning on analytical and convergent approaches;
- Approaches to identifying customer insights are utilised in an unstructured manner: depending on the capability of the person conducting/participating in ideas exploration/generation using designerly applications, ways of findings customer insights are determined.

Thus, a project manager (design champion at the project level) has to manifest and apply designerly applications to obtain customer insights. A project manager reconfigures consumer engagement by immersing him/herself in customers' lives (•DA2) and using designerly thinking which highly regards divergent, abductive, intuitive and visual thinking (•DA5).

To do	Corporations	Consultancies
Manifest and apply designerly applications to obtain customer insights	•DA: 1, 2, 5	•DA: 1, 2
	, .	•DE: 1

9. Development relies on consumer evaluation of brand proposals: Since the FMCG industry is

predominantly operated by marketers or people who are educated in business, brand development relies strongly on the statistical results of researching customers' findings. This entails a focus on testing ideas as a means of customer engagement, but there is a fundamental defect in perceiving testing ideas as customer engagement. Since customers tend to be right wing – customers are conservative and feel comfortable in what they know and, even worse, have difficulties in describing what they want – they generally state what they know. Thus, some design-led/innovation-led companies (design-driven) do not start or shape ideas emanating from customers (Beverland, 2010; Verganti, 2009). However, within the FMCG industry, the following tendencies are identified:

- Focus groups for selecting an idea still dominate and results in innovative ideas being withdrawn;
- Marketers use consumer tests as evidence to justify investment by the organisation.

Therefore, FMCG corporations seek to become immersed in customers' lives whilst undertaking designerly applications and generating ideas with designerly attitudes and mindsets. To enhance employees' engagement with customers, an organisation, for example, keeps feeding (•HR1) how to fulfil designerly applications and a project manager (•DA1) facilitates diverse designerly applications (•DA2).

Table 7.11 Overall and exemplar actions	Table 7.11	Overall	and	exempla	ar	actions
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To do	Corporations	Consultancies
Engage with customers in creative ways to overcome consumer bias and	•DA: 1, 2, 5	•DA: 1, 2
find underlying insights	•HR: 1, 2	•DE: 1

10. The integration between organisation (organisational management) and each brand (brand development) is limited: Within the FMCG industry, a brand portfolio strategy is deemed to align with category management (Chimhundu and Hamlin, 2007) or to have an independent and lightly endorsing brand portfolio. Thus, each category or brand is likely to have its own organisation under the mother brand of a holding corporation. This context implies that a brand has less integration or support from the organisation: a decentralised tendency of organisational management. In a word, an FMCG organisation is structured around each category or brand without any interlocking.

Therefore, an organisation integrates each brand under a corporate vision by, for example,

formulating an organic structure and a collaborative flow in order to enhance the interactions between businesses (•DE3 and 4).

 (γ,γ_{i})

Table 7.12 Overall and exemplar actions		
To do	Corporations	Consultancies
Incorporate brand development within an organisational	•DE: 3, 4	•CO: 3
strategy/Enhance the interaction between organisational management	•CO: 1	
and brand departments		

In summary, within FMCG culture, there is tacit and inherent friction that permeates designerly applications. Thus, it is vital for FMCG corporations to nurture designerly experience and knowledge at the strategic level in order to implant designerly applications as cultural DNA. A marketing-led brand is vulnerable to small changes (e.g. project manager resigns, sudden contradictions arising, etc.), so every party and stakeholder inherits an organisational culture driven by a strategic vision (Hatch and Schultz, 2003). Grounded in these stances and the summary of findings from the primary research, a list is suggested here to reflect ways for the roadmap user's organisation and outlines organisational commitment and devotion to DDA catalyse and becomes embedded DDA across organisational activities.

7.3.2.2 How do we get DDA?: Specific-context characteristics and exemplars of a "to do" list – Corporations

The findings in six specific contexts and a to do list are discussed: 1) by size of corporation; 2) by leadership; 3) by brand ownership (departments); 4) by industry; 5) by project time frame (project type); 6) by proportion of exploratory projects. Except for the second context, the subgroups of each context show contradictory characteristics so that organisations need to find a balance between reinforcing positive characteristics and employing features which are not yet employed. The characteristics in bold are substantial ones which surpass the others in terms of designerly aspects.

By size of corporation: Two subgroups – larger (global market) and smaller (local/regional market) size corporations – are extracted and their characteristics distilled from the primary research: while global corporations distribute brands globally (e.g. across regions: America, pan-Europe, Asia, etc.), local market-oriented corporations concentrate on one national market or on those in the same

region, as previously indicated in the synthesis above (see Subsection 7.2.1.1). The characteristics in each group show opposite stances: positive characteristics in bigger-size corporations are negative features in smaller corporations. Larger-size corporations are able to invest more in infrastructure for design and challenge to conduct exploratory projects. On the other hand, smaller-size corporations have less complicated and rigid structures and so they can manipulate a project and respond to issues arising during project deployment. The table below summarises the characteristics of each group.

	Positive features to enhance DDA	Negative feature to enhance DDA
Larger-size corporations	 + Better appreciation of and infrastructure for DDA + More investment in risk-taking and designerly infrastructure + Seek approaches (process) for DDA and collaboration with external consultancies for designerly likelihood: less difficulty in selecting external consultancies 	 More complicated structured than smaller corporations More time to make decisions and hard to discuss across departments and positions Less flexibility in undertaking projects: formal structure for project development
Smaller-size corporations	 + Less complicated structure than larger corporations + Less time to make decisions and easier to discuss across departments and positions + More flexibility in undertaking projects 	 Less appreciation of and infrastructure for DDA Less investment in risk-taking and designerly infrastructure Hard to collaborate with external consultancies beyond making tangibles: limitations in selecting external consultancies due to budget constraints

Both types of corporation compensate for negative features in order to implement a design-driven environment: 1) larger-size corporations seek an organic and flexible communication channel by, for example, reconfiguring the stage-gate process (*DE2) as well as developing a communication flow; 2) smaller-size corporations need to empower a project manager at the project level to utilise DDA in the organisation via a leader engaging in DDA commitment (•DA1 and •DE1).

Table 7.14 Specific-context and exemplar actions

······································	To do	Corporations	Consultancies
Larger-size	Reconfigure an organisational structure for	•DE: 2, 3, 4	•DA: 2, 3
corporations	flexibility and better communication	•CO: 1	•DE: 1
Smaller	Initiate the organisation to empower DDA	•DA: 1, 4	•DA: 3
corporations		•DE: 1	•DE: 1
·			•CO: 2

By leadership: Smaller corporations fall into the group of sales-driven leadership: a strong concern

over cost and sales rather than investment in DDA. There is a fundamental underlying difference

between leader's acknowledgement in terms of DDA's contribution and design investment: viewing

design as a cost.

Table 7.15 Characteristics by leadership

Design leadership	Sales-driven leadership
 + Seek to institutionalise a DDA mechanism: designerly conceptualisation and exploitation as a cultural entity + Investment in designerly infrastructure and envisage/encourage employees to move towards DDA benefits/utilisation 	 Stick to the status quo and conventional approaches: sales-driven, process-oriented, no risk- taking, etc.

Corporations with design leadership need to build on the advantages they have gained and experienced within organisational activities. In contrast, corporations with a tendency to sales-driven leadership need a game-changer at the strategic level to initiate DDA. As previously mentioned, smaller-size corporations have a tendency to sales-driven approaches, such corporations are deemed not to have an internal design team or designers. Thus, for example, an organisation having salesdriven leadership can seek external collaboration (*DE1 and •CO3) to experience DDA or hire someone who can be a game-changer to underpin DDA (•HR2).

Table 7.16 Specific-context and exemplar actions

	To do	Corporations	Consultancies
Design leadership	Keep transforming the organisation towards being design driven to rise to challenge of new opportunities	•DE: 3, 5	•DE: 1 •CO: 3
Sales-driven leadership	Seek to imbue a leader with DDA via consultancy collaboration	•DE: 1, 5 •CO: 3 •HR: 2	•DA: 2 •CO: 3

By brand ownership (departments): This criterion is quite controversial in a discussion about pros and cons. As indicated in the interview analyses, some marketers' capability to undertake DDA is very similar to designerly ways; not every designer has the DDA capability to fulfil designerly applications across organisational activities. Nevertheless, as illustrated in Table 7.17, most marketers' failure to undertake designerly applications and concerns with personal career-building result in deficiencies in utilising DDA in brand development. Overall, designers do have better attitudes to undertaking DDA: undertaking projects with designerly lenses.

Table 7.17 Characteristics by brand ownership (departments)	Table 7.17	Characteristics I	oy brand	ownership	(departments)
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	Positive features to enhance DDA	Negative features to enhance DDA
Marketers (business department)	+ Better understanding of organisational management	 Lack of appreciation for and utilisation of designerly applications: process oriented; less empathetic; lack of integration of all development phases Driven by personal career-building: tend to revitalise a brand and not take risks, stay for the short term Check consumers' preferences to be protected from project failure
Designers (design)	+ Better understanding of designerly applications and risk-taking + Engage in customer engagement to find customers' insights	 Less concerned about technology or other management features Sometimes have conflicts with external consultancies: direct how to design

Since marketers (non-design departments) predominate in the FMCG industry, their appreciation of DDA – locked into modifying/developing tangible parts of a brand – impedes embedding DDA into brand development and organisational activities. In contrast, those who are trained as designers rarely take ownership to lead a project within the FMCG industry, especially in a smaller-size organisation.

Thus, it is necessary for marketers to elevate their knowledge of DDA and to seek to utilise designerly applications within project development. For example, marketers need to change their way(s) of thinking (•DA5) and this can be achieved through collaboration with designers (•CO1, 2 and 3). On the other hand, designers need to find a slot to disseminate designerly knowledge and ways into a predominantly business environment, e.g. by creating a collaborative flow (•CO1). To enhance collaboration flow, both groups need education on their deficiencies to implement better collaboration (•HR1).

	To do	Corporations	Consultancies
Marketers (business	Engage with internal designers and external	•DA: 1, 5	•DA: 2, 3
department)	consultancies to understand designerly applications	•DE: 5	•CO: 2, 3
		•CO: 1, 2, 3	
		•HR: 1	
Designers (design	Disseminate designerly knowledge and ways into	•CO: 1	•DA: 1
department)	the organisation via internal or external	•HR: 1	•DE: 1
	collaboration		•CO: 3

Table 7.18 Specific-context and exemplar actions

By Industry: There is a limit on finding the pros and cons from primary research: from ANOVA analyses, a few variables in the food and beverage industry show statistical significance but, following the interviews, this is limited in the findings due to the number of interviewees. However, the

characteristics in Table 7.19 might be seen as exemplar stereotypes and these are worth discussing, as proceeds below.

- Food & Beverages: More accounting for structured and rigid organisational management.
 This industry 'face[s] the dilemma of responding to changing consumer demands while
 bearing the risk and responsibility of their image and reputation' (Gehlhar et al., 2009: 116);
- Households: More accounting for operational efficiency (manufacture) and usability: a stronger view of structural development (industrial design);
- Spirits: More accounting for emotional engagement with customers to communicate brand heritage.

	Positive features to enhance DDA	Negative features to enhance DDA
Food & Beverages	N/A	 Structured and conventional ways of organisational management Averse to risk-taking for new brand development for new categories Have difficulty in applying new technology due to sales-driven approach
Households and personal	+ Call for feasibility of technology and usability of the functions of a brand	- Structural change is regarded as a cost: this sometimes restricts designers when generating ideas
Spirits	 + Less concern about cost of manufacture for emotional engagement + Seek to use diverse media to engage with customers' emotions 	- Due to the heritage of brand, it is hard to engage in new brand development (within a new category)

Table 7.19 Characteristics by industry

The typical characteristics above need to be transmuted into DDA features. For example, food and beverage corporations can initiate designerly applications and reconfigure the conventional stagegate process by leadership at the strategic level (*DE1 and 2). Despite the important nature of the household and personal care industry, they are not deemed to utilise prototyping well or to use prototyping for testing ideas. Thus, such industry does not regard prototyping as a cost (*DE5) and also does not manifest various types of prototyping (*DA3). The nature of the spirits industry – the importance of brand heritage – calls for customer engagement by using designerly applications to build a strong relationship with customers (*DA2 and 3). Table 7.20 Specific-context and exemplar actions

	To do	Corporations	Consultancies
Food & beverages	Employ designerly applications to break with the	•DA: 4, 5	•DE: 2
	status quo	•DE: 1, 2, 5	•CO: 2
Households and	Conduct various types of prototyping to lessen	•DA: 2, 3	•DA: 2, 3
personal care	manufacturing mistakes and facilitate finding the usability of the structure of a pack	•DE: 5	•CO: 3
Spirits	Engage with customers in designerly ways to find customer insights and build brand loyalty	•DA: 2, 3	•DA: 2, 3 •CO: 3

By project time frame (project type/scale): Project time frame relates to the type and scale of a project. New brand (category) development or global brand development projects need longer project time frames. For example, interviewee COR-4 indicated a two-year project time frame for global brand development. Typically, projects having less than a 12-month time frame are for revitalisation, the line extension of a brand and some new brand development; and projects having a 1-year or over time frame can include all the tasks previously mentioned for new brand development or new category development. However, as indicated at the beginning, project time frame is altered by the urgency and progress of a project.

Briefly, the characteristics of corporations having less than a 12-month time frame show similar patterns to those of smaller corporations. The other two groups show better collaboration or better DDA utilisation through brand development, but have difficulty in coping with fluctuating changes in market and social culture. Besides, these groups account more for trends as a trigger to find new opportunities. The characteristics of the corporation having a 1-2 year time frame indicate intermediate aspects compared to the other two subgroups.

	Positive features to enhance DDA	Negative features to enhance DDA
Less than 12 months	+ A better environment for quick decision-making	 Insufficient infrastructure for brand development and designerly applications Insufficient time to utilise internal/external collaborative approaches in every phase
1-2 years	+ Better collaboration than in the other subgroups	 Have difficulty in coping with sudden changes arising from market and social culture
Over 2 years	+ Better DDA utilisation throughout the brand development process	- Have difficulty in coping with sudden changes arising from market and social culture

Table 7.21 Characteristics by project time frame

Corporations with less than a 12-month time frame break with the status quo by strategic alacrity to challenge and engage in new brand development by, for example, undertaking designerly applications

or working with designers (•DE1 and •CO2). Corporations having a 1-year or more time frame have to be versatile to deal with various types of brand development by, for example, transforming their organisations to being organic and flexible (•DE3).

	To do	Corporations	Consultancies
Under 12 months	Undertake exploratory projects to break with the	•DE: 1, 4	•DA: 1, 2
	status quo by working with designers (designerly applications)	•CO: 2	•CO: 2
1-2 years	Set up different levels of utilising designerly	•DE: 3	•DA: 3
	applications depending on project type		•DE: 2
Over 2 years	Cope with context changes while developing a	•DE: 3	•DA: 3
	brand		•CO: 3

By proportion of exploratory projects: The innovation survey of 2009 by BIS (Department for Business Innovation and Skills) indicated that 'the share of firms with a product innovation was 24%' (2010). It can be interpreted that corporations with a proportion of less than 20% of exploratory projects do not reach the mean of UK firms' innovation. Such corporations show a lack of internal competencies and risk-averse attitudes. Those corporations with a proportion of 20-40% of exploratory projects account for better competency for DDA. Corporations with a proportion of over 40% of exploratory projects indicate the characteristics of start-up (unsettled) corporations: they have good attitudes but difficulty in achieving DDA.

Table 7.23 Characteristics by proportion of exploratory projects

Tubic /	.25 characteristics by proportion of exploratory projects
	Positive/negative features to enhance DDA
Under 20%	 Less appreciation and integration of DDA Difficulty in undertaking internal and external collaboration Structured and sales-driven organisations: less taking of risks: stop projects which cannot be estimated
20-40%	 + Better understanding of DDA and show the features of settled corporations + Better DDA integration and external collaboration for DDA - Structured and sales-driven organisation
Over 40%	 + Better understanding of DDA but difficult to utilise DDA for brand intentions (unsettled corporations): seek new opportunities + Apply more prototyping to develop a brand for a new category - Internal collaboration is underpinned but external collaboration is limited

Thus, corporations with less than 20% of exploratory projects can expand them to over 20% by, for

example, assigning a design champion to catalyse DDA and embrace designerly thinking (•DA1 and 5).

On the other hand, either start-up (unsettled) or innovative corporations with over 40% of exploratory

projects cannot accomplish every exploratory project so they form alliances with external

consultancies by, for example, collaborating with an external network and involving it in strategic

development (•CO2 and 3). Finally, it might be assumed that corporations with 20-40% of exploratory projects need to permeate the intellectual properties (competencies) obtained from project development into organisational activities by, for example, dynamic interaction through collaboration flow (•CO1).

	To do	Corporations	Consultancies
Under 20%	Elevate the proportion of exploratory projects up to	•DA: 1, 5	•DA: 2
	20% in order to break with the status quo	•DE: 1, 5	•CO: 2
20-40%	Begin an exploratory or team-building project to	•DA: 1, 5	•DA: 2
	change organisational attitudes	•DE: 1, 2	•CO: 3
		•CO: 1	
Over 40%	Form alliances with external consultancies	•CO: 2, 3	•DA: 2, 3
	(network) for a project to obtain fresh ideas for brand direction		•CO: 3

Table 7.24 Specific context and exemplar actions

To sum up, the characteristics are not definitive; instead, corporations can reflect on these characteristics according to their context as cornerstones in order to be transformed into a designdriven organisation and excel at utilising designerly applications. The overall characteristics according to context and its "to do" list help a corporation to keep its auditing and reconfiguring processes and organisational structure, achieve its own DDA tenet and suggest to a consultancy how to cope with different clients.

7.3.2.3 How do we get DDA?: Overall characteristics and exemplars of a "to do" list – Consultancies

A role for consultancies or an external network is highlighted in DDA: design discourse with external (Verganti, 2003, 2009); external linkage (O'Connor, 2008); correspondence to a new business environment (Gornick, 2009). However, from the primary research, the role of consultancies is limited to providing design skills within the FMCG industry and other external networks are rarely involved in the up-front stage. Therefore, this subsection intends to drive consultancies robustly to integrate with clients' (corporations') activities. The order of components for consultancies is also the same as the one for corporations. Nine overall characteristics and a "to do" list are provided, corresponding to those characteristics.

1. Consultancies' approaches are driven by clients' organisational intentions: organisational characteristics, budget, project type (revitalisation and new brand development for existing and

new categories), long-term relationship, etc.: The FMCG industry involves consultancies in limited tasks depending on their needs: consultancies are assigned the task of modifying/developing tangible identity. Some global corporations seek to include a consultancy's capability in the up-front stage of brand development as well as organisational activities. This movement will be taken up by locallyfocused corporations too. Moreover, consultancies need to respond agilely to client culture due to the specific context of brand development.

Thus, consultancies need to reinterpret a predetermined project brief in order to strike a balance between designerly applications and client needs by, for example, tailoring a proprietary process in response to clients' needs (DE2).

Table 7.25 Overall and exemplar actions

To do	Consultancies
Reinterpret the agenda for a project to blend clients' requests and designerly needs	•DE: 1, 2

2. Consultancies' working style - capability to fulfil designerly applications - is an important

criterion in the selection of consultancies: Corporations assign a task to consultancies depending on corporations' demands, rather than forming an alliance with them. In a word, the kinds of tasks that consultancies can cope with are a substantial criterion for corporations' selection, as indicated below:

 Consultancies which undertake a higher proportion of exploratory projects have more chances to work with clients with a higher appreciation of DDA and to conduct exploratory projects.

Consultancies can elevate their capability to tackle exploratory projects by, for example, seeking a proprietary approach that converges with designerly approaches: visualisation, prototyping, customer-engagement, etc. (•DA2).

Table 7.26 Overall an	d exemplar actions
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To do	Consultancies
Develop proprietary designerly approaches (methods) to fulfil exploratory projects	•DA: 2
	•DE: 1

3. Consultancies criticise clients' approaches to undertaking DDA: limited role of consultancies in

developing artefacts: Consultancies are often asked to take part in modifying/developing the final

output. As illustrated below, consultancies are deemed to undertake given tasks after finishing an overall idea for a brand or product, so that the consultancy's project time frame is insufficient. Most of all, there is a fundamental difference in running an organisation between clients and consultancies: 1) clients: set up for revenue growth and 2) consultancies: set up to offer creativity. Thus, the views on undertaking DDA between corporations and consultancies are incompatible during collaboration.

- Integration into clients' processes is challenging due to short project time frames;
- Client's predetermined agenda is reconfigured to accommodate implementation within consultancies.

This difference can be lessened by consistent and dynamic interaction between corporations and consultancies. Therefore, instead of criticising a client's lack of appreciation of DDA, consultancies seek to transfer their knowledge (competence(s)) through a project by, for example, involving designers in the communication with clients and strategy establishment, rather than isolating them for the sake of creativity (•DA1).

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Table 7.27 Overall and exemplar actions
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To do	Consultancies
Attempt to develop consultancies' own competences to provide designerly approaches	•DA: 1, 2
to clients	•DE: 1

4. Consultancies prefer to work with clients who have an open mind, are willing to develop an appreciation of DDA, have the authority to make brand development decisions and control project budgets: Consultancy's preferences for whom they work with show various opinions and there are certain pros and cons. In regard only to DDA, a person who has a design background is preferred for utilising DDA; on the other hand, with regard to overall procedure efficiency, consultancies prefer to work with a budget-holder who can make decisions, but there is also a downside to working with marketers: consultancies deliver what they favour and "just" provide the skill of design.

Thus, each preference has its pros and cons. Most of all, it is important for consultancies to set milestones for how to engage with clients by, for example, developing proprietary methods to build a good relationship with them (•CO2).

Table 7.28 Overall and exemplar actions

To do	Consultancies
Set milestones for key-decision person's (project manager) engagement to enhance the	•CO: 2, 3
understanding of designerly applications	

5. There is rarely integration with other tasks of brand development or with a leading project team:

Since FMCG corporations have a silo operation for each task in brand development, consultancies rarely have the chance to integrate with other consultancies. Thus, each consultancy sets up separate detailed tasks for a brand or product. This silo operation entails a lack of communication between clients, consultancies and other parties which are assigned different tasks.

This practice tends to result in a fractured and inconsistent brand experience and communication with customers. Unfortunately, the need to integrate between consultancies, stakeholders and other parties is too vulnerable and is often missed during a process. Hence, consultancies ask clients to meet stakeholders and other parties to speak with the same voice for a brand (•CO2).

Table 7.29 Overall and exemplar actions

To do	Consultancies
Ask clients to meet with stakeholders and other parties, including manufacturer,	•CO: 2
logistics, etc.	

6. A good relationship between client and consultancy results in more effective project delivery:

Despite that, a good relationship also has its downside: it is sometimes hard to refuse their flights of fancy and break a good relationship; good relationships have a lot of advantages when employing DDA, as shown below:

- Good (long-term) relationships enable consultancies to suggest more designerly ways and to run consultancy businesses stably;
- Forming a good relationship is another important goal, as is seamless delivery to suggest designerly applications.

Therefore, to build a good relationship with clients, consultancies develop an interactive flow and experience each other's disciplines via, for example, casual (tacit)/formal discussion, preliminary workshops, etc. (•CO2)

Table 7.30 Overall and exemplar actions

To do	Consultancies
Enhance the interaction between consultancy and clients in both a casual and	•CO: 2, 3
structured manner	

7. Consultancy-driven training programmes for internal and client organisations are limited:

Consultancies only provide a formal education programme for DDA when clients ask. They seem not to be interested in elevating the client's capability for DDA. Besides, it is generally hard to find a consultancy case to conduct internal continuing programmes, except for global networked consultancies.

DDA is developed by the interaction between designers and non-designers. Thus, an external consultancy does not have to be evangelic to propagate DDA, but rather to be a broker or catalyst in order to transfer its designerly knowledge to clients by, for example, offering an induction session (•HR2).

Table 7.31 Overall and exemplar actions

To do	Consultancies
Develop activities and/or work scope to elevate the understanding between clients and	•DA: 2
consultancies	•DE: 1
	•HR: 1, 2

8. Conflicts occurring in terms of internal collaboration result in difficulties with seamless delivery:

Designers and non-designers are constituted by a consultancy so that conflicts between them exist, as in a corporation. Especially, such conflicts are found within an interdisciplinary consultancy – tackling visual and structural identities together. Thus, disconnections between parties may occur, as shown below:

 Internal conflicts between: 1) different design discipline teams (e.g. sequentially structural and visual identity development without integration), and 2) design departments and nondesign departments (e.g. client's service team says "yes" although the design team cannot fulfil promises: a lack of understanding of design practice).

Thus, consultancies need to configure an effective collaborative approach within a limited time frame: for example, the collocation of design teams or between design and strategic teams, etc. (•CO1). Table 7.32 Overall and exemplar actions

To do	Consultancies
Configure the work scope of each department and formulate collaborative meetings to	•DE: 1
enhance internal collaboration	•CO: 1

9. There is a propensity for passive attitudes to managing clients during vigorous DDA utilisation in

brand development: some substantial scope for brand development is excluded because of budget

constraints: Consultancies mostly operate on a project-based contract work basis. Thus, consultancies

show a propensity towards passive attitudes when working with clients and this leads to:

- Consultancies occasionally exclude substantial scope because of financial constraints or are deemed to conduct only those tasks assigned by clients;
- Consultancies tend to cover only the solutions/tasks requested when working with a new client.

In this regard, consultancies incorporate their tasks by developing a holistic brand: e.g. in alliance with clients (•CO2) by providing both strategies and tangible delivery (•DA3), etc.

Table 7.33 Overall and exemplar action	Table	le 7.33	Overall a	and exem	olar	action
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To do	Consultancies
Seek to incorporate their strategy into a holistic brand for consistent brand touchpoints	•DA: 3
	•CO: 2

To sum up, a consultancy's ways of underpinning DDA depend on the client's needs and appreciation of DDA, but FMCG corporations rarely involve external consultancies in the up-front stage: strategic ideas exploration and generation. Thus, through forming a relationship, consultancies seek to disseminate designerly applications in order to help corporations attain DDA.

7.3.2.4 How do we get DDA?: Specific-context characteristics and exemplars of a "to do" list – Consultancies

The positive and negative characteristics to enhance DDA are hard to categorise within the perspective of consultancies, because they handle different types of projects, industries, sizes of clients, etc. Accordingly, in terms of a discussion of the characteristics to enhance DDA within consultancies, the boundary for categorising positive/negative characteristics is not distinct: the extent of exceptional cases is considerable (e.g. some small studios run by notable star designers

tackle global projects). Thus, three groups amongst the five specific-context groups below – proportion of long-term relationships, project time frame, and proportion of exploratory projects – describe their client tendencies or responses to their clients.

By size of consultancy: Overall, characteristics depending on size are similar to those of corporations: the bigger an organisation is, the more rigid and fragmented a structure it has. This phenomenon affects the internal ways of collaborating with different parties. An interesting tendency is identified: local-based consultancies (here smaller means up to 50 employees) are deemed to work with smaller corporations which show a lack of appreciation and exploitation of designerly applications; on the other hand, global-networked or bigger consultancies with over 50 employees might work with bigger corporations which have better utilisation of designerly applications (Table.7.34). This relates to the client's budget and costs to run a consultancy: smaller corporations have comparatively smaller budgets for a project. Above all, corporations (clients) prefer to work with a well-known or big-name value consultancy for the sake of easy approval from the board without apparent risk-taking.

Table 7.34 Characteri	istics by size of consultancy
Local-based consultancies	 More chances to work with small corporations which have less appreciation of designerly applications Account for workshops to establish brand goals and have better consensus about projects
Global-networked consultancies	 More chances to work with bigger corporations which have more appreciation of designerly applications Develop structured ways to inform project progress Fragmented structure and silo operation

In response to the findings above, local-based consultancies need to elevate their client's understanding of DDA to achieve better collaboration and to transfer designerly knowledge to stakeholders on the client's side by, for example, setting up a preliminary meeting to inform them about designerly applications (•DA2). On the other hand, global-networked consultancies, for example, develop formal ways or proprietary methods to work effectively with (big) clients (•CO2) and develop collaborative activities by setting up collaborative meetings (•CO1) to avoid an organisation becoming fractured.

Table 7.35 Specific-context and	d exemplar actions
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	To do	Consultancies
Local-based	Set up a preliminary meeting to get clients to understand	•DA: 2
consultancies	how consultancies deploy designerly applications	•DE: 1

		•CO: 2
Global-networked	 Develop formal ways to work with (big) clients and set up 	•DA: 2
consultancies	internal meetings to monitor project progress across	•CO: 1, 2
	departments	

By departments: A design consultancy is composed of design and non-design departments. The design department is the main stream of its business but, within a larger consultancy, it is often hard for designers to communicate with clients about creativity development due to a fractured structure. From the primary research, participants in a design department are more sceptical about client approaches toward DDA; nevertheless, designers are deemed to have a complacent attitude instead of bringing change in the form of DDA to their organisations and clients. However, people who are from non-design departments – e.g. account management team, client services team, strategic (consulting) team, etc. – adopt a role to develop other brand strategies or often intervene between clients and designers in a consultancy. This division point might be more noticeable in bigger consultancies.

Table 7.36 Characteristics by departments

Design department	 More sceptical about clients' ways of employing designerly approaches
Non-design departments	• Adopt a role to communicate with clients and develop a brand strategy: negotiate with clients, develop strategy and transfer what clients request to the internal design team

A consultancy needs to be a beacon to imbue designerly ways within a client's projects and other organisational activities. Thus, both design and non-design departments involve designers in the entire project. To fulfil this, designers and the design team need to champion more robust integration and the others need to ensure designers' involvement via, for example, creating an internal collaborative flow (•CO1) and educating designers on communication via strategic thinking, and members of non-design departments about how to bridge the gap between clients and designers, or between designers (•HR1).

	To do	Consultancies
Design department	Champion being vigorously involved in a project	•DA: 1, 3
0		•HR: 1
Non-design	Involve designers or design teams to deliver designerly	•DE: 2
departments	experiences to clients and collaborate with them to offer	•CO: 1
-1	strategically integrated final delivery	•HR: 1

Table 7.37 Specific-context and exemplar actions, according to the characteristics

By proportion of long-term relationships: As indicated at the beginning of the subsection, depending on consultancies' proportion of long-term relationships, the characteristics of consultancies are not herein delineated; instead, their clients' tendencies are discussed according to the proportion of longterm relationships. Good relationships naturally lead to long-term relationships but, despite that, it is misleading to indicate that long-term relationships result in better utilisation of designerly **applications**, because long-term relationships have their pros and cons in terms of applying DDA.

In detail, consultancies with less than 40% of long-term relationships are DDA averse, so they have more difficulty in exploiting designerly applications. In contrast, as regards consultancies with over 60% of long-term relationships, their clients seek to employ DDA although, paradoxically, they call for more structured ways for project and operational efficiency. Consultancies with 40-60% of long-term relationships are deemed to have clients with intermediate characteristics, i.e. between the others.

Table 7.30 Cheft Lendency by consultancy s brobot tion of long-term relationships	Table 7.38 Client tendend	cv bv consultancv'	's proportion of long-term relationships
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Less than 40%	• Less DDA employment, less investment in external collaboration and more bureaucratic organisation
40-60%	 Intermediate characteristics between clients of the other two subgroups
Over 60%	 More employment of DDA but more concerns about a structured manner of project progress and operational efficiency (e.g. manufacturing efficiency)

In accordance with clients' tendencies, a "to do" list for consultancies is suggested in the table below: consultancies drive their clients to become immersed in DDA while elevating their capability for DDA. The first group seeks to drive clients to employ more DDA by, for example, enhancing the interaction with clients via preliminary workshops, conferences, etc. (•CO3). The second group seeks to suggest training sessions or other education programmes to transfer their knowledge: for example they may suggest inductions sessions to enhance DDA as a starting point (•HR2). The last group seeks to develop structured ways to utilise DDA and suggest an operational way for implementation from a holistic perspective (•DA3).

	To do	Consultancies
Less than 40%	Conduct preliminary workshops to increase the	•DA: 2
	understanding of what consultancies do	•CO: 3
40-60%	Offer training sessions to transfer designerly applications to	•DA: 2
	clients	•HR: 2
Over 60%	Offer a structured way for progress and operational	•DA: 3
	implementation along with final tangible delivery	

Table 7.39 Specific-context and exemplar actions

By project time frame: Project time frame depends on project type: revitalisation, brand line extension, new brand development, etc.; but, from the primary research, project time frame can be divided into three groups, as shown below, according to what types of projects consultancies predominantly engage in. In other words, these categories relate to project types. Consultancies which have a longer time frame have better client attitudes towards designerly applications, because their clients have the designerly and financial capabilities to afford a longer time frame for new brand development. However, due to the nature of consultancies – they depend on clients' requests – the boundaries of categorisation in the following subsets are altered.

Despite the vague boundaries of categorisation, generally, the longer a project time frame that a consultancy has, the better the client's appreciation of DDA is: 1) consultancies with less than a 6-month project time frame mostly take on operational jobs or brand revitalisation, and 2) consultancies with a longer project time frame can afford to undertake more visualisation and prototyping.

Less than 6 months	Less employment of designerly applications
	- Less use of visualisation and prototyping
	- Mostly consultancies are only involved in making tangibles (a more operational role)
6-12 months	• Intermediate characteristics between the other two subgroups in the same
	category (getting better at employing DDA)
Over 12 months	More employment of designerly attitudes than the previous subgroups and
	undertake projects within a long-term plan
	+ More use of visualisation and prototyping

Table 7.40 Client tendency by consultancy's project time frame

Therefore, if a project time frame is shorter than 6 months, consultancies seek to develop a mechanism to apply designerly thinking to develop a brand or other project along with enhancing consultancies' capability to utilise/transfer DDA. Otherwise, if a project time frame is longer than 12 months, two instances are assumed: 1) strong integration with consultancies and 2) new brand development in a new category. In both instances, consultancies need to incorporate designerly thinking with the client's long-term plans and corporate vision (•DA2).

······································	To do	Consultancies
Less than 6 months	Imbue a brand with new designerly thinking (freshness and disruptiveness)	•DA: 1, 2
6-12 months	Identify what clients request and utilise designerly applications to develop a brand	•DA: 2 •CO: 2

Over 12 months	Utilise designerly applications to find a competitive idea	•DA: 2
	within a long-term strategic plan for the client's business	•CO: 3

By proportion of exploratory projects: This category relates to what types of project are handled and previous project time frames in consultancies. Consultancies with less than 20% of exploratory projects have clients who employ less DDA and are risk averse. However, consultancies with over 20% of exploratory projects have clients who have better attitudes to employing DDA but, with regard to consultancies with over 40%, clients are deemed to be more concerned with the efficiency of delivery: whether final delivery can be efficiently implemented into their operational management system.

Table 7.42 Client tendency by proportion of exploratory projects

Less than 20%	 Less DDA and less risk-taking 	
20-40%	• Intermediate characteristics between the other two subgroups in the same category, and utilise designerly approaches in more stages of brand development than the other groups	
Over 40%	More employment of DDA and calls for efficiency in design delivery	

Thus, consultancies with less than 20% seek space to elevate clients' appreciation of DDA in order to underpin DDA during project deployment via, for example, a preliminary phase (•DA 1 and 2: e.g. workshops, conferences, etc.). On the other hand, in terms of consultancies with more than 20%, their clients employ/acknowledge DDA to a certain extent and are starting to build their DDA capability as an organisational entity. Meanwhile, consultancies with over 40% consider overarching strategic implementation (•DA3). Accordingly, consultancies need to develop updated/proprietary designerly competences internally in order to help to transform their clients into being design led.

Table 7.43 Specific-context and exemplar actions

	To do	Consultancies
Less than 20%	Develop/suggest exemplars of designerly approaches and	•DA: 1, 2
	methods to elevate the appreciation of DDA within a brand	•DE: 1
	development project	
20-40%	Enhance designerly competencies in consultancies to	•DA: 2, 3
	challenge clients' thinking	•CO: 3
Over 40%	Enhance designerly competencies to introduce a disruptive	•DA: 2, 3
	concept and strategic implementation	•CO: 3

In summary, since consultancy's approaches to undertaking projects relate to clients' ways of undertaking DDA, consultancies do not take chances by promoting the undertaking of DDA during collaboration. Hence, the role of a consultancy needs to shift from that of supplier to providing design skills to a substantial client alliance. From the perspective of running a consultancy, since new brand development or exploratory projects demand more scope (strategy for brand portfolio, naming development, formal research stage, etc.), this means another source of income is available. Thus, fostering/enhancing DDA competence within consultancies cannot be overlooked and all employees are entrusted to improve their capability by themselves. Therefore, consultancies elevate their internal capability to let DDA permeate throughout the whole client's organisation.

RM3 7.3.2.5 Are we ready?

Previously, the "RM2: how do we get DDA" was devised to let FMCG corporations and consultancies reflect on their situations before taking action for the endorsement (strategic) and operation of DDA. This step of the roadmap focuses more on the organisational commitments of corporations and consultancies to let penetrate DDA into organisational activities and DDA utilisation in brand development, as grounded in the primary findings, i.e. combining with AAAP and the four themes in DDA.

The activities illustrated in Figure 7.11 are carried on repeatedly to procure designerly knowledge and experience, as indicated in the AAAP model. Internal and external streams for accumulating knowledge and experience are configured to foster DDA and attain cultural competence. The features in collaboration (CO) and human resources (HR) enable such a stream to flow; in a word, DDA will accrue from the interactions between design applications (design disciplines) and design endorsement (non-design disciplines) via CO and HR mobilisation. A combination of the fourth commitment in the DA and the DE themes forms HR and CO within corporations; meanwhile, the second commitment in DA and the first commitment in DE form HR and CO within consultancies (see arrows in Figure 7.11).

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Corporation

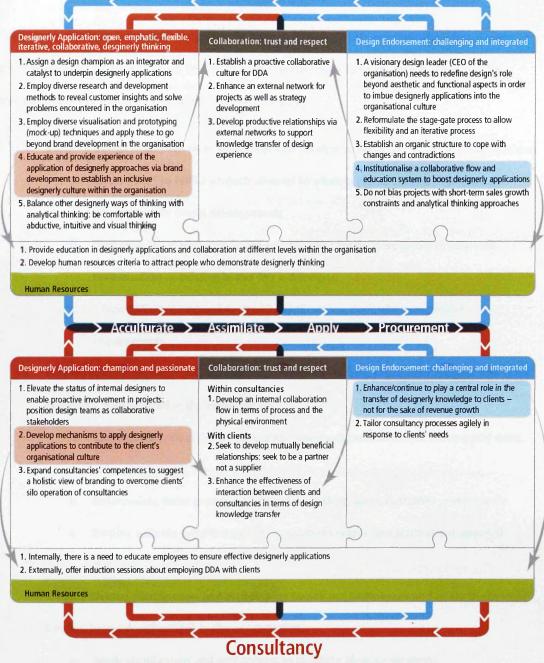


Figure 7.11 Organisational commitment to DDA applied to the AAAP model

In this subsection, there are two levels of action for organisational commitment, for both corporations

and consultancies, according to the four DDA themes: 1) primary actions for organisational

commitment to DDA (illustrated in Figure 7.11) and 2) subordinate (detailed) actions to fulfil the

divergence of actions.

Organisational commitment for corporations

First, commitment to designerly applications is discussed. To fulfil this commitment, certain mindset traits are needed: open, emphatic, flexible, iterative, collaborative and designerly thinking. These traits are cemented through consistent commitment to DA.

1. Assign a design champion as an integrator and catalyst to underpin designerly applications.

- Empowered to fulfil a project: allowed to allocate resources and manipulate a mechanism for brand development;
- b. Challenge the status quo: brand development tends to be confined to brand revitalisation or existing brand line extensions;
- c. Utilise different types of designerly applications, depending on project requirements.
- 2. Employ diverse research and development methods to reveal customer insights and solve problems encountered in the organisation.
 - Customer-driven approaches: engage with customers when purchasing and using products;
 - b. Reformulate focus groups, go beyond just asking about customer preferences;
 - c. Employ suitable expertise to elicit consumer insights and learn about updated methods.
- Employ diverse visualisation and prototyping (mock-up) techniques and apply these to go beyond brand development in the organisation.
 - a. Apply visualisation and prototyping to facilitate ideas generation;
 - b. Teach non-designers to be comfortable with visualisation and prototyping.
- Educate and provide experience of the application of designerly approaches via a collaborative brand development process to establish an inclusive designerly culture within the organisation.
 - Set up how people (stakeholders in the business) are engaged in brand development;

 Involve internal designers or external design consultancies for strategic contributions to the organisation as well as tangible brand development.

5. Balance other designerly ways of thinking with analytical thinking: be comfortable with abductive, intuitive and visual thinking.

Secondly, the commitment to designerly endorsement is explained as a ground to underpin other actions in other DDA themes. Thus, as previously indicated, a CEO (someone who can configure a mechanism for organisational activities) needs to play the role of a design leader to invigorate the fundamental actions, shown below, pertaining to DDA commencement within other themes. Most of all, to fulfil this commitment, challenging and integrated mindsets are necessary.

- A visionary design leader (CEO of the organisation) needs to redefine design's role beyond aesthetic and functional aspects in order to imbue designerly applications into the organisational culture.
 - a. Continue/enhance the investment and commitment to embed designerly applications and undertake exploratory projects within the organisation;
 - Develop a physical infrastructure to inspire employees: a creative and inspiring working environment;
 - c. Enthuse internal/external designers to undertake developing tangible output (in terms of aesthetics and function) as well as designerly conceptualisation and exploitation at multi-dimensional levels (across organisational activities).
- 2. Reformulate the stage-gate process to allow flexibility and an iterative process: ensure appropriate investment for an exploration and research stage.
 - Invest time and resources, and ensure a flexible and iterative process for agendasetting (up-front stages: exploring and researching);
 - After selecting a development direction, check if progress is appropriate and that the initial integrity of design intent remains intact.
- 3. Establish an organic structure to cope with changes and contradictions.
 - Avoid the organisational structure becoming rigid and tedious (status quo) as a company grows;

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b. Agility required to amalgamate different units and resources to cope with context changes.

4. Institutionalise a collaborative flow and education system to boost designerly applications.

- Develop multiple levels of collaboration flow: between business and departments,
 and at organisational and project levels;
- b. Assign HR (or another department) to develop education programmes for DDA.

5. Do not bias projects with short-term sales growth constraints and analytical thinking approaches.

- a. Continue with/enhance a proportion of exploratory projects (ideally at least 20%);
- Set up an independent and authoritative incubator team (or individual) to find opportunities to explore disruptive ideas.

Thirdly, the commitment to collaboration is divided into internal and external commitment. Collaboration per se is not literally designerly applications but, via well-established collaboration for DDA, designerly applications can be attained, fostered and procured (AAAP model). Hence, it is important to develop the mechanisms below for collaboration; besides, this commitment calls for trust and respect to dilute each party's tribalism.

Internally:

- 1. Establish a proactive collaborative culture for DDA (within an internal perspective).
 - Develop mechanisms to share project progress with and participation by stakeholders, including manufacturing, logistics, etc., and between different businesses within the same organisation;
 - Develop structured meetings or open discussions to enable consensus building and decrease the dichotomy between different disciplines and positions at working and board levels.

Externally:

2. Enhance an external network for projects as well as strategy development.

- a. Set up a conference which all external consultancies and suppliers attend;
- b. Bring in external consultancies in the agenda-setting phase of projects;
- c. Support integration between external consultancies and/or suppliers.

3. Develop productive relationships via external networks to support knowledge transfer of design experience.

- a. Establish positive working relationships with external consultancies and build longterm relationships, as appropriate;
- b. Establish effective mechanisms to mange external relationships.

Finally, a commitment to human resources is another substantial ground for fostering DDA, because DDA is mostly inherited by projects and organisational activities. Since HR commitment generates fertile ground for other commitment to DDA, corporations do not neglect HR's commitment.

- 1. Provide education in designerly applications and collaboration at different levels within the organisation.
 - a. Training programmes for project managers to be integrators as well as catalysts:
 - Integrate all phases and amalgamate different departments and external consultancies;
 - ii. Understand and exploit designerly applications: designerly thinking and exploitation.
 - b. Training programmes for the strategic level staffs: aim for strategic decisions to resonate with designerly approaches;
 - c. Training programmes for business people (non-designers): use a project- or teambuilding workshop to let them experience the benefits of designerly applications and bring together marketers (brand teams) and designers (design teams).

2. Develop human resources criteria to attract people who demonstrate designerly thinking.

a. People in human resources need to understand DDA to recruit design thinkers.

Organisational commitment for consultancies

Mostly, consultancies are established by being rooted in creativity. Despite that, to run a business, consultancies often forget a pivotal entity. Thus, this intends to attract consultancies' attention to their original roots – designerly applications – and to expand their role to the concept of DDA.

First, the commitment to designerly applications seeks to amplify the designer's role and advance ways to undertake DA. Designers and a design team play a substantial role to accomplish the commitment shown below, so championing and passionate mindsets are necessary. Such mindsets might also be applicable to designers and the design team within a corporation.

- 1. Elevate the status of internal designers to enable proactive involvement in projects:
 - position design teams as pivotal stakeholders during internal/external collaboration.
 - a. Engage designers in strategy establishment;
 - b. Let designers communicate directly with clients.

2. Develop mechanisms to apply designerly applications to contribute to the client's organisational culture.

- Apply visualisation and prototyping techniques proactively to projects to verify and experience the benefits of those techniques;
- Develop/apply (new) methods to identify insights into customer behaviour patterns and translate insights into tangible form(s);
- c. Elevate competencies to utilise exploratory projects to cope with exploring new horizons: (at least 20% of exploratory projects);
- d. Consider/suggest what consultancies can do, beyond what clients ask for.
- 3. Expand consultancies' competences to suggest a holistic view of branding to overcome clients' silo operation of consultancies.
 - Develop interdisciplinary approaches: e.g. structural identity + visual identity, visual identity + campaign, etc.;
 - Keep investigating new technologies and trends which can be applied to offer competitiveness for brands;

- c. Provide strategic intent as well as tangible delivery: e.g. deliver both tangible outcomes and guidelines for the implementation of designerly applications or manage creativity and financial aspects together;
- d. Seek a way to take part in clients' early ideas generation activities.

Secondly, a commitment to design endorsement thrives on consultancies developing a platform for designerly applications for their clients and developing competitiveness within projects. Thus, the mindsets for this commitment are the same as the ones for DE in corporations: challenging and integrated.

- Enhance/continue to play a central role in the transfer of designerly knowledge to clients not for the sake of revenue growth.
 - Do not separate necessary and proprietary processes/methods for the sake of revenue growth;
 - b. Support operational activities to utilise designerly applications in consultancies;
 - c. As consultancies grow, try not to be a rigid or fragmented organisation.

2. Tailor consultancy processes agilely in response to clients' needs: adjustable structure.

- a. Identify tacit needs which clients cannot tackle;
- b. Configure organisational departments (teams) to amalgamate them easily.

Thirdly, just like the commitments in corporations, designerly applications are advanced and transferred to clients via collaboration commitment. Collaboration commitment is twofold: internal and external collaboration, and these also call for the same mindsets as those in corporations. Notably, since collaboration in consultancies is critical to determining their reputation and the success of a project, consultancies seek to accomplish commitment, as shown below.

Internally:

- 1. Develop an internal collaborative flow in terms of process and the physical environment.
 - a. Establish a communication flow or meetings to share the progress of projects;

- b. Consider how project tasks can be allocated concurrently to ensure efficient workflows: e.g. structural design and graphic design working in tandem;
- c. Consider the use of collocation of design specialisms: e.g. place a strategic team and a design team together/adjacently.

Externally (with clients):

2. Seek to develop mutually beneficial relationships: seek to be a partner not a supplier.

- a. Provide seamless/timeless delivery with design experience to build trust;
- b. Have casual and/or formal discussions with clients to build trust;
- c. Be realistic and honest with clients: do not say you can do anything or everything;
- d. Use clear language when communicating with clients;
- e. Ensure account managers are conversant with the nature, benefits and limitations of applying designerly applications.

3. Enhance the effectiveness of interaction between clients and consultancies in terms of design knowledge transfer.

- Define milestones which involve clients with the development process: workshops (preliminary phase to inform design knowledge for a project before starting) and interim meetings to manage project development;
- Encourage clients to liaise with other manufacturers or consultancies (where appropriate).

Finally, comparatively, consultancies have no role, or a smaller role, as a human resources department, so the commitment shown below is rarely considered. They are expected to find a person who meets their recruitment criteria rather than training existing employees. However, they need to imbue employees with advanced designerly approaches so they become integrated with the client's business-driven organisation.

- 1. Internally, there is a need to educate employees to ensure effective designerly
- applications.

- a. **Design department:** Educate designers in how to communicate with clients in terms of strategic thinking and ways of demonstrating insight interpretation;
- b. Strategic department: Provide training sessions on how designers can proceed with designerly applications and how to bridge the gap between consultancies and clients.

2. Externally, offer induction sessions about employing DDA with clients.

In summary, the organisational commitment for corporations and consultancies must continue to comply with the DDA framework and eventually enhance the FMCG industry in order to underpin DDA in brand development and organisational activities. Moreover, the commitment of two substantial stakeholders – corporations and consultancies – needs to be interwoven to generate synergy, achieve DDA and sustain a business by developing competitive brands within the FMCG industry.

RM4 7.3.2.6 Now, let's implement

Previously, organisational commitment was illustrated to support the framework for DDA. This step describes a suggestion to help fulfil the designerly applications for corporations and consultancies being implemented within brand development: five actions (actions A to E in Figure 7.12) according to four overarching implementation tasks (see Figure 7.9): agenda establishment and three overarching implementation phases: product development, brand development and brand experience development. Specifically, this subsection suggests ways of utilising designerly methods which facilitate designerly applications in all the tasks in brand development, and is threefold:

- 1. Illustrate the actions of a development process in the tasks (Figure 7.12);
- According to the tasks, illustrate what can be achieved by going though certain actions (Figure 7.13);
- 3. Encapsulate a list of designerly methods to fulfil the objectives (Figure 7.14).

First, the actions in a development process are indicated in Figure 7.12 as focusing more on vulnerable actions in the FMCG industry. Five overarching actions (A to E) are undertaken in every task, but different extents of application underlie specific tasks: for example, within agenda establishment,

more organisational support – time and financial investment – is needed at the front of the process (A to C). After agenda establishment, a project ensures implementation tasks are interlocked to offer consistent brand value and meaning to customers. In detail, compared to the "Double Diamond" process (see Figure 2.5), two preliminary actions (A and B) are added and emphasised, whereas the *discover* and *define* phases in "Double Diamond" are merged in action C. During the preliminary actions, A and B, the blueprint of a project needs to be explicated in order to formulate a collaborative and integrated project with diverse stakeholders and other business strategies before starting ideas development. Instead, the *discover* and *define* stages, action C, which are critical to developing competitiveness, are reconfigured to emphasise ideas development through iteration. The *delivery* phase is located after E, after a springboard meeting, but the following actions will be applied differently: in agenda establishment, after action E, a subsequent implementation phase will be conducted, whereas in a subsequent implementation phase, after action E, production for each implementation task is conducted.

The springboard meeting indicated in the DDA framework has to be held in actions A, D and E in order to support and embody a way of conducting a following action. Internal and external collaboration for a project is inherent during the entire development process: especially in actions B and C, collaboration has to be ensured to disseminate designerly knowledge to other employees. Moreover, to fulfil a project with a designerly perspective in FMCG, it is important for a project manager to be a design champion or to work with an assigned design champion. Indeed, the organisation's commitment to DDA continues to enhance actions and seeks to epitomise the details of actions for its own organisation-specific context.

Agen For a pr	verarching ideas generation ida establishment: roduct and brand (see framework for erly applications)	Subsequent phases for devel Product development: Develop a product inside a pack This stage is not undertaken in brand revitalisation	oping and fulfilling initial ideas: underta Brand development: Develop the name, structure and graphics of a brand	ke phases and tasks within them in tander Brand experience development: Develop every touch point where a brand encounter customers
(A) (S)	and configure the involven 1. Involve internal or external	nent of external consultancies designers or people who have designer	ders will be engaged within a phase: i ly thinking who are easily isolated in this acti nternal team outlines how to engage external cor	on
B	1. Understand the internal orga	n where the corporation/business anisation situation with the following exe competitors a brand has: e.g. market res		velopment
C	developing generated idea 1. Think in terms of metaphor 2. Identify current/future socio 3. Utilise customer-centred (us 4. Use visual stimulus to facilit	s in terms of how the brand can a s to facilitate ideas generation with desi cultural aspects for a brand ser-centred) methods: see 'customer eng rate ideas: see 'visualisation' in the App	gagement' in the Appendix	5
() ()	1. Test the ideas in terms of ho	assumptions) and finalise directio w customers respond to ideas, not abo is recommended to involve all stakehol		
E		n, configure how to execute a sel ectual resources in the implementation	ected idea into subsequent phases an phases and production	d production
Exter	nal collaboration: arrange con	ference for external partners and s	suppliers to have consensus about the	direction of brand development
Springboa	rd meeting Collaboration for des	_{signerly experience} part in a springboar	d meeting to gain experience in a colla	borative manner.
commend Springbo	ard meeting	esignerty experience		

Figure 7.12 Actions for a development process and the aims of each task

Secondly, along with actions, Figure 7.13 enumerates what can be obtained throughout the actions according to the various tasks. The tasks for implementation of an agenda can be dependent on the project type: new brand development, brand revitalisation, line-stretch development, etc. The agenda establishment phase calls for more designerly mindsets to solve a problem – initiation for starting a project – and to suggest a direction for the implementation phase. In addition, it suggests that external stakeholders who are indicated in each task need to be involved in those tasks.

Overarching ideas generation	Subsequent phases for developing	ng and fulfilling initial ideas: undertake	phases and tasks within them in tand
Agenda establishment	Product development	Brand development	Brand experience development
Calls for designerly mind-sets: open, emphatic, flexible, iterative, collaborative, and designerly thinking. Flexibility and iteration need to be ensured more than other phases, along with sufficient time.	overarching actions in agenda establishment ar	ementation is different: duration of project time, bu e repeated with more objective-driven processes to enda was developed in the previous phase, some ur ication in agenda establishment.	apply/reinterpret the overarching agenda in ter
Develop a brief for each task			
 Understand corporate vision/brand statements, history of brands (hentage of brands), architecture of portfolio, etc. Investigate current/future competitions to create competitive ideas for a product and brand 	Identify the capability of product manufacture Investigate what has been done in agenda establishment in detail in terms of product development	Identify the capability of manufacturing structure Investigate what has been done in agenda establishment in detail in terms of brand development	 Identify ways for current and future communication for a brand's touch point Investigate what has been done in agenda establishment in detail in terms of brand communication development
Exploring, discovering and defining			
Identify overarching ideas for what is a better medium and way for a product and brand	Re-interpret overarching ideas into specific ideas for a product	Re-interpret overarching ideas into specific ideas for the name, structure and visual of a brand in terms of strategy and design	Re-interpret overarching ideas into specifi ideas for communication development
Develop/refine brand promise and initial strategy direction of subsequent implementation phases	Translate a selected idea into manufacturing a product	Translate a selected idea into the execution of a brand	Translate a selected idea into the executi of brand communication
Experts from across disciplines (e.g., semiotician, trend analyst, visualist, designers, etc.) to facilitate ideas generation: external collaboration is easily ignored but this is strongly recommended in agenda establishment	Experts (e.g. nutrition expert, food innovation expert, etc.) regarding product development for inside a pack	Work with consultancies for structural and visual consultancies (brand consultancy), etc.	Work with a media agency, advertising agency, brand consultancy, etc.

Figure 7.13 Results obtained from the development process

Thirdly, Figure 7.14 exemplifies the methods that help to fulfil each objective with designerly applications. Since applying specific methods is responsive to project type, as stated earlier, methods which are applicable to a development process are categorised into four groups, for: 1) ideas generation, 2) customer engagement, 3) visualisation and 4) prototyping. The colour of each cell stands for the extent of applications: there are three levels of indication (weak, moderate and robust). Since the extent of utilisation of these methods is based on new brand development, different project types needs to justify different extents of utilising designerly methods.

In particular, within actions C and D, these methods are invigorated to define the issues (problems) confronted. In addition, some methods in the category of prototyping and visualisation can be maximised to attain the utilisation of designerly applications by being combined with other methods in "for customer engagement" and "for ideas generation", rather than by being solely applied to resolving a problem. Since various designerly methods are already identified in the literature (e.g. Liedtka and Ogilvie, 2011; Stickdorn and Schneider, 2011), the designerly methods which need to be fundamentally underpinned during project deployment are indicated here. As a minimum, the FMCG industry undertakes methods which are "robust" to penetrate FMCG brand development.

	Agenda establishment				Subsequent phases					
	(A)	B	C	D	E	A	B	C	D	
For ideas facilitation:										
Brainstorming, mind mapping, post-it exploration, value chain analysis, etc.	м	м	R		м	м	м	R		
For exploration and generating of Ideas:					1					İ
Ethnography, consumer journey mapping, persona, cultural probes, semiotic analysis, focus groups (more with intention), etc. via real situations where customers (consumers) shop and use a brand.		a a	R	М	d	м	1	R	м	
For developing generated ideas:										
context mapping, storyboards, scenario building, persona, etc.	W	м	R	R			м	R	R	
For testing initial selected ideas:		135								ľ
Focus groups in terms of co-creation aspects; do not just to ask about customers' preferences and need to provide tangibles which participants play with (right stimulus)	N.		M	R			w	м	R	
Visual stimulus:										
Diverse visual forms can be used to facilitate ideas generation (photos, illustrations, videos, samples (competitors') products, mood boards for initial ideas, diagrams, etc.)	м	R	R	R	M	м	R	R	R	
Collective visualisation:										
All the information from generated ideas translates into a short articulated form of visualisation before moving forward to next phases.	a a	м	R	R	м	1	м	R	R	
Sketches (2D) in proposition:						2				
Translate conceptual ideas into rough visual form (rapid sketches, napkin sketches, storyboards, mood boards, etc.)	W	м	R	м			м	R	м	
Sketches (visualisation) through iteration:										
After propositions and ideas, initially selected ideas are refined iteratively (2D, 3D, sequence movies and CAD)			R	R			м	R	R	
Presentation sketches (visualisation):					1					
Get opinions and/or approval of most refined version of visualisation for launch from customers and board members, similar to a final version (most refined 2D, 3D, CAD)			м	R				м	R	
Rapid prototyping in proposition:										
Utilise rough and rapid prototyping to generate ideas and prepare some materials to configure a shape easily			R	R		м	м	R	R	
Prototyping (mock-up) through iterations:			R							
While developing ideas, utilise a cheap and rapid form of prototyping in order to examine usability			ĸ	M			м	R	м	
Presentation prototyping (mock-up):			м	R				м	R	
Use most refined prototype (mock-up) to get opinions or approval for launch from customers and board members similar to a final version				^				"	1	
Prototyping for manufacturing:				м	R	1				
Almost exact product to help to manufacture structure of a brand)					_	1000				į

Figure 7.14 Exemplars of utilising designerly methods for actions

In summary, there is a limit to exemplifying all the different types of brand development, but this subsection seeks to unveil designerly applications which are not yet undertaken within FMCG brand development. Within a business-driven organisation which is composed of non-designers, it is hard to undertake these methods without facilitators' (designers') guidance/help; non-designers are not comfortable with utilising designerly methods. Therefore, other organisational commitments in other themes – DE, CO and HR – are formulated to stimulate these methods well at the strategic level (RM3: Are we ready?).

7.4 Validation of the DDA model

Robust

Weak

Moderate

A DDA model – framework and road map – was previously discussed; now, within this section, validation of this model is noted in terms of how this is evaluated to give credibility to the DDA model.

Kumar notes that the credibility of results is 'judged by the extent of respondent concordance' (2005: 382), by confirmation, congruence, validation and approval.

This evaluation is conducted by being derived from the concept of "consumer-oriented/client-centred evaluation". This one intends to check the 'the assessment of value or merit of an intervention – including its effectiveness, outcomes, impact and relevance' (Kumar, 2005: 342-343) from consumers' or clients' views. Clients' perspectives are here considered as a view mainly of FMCG corporations and consultancies. In addition, since there is difficulty in communicating an expanded role for design, there is a lack of understanding of the concept of DDA, this evaluation includes academic researchers who are experts in brand development. In short, three groups are contacted for this evaluation: FMCG corporations, consultancies and academia.

7.4.1 Process of validation

This validation process is based on the criteria of validity and reliability in qualitative research coined by Cuba and Lincoln. They suggest four indicators to determine trustworthiness: credibility, transferability, dependability and conformability (see chapter 'Competing paradigms in qualitative research': 105-117, edited by Denzin and Lincoln, 2003). In detail, Kumar (2005) defines how: 1) credibility is 'judged by the extent of respondent concordance whereby you take your findings to those who participated in your research for confirmation, congruence, validation and approval' (ibid.: 185); 2) transferability 'refers [to the] degree to which the results of qualitative research can be generalized or transferred to other contexts or settings' ('The research methods knowledge base'. Trochim and Donnelly, 2007:149, cited by Kumar, 2005: 185); 3) dependability is the ability to replicate the same results via the same process (ibid.); 4) conformability 'refers to the degree to which the results could be confirmed or corroborated by others' (ibid.).

Grounded in these criteria, the validation is conducted by adopting a "member checking" method (see Section 4.4) to give credibility to a DDA model. This process can be divided into two phases: 1) developing a questionnaire for checking credibility and transferability, and 2) recruiting participants

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for credibility and conformability. The third criterion *dependability* is hard to check in this evaluation but using mixed methods decreases the risk of getting a different result.

Approach to validation

To satisfy the criteria above, four parameters are developed to evaluate the DDA model:

understanding, fitness, generality and control. To check these parameters, a quantitative survey form

is used. Although the total number of participants is small, it is good to see the advantages and

weaknesses of the model via a quantitative approach. To supplement any deficiencies in analysing a

small number of participants, six statistical questions follow open questions to elicit their responses

and obtain further insights in order to refine the model.

A questionnaire composed of three types of question was used in this validation (see Table 7.44):

dichotomy, five rating scale and open questions. The original validation form is presented in Appendix

30.

Criteria	Questions
Understanding	Q1. Can you recognise the intention of a DDA model? (dichotomy type question)
	Q2. In what contexts can a DDA model be applicable to (enhance) your organisation (FMCG industry)?
Fitness	Q3. This DDA model facilitates enhancing design's role beyond making artefacts.
Generality	Q4. This DDA model aligns with your experience of FMCG (or consumer packaged goods) brand development. Q5. Regarding this DDA model, is it/can it be relevant (generalizable) to FMCG brand development?
Control	Q6. This DDA model has possibilities for bridging the gap between business and design.
Overall evaluation Q7. Do you have any further comments about the DDA model?	
(open questions)	Q8. Is there any stance (area) which I have not covered in the DDA model?

Table 7.44 Criteria and questions in validation

Recruiting participants for validation

To ensure the credibility and conformability of the DDA model, as indicated above, three groups – FMCG corporations, consultancies and academia in the UK – were considered. Six from FMCG corporations, four from consultancies and four from academia were contacted. The respondents from academia were recruited for the sake of conformability and credibility of this validation: from the primary research, corporations and consultancies do not undertake DDA under the name of design but under another concept: creativity in ideas generation, innovation, etc. Thus, via checking this DDA model with participants from academia, this model is validated in terms of the DDA concept, which is current design discourse.

The people contacted were provided with a validation pack – a short version of the DDA model (Figure 7.15) and a validation form via e-mail. The full version of the DDA model was too long for people belonging to an organisation to review: they were hampered by a lack of spare time. Thus, the full version was devised as a short version composed of three elements of the DDA model: RM1: Do we understand DDA?; FW: DDA framework for brand development (see subsection 7.3.1); RM3 Are we ready?.

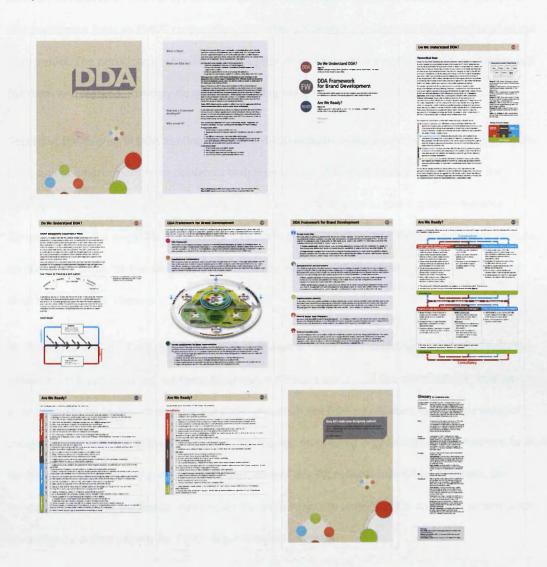


Figure 7.15 A short version of the DDA model for validation

7.4.2 Results of the evaluation

There are three participants from each of FMCG corporations and consultancies and two from academia in the validation process: a total 8 of participants. One participant from an FMCG corporation and two participants from academia did not take part in the previous primary research.

"Understanding" has two questions: Q1) an overall understanding of the intention(s) of the DDA model and Q2) the degree of application to the participant's FMCG industry, depending on DDA themes: collaboration themes are divided into internal and external collaboration. First, except for one participant from an FMCG corporation, the other participants recognised the intention(s) of the DDA model. The participants who did not recognise its intention(s) noted that it was too theoretical for them and marked "strongly disagree" regarding the entire questions of validation.

Secondly, the degree of DDA application to the FMCG industry is illustrated in Table 7.45 and Figure 7.16, and one participant from academia withdrew to evaluate this criterion: according to the participant's comment, since s/he is working in academia, s/he cannot give a proper response. Comparatively, the mean for designerly applications theme is lower than those of the other themes; on the other hand, for the design endorsement and external collaboration themes they are higher than those of other themes.

As illustrated in Table 7.45, regarding DA, participants account for a lower mean and small negative values in both skewness and kurtosis: DA shows a different pattern to the other criteria. This can be interpreted in two ways. First, since the short version of the DDA model does not include ways of design implementation at the project level but focuses on offering organisational commitment to DDA for/through collaborative projects, the lower value of this DA result is inevitable. Secondly, the concept of DA is not explicated well enough for participants to understand it or DA per se and is not considered a primary driver for FMCG organisational interests.

	Designerly applications (DA)	Design endorsement (DE)	Internal collaboration	External collaboration	Human resources (HR)
Mean	3.1429	3.7143	3.4286	3.7143	3.4286
Std. Deviation	1.34519	1.25357	1.39728	1.38013	1.27242

Table 7.45 Statistics for Q2 (n=7, one missing from academia)

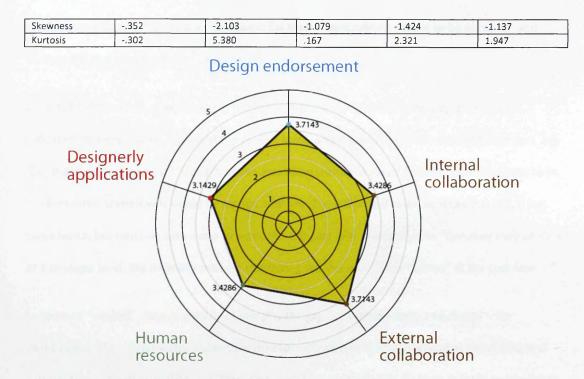


Figure 7.16 Means for each theme

Next, the following four questions are discussed in relation to Table 7.46 and Figure 7.17: Q3) fitness for the facilitation of an expanded role for design; Q4) generality 1 for aligning with FMCG experiences; Q5) generality 2 for relevance to FMCG brand development; Q6) control for the possibility of bridging the gap between business and design. The mean of "fitness" is comparatively higher than for the other questions. In their elaboration, participants called for more specific ways of DDA implementation for projects, which are intentionally excluded from the short version, e.g. a participant from FMCG corporations pointed that "the issues [in the DDA model] that typically businesses and consultancies face while handling design are highlighted and the model could provide a way of managing these issues". Two questions –generality 1 and control – account for the same mean (3.6250). Generality 2 shows a lower mean than the others.

The participants' elaboration of the criteria substantiates the statistical results. In terms of generality 1 and 2, the participants can envision the application of this model but they mention an exemplar case which tests this model and is a challenge to fulfilling this model in reality. Within the elaboration of generality 1, the participant from academia noted, "Best practice yes! Not all FMCG is best practice. The market leaders do work in this way", but the participant in FMCG corporations also indicates a challenge in that s/he "Recognises [the] need for [the] organisation's culture to be nurtured, and realises the complexities that arise within it".

Within the elaboration of generality 2, to apply this model to the FMCG industry, participants indicated implementation of DDA at the project level, which is excluded from the validation part, e.g. "[...] the term designerly applications needs amending slightly. It may be an accepted academic term, [...] Also more brand levels would be a good addition. The 3-D model could be more 3-D too, it has some levels, but could do with more to make the 3-D part fully relevant", also "Certainly they all do it at a strategic level, the difficulty arises in translating the impetus to the "troops" at the coal-face....."

In terms of "control" – the possibility of bridging the gap between business and design – the participants offer similar elaboration: they mention affirmative feedback as well as the difficulty of cultural transformation to DDA, e.g. "Yes. This model is a step forward. Success in bridging the gap is down to the individuals and whether they internalise this as part of their working environment."

Table 7.46 Statistics for each theme (n=8)

Contraction of the	Fitness	Generality 1	Generality 2	Control
Mean	4.0000	3.6250	3.5000	3.6250
Std. Deviation	1.30931	1.40789	1.41421	1.68502
Skewness	-2.037	-1.158	808	-1.123
Kurtosis	4.900	.483	229	403

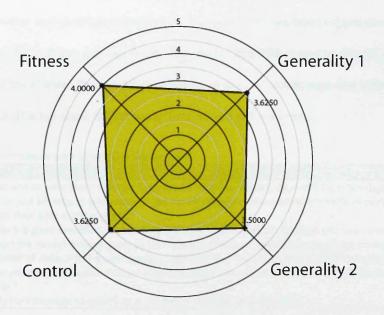


Figure 7.17 Means for each theme

The participants recognise the benefits of this model but also indicate its challenges. The participants' further comments (see Table 7.47) about this model make the results above explicit and are more relevant for checking the conformability of the model. The participants from academia gave positive feedback and their remarks concerning improvement of the model relate to providing DDA methods at the project level, as indicated above: approaches to implementing DDA features at the project level. On the other hand, one participant from each corporation and consultancy criticised the complexity (difficulty) involved in directly applying this model to day-to-day activities (their current usage) or linking to direct change at once. These two participants tended to note an operational role for design or the direct impact of creativity on sales growth in the previous interviews. In addition, there are no statistical differences between the three groups, tested by ANOVA, due to the smaller sample size.

In terms of the coverage of this model within the FMCG industry, two participants noted that this model covers all areas of brand development and one participant called for fortifying design's role in digital (online) branding within the FMCG industry. From the comments above, digital branding and the feasibility of direct application in reality could be this model's limitations – these could be the next challenges in future work. Although digital branding is referred to in brand experience development, the investigation of digital branding per se might be another research area for the future. Regarding the latter, as another participant commented, this model calls for consistent organisational efforts to shift their culture towards being design driven. This implies that DDA cannot be directly embedded into a cultural entity at once. Thus, a critical comment on the DDA model regarding agile feasibility is actually paradoxical in the sense of DDA being fostered as a cultural entity.

Table 7.47	Further	comments	about	the DDA	\ model
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	Comments
Corporations	"It's a clear and concise piece of work. It would be useful to anyone approaching this subject area for the first time, or just wishing to learn more. I like how it respects the opinions and skills of designers, and appreciates their part in the process." "The model is a good construct, but as it stands now it is theoretical. Perhaps you have many examples that support the model. Indeed perhaps you have created the model based on these examples. From a practical point of view, if this model was presented to me, I would be keen to see examples across multiple brand design issues and then I would be able to visualise clearly how this works in normal working life."

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consultancies	"As a business development director, I make things simple. An elevator pitch for a concept that took weeks to develop, delivered in one or two sentences. For business to adopt this model it has to be summarised in such a way, i.e. that speaks as business does. A DDA model is its own worst enemy because of its means of communication. I need a conclusion, not what it sets out to do or what it will achieve, but in the simplest terms what it will do. How will a designerly approach change the way a salesman works to his benefit? If it can be made to work there then it has merit." "As a 'consultant' who has worked on 'both sides of the fence', I can see this from both a consultant & a corporation perspective."
 Academia	"I think this is a very thorough and appropriate theoretical model, my only concern is in its application. [] Do you have any case studies of this operating? What is the background of most FMCG brand managers? If as I suspect they are drawn from a wide variety of business backgrounds with sometimes minimal experience of design, persuading them to take on board what is quite a complex framework may be quite a challenge and possibly would depend on their openness to this design-led approach."

In summary, overall, it can be recognised that this short version is appropriate for the FMCG industry, to establish an environment for DDA: this model complies with the intention of offering organisational support to DDA within a specific FMCG context. As some participants commented on further improvement – another layer for DDA implementation, which is the part excluded from the short version – the FMCG industry needs a full version of the DDA model to perceive DDA as a cultural entity within multi-faceted activities.

Thus, the full version of the DDA model was not revised using feedback from validation but by the consistent researcher's articulation of the findings from the primary research: the AAAP model was applied to decrease the gap between lower and higher positions in the organisation, but for better communication of DDA delivery, design and non-design disciplines are applied to the AAAP model. Nevertheless, it might be necessary to calibrate this full version of the DDA model via better promotion, depending on the audience's understanding of DDA or organisational intention: e.g. a need for configuration at strategic and/or project levels.

7.5 Chapter summary

This chapter describes a procedure to attain the research aim: to develop a DDA model which helps corporations and consultancies integrate DDA at strategic and project levels through FMCG brand development. In short, there are three stages to developing a DDA model:

• Overall findings – substantiation according to the propositions: It is found that current phenomena using design rather than DDA are perceived as secondary and play a limited role

in making artefacts tangible from the evidence according to propositions. Most of all, the FMCG industry needs an environment whereby DDA can be underpinned at strategic and project levels: without consistent organisational support, DDA especially is too vulnerable to undertake organisational activities or even design-related projects. In addition, DDA organisational culture can be established by repeated DDA projects, the different dimensions of DDA application need to be interlocked in a collaborative manner to foster DDA.

- Developing the DDA model: Grounded in the findings from a synthesis of the research, a framework and roadmap are developed to suggest an organisational commitment to DDA projects and culture, and exemplar ways to exploit DDA in projects in order to bridge the gap between design and business and elevate DDA's role (expanded design role). In a way, this model seeks to cover different dimensional approaches to DDA and to amplify the interaction between strategic and project levels.
- Validation of the DDA model: This model is examined in terms of its ability to adapt to the FMCG industry. Overall, this model is proposing ways for DDA enhancement in the FMCG industry.

Overall, this model is proposing ways of DDA enhancement in the FMCG industry. However, from the validation, depending on the openness and recognition of participants' need and/or willingness for cultural change to DDA, the results and their elaboration are altered. Hence, the content of this model needs to be manipulated and justified: e.g. as an educational material or a foundation for organisational DDA calibration, depending on the target's openness and understanding of an expanded role for design (DDA). Since within predominantly business-driven culture employees are limited to experiencing an operational role of design rather than having the chance to experience an expanded role for design, DDA at the project level – "RM4: Let's implement DDA" – is more relevant to enhancing its use, or it is necessary to educate employees about the DDA concept – "RM1: Do we understand DDA?" (see Appendix 29) – as a preliminary process.

Therefore, based on the DDA model – the framework and roadmap – FMCG corporations can justify and use components as a blueprint in order to build their own roadmap for a design-driven culture.

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Chapter 8 Conclusions

8.1 Introduction

This chapter summarises this PhD research which has investigated potential approaches to enhance DDA within the FMCG industry. Specifically, this investigation into ways of using DDA in the FMCG industry has resulted in developing a model: framework and roadmap. By recapping on the research undertaken (Section 8.2), this chapter focuses on delineating the research conclusions (Section 8.3) and their contribution to knowledge in terms of DDA employment within academia and FMCG practice aspects (Section 8.4). Finally, this chapter closes with remarks about the limitations of and further extension to the research (Section 8.5). The contents of the chapters are illustrated in Figure 8.1, below.

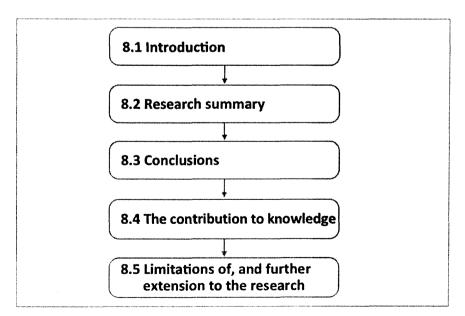


Figure 8.1 Chapter map for conclusions

8.2 Research summary

This research was motivated by the researcher's experience as a designer in a branding consultancy: it was comparatively more difficult to defy a limited role for design within FMCG brand development and designers were deemed to be excluded from developing an overarching strategy for a brand when developing a visual and structural identity. This prompted the researcher to start her PhD research with the aim of *"Developing a model which helps corporations and consultancies integrate DDA at strategic and project levels through FMCG brand development"*. Indeed, this research is centred around one main research question *"How can organisations employ DDA within the FMCG industry?"* and two subordinate questions: 1) *"What is a design-driven approach (DDA)?"* for secondary research and 2) *"What features of DDA can be identified in FMCG brand development?"* (see Figure 1.2). Each of the seven research objectives is precisely targeted by the research.

To accomplish these objectives, a series of research stages – secondary and primary research – was followed: secondary research in preparation for the primary research, to develop the ground for the primary research – pilot research, literature review (selected literature analysis); and primary research to develop a model for DDA enhancement using transformative mixed methods – online survey and interviews (see Figure 4.5): i.e. to conduct the primary research, four propositions were elicited. Indeed, by synthesising the primary research results, a DDA model – a framework and roadmap – was generated and validated by member checking. All the research phases were configured to particular aims and sought to collect evidence to develop a model for DDA within the FMCG industry.

8.3 Conclusions

Two types of conclusions for this research – factual and conceptual conclusions (Trafford and Leshem, 2008) – will be discussed in this section by referring to research aims, questions and objectives. Factual conclusions are drawn from evidence collected by the pilot research, selected literature analysis, online survey and interviews; and conceptual conclusions (DDA model) are generated by conceptualising the factual conclusions.

First, the factual conclusions are discussed by the research questions and their objectives:

Research question 1: What is a design-driven approach (DDA)?

- Objective 1: To embody research questions by exploring ways of FMCG brand development.
- Objective 2: To understand the theoretical base of DDA (from the literature) and to identify significant features to support its integration into organisational activities.

The results for research question 1 are designated to inform the next research question. To substantiate the above question, the following two objectives were undertaken.

To achieve the first objective, pilot research was conducted in S. Korea and the UK to outline the primary research and assist in developing the concept of DDA by investigating how design is undertaken in branded packaging development. From the pilot research, the role of design is still confined to developing final artefacts and a strategy for these artefacts, but the features of design integration and collaboration identified in the UK show more similarities to the concept of DDA. In the case in S. Korea, the role of design is deemed to be confined to aesthetic modification. This factual conclusion helped to outline the research region and industry.

Secondly, contemporary literature, which presents design thinking (and design-driven innovation) as an incentive for organisations to devise new and novel solutions, exemplifies how organisations can adopt such a designerly approach and mindset. In such instances, the concept of design thinking is not limited to traditional notions of the design and development process; rather, it applies to the entire operation of organisations and thus extends far beyond traditional design domains. Therefore, using the term *design* per se might not, on its own, be sufficient to demystify the current demanding roles of design thinking and design-driven innovation, so the concept of "design-driven approach (DDA)" is proposed to encapsulate the contemporary discourse related to the use of design in organisations via a comprehensive understanding and analysis of seven key design commentators: Berger (2010); Verganti (2009); Brown (2009); Martin (2009); Esslinger (2009); Neumeier (2008b) and Lafley and Charan (2008). DDA encompasses a multitude of conceptual and practical designerly activities, in both design development projects and, more widely, within organisational activities. DDA is composed of four themes: designerly applications, design endorsement, collaboration and human resources. The four themes form the epicentre of a design-driven culture in the organisation and their relationship is illustrated in subsection 2.3.2. These are not independent but complementary components that work together to form a design-driven culture – the integration of designerly applications into the organisation. To achieve such a culture, diverse approaches to and methods of each theme were identified at strategic and project levels: e.g. visualisation/prototyping, co-creation, user (customer)-centred approaches, etc. Eventually, this reference of the DDA model feeds into the foundation to fulfil the next research question.

Research question 2: What features of DDA can be identified in FMCG brand development?

- Objective 3: To compare the theoretical and practical applications of DDA within the FMCG industry.
- Objective 4: To investigate and identify how DDA in FMCG brand development is employed in different contexts (e.g. size of company, industry sector, department, etc.).
- Objective 5: To investigate and identify what drives organisations corporations and consultancies – to appreciate and exploit DDA.

This factual conclusion can be derived from the Research question 2 devised for the primary research. The above three objectives elicit four propositions for the primary research. Substantiation of the propositions has already been discussed in Subsection 7.2.1 as a form of "synthesis of the primary research" before developing a model. Since conclusive findings have already been presented in Subsection 7.3.2, "RM2: How do we get DDA?" as part of the roadmap, to avoid repetition, this subsection recaps the substantiation of the propositions before the next conceptual conclusions. Collecting evidence for the propositions is briefly summarised, as shown below:

Proposition 1: The context-specific features which enhance/hinder DDA in projects and organisational activities going beyond design-related projects are identified. Subsections 7.3.2.1 and 7.3.2.2 explain the influential features that underpin DDA within FMCG corporations according to the size of organisation, ownership of brand development, etc.;

- **Proposition 2**: Consultancies' characteristics are related to the reasons why their clients access and choose consultancies: e.g. smaller consultancies tend to work with smaller corporations, which have a lack of infrastructure of DDA or budget, etc. However, consultancies can defy their size limitation by underpinning the influential features that underpin DDA within consultancies as explained in Subsections 7.3.2.3 and 7.3.2.4: exploratory approaches, good relationship, etc.;
- Proposition 3: There is a discrepancy between appreciating and undertaking DDA in brand development and in corporations and consultancies: a lack of consensus over DDA employment in FMCG brand development;
- Proposition 4: This research identifies the stigma that hinders DDA employment as follows.
 Design in the FMCG industry is limited in terms of what traditional designers can cope with, and this is too fragile to underpin the entire brand development process. On top of that,
 FMCG organisational management and project approaches tend, comparatively, to be rigid and resistant to change, or do not incorporate enough lead time for designerly applications due to FMCG characteristics: cost-efficiency, short-term planning, etc. Besides, FMCG brand development and design tasks are mostly controlled by people who lean towards business-driven thinking, or who rarely experience the benefits of an expanded role for design DDA. Consequently, DDA rarely has chances to penetrate brand development: the FMCG industry is caught in a vicious cycle of poor usage of DDA.

Those factual conclusions entail conceptual conclusions that, above all, there is impediment to undertaking DDA, even in design-related projects within FMCG corporations and such projects are often manipulated or turned down. In particular, the FMCG industry needs consistent organisational endorsement for design/designerly applications; meanwhile, stakeholders and employees need to enhance their knowledge of DDA via learning programmes. To integrate designerly applications, all the themes in DDA need to penetrate the organisation. That is to say, DDA needs to be implanted as a cultural entity to support consistent DDA performance. It is found that the most influential way to achieve DDA is to let employees and stakeholders encounter DDA, or its benefits, through project ...

for DDA to penetrate, the other three themes – design endorsement, collaboration, human resources – need to support designerly applications. Despite the common conclusions illustrated above, there is no single way to embed/foster DDA. Since every organisation has different contexts of brand development and organisational activities, it is, above all, critical that each corporation and consultancy needs to develop its own way to achieve DDA according to its specific context.

Main question: "How can organisations employ DDA within the FMCG industry?"

A combination of factual and conceptual conclusions substantiate the main research question and a foundation to achieve the research aim – a model: framework and roadmap. A DDA model is seen as a deliberate way to achieve consistent DDA fulfilment as a cultural entity within FMCG organisations. The two objectives below directly relate to the second research question are but mostly are intended to generate a model for DDA (see Figure 1.2).

- Objective 6: To identify and develop how corporations can employ DDA in organisational activities at different levels (strategic and project levels).
- Objective 7: To identify and develop how consultancies can contribute to embedding DDA into clients' projects.

Briefly, grounded in the findings of the diverse research phases, this model illustrates the key elements for corporations and consultancies to enhance designerly applications and there is also a configuration for consultancies to help the FMCG industry underpin DDA, rather than just borrowing the skills which clients ask for.

From the validation process (see Section 7.4), the model demonstrates the possibility of assisting the FMCG industry to employ DDA. However, the respondents' degree of understanding of this model alters depending on the extent of organisational understanding of DDA. Therefore, to implement this model, it is imperative to find a person who has openness to DDA and to have leaders' dedication to embedding and fostering DDA at strategic and project levels. Meanwhile, corporations may seek to adjust and optimise this model in order to calibrate organisational processes and activities and to a embed designerly applications; consultancies also need to provide designerly experiences beyond the

classical design development role by using designerly applications: designerly thinking, visualisation, prototyping, customer-centred approaches. To embark on a course of action, design leadership at strategic and project levels initiates ways of employing key elements in the framework and calibrating the roadmap depending on the organisational situation. By combining two types of design leadership, their synergy can be amplified and be expected to produce better results for a product, brand or service.

A framework for DDA

This framework (see Subsection 7.3.1) delineates the fundamental key elements to disseminate DDA across the organisation through a collaborative activity flow. Most of all, this framework emphasises collaboration between tasks and in the up-front stages of FMCG brand development to experience designerly applications. For example, within the agenda establishment for DDA implementation, collaboration between diverse stakeholders is reinforced to assimilate designerly applications. DDA fulfilment in establishing an agenda for a project is often neglected within current brand development, but this is the most appropriate phase in which to encounter and embrace the benefits of designerly applications. A springboard for decision-making is configured to ensure integration and collaboration between tasks, rather than to restrain a project's deployment.

In addition, this framework notes the DDA commitment of key stakeholders: leaders at strategic and project levels, and internal and external designers. They need to play a pivotal role by starting to form the infrastructure for DDA, elevating the usage of designerly applications and implanting seeds of DDA at project and strategic levels. Most of all, such a project, which adopts these elements, calls for recursion and, via this, repetition, so that DDA can accumulate and accomplish an objective, so that an organisation inherits DDA as a cultural entity.

A roadmap for DDA

To facilitate the framework, it is necessary for the FMCG industry to configure ways of DDA exploitation at multi-faceted levels of the organisation. Within this thesis' context, four steps are suggested: RM1) Do we understand DDA?: understand an expanded concept for design from current

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design discourse; RM2) How do we get DDA?: reflect on findings from the primary research and suggest some implications from RM3; RM3) Are we ready?: organisational commitment to construct a DDA framework and cultivate fertile ground for DDA implementation; RM4) Now, let's implement: exemplar usages of designerly application in brand development (project level). This model seeks to provide multidimensional levels of commitment and activity for DDA at strategic and project levels. The concept of this roadmap is derived from primary research and calibrated according to the thesis' context. Hence, when an organisation applies this road map, reconfiguration of the roadmap might be required, depending on the degree of appreciation and exploitation of DDA and the audience. For example, when applying this to practice, RM2, "How do we get DDA?", might be taken first to determine how to reconfigure the roadmap and adapt it to a specific organisational context: the content of the roadmap needs to be articulated before applying it in order to achieve an optimal outcome in each situation.

The last factual conclusion – the model for DDA – can obtain evidence in terms of its competency to assist the FMCG industry in employing DDA and establishing a culture of DDA by member-checking. Therefore, the model is developed in a booklet format (see Appendix 29) and this booklet per se represents the conclusion of this PhD research. By some adjustment to the booklet, it may be used for DDA education, and as a guide to develop a tailored DDA mechanism for the organisation and show how to use designerly applications in projects. Indeed, the commitment to and activity of DDA need to be fulfilled at the end to cement DDA as cultural DNA of the organisation.

8.4 The contribution to knowledge

One of the intentions of this research is to bridge the gap between academia and practice: to transfer current design knowledge in academia into FMCG practice and to enhance and expand the role of design. Currently, there is a need for sector-specific understanding of design adoption across a range of different contexts (Collins, 2010) to ensure that research projects are relevant to the needs of specific industries. Where organisations have adopted designerly approaches, the lack of guidance with regard to how to proceed and achieve such change through DDA has resulted in an ad hoc

adoption of design thinking and design-driven innovation perspectives. There is little guidance for organisations in how to adopt a more designerly applications in specific sectoral contexts – this is particularly challenging when this is a culture which is alien to how they operate. Thus, this research takes a step to advance the current design thinking (design-driven innovation) discourse: it proposes a model of how to employ DDA in the FMCG industry and transfer current design discourse into real practice. Thus, the contribution to knowledge can be seen as twofold: to academia and to FMCG practice.

First, the contribution to academic knowledge is discussed in terms of the DDA concept identified from the current design discourse. By analysing the contemporary literature, which presents design thinking (and design-driven innovation) as motivation for organisations to achieve new and novel solutions, this research proposes the concept of "design-driven approach", which is advanced to encapsulate the contemporary discourse relating to the use and support of design in organisations. This DDA concept exemplifies how organisations can adopt such a designerly application and mindset, and builds an infrastructure to elevate designerly applications. DDA encompasses a multitude of conceptual and practical designerly activities in both design development projects and, more widely, within organisational activities. This concept highlights the features which enable designerly applications to be accomplished: design endorsement, collaboration and human resources. Designerly application and design endorsement are primary themes to implant a design-driven culture within an organisation. On the other hand, collaboration and human resources are booster themes to catalyse and facilitate the primary themes. This thesis also details the features of each theme at strategic and project levels (Subsection 2.3.2).

Secondly, the DDA model contributes to embracing DDA's application within the FMCG industry, specifically by formulating a collaborative flow for DDA enhancement and dissemination in projects. It has been validated via member checking and confirms that the DDA framework contains key elements which the FMCG industry adopts in the course of brand development or design management. Especially through satisfying these elements, the FMCG industry may be able to break down the silo task operations in brand development and subsequently drive those tasks to converge towards DDA and its integration. Even though the roadmap presented here is optimised to correspond to the

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research findings (factual conclusions), the contents of the four steps in the roadmap are valid for FMCG corporations to underpin DDA within their organisational activities. Soon, by referring to this roadmap, the FMCG industry can reconfigure it as an educational tool to imbue employees with DDA and use it as a platform to form the corporation's own roadmap for DDA implementation, depending on the results of auditing the current situation, as shown in RM2, "How do we get DDA?" Eventually, this model will contribute to an understanding of how to establish a DDA environment (culture) through a collaborative project as well as promoting awareness of DDA within the FMCG industry.

The DDA model is more appropriate for the leader of an organisation, the leader of a project (i.e. mostly marketers or stakeholders with a business background in the FMCG industry) and for designers who are confined to acting out an operational role within corporations which focus on local or regional markets. This might also be suitable for other FMCG corporations which seek to employ DDA as a primary driver in order to elevate a brand's competitiveness and attract customers' attention, yet not know how to start employing DDA. In addition, this model exists to encourage consultancies to promote their role as DDA catalysts or champions in close liaison with FMCG corporations (clients). In another way, this suggests how corporations work with consultancies to enhance DDA utilisation.

8.5 Limitations of, and further extensions to the research

It is inevitable that research will confront certain limitations during/after its deployment, despite the effort made to reduce errors or limitations. Issues arising with the benefit of hindsight arising after completing this research highlight the need for further extensions to it. Before remarking on the limitations, a difficulty is first discussed concerning conducting the primary research. When communicating with participants during that research, the researcher confronted a barrier to communicating an expanded role for design because of insufficient knowledge of an expanded role for design in practice; the term "design" is still perceived as a classical role and the features of designerly applications are utilised or perceived in different terms: innovation and creativity. Therefore, especially during interviews, questions were carefully framed to articulate participants' responses and interpret them.

First, limitations arose in the primary research as illustrated below:

- Limitation on recruiting participants: This research sought to tackle specific FMCG industries which operate businesses in the UK, including global and pan-European corporations and consultancies. Thus, it was hard to contact participants working in the FMCG industry in the UK and to motivate participants to complete the survey, because employees did not find it easy to make the time to do so when they were busy with scheduled day-to-day activities. Therefore, since the size of the sample did not reach what the researcher had expected before conducting the primary research, some analysis methods regression and factor analysis were rendered invalid in terms of producing reliable statistical results, so they were withdrawn. Besides, one of the original intentions of the survey was to compare DDA usage in brand development between the FMCG industry and other industries, but the researcher was unable to simultaneously recruit participants from the FMCG industry and other industries. Thus, the survey of other industries was withdrawn due to the failure to recruit sufficient participants.
- Limitation on covering diverse FMCG industries in different sizes of organisations: The primary research has investigated typical FMCG industries food and beverages (including spirits), household and personal care, but this is limited to the study of each industry in different sizes of corporations, due to time constraints. Also, there were no interviewees who currently work in a global corporation having multiple industries (e.g. personal care industry + food industry); instead, DDA approaches in multiple industries were studied indirectly, via the previous work experience of some interviewees.
- Limitation on investigating diverse external networks: Since brand awareness is built from all the communications and experiences which customers confront, all external networks, which work in other brand activities, need to be investigated. However, although this research sought to recruit diverse types of external networks, this research was limited to branding consultancies.
- Limitation on obtaining satisfying statistical evidence: Since the survey comprises rating scale and categorical scale types of questions, an arbitrary parameter was involved in an N-

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way table – analyses of categorical scale questions – to identify FMCG tendencies and differences between the subgroups of profiles: e.g. 33% difference between subgroups in Subsections 5.5.2 and 5.6.2. Thus, the analyses of categorical scale questions are somewhat limited to providing flawlessly objective and statistical results.

• Limitation on offering a real case applying the DDA model: Since this research focuses on developing a model for organisational culture and infrastructure for consistent DDA utilisation in FMCG through collaborative projects, it is impossible to check conformability by applying this model to a real working environment within a short time.

Except for the last two limitations, the others were determined by the responses of the people contacted, so it was impossible for the researcher to avoid some limitations beforehand. However, in a good way, the limitations above can be extensions for further research. This new step can be taken in two directions: a more in-depth study of design within an FMCG regime and a study of DDA expanded into other industries. First, more in-depth investigation of the FMCG industry can be considered in order to study:

- Usage of the developed DDA model in real practice and exemplar case(s) of using DDA in the FMCG industry so that this model can be strengthened in terms of its application aspect and to illustrate more concrete ways of adopting DDA in FMCG practice;
- Designerly methods development for FMCG brand development and organisational activities.
 In particular, it is necessary to develop ways of utilising designerly applications in ideas generation and collaboration corresponding to the needs of FMCG contexts;
- Missing profiles different FMCG industries in different sizes of organisation (e.g. corporations having multiple industries) and other external networks (e.g. advertising consultancies, universities, market research consultancies, etc.). In particular, since local-based (smaller) FMCG organisations show impediment to underpinning DDA, it is necessary to develop a way of undertaking DDA within such organisations by amplifying their advantages: e.g. understanding of local markets and culture, less complicated organisational structure, etc.;

 Newly emerging areas – service design and online customer engagement or shopping – which are not yet highlighted within the FMCG industry. Despite the current highlight in design academia, the concept of service design and online-customer engagement or shopping has not drawn attention, so further research could investigate the tendencies of and hindrances to undertaking such approaches.

Secondly, further research can be expanded by investigating a new industry sector in order to develop its ways of DDA employment as well as to distil common and different features of DDA compared to the results for DDA in the FMCG industry. Such further research will be able to propose essential ways to calibrate the organisational environment.

Above all, in further research, since this PhD research has not had opportunity to adopt DDA in FMCG practice, the researcher will be immersed in real practice to promote designerly applications and help organisations to establish a DDA infrastructure for each specific corresponding characteristic of each organisation.

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Appendix 29 Full version of the DDA model

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* Only Appendix 29 will be presented in the printed version of the thesis; the other appendices will be included in the electronic version (CD-Rom).



How to Employ Design-Driven Approaches in the Fast Moving Consumer Goods Industry

What is DDA?

What can DDA do?

Design-driven approach (DDA) means a combination of conceptual and practical designerly approaches at organisational management and project levels. DDA encompasses all the activities – organisational supports as well as designerly approaches – to attain designerly approaches: design applications, design endorsement, collaboration and human resources. These concepts will be explained in 'do we understand DDA?'.

DDA helps fast moving consumer goods (FMCG) organisations to:

- 1. Break the organisational status quo in brand development;
- Enhance the utilisation of designerly applications in brand development and organisational activities;
- 3. Find new opportunities for brands by using designerly applications;
- 4. Experience and learn designerly applications to achieve a design-driven culture for business.

Working practices within FMCG brand development presents challenges to the integration with a diverse range of stakeholders from different disciplines throughout the brand development process and a risk-adverse tendency results in continuance of the status quo in developing a brand.

Page and Thorsteinsson (2011) indicate some constraints on FMCG brand development: 1) complicated manufacturing and launching mechanisms due to the relationship with logistics and detailed regulatory requirements; and 2) the limited capacity for the integration of internal and external parties into the brand development process due to the various levels of internal and external processes. These characteristics – limited capacity to bond separate parties to work together, and a production and sales-driven culture – are considered to inhibit integration of design into the FMCG industry. Furthermore, Olins (2007) claims that, in recent years, the FMCG industryhas lost out on initiatives to innovatively develop brands.

Hence, the FMCG industry needs a catalyst to initiate the effective application of design and an organisational culture which supports design endorsement.

A conceptual model was developed to enhance the employment of DDA. This model for the FMCG industry comprises a scheme suggesting how to initiate and enhance DDA and, ultimately, to empower the utilisation of designerly applications. A framework is configured regarding how design-driven projects can drive an organisation to enrich DDA. This framework is suitable for industry which develops and sells to FMCG products.

There are two major stakeholders who impact on developing a brand: 1) organisation and 2) external consultancy. This model is configured for both parties with needs as follows.

An organisation which:

1. Needs initiatives to break with the status quo;

2. Appreciates the benefit of designerly applications but does not know how to implement them;

- 3. Has difficulty in developing a new brand within a new category;
- 4. Enhances/procures the undertaking of designerly applications at both strategic and project levels: ultimately, DDA features flourish across organisational activities and are shifted into cultural entities which cannot be replicated.

A consultancy which:

- 1. Predominantly works in the FMCG industry;
- 2. Rarely engages with the client's process;
- 3. Lets designerly applications permeate through to its clients;
- 4. Looks for ways to form a good relationship with the client.

Page, T., & Thorsteinsson, G. (2011). Brand innovation in FMCG. Germany: LAP Lambert Academic Publishing. Olins, W. (2007). Wally Olins on brand. London, UK: Thames & Hudson. (Original work published 2003)

How was a framework developed?

Who needs it?



DDA Framework for Brand Development

Page 4-5

This framework outlines approaches which support how to imbue desginerly ways and nurture organisational commitments to the utilisation of designerly applications within brand development.



Do We Understand DDA?

Page 6-7 Indicates a concept of design-driven approaches; This phase calls for understanding DDA before starting to employ designerly applications.



We Get DDA?

How Do

In response to these

characteristics, 'To Do'

the strategic level for

corporations and

activities for the the FMCG

consultancies are outlined.

industry to undertake DDA at

Page 8-10



Are We Ready?

Page 11-13

Suggests approaches of DDA features in terms of the organisational commitment to brand development to utilise designerly applications.



Now, Let's Implement

Page 14

Suggests approaches to DDA features at the project level to stimulate designerly applications when developing a brand.



A Roadmap to Establish DDA Culture through Brand Development Projects

Appendix and Glossary are attached

DDA Framework for Brand Development

Grounded in the view of the AAAP (see page 7), this framework is developed in order to enhance DDA in the organisation via a project which seeks to utilise designerly applications in a collaborative manner. DDA is ignited by the design leader at the strategic (organisational) level and is nurtured by the design champion at the project level. This interaction between strategic and project levels creates a synergy for an organisation to foster a designerly culture: this is more likely to be a combination of top-down and bottom-up implementation.

DDA framework:

This illustrates how the experience of designerly ways flows through organisational management; afterwards, via an evaluation (audit), the organisation reconfigures its organisational infrastructure to ensure designerly applications underpin subsequent projects. These constant flows create the organisation's own designerly cultural umbrella through patronage. Under this umbrella, designerly ways are dispersed throughout the entire organisation as a cultural entity. The organisation can attain DDA culture by metamorphosing through constant loops.

Organisational commitments:

After conducting a project, an organisation conducts an audit to determine whether the commitment to the four DDA themes interplayed well and then how this needs to be reformed to invigorate designerly applications within subsequent projects. Such organisational actions are a way to foster DDA but, depending on organisational characteristics, organisations will have different extents of undertaking designerly actions. For example, start-up corporations will find it hard to commit fully at once due to lack of investment. Hence, each corporation seeks to employ its own degree of commitment by understanding the corporate situation from a designerly viewpoint.



Agenda establishment for design implementation:

This phase involves finding ideas and setting the agenda for product development (inside a pack or a structure such as a new recipe for food, new function for laundry powder, etc.) and for different tasks in brand development, including graphic design, structural design, campaigns, etc. The agenda encompasses directions for the subsequent implementation phases. The following needs to be incorporated into this phase:

- 1. More lead time to engage with consumers/customers and to utilise diverse designerly applications in terms of customers' insights and visualisation/prototyping, etc.;
- 2. Flexibility and iteration to be assured to underpin designerly thinking: ensure a divergent thinking process;
- 3. Ensure the design champion has access to intellectual and physical resources across departments;
- 4. Involve internal and external stakeholders who take part in subsequent implement phases in a collaborative and integrative manner;
- 5. Engage with experienced specialists from external networks who are often neglected in this phase.

DDA Framework for Brand Development



Design leadership:

DDA can be ignited, enhanced and exploited by two different types of design leadership. There have been numerous investigations into to how design leadership initiates an organisation at the strategic level, but leadership at the project level (tactical and operational level) has often been neglected. By combining two types of design leadership, their synergy can be interlocked and amplified. This combination expects robust DDA integration and generates better results for a product, brand or service.

1) Strategic design leader: someone who can access and allocate organisational resources ignites DDA and mobilises the capacity of a DDA infrastructure at the strategic level: financial and physical resources, organisational structure and processes, knowledge resources, etc.

2) Design champion at the project level: someone who can boost designerly applications in a project needs the capability to integrate designerly applications into the business and to amalgamate different departments and methods. For example, marketers, brand managers and designers; whoever is a project manager needs to play this role in the organisation.



Springboard for decision-making:

Two activities are highlighted in this phase: evaluation of progress and re-establishing the agenda. This phase does not seek to terminate a project but to help it by offering a reference point with an inclusive view. The springboard for decision-making calls for different milestones for the implementation phases: a) within a specific task phase, b) within the overarching development process. Between these two levels, decisions inform each level and the design leader and champion supplement and reconfigure the direction for development and resources.

1) Within a specific task phase: Scheduling adjustments to decision-making is more flexible because much smaller stakeholders are involved and they can easily reach agreement over changes to the schedule. Decisions are made in response to the demands for implementation deployment between stakeholders at the project level.

2) Within the development process: Key stakeholders at the strategic level are involved and seek to give consolidated opinions about a task, which are integrated with other implementation phases. During this decision-making, it is vital to check whether all forms of delivery are incorporated into consistent brand touch-points. Meanwhile, mostly budget and strategic resources are determined in this phase.

Implementation phase(s):

In responding to the previous agenda establishment for design implementation, different tasks are exploited in each overarching phase: product development, brand development and brand experience development. Ideally, all phases are conducted in tandem and each task in the phase goes through a micro-level of establishing the direction (agenda) for each implementation task. Between tasks, features of the four themes – designerly application, design endorsement, collaboration and human resources – need to interplay with flexibility and iteration.



Internal design team (designers):

An internal design team needs to integrate designerly applications into the agenda establishment and implementation phases. Simultaneously, they input their designerly knowledge into the collaboration flow to let the organisation experience designerly applications. If corporations have an internal team, they also stimulate an internal design team to contribute to DDA corporate culture establishment.



External consultancies:

External consultancies need to act as satellites in orbit and to transfer their specialties and expertise through good relationships. These enable consultancies to observe what and clients do and how, and to engage with clients' projects. Consultancies' involvement is too vulnerable, depending on corporation and project conditions (attitudes to external collaboration, project budget, time frame, etc.). Nevertheless, corporations need to involve consultancies in the brand development process in order to envisage the benefits of employing DDA and to encourage the undertaking of DDA through casual dialogues, workshops, delivery, strategy planning, etc.

Do We Understand DDA?

Theoretical Base

Primary themes

Design has evolved from developing the aesthetic or functional parts of tangibles for competiveness to being integrated into organisational activities at the strategic level. A role for design resonates with developing a platform in the organisation in order to support creating competitive products and brands. Via this evolution, the meaning of the term design is highly context specific and dependant on individual and organisational perspectives. Using the term design per se might not be sufficient on its own to demystify the current demanding role of design so that the concept of 'design-driven approaches' (DDA) is put forward to encapsulate contemporary discourse related to the use of design in organisations. DDA combines conceptual and practical designerly mindsets and contribute a new strategic role for design. In other words, DDA can be applied at the operational and strategic levels in both design-related projects and more widely within organisational activities.

This concept is grounded from the two primary notions in a selection of recent literature: design-driven innovation and design thinking. Based upon a comprehensive a literature review, the work of seven authors were used as key sources (see Footnotes). By exploring the literature, features of DDA were identified with respect to the following two substantial themes: 1) **designerly application**: undertaking designerly ways to conceptualise and exploit within organisations; 2) **design endorsement**: changing the conventional behaviour of organisations, such as sales-driven and short-term effectiveness to commit to designerly applications. To bridge the primary two themes, a booster theme calls for unifying the first and second attributes for a design-driven culture: i.e. collaborative activities to develop competitive advantage by bridging the gap between design and business contexts. In addition, to enhance the three previous themes, a human resources theme arises in the literature as a second other booster theme. Under these four themes, the approaches from the literature are categorised into the mechanism for actions, which achieve the fulfilment of design-driven culture at strategic and tactical/operational levels.

The characteristics of each theme are described in terms of primary and booster themes.

- Designerly Application (DA): This theme is a cluster of features which help in the application of designerly ways, going beyond a limited design development process, as a way of promoting undiluted design-driven approaches in design thinking and design-driven innovation literature. It focuses on how to solve the possible challenges facing organisations and projects through a designerly ways.
- Design Endorsement (DE): Simply providing designerly ways cannot achieve design integration at the strategic level in corporations or, furthermore, a design-driven culture in the organisation. Thus, this theme relates to how business supports and empower people to undertake designerly exploration and exploitation in order to embed them throughout an organisation as an essential entity.
- Collaboration (CO): The above two cultures (DA, DE) often result in paradoxical situations as features in the two cultures are contradictory or run in parallel. Collaboration calls for an integrated approach, both internally and externally, to bridge the gap between designerly application and design endorsement.
 - Human Resources (HR): Each person's behaviour is composed of every culture's activity, both internally and externally. In order to transform the habitual attitude toward designerly exploration and exploitation, it is imperative to embed design-driven culture into employees' mindsets.

The four themes form the epicentre for a design-driven culture in the organisation and the approaches of each theme are constituents to achieve the fulfilment of design-driven culture. To take action, diverse designerly methods are suggested from the literature and are utilised depending on the organisational context. The interplay of approaches and methods in each theme at strategic and tactical/operational levels enables the organisation to attain a design-driven culture.

Design-driven innovation / Design thinking Berger Esslinger Brown Verganti Martin Neumeier Lafley& Charan

Berger, W. (2010). Glimmer: How design can transform your life, your business, and maybe even the world. Canada, Random House.

Esslinger, H. (2009). A fine line: How design strategies are shaping the future of business. San Francisco, CA: John Wiley and Sons.

Brown, T. (2009). Change by design: How design thinking transforms organizations and inspires innovation. USA, HarperCollins.

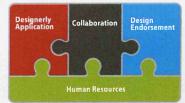
Verganti, R. (2009). Design-Driven innovation: Changing the rules of competition by radically innovating what things mean. Boston, Mass.: Harvard Business Press.

Martin, R. L. (2009). The design of business: Why design thinking is the next competitive advantage. Boston, USA: Harvard Business School Press

Neumeier, M. (2008). The designful company: How to build a culture of nonstop innovation. NJ, USA: Peachpit Press.

Lafley, A. G., & Charan, R. (2008). The game changer: How every leader can drive everyday innovation. London, UK: Profile Books.

Primary & Booster themes





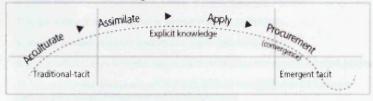
Do We Understand DDA?

AAAP Designerly Experience Flow

To develop a conceptual model, first, the underlying concept was developed for DDA to be embedded into the organisation as a cultural entity. It is asserted that DDA can be attained not by forceful input but by experiencing designerly applications. In other words, commencing an 'action' from a theme might be a 'trigger' to initiate DDA, but via onetime action, organisations cannot attain DDA integration as an organisational entity. A combination of the four themes enables DDA to be attained, based on the literature and a series of research steps. DDA is accumulated and practically adjusted thorough actions taken to undertake designerly approaches by decreasing the gap in appreciating designerly ways between different disciplines and positions. Most of all, consistently feeding designerly experiences into a project and an organisation is important to it establishing its own design-driven culture.

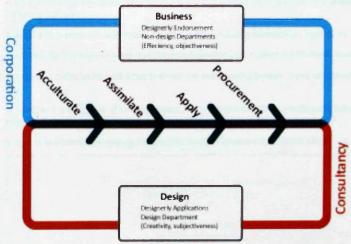
Hence, this concept of DDA is developed to disseminate, accumulate and inherit DDA experience and knowledge into the organisation via a project underpinned by designerly ways (see figure below). This helps an organisation to decrease the differences and contradictions between different departments and positions in a collaborative manner.

Four Phases to Procuring a DDA Culture



To imbue designerly ways into business and enhance DDA within an organisation, the organisation starts with projects to acculturate designerly experiences and thus assimilate what designerly approaches can do. Afterwards, an organisation applies what it has experienced to subsequent projects and other cultural activities. Throughout this loop, the approaches to the four themes are interwoven and reinforced and, ultimately, an organisation procures its own DDA culture and the capability to cope with contradictions encountered between design and business as a project progresses.

AAAP Model



 Adjusted from Kan Kautti Artifacts, activities and design knowledge from Poggenpohl & Sata, (2009; 73) Design integrations. Research and collaboration



How do we get DDA?

Overall, there is a lack of organisational infrastructure to fulfil and nurture designerly ways within the FMCG industry: corporations and consultancies. Thus, exemplars of key actions are suggested for the employment of DDA in the organisation. These are derived from a series of PhD research findings. If you are interested in the research findings, please check the Appendix. (see page 16).

Overall to do for corporation	Corporation	Consultancy			
1. Undertake exploratory projects to challenge the status quo	• DA: 1 • DE: 1, 5	• DA: 1, 2 • DE: 1 • CO: 3			
2. Employ designerly applications for strategic development as well as tangible outcomes	• DA: 4 • DE: 1, 4	• DA: 3 • CO: 3 • HR: 2			
3. Involve internal designers or external design consultancies in projects to provide organisations with experience of designerly applications	• DA: 4, 5 • DE: 1, 4	• DA: 1 • DE: 1 • CO: 3			
4. Undertake interdisciplinary (collaborative) approaches with flexibility: especially, ensure a collaborative approach in the up-front ideas generation stage	• DE: 2, 3, 4 • CO: 1	• DA: 3 • DE: 2 • CO: 2			
5. Overarching brand direction needs to be coordinated between external consultancies and corporations	• DE: 1 • CO: 2, 3	• DA: 2, 3 • CO: 2,			
6. Employ visualisation and prototyping through all stages of brand development	• DA: 1, 3	• DA: 1, 2 • DE: 1			
7. Access, audit and develop activities to enhance designerly applications	● DE: 1, 5 ● HR: 1, 2	• DA: 1, 2 • DE: 1			
8. Manifest and apply designerly applications to obtain customer insights	• DA: 1, 2, 5	• DA: 1, 2 • DE: 1			
9. Engage with customers in creative ways to overcome consumer bias and find underlying insights	• DA: 1, 2, 5 • HR: 1, 2	• DA: 1, 2 • DE: 1			
10. Incorporate brand development within an organisational strategy/Enhance the interaction between organisational management and brand departments	• DE: 3, 4 • CO: 1	• CO: 3			

Overall exemplars for key actions of DDA facilitation/catalysts for consultancies are suggested.

Overall to do for consultancy	Consultancy
1. Reinterpret the agenda for a project to blend clients' requests and designerly needs	• DE: 1, 2
2. Develop proprietary designerly approaches (methods) to fulfil exploratory projects	• DA: 2 • DE: 1
3. Attempt to develop consultancies' own competences to provide designerly approaches to clients	• DA: 1, 2 • DE: 1
4. Set milestones for key-decision person's (project manager) engagement to enhance the understanding of designerly applications	• CO: 2, 3
5. Ask clients to meet with stakeholders and other parties, including manufacturer, logistics, etc.	• CO: 2
5. Enhance the interaction between consultancy and clients in both a casual and structured manner	• CO: 2, 3
7. Develop activities and/or work scope to elevate the understanding between clients and consultancies	• DA: 2 • DE: 1 • HR: 1, 2
B. Configure the work scope of each department and formulate collaborative meetings to enhance internal collaboration	• DE: 1 • CO: 1
9. Seek to incorporate their strategy into a holistic brand for consistent brand touch points	• DA: 3 • CO: 2

RM2

How we got DDA? - Corporations



Check how your organisation undertake DDA

Exemplars of key actions to enhance or manage DDA are suggested, depending on the characteristics identified in each category. Thus, with 'to do' in subgroups, you can reflect on your/client's organisation and then take initial action(s). Each group is categorised and characterised through a series of research findings. If you are interested in the characteristics of each group (research findings), please check the Appendix. (see page 17).

	lf you are	To do	Corporation	Consultancy
	Global corporations (Larger corporations)	Reconfigure an organisational structure for flexibility and better communication	 DE: 2, 3,4 CO: 1 	• DA: 2, 3 • DE: 1
	Local market-oriented	Initiate the organisation to empower DDA	• DA: 1, 4	• DA: 3
	corporations		• DE: 1	• DE: 1
	(Smaller corporations)			• CO: 2
leadership	Design leadership	Keep transforming the organisation towards being	• DE: 3, 5	• DE: 1
ers		design-driven to rise to challenge of new opportunities		• CO: 3
eac	Sales-driven leadership	Seek to imbue a leader with DDA via consultancy	• DE: 1, 5	• DA: 2
		collaboration	• CO: 3	• CO: 3
		and the second sec	• HR: 2	
112)	Marketers (Business	Engage with internal designers and external	• DA: 1, 5	• DA: 2, 3
ner	department)	consultancies to understand designerly applications	• DE: 5	• CO: 2, 3
		and the second	• CO: 1, 2, 3	
(Departments)			• HR: 1	
9	Designers	Disseminate designerly knowledge and ways into the	• CO: 1	• DA: 1
	(Design department)	organisation via internal or external collaboration	HR: 1	• DE: 1
				• CO: 3
	Food & Beverages	Employ designerly applications to break with the	• DA: 4, 5	@ DE: 2
		status quo	• DE: 1, 2, 5	• CO: 2
	Households and	Conduct various types of prototyping to lessen	• DA: 2, 3	• DA: 2, 3
	personal care	manufacturing mistakes and facilitate finding the	• DE: 5	• CO: 3
		usability of the structure of a pack		
	Spirits	Engage with customers in designerly ways to find	• DA: 2, 3	• DA: 2, 3
		customer insights and build brand loyalty		• CO: 3
be)	Under 12 months:	Undertake exploratory projects to break with the status	• DE: 1, 4	• DA: 1, 2
P.	Revitalisation or new brand development for	quo by working with designers (designerly	• CO: 2	• CO: 2
Jec	existing categories	applications)		
(project type)	1-2 years: Can be	Set up different levels of utilising designerly	• DE: 3	• DA: 3
	any type of brand	applications depending on project type	00.3	• DA: 3
	development			
	Over 2 years: New brand development	Cope with context changes while developing a brand	• DE: 3	• DA: 3
	for an existing and new			• CO: 3
	categories		Contract of the second	
ra Fi	Under 20%	Elevate the proportion of exploratory projects up to	• DA: 1, 5	• DA: 2
Je		20% in order to break with the status quo	• DE: 1, 5	• CO: 2
pro		and the second		
exploratory projects	20-40%	Begin an exploratory or team-building project to	• DA: 1, 5	• DA: 2
rat		change organisational attitudes	• DE: 1, 2	• CO: 3
bldx			• CO: 1	
e	Over 40%	Form alliances with external consultancies (network)	• CO: 2, 3	• DA: 2, 3
		for a project to obtain fresh ideas for brand direction		• CO: 3

How we got DDA? - Consultancies



Check how your organisation undertake DDA

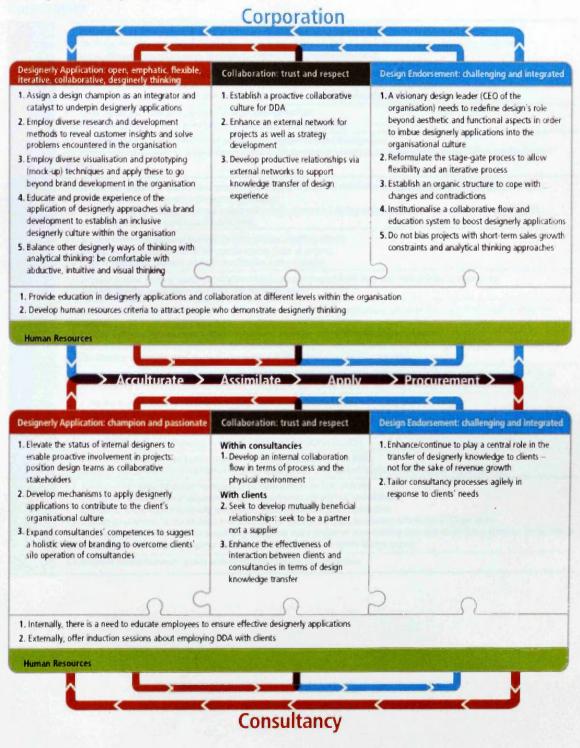
Exemplars of key actions to enhance or manage DDA are suggested depending on the characteristics identified in each category. Thus, with 'to do' in subgroups, you can reflect on the current consultancies' role and then take initial action(s). Each group is categorised and characterised through a series of research findings. If you are interested in the characteristics of each group (research findings), please check the Appendix. (see page 18).

If you are	To do	Consultancy
Local-based	Set up a preliminary meeting to get clients to understand how	• DA: 2
consultancies	consultancies deploy designerly applications	• DE: 1
(Smaller consultancies: under 50 employees)		• CO: 2
Global-networked	Develop formal ways to work with (big) clients and set up internal	• DA: 2
consultancies	• CO: 1, 2	
(Bigger sized		
consultancy: over 50 employees)		
Design department	Champion being vigorously involved in a project	• DA: 1, 3
		• HR: 1
Non-design departments	Involve designers or design teams to deliver designerly experiences to clients	@ DE: 2
(Accounting department,	and collaborate with them to offer strategically integrated final delivery	• CO: 1
strategic department, etc.)		• HR: 1
designerly applications,	is between clients and consultancies. However, it is ambiguous in terms of indicating betw because long-term relationships show pros and cons in terms of employing DDA.	er utilisation of • DA: 2
Less than 40%	Conduct preliminary workshops to increase the understanding of what consultancies do	• DA: 2 • CO: 3
40-60%	Offer training sessions to transfer designerly applications to clients	• DA: 2
		• HR: 2
Over 60%	Offer a structured way for progress and operational implementation along with final tangible delivery	• DA: 3
	e longer time frames and greater proportions of exploratory projects have better client att However, due to the nature of consultancies – dependent on clients requests – the edges clear	
Under 6 months	Imbue a brand with new designerly thinking (freshness and disruptiveness)	• DA: 1, 2
6-12 months	Identify what clients request and utilise designerly applications to develop a brand	• DA: 2
		• CO: 2
Over 12 months	Utilise designerly applications to find a competitive idea within a long-term	• DA: 2
Over 12 months	strategic plan for the client's business	• CO: 3
Less than	Develop/suggest exemplars of designerly approaches and methods to elevate	• DA: 1, 2
20%	the appreciation of DDA within a brand development project	• DE: 1
	Enhance designerly competencies in consultancies to challenge clients' thinking	• DA: 2, 3
20-40%	Enfonce designenty competencies in consultancies to choicinge cierts annung	• CO: 3
20-40%	Internative Departure Contra and	
	Enhance designerly competencies to introduce a disruptive concept and strategic implementation	• CO: 3 • DA: 2, 3 • CO: 3

Are We Ready?



Throughout four interactive themes, this intends to indicate organisational commitment to support designerly applications in brand development and nurture DDA throughout a series of projects.



Are We Ready?

These are detailed actions in accordance with the previous map (categories).

Corporation

5	1	 Empowered to fulfil a project: allowed to allocate resources and manipulate a mechanism for brand development; Challenge the status quo: brand development tends to be confined to brand revitalisation or existing brand line extensions; Utilise different types of designerly applications, depending on project requirements.
Designerly Application	2	2.1. Customer-driven approaches: engage with customers when purchasing and using products;2.2. Reformulate focus groups, go beyond just asking about customer preferences;2.3. Employ suitable expertise to elicit consumer insights and learn about updated methods.
signerl	3	3.1. Apply visualisation and prototyping to facilitate ideas generation;3.2. Teach non-designers to be comfortable with visualisation and prototyping.
De	4	4.1. Set up how people (stakeholders in the business) are engaged in brand development;4.2. Involve internal designers or external design consultancies for strategic contributions to the organisation as well as tangible brand development.
ration	1	 1.1.Develop mechanisms to share project progress with and participation by stakeholders, including manufacturing, logistics, etc., and between different businesses within the same organisation; 1.2.Develop structured meetings or open discussions to enable consensus building and to decrease the dichotomy between different disciplines and positions at working and board levels.
Collaboration	2	 2.1. Set up a conference which all external consultancies and suppliers attend; 2.2. Bring in external consultancies in the agenda-setting phase of projects; 2.3. Support integration between external consultancies and/or suppliers.
	3	3.1. Establish positive working relationships with external consultancies and build long-term relationships, as appropriate;3.2. Establish effective mechanisms to mange external relationships.
Design Endorsement	1	 1.1. Continue/enhance the investment and commitment to embed designerly applications and undertake exploratory projects within the organisation; 1.2. Develop a physical infrastructure to inspire employees: a creative and inspiring working environment; 1.3. Enthuse internal/external designers to undertake developing tangible output (in terms of aesthetics and function) as well as designerly conceptualisation and exploitation at a multi-dimensional levels (across organisational activities).
n Endo	2	 Invest time and resources, and ensure a flexible and iterative process for agenda-setting (up-front stages: exploring and researching); After selecting a development direction, check if progress is appropriate and that the initial integrity of design intent remains intact.
Desig	3	3.1. Avoid the organisational structure becoming rigid and tedious (status quo) as a company grows;3.2. Agility required to amalgamate different units and resources to cope with context changes.
	4	4.1. Develop multiple levels of collaboration flow: between business and departments, and at organisational and project levels;4.2. Assign HR (or another department) to develop education programmes for DDA.
	5	5.1. Continue with/enhance a proportion of exploratory projects (ideally at least 20%),5.2. Set up an independent and authoritative incubator team (or individual) to find opportunities to explore disruptive ideas.
Human Resources	1	 1.1. Training programmes for project managers to be integrators as well as catalysts: a) Integrate all phases and amalgamate different departments and external consultancies; b) Understand and exploit designerly applications: designerly thinking and exploitation. 1.2. Training programmes for the strategic level staff: aim for strategic decisions to resonate with designerly approaches; 1.3. Training programmes for business people (non-designers): use a project- or team-building workshop to let them experience the benefits of designerly applications and bring together marketers (brand teams) and designers (design teams).
	2	2.1. People in human resources need to understand DDA to recruit design thinkers.



Are We Ready?

These are detailed actions in accordance with the previous map (categories).

Consultancy

	1	1.1. Engage designers in strategy establishment; 1.2. Let designers communicate directly with clients.
Designerly Application	2	 Apply visualisation and prototyping techniques proactively to projects to verify and experience the benefits of those techniques; Develop/apply (new) methods to identify insights into customer behaviour patterns and translate insights into tangible form(s); Blevate competencies to utilise exploratory projects to cope with exploring new horizons: (at least 20% of exploratory projects); Consider/suggest what consultancies can do, beyond what clients ask for.
Designerly	3	 3.1. Develop interdisciplinary approaches (e.g. structural identity + visual identity, visual identity + campaign, etc.); 3.2. Keep investigating new technologies and trends which canbe applied to offer competitiveness for brands; 3.3. Provide strategic intent as well as tangible delivery: e.g. deliver both tangible outcomes and guidelines for the implementation of designerly approaches or manage creativity and financial aspects together; 3.4. Seek a way to take part in clients' early ideas generation activities.
E E	1	Within consultancies 1.1. Establish a communication flow or meetings to share the progress of projects; 1.2. Consider how project tasks can be allocated concurrently to ensure efficient workflows: e.g. structural design and graphic design working in tandem; 1.3. Consider the use of collocation of design specialisms: e.g. place a strategic team and a design team together/adjacently.
Collaboration	2	With clients 2.1. Provide seamless/timeless delivery with design experience to build trust; 2.2. Have casual and/or formal discussions with clients to build trust; 2.3. Be realistic and honest with clients: do not say you can do anything or everything; 2.4. Use clear language when communicating with clients; 2.5. Ensure account managers are conversant with the nature, benefits and limitations of applying designerly applications.
	3	3.1. Define milestones which involve clients with the development process: workshops (preliminary phase to inform design knowledge for a project before starting) and interim meetings to manage project development;3.2. Encourage clients to liaise with other manufacturers or consultancies (where appropriate).
Design Endorsement	1	 1.1. Do not separate necessary and proprietary processes/methods for the sake of revenue growth; 1.2. Support operational activities to utilise designerly approaches in consultancies; 1.3. As consultancies grow, try not to be a rigid or fragmented organisation.
Des End	2	2.1. Identify tacit needs which clients cannot tackle;2.2. Configure organisational departments (teams) to amalgamate them easily .
Human Resources	1	 1.1. Design department: educate designers in how to communicate with clients in terms of strategic thinking and ways of demonstrating insight interpretation; 1.2. Strategic department: provide training sessions on how designers can proceed with designerly applications and how to bridge the gap between consultancies and clients.

RM3 -3

Now, Let's Implement



This step describes a suggestion (five approaches in total) to help to fulfil designerly applications for corporations and consultancies be implemented within brand development. The specific actions to develop and implement ideas for each implementation phase are provided in the Appendix. So if you are interested in those, please check there. (see page 19-20)

Action scheme to develop and implement ideas

Ideally, all the implementation tasks are undertaken in parallel, rather than in a linear process. The manner of undertaking actions can be adjusted and applied to the brand development phases, depending on the project type and characteristics of the organisation and project manager. Five overarching actions are undertaken in every brand development phase, but a different extent of application underlies specific tasks.

Before starting a project: Get a project manager to be a design champion or to work with an assigned design champion

ŧ	0	verarching ideas generation	Subsequent phases for develop	bing and fulfilling initial ideas: undertai	ke phases and tasks within them in tandem			
Implement phases	Agenda establishment: For a product and brand (see framework for designerly applications)		Product development: Develop a product inside a pack This stage is not undertaken in brand revitalisation	Brand development: Develop the name, structure and graphics of a brand	Brand experience development: Develop every touch point where a brand encounter customers			
Actions	(A) (3)	and configure the involven 1. Involve internal or external	nent of external consultancies designers or people who have designerly	ers will be engaged within a phase: i thinking who are easily isolated in this acti emal team outlines how to engage external con	on			
	B	1. Understand the internal orga	n where the corporation/business h anisation situation with the following exem competitors a brand has: e.g. market resea		velopment			
	C	developing generated idea 1. Think in terms of metaphor 2. Identify current/future socio 3. Utilise customer-centred (us 4. Use visual stimulus to facili	as in terms of how the brand can en s to facilitate ideas generation with design ocultural aspects for a brand ser-centred) methods: see 'customer enga tate ideas: see 'visualisation' in the Appen	tred) methods: see 'customer engagement' in the Appendix				
	(D) (%)	1. Test the ideas in terms of he	assumptions) and finalise direction ow customers respond to ideas, not about t is recommended to involve all stakeholde	their preferences for ideas ers in each phase in a springboard meeting				
	E T	After establishing directio 1. Allocate financial and intelle	d production					
oration	External collaboration: arrange conference for external partners and suppliers to have consensus about the direction of brand development							
Collabo	Intern	al collaboration: Stakeholder	s need to take part in a springboard	meeting to gain experience in a colla	borative manner.			
Recon	nmend							

Springboard meeting Collaboration for designerly experience

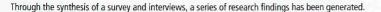
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Now, let's make your designerly culture!

This is a short version of a conceptual model, so if you want to receive the full version – with findings from the primary research, roadmap, implementation, etc. – then please contact me.

y.lee1@lancaster.ac.uk

Appendix – How do we get DDA?



Overall findings – Corporation

- 1. Cost-driven approaches result in incremental brand development.
- 2. Design is perceived as providing aesthetic and functional modifications (operational level).
- 3. Business-driven thinking hinders new ideas generation and project exploitation in terms of designerly ways.
- 4. Organisational 'silo' structure and operation as a barrier to holistic branding.
- 5. Consultancies operating via a silo approach results in fewer opportunities for FMCG companies to gain designerly knowledge.
- 6. Visualisation and prototyping are utilised in limited stages of brand development.
- 7. Commitment to enhance designerly applications is limited in organisations.
- 8. Designerly methods to identify customer insights (developing ideas) are not formalised.
- 9. Development relies on consumer evaluation of brand proposals.
- 10. Integration between organisation (organisational management) and each brand (brand development) is limited.

Overall findings – Consultancy

1. Consultancies' approaches are driven by clients' organisational intentions: organisational characteristics, budget, project type (revitalisation and new brand development for existing and new categories), long-term relationship, etc.

- 2. Consultancies' working style capability to fulfil designerly applications is an important criterion in the selection of consultancies.
- 3. Consultancies criticise clients' approaches to undertaking DDA: limited role of consultancies in developing artefacts.

4. Consultancies prefer to work with clients who have an open mind, are willing to develop an appreciation of DDA, have the authority to make brand development decisions and control project budgets.

5. There is rarely integration with other tasks of brand development as well as with a leading project team.

6. A good relationship between client and consultancy results in more effective project delivery.

7. Consultancy-driven training programmes for internal and client organisations are limited.

8. Conflicts occurring in terms of internal collaboration result in difficulties with seamless delivery.

9. There is a propensity for passive attitudes to managing clients during vigorous DDA utilisation in brand development: some substantial scope for brand development is excluded because of budget constraints.

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Appendix – How we got DDA? / Corporations



Check how your organisation undertake DDA

The subgroups mostly show contradictory characteristics so that organisations enhance positive characteristics in categories as well as features which are not employed well. The characteristics in bold are substantial ones which surpass the others in terms of designerly aspects. (+ positive, • neither positive nor negative, – negative)

Findings

	rinuings						
By By By size leadership	Global corporations (Larger corporations) Local market-oriented corporations (Smaller corporations) + Better appreciation of and infrastructure for DDA Less time to make decisions and easier to discuss across departments and positions - More complicated structured than smaller corporations Less time to make decisions and hard to discuss across departments and positions - More time to make decisions and hard to discuss across departments and positions Less time to make decisions and hard to discuss across departments and positions - Less flexibility in undertaking projects: formal structure for project development Less investment in risk-taking and designerly infrastructure - Less flexibility in undertaking projects: formal structure for project development Sales-driven leadership + Seek to institutionalise a DDA mechanism: designerly infrastructure and envisage/encourage employees to Sales-driven leadership - Stick to the status quo and conventional approact sales-driven, process-oriented, no risk-taking, etc. - Stick to the status quo and conventional approact sales-driven, process-oriented, no risk-taking, etc.						
By brand ownership (Departments)	 move towards DDA benefits/utilisation Marketers (Business department) Mostly marketers' brand ownership Better understanding of organisational management More concern about new concepts for product development (product inside a pack) Lack of appreciation for and utilisation of designerly applications: process oriented; less empathetic; lack of integration of all development phases Driven by personal career-building: tend to revitalise a brand and not take risks, stay for the short term Check consumers' preferences to be protected from project failure 						
by Industry	Food & Beverages • More accounting for structured and rigid organisational management. • Structured and conventional ways of organisational management • Averse to risk-taking for new brand development for new categories • Have difficulty in applying new technology due to sales-driven approach	More accounting for structured and gid organisational management. Structured and conventional ways of rganisational management Averse to risk-taking for new brand development in new categories Have difficulty in applying new technology due to		Spirits • More accounting for emotional engagement with customers to communicate brand heritage. + Less concern about cost of manufacture for emotional engagement + Seek to use diverse media to engage with customers' emotions - Due to the heritage of brand, it is hard to engage in new brand development (within a new category)			
by time trame (project type)	Under 12 months: Revitalisation or new brand development for existing categories • Similar pattern to smaller corporations: • A better environment for quick decision-making • Insufficient infrastructure for brand development and designerly applications • Insufficient time to utilise internal/external collaborative approaches in every phase	Under 12 months: Revitalisation or new brand development for existing categories 1-2 years: Can be any type of brand development Over 2 yearsing categories • Similar pattern to smaller corporations: • Indicate intermediate aspects compared to the other two subgroups • Brand de long-term • Brand de long-term • Insufficient infrastructure for brand development • Indicate intermediate aspects compared to the other two subgroups • Need more + Better OD, and development • Need more + Better OD, and development - Insufficient time to utilise internal/external • Better collaboration than in the other subgroups • Need more + Better OD, and other for the other subgroups					
by Proportion of exploratory projects	Under 20% - Less appreciation and integration of DDA - Difficulty in undertaking internal and external collaboration - Structured and sales driven organisations: less taking of risks: stop projects which cannot be extinuated	20-40% + Better understanding show the features of so corporations + Better DDA integration and i collaboration for DDA - Structured and sales-driven of	ettled	Over 40% + Better understanding of DDA but difficult to utilise DDA for brand intentions (unsettled corporations): seek new opportunities + Apply more prototyping to develop a brand for a new category - Integral caliberation is undersigned but external			

 Internal collaboration is underpinned but extern collaboration is limited

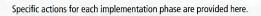
Appendix – How do we get DDA? – Consultancies

The subgroups mostly show contradictory characteristics so that organisations enhance positive characteristics in categories as well as features which are not employed well. The characteristics in bold are substantial ones which surpass the others in terms of designerly aspects. (+ positive, • neither positive nor negative, – negative)

	Global-network (Bigger sized consultan	ed consultancies cy: over 50 employees)
rations y nave	• Develop structured w	work with bigger corporations which have n of designerly applications ays to inform project progress acture and silo operation
la seta la députe operadi. Ingeni		artments (Accounting department, strategic
	 Adopt a role to brand strategy: no transfer what clie 	communicate with clients and develop a egotiate with clients, develop strategy and nts request to the internal design team ltancy, hard for designers to communicate with clients.
40-60%	S-14 1 1	Over 60%
 Client tendency: Intermediate characteristics between clients of the other two subgroups 		• Client tendency: More employment of DDA but more concerns about a structured manner of project progress and operational efficiency (e.g. manufacturing efficiency)
6-12 months		Over 12 months
characteristics betwee subgroups in the sam	en the other two e category (getting	• Client tendency: More employment of designerly attitudes than the previous subgroups and undertake projects within a long-term plan + More use of visualisation and prototyping
20-40%		Over 40%
characteristics betwee subgroups in the sam utilise designerly app	en the other two e category, and roaches in more	 Clients tendency: More employment of DDA and calls for efficiency in design delivery
	40-60% Client tendency: Intr characteristics betwee other two subgroups 6-12 months Client tendency: Intr characteristics betwee subgroups in the same better at employing D 20-40% Clients tendency: Intr characteristics betwee subgroups in the same better at employing D 20-40%	 (Bigger sized consultan more appreciation more appreciation • Develop structured w • Fragmented strutured w

AP

Appendix – Now, Let's Implement



Overarching ideas generation	Subsequent phases for developing the second seco	ng and fulfilling initial ideas: undertake J	phases and tasks within them in tande
Agenda establishment	Product development	Brand development	Brand experience development
alls for designerly mind-sets: open, emphatic, lexible, iterative, collaborative, and designerly hinking. Flexibility and iteration need to be nsured more than other phases, along with ufficient time.	overarching actions in agenda establishment a	lementation is different: duration of project time, bu re repeated with more objective-driven processes to genda was developed in the previous phase, some un lication in agenda establishment.	apply/reinterpret the overarching agenda in terr
 Develop a brief for each task 			
 Understand corporate vision/brand statements, history of brands (heritage of brands), architecture of portfolio, etc. Investigate current/future competitors to create competitive ideas for a product and brand 	 identify the capability of product manufacture Investigate what has been done in agenda establishment in detail in terms of product development 	 Identify the capability of manufacturing structure Investigate what has been done in agenda establishment in detail in terms of brand development 	 Identify ways for current and future communication for a brand's touch points Investigate what has been done in agenda establishment in detail in terms of brand communication development
Exploring, discovering and defining			
Identify overarching ideas for what is a better medium and way for a product and brand	Re-interpret overarching ideas into specific ideas for a product	Re-interpret overarching ideas into specific ideas for the name, structure and visual of a brand in terms of strategy and design	Re-interpret overarching ideas into specific ideas for communication development
Develop/refine brand promise and initial strategy direction of subsequent implementation phases	Translate a selected idea into manufacturing a product	Translate a selected idea into the execution of a brand	Translate a selected idea into the execution of brand communication
Experts from across disciplines (e.g. semiotician, trend analyst, visualist, designers, etc.) to facilitate ideas generation: external collaboration is easily ignored but this is strongly recommended in agenda establishment	Experts (e.g. nutrition expert, food innovation expert, etc.) regarding product development for inside a pack	Work with consultancies for structural and visual consultancies (brand consultancy), etc.	Work with a media agency, advertising agency, brand consultancy, etc.

AF

Appendix – Now, Let's Implement

Exemplar of designerly method utilisation for actions

This exemplifies the methods to help to enable the previous actions. Since applying specific methods is responsive to the project type, as stated earlier, in this section, four specific criteria will be illustrated in terms of how they can be utilised in the overarching actions within brand development. The colour of each cell illustrates the extent of applications: there are three levels of indication (weak, moderate and robust). The methods will be indicated as exemplars and explained in detail within the glossary. Due to the nature of projects – execution for brand development and activities of DE, CO and HR do not appear but underlie the execution of brand development.

		Agenda establishment				Subsequent phases					
				0	D	C		0	0	0	
	For ideas facilitation: Brainstorming, mind mapping, post-it exploration, value chain analysis, etc.	м	м	R		м	M	м	R		A DESCRIPTION OF A DESC
5 MISSING REFISES SEMINATE IN THE INFORMATION AND	For exploration and generating of ideas: Ethnography, consumer journey mapping persona, cultural probes, semiotic analysis, focus groups (more with intention), etc. via real situations where customers (consumers) shop and use a brand,			R	50		*	Solution and a	R	м	
	For developing generated ideas: context mapping, storyboards, scenario building, persona, etc.		м	R	R			м	R	R	
	For testing initial selected ideas: Focus groups in terms of co-oregion aspects; do not just to ask about customers' preferences and need to provide tangibles which participants play with inglit stimulus!	a de la dela dela dela dela dela dela de	Sec. March	M	R			w	м	R	
	Visual stimulus: Diverse visual forms can be used to facilitate ideas generation (photos, illustrations, videos, samples (competitors') products, mood boards for initial ideas, diagrams, etc.)	м	R	R	R	м	M	R	R	R	
	Collective visualisation: All the information from generated ideas translates into a short articulated form of visualisation before moving forward to next phases.		м	R	R	N	のである	M	R	R	
	Sketches (2D) in proposition: Translate conceptual ideas into mugh visual form (rapid sketches, napkin sketches, storyboards, mood locards, etc.)		м	R	M			M	R	M	
	Sketches (visualisation) through iteration: After propositions and ideas, initially selected ideas are refined iteratively (ZD, 30, sequence movies and CAD)		No. of Concession, Name	R	R			м	R	R	
	Presentation sketches (visualisation): Get opinions and/or approval of most refined version of visualisation for launch from customers and board members, similar to a final version (most refined 2D, 3D, CAD)		No. of Concession, Name	M	R				M	R	
	Rapid prototyping in proposition: Utilise rough and rapid prototyping to generate ideas and prepare some materials to configure a shape easily		The second	R	R	1000	M	M	R	R	
	Prototyping (mock-up) through iterations: While developing ideas, utilise a cheap and rapid form of prototyping in order to examine usability		100	R	м			M	R	M	
	Presentation prototyping (mock-up): Use most refined prototype (mock-up) to get opinions or approval for launch from customers and board members, similar to a final version		and a state	M	R				м	R	
	Prototyping for manufacturing: Almost exact product to help to manufacture structure of a brand.)				M	R					

Weak

Robust

Moderate

AP

Glossary (In alphabetical order)

Customer-centred (also referred to as user or human-centred):	Broader than 'consumers', a customer-centred approach considers the holistic experience of engagement with a brand – from initial awareness of a brand, through purchase, to use of product. It seeks to act as a driver to enhance the interactions between a brand and enterement the set three drivers are been been been been been been been be		people's responses to them. This is deemed to be useful to identify the sensory aspects of what corporations offer. Focus groups: engage small and targeted group of consumers in a discussion or observation about perceptions, opinions and attitudes
	customers at the real time of usage and purchase. The FMCG industry tend to limit themselves to the word 'consumers' who use goods in terms of developing a brand and product rather than 'customers' who have the ability to choose between different products and use them.		(behaviours) towards diverse forms of what a brand offers. It is widely conducted in the FMCG industry and marketing community due to the convenience of time and budgets but offen (mis)used in a conventional manner or for the sake of evidence for budget approval (permission to move forward to the next level). Hence, they need to be undertaken carefully, by providing the right stimuli;
Designerly thinking:	Ways of designers' thinking while undertaking a project (solving a problem).		so that they guide participants to provide unbiased opinions and insights within ideas generation and testing.
(designerly ways of thinking)	Abductive thinking: the process of forming an explanatory hypothesis to help to undertake projects (heuristic task). Iteration in a project: a cyclical process of assumption, testing and refining work, which is embodied in designerly characteristics		Context mapping: identifies the relationship and interactions between customers (consumers) and what a corporation provides, as well as stakeholders' involvement in a project. This can be translated into collective visualisation.
	along with abductive thinking. Intuitive thinking: using people's instinct without conscious reasoning. Visual thinking: drawing can simultaneously reveal both the functional and emotional characteristics of an idea.		Scenario building: hypothetical stories about the future whose their purpose is to make better decisions in the present; used to consider 'what if' situations; helps to make ideas more plausible by incorporating relatable context.
	Parallel thinking: a process where the focus is split into specific directions.	Living the brand:	All the employees in the organisation contribute to brand development, and the meaning of a developed brand needs to permeate the entire organisation as an organisational entity.
FMCG:	An abbreviation of 'fast moving consumer goods'. This is also used for (consumer) packaged goods. Theses goods are normally purchased at supermarkets and drug stores and range from cosmetics to household goods which are: used directly by the end-consumers, non-durable and sold in packaged form. Typical companies in this industry are Procter & Gamble, Unilever and Rekitt Benckiser.	Product development:	Given the nature of the FMCG industry, the term 'product development' mystifies people with regard to collaboration between corporations and consultancies. While FMCG corporations perceive this term as the development of the contents within the packaging, consultancies perceive it as the development of the structure of a pack (industrial design aspect). Hence, in the FMCG context and this paper, it is practicable to use the product
For ideas	Brainstorming: used to generate a large number of ideas that		development definition as the corporation's aspect.
facilitation:	question existing assumptions to break the status quo. Participants are encouraged to generate large number of ideas in a simple and quick manner: there should be no criticism of opinions, i.e. all ideas	Prototype:	A physical or virtual model to explore and test ideas through iteration (Best, 2006)
	are valid. Mind mapping: illustration to link words and ideas around a key word or theme. It allows the free flow of ideas and links sequent associations; ideas are clustered by possibilities and similarities. Post-it exploration (Sticky-note exploration): participants write ideas onto post-it and organise around identified or emerging		Rapid prototype: a tangible creation which manifest concepts through idea exploration and generation. Since this intends to translate abstract concepts into testable forms, it needs to be done quickly and roughly: there is no need for the content to be aesthetically pleasing. Rapid sketches: sometimes perceived as part of rapid prototyping. While rapid prototyping is close to 3-dimensional artefacts, rapid
	themes; a simple and quick way to visualise associations and relationships between emerging concepts by clustering ideas by possibility or similarity (Stickdorn & Schneider, 2011)	Silo:	sketching translates ideas into 2-dimensional form.
	Value chain analysis: understands the capabilities of suppliers and partners (manufacturers, external consultancies, etc.) so as to find enoretruinties and reduce mitches from development to	5101	integrate with related systems.
	find opportunities and reduce mistakes from development to launch, e.g. customer journey mapping which illustrates the process of a brand before presenting a final tangible form to customers	Touch points:	Contact points with the brand which customers encounter and experience through a brand, service, campaign, etc.
For the exploration and development of	Ethnography: is grounded in anthropology and the social sciences; it seeks to understand the behaviour of humans, organisations, processes, etc. When used in design, ethnography	Visualisation:	Helps to explicate abstract ideas by envisioning possibilities or communicating with clients. The information collected from research needs to be translated into a visual (tangible) form. Hence, there is a wide range of visualisation forms, from napkin sketches to final presentation visuals:
ideas:	helps to understand customers (consumers) behaviour in their natural environment rather than a formal setting; facilitates a deep understanding of humans, and can be used to inform the generation of ideas driven by customer understanding. Customer (Consumer) journey mapping: visually illustrates the		Visual stimulus: can be any types of images or artefacts which facilitate idea generation and exploration. Above all, presenting tangibles for discussion or research has a strong impact on proactive participants' responses, leading to better insights and for bidges.
	touch points where customers and users experience and interact with goods. Often used in conjunction with storytelling, this method can be undertaken to identify current customer touch points and develop the future touch points of a product, brand and		fresh ideas. Mood boards: uses images to represent the (initial) tone and voice of products or brands and the lifestyles of target groups by using a range of visuals, textures, etc. (Best, 2006).
	services. Persona(s): a made-up person who represents a centre-line view of a particular target user. Personas are archetypal users with specific goals and needs based on real market and design research.		Storyboard: a sequence of events used to illustrate current and future customer experience (e.g. within customer journey mapping) and deliver ideas for discussion (mostly used in advertising development).
	Spectre goods and understanding of whom the product Personas provide a common understanding of whom the product or service is being designed for. This understanding will prevent the project team from making decisions based on personal preferences and biases. For better results personas should be visually communicated (Roscam-Abbing, 2010).		Collective visualisation: a refined form which translates the information collected through research into concise visualisation. This data has a linchpin role to develop ideas and branch out to subsequent implementation tasks.
	Cultural probes: self-administered research technique led by participants where they document their experiences in a particular area of interest. Goods are given to participants for a prolonged period of time; they reflect on their lives and the usage of products and then this is interpreted to obtain intimate insights. Participant interviews follow. Semiotic analysis: semiotics is the study of signs. Semiotic	Switzerland: AVA Pu Stickdom, M., & S Amsterdam: BIS Pul	chneider, J. (2011). This is service design thinking: Basics - tools - cases.
	analysis (usually undertaken by semioticians) interprets a network of meanings for products, brands and services and the meaning of		