



LANCASTER UNIVERSITY MANAGEMENT SCHOOL
DEPARTMENT OF STRATEGY, ENTREPRENEURSHIP AND INNOVATION
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Toward a Process View of Resource
Orchestration: Social Capital and Qualitative
Study in Family Firm Innovation

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This Dissertation is Submitted in Partial Fulfilment of the Requirements for
the Degree of Doctor of Philosophy

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DECLARATION

I confirm that this thesis has been composed in its entirety by the candidate.

I confirm that this thesis has not been accepted in any previous application for a degree.

I confirm that all quotations have been distinguished by quotation marks and all sources of information utilised in this thesis have been acknowledged.

.....

Emanuela Rondi

December 2016

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ABSTRACT

This thesis explores how firms and organisational actors implement the resource orchestration process. Resources are deemed drivers of value creation and interest is growing in the actions that executives take to manage resources. However, empirical research in this area is limited to the analysis of organisational performance while the process of orchestrating resources over time is under-investigated. This thesis includes four theory-building articles and embraces a process thinking approach to provide a deeper and more nuanced understanding of the dynamics underlying resource orchestration.

The 18-month empirical investigation took place in a textile district in Northern Italy using ethnographic techniques and multiple-case studies to identify the patterns and processes that resource orchestration entails. Through specific qualitative techniques, the empirical inquiry generated data on the mechanisms that organisational actors employ in activating their social capital, reactivating latent ties and orchestrating resources. To analyse the resource orchestration phenomenon, 67 open-ended interviews were triangulated with 25 non-participatory observations and 500 archival documents.

The findings from this research make three significant contributions to the field of resource orchestration and social capital. First, the study demonstrates the potential of the process thinking approach to investigate a broad range of organisational phenomena involving change. Second, by developing social capital and resource orchestration process models, the thesis contributes to literature by providing more nuanced frameworks of the resource orchestration practices and processes. Finally, the study sheds light on the role of time in shaping relationships and the dynamics of latent ties. The results of this study may assist policy makers, practitioners and consultants in considering the critical impact of resource orchestration processes, social capital and the underlying temporal dynamics.

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1 INTRODUCTION

This dissertation explores the resource orchestration process with a particular focus on social capital. According to the resource-based theory, firms achieve and sustain competitive advantage through resources and capabilities (Barney, Ketchen, & Wright, 2011); resource orchestration extends the theory aiming at investigating the managerial actions through which organisational actors create value and achieve competitive advantage (Sirmon, Hitt, Ireland, & Gilbert, 2011). Among the resources that executives orchestrate, social capital consists in the goodwill and assets individuals access and mobilise through their social relations within their network of contacts (Bourdieu, 1986, Kwon & Adler, 2002). Although previous research investigates the contents of resource orchestration and social capital, this study provides a richer and deeper understanding of the underlying dynamics of orchestrating resources as relationships. Using extant literature as an informed platform, this study adopts a qualitative research approach to derive a thorough understanding of the processes that organisational actors implement in relation to resource orchestration. The research focus, the issues investigated, the empirical study and the methodological approach used to explore the identified issues enable this thesis to make a significant contribution to literature. As a collection of four theory-building research articles, it extends existing knowledge on resource orchestration processes and practices in family firms.

The main purpose of this introduction is to provide a full explanation and the rationale behind this study. However, the doctoral journey cannot be captured by a single snapshot *in time* as it consists of a process *over time*. Therefore, by embracing the process

view both as a researcher and in my research, in this section I also explore my doctoral journey as the process that took me from my early days as a newly graduated engineer through the complexities and frustrations of the research design, the fieldwork and the analyses, up to the satisfaction of finalising the first research output.

1.1 THE RATIONALE BEHIND THIS STUDY

This thesis specifically deals with the question *"How do firms and organisational actors implement the resource orchestration process?"* To deepen understanding of this process, the underlying mechanisms of social capital (process) are investigated to explore the link between organisational actors (agent) and the orchestrated resources (object) through innovation in family firms (context). The next section provides an overview of the relevant literature in the field and explains the need for this study.

1.1.1 Theoretical Overview

The importance of resources for firm performance has received increasing attention over the last decades (Wernerfelt, 1984). The resource-based view assumes firms drive value creation through developing competitive advantage (Ireland, Hitt, & Sirmon, 2003). Whilst value and resource scarcity are necessary but insufficient conditions for competitive advantage, when resources are simultaneously non-transferable, non-substitutable and inimitable, they can drive sustainable competitive advantage in the long term (Barney, 1991). Early resource-based view literature emphasised change over time according to a dynamic approach, yet subsequent literature has remained essentially static in concept (Priem & Butler, 2001). The resource-based view has matured and is acknowledged as one of the "most prominent and powerful theories for describing, explaining, and predicting organisational relationships" (Barney et al., 2011:1300). While extant studies mainly implement a descriptive approach to investigating the characteristics of resources, *how* questions on the processes that firms and managers implement to create value from their

resources and develop competitive advantage are investigated to a much lesser degree (Sirmon, Hitt, & Ireland, 2007). Two nascent literature streams have emerged in addressing this issue. First, the asset orchestration logic drawing on the dynamic capabilities construct¹ (Adner & Helfat, 2003) assumes two phases in orchestrating firm assets (search/selection and configuration/deployment) (Helfat, Finkelstein, Mitchell, Peteraf, Singh, Teece, & Winter, 2007). Second, the resource management framework investigates the managerial actions involved in creating competitive advantage (Sirmon et al., 2007) by distinguishing the structuring, bundling and leveraging phases of value creation (Sirmon, Gove, & Hitt, 2007).

These two research streams indicate the potential of investigating managerial actions to extend the resource-based view. By comparing and integrating these, scholars have developed the concept of *resource orchestration* for a deeper understanding of the role of managers in a resource-based perspective (Sirmon et al., 2011). Resource orchestration tends to be empirically investigated according to the firm's "breadth" as scope (Wright, Clarysse, & Mosey, 2012), "lifecycle" as stage of maturity (e.g., Carnes, Chirico, Hitt, Huh, & Pisano, 2016) and "depth" as hierarchical firm levels (Chadwick, Super, & Kwon, 2015). Despite these initial efforts in investigating the resource orchestration dynamics, the empirical studies conducted thus far tend to be quantitative, missing the opportunity to grasp the nuances of the underlying processes and practices that managers implement in orchestrating resources. Among the suggested research avenues to further investigate the orchestration process, social capital has emerged as a promising

¹ "Higher-level competencies that determine the firm's ability to integrate, build, and reconfigure internal and external resources/competences to address, and possibly shape, rapidly changing business environments" (Teece, 2012:1395)

means of identifying the actions that managers take to implement their strategies (Sirmon et al., 2011).

Social capital is the value embedded in the social relationships of individuals or collectives (Adler & Kwon, 2002; Payne, Moore, Griffis, & Autry, 2011; Kwon & Adler, 2014) and is defined as “the sum of actual and potential resources embedded within, available through, and derived from the network of relationships possessed by individuals or social units. Social capital thus comprises both the network and the assets that may be mobilised through that network” (Nahapiet & Ghoshal, 1998:243). The evolution of social capital as a research field has been enriched by the empirical and theoretical efforts deployed in understanding the sources, benefits, risks and contingencies of organisational and social relationships in a wide range of social science disciplines (Adler & Kwon, 2002). In recent years, social capital research has developed and evolved (Inkpen & Tsang, 2016) focusing on its effects on organisational performance (Shaw, Duffy, Johnson, & Lockhart, 2005; Tortoriello & Krackhardt, 2010), the dark side (or downside) (Villena, Revilla, & Choi, 2011) and contingency factors influencing its development (Stam, Arzlanian, & Elfring, 2014).

Scholars distinguish between the content and process perspectives of social capital (Arregle, Hitt, Sirmon, & Very, 2007). Research on content investigates the antecedents and outcomes of social capital (Shuller, 2007) largely grounded in the structural, relational and cognitive dimensions (Nahapiet & Goshal, 1998). The process perspective on social capital is more dynamic, exploring the role of time, interaction, interdependence and closure on shaping the creation and development of social capital (Naphiet & Goshal, 1998). Research has focused more on the content than the processes of social capital, and remaining a major challenge for organisational actors is how to orchestrate relationships to realise the social capital benefits (Srivastava, 2012).

Increasingly, literature adopts the process view to understand social capital, academic interest needs to focus on examining the temporal dynamics of organisational actors (Kwon & Adler, 2014). Although the process perspective is increasingly gaining attention, it has yet to be fully embraced in empirical investigations on resource orchestration in general and social capital in particular. Process thinking consists of a vessel to explore how managerial and organisational phenomena emerge and unfold over time (Langley, Smallman, Tsoukas, & Van de Ven, 2013). By involving temporal progressions of activities, process research recognises the centrality of time and offers an essential contribution to developing “evidence-based” management knowledge (Pfeffer & Sutton, 2006). To ensure credibility and reliability, research at the micro level requires the combination of prolonged engagement with deep reflexivity and analytical rigour (Gioia, Corley, & Hamilton, 2013). The temporally bracketing phenomenon of investigation enables identifying the theoretical mechanisms recurring over time (Van de Ven, 1992). In fact, scholars underline the significant opportunities the process view offers in addressing organisational concerns at the individual level. Qualitative and ethnographic methodologies are prominent in shedding light on the nuances of organisational processes, moving beyond the description of situations to unravel the underlying logics and develop theoretical interpretations (Langley et al., 2013).

1.2 REFLECTION ON THE DOCTORAL JOURNEY AS AN INTELLECTUAL CHALLENGE

To explain how the theoretical research problems were conceptually and empirically addressed, I provide an overview of my doctoral journey (Figure 1). This section illustrates the actions and reflections undertaken in developing the research outcomes as well as their relevance to my dissertation.

In October 2013, I was accepted for the doctoral programme in management and in November 2013 started the first year courses. These were oriented to the “upstream” conditions associated with the production of scientific knowledge and the “downstream” effects of such knowledge. At the beginning, my engineering background naturally steered me towards quantitative methods based on statistics and numerical data, and hence my perception of their greater reliability. However, I approached the courses on qualitative methods with curiosity and suddenly understood the relevance of approaches able to capture not just the “what” but delve into the “how” and “why” of organisational phenomena. I came to appreciate the power of qualitative methods in exploring the nuances of phenomena by engaging in conversations and observing organisational actors in their activities. Throughout the doctoral programme, the dilemma between my qualitative and quantitative tendencies often emerged as a constructive dialectic that helped me reflect on the validity of the research and the reliability of my findings.

From autumn to spring, I attended the "Central Perspectives and Themes in Family Business Research" PhD course at the Jonkoping International Business School with Professor Matthias Nordqvist, Professor Leif Melin and Professor Dawn DeTienne (Colorado State University). The doctoral course aimed to provide an overview of theories and issues in family business research and train students to act as critical, independent and reflective researchers. The course was the first opportunity to meet scholars and colleagues in the field and present and discuss my research proposal. Each attendee was asked to focus on a particular theory and to present a short paper analysing the relevance of the theory to address current or new themes in family business research.

The assignment encouraged me to reflect on the relationship between process thinking and family business. By critically reviewing the literature, I analysed past research adopting the process view in family business studies and identified potential avenues for

future research where the process perspective may contribute to investigating the family business phenomena over time. The multi-generational time horizon of family firms is a unique context for building and testing time-related theories. Moreover, the combination of the retrospective (e.g., family history and culture) and prospective temporal aspects (e.g., passing the business to subsequent generations) strongly influences family firm behaviours (Le Breton-Miller & Miller, 2014). Adopting process thinking thus seemed a promising approach to shedding light on the dynamics underlying family firms. This reflection was further developed into a full chapter presented in this thesis as PAPER A “Process Thinking and the Family Business”. After three rounds of peer reviews, the chapter was published in “Theoretical Perspectives on Family Businesses”, a book edited by Nordqvist, Melin, Waldkrich, & Kumeto (2015).

Meanwhile, I became involved in the Knowledge Exchange and Research Group of the Wave 2 Growth Hub (W2GH) programme that sponsored my doctoral research.

“As an early initiative in the devolution and local growth agenda the £32m W2GH Programme was funded through the Regional Growth Fund (RGF) and was developed by the [Lancaster] University in collaboration with the Cabinet Office, the Department for Business, Innovation and Skills (BIS), British Chambers of Commerce, BIS Local and the Department of Communities and Local Government (DCLG)” (W2GH Programme, Interim Report, 2016).

The aim of the programme is to boost economic growth in some of England’s fastest growing cities by generating 15 new ‘Growth Hubs’ to create over 4,000 new private sector jobs by 2017. Each hub created support packages for local businesses (grants, vouchers, skills development and mentoring) and provided coordinated access to national and local business packages. Overall, the programme supports over 67,000 small-and medium-sized enterprises. Due to its recognised ability to translate world-class research into programmes with proven economic effects, Lancaster University assumed the role as the Growth Hubs’

network enabler through two entities: the Programme Secretariat (providing comprehensive guidance to cities in relation to programme eligibility) and the Knowledge Exchange and Research Group (leading the strategic direction of the programme). In August 2015, the W2GH programme won the prestigious Academy of Management (AOM) Runner-up Practice Research Centre Award in recognition of the programme's outstanding contribution and impact on society and the economy. Moreover, in February 2016, the Association to Advance Collegiate Schools of Business (AACSB) selected the programme for its 'Innovations That Inspire' initiative.

As for the actions and reflections that contributed to the research journey, participating in the Knowledge Exchange and Research Group provided me with the opportunity to engage in events and conversations with numerous businesses and policymakers throughout the UK. As a learning experience, I collaborated with senior scholars and observed how they managed the complexities of a research programme involving numerous and heterogeneous institutions throughout the two-year period. Involvement in the W2GH programme deepened my interest in the connections of firms with institutions, clarifying their relevance in boosting organisational performance and growth. This observed phenomenon triggered my interest in understanding the theoretical debates on the role of social capital and the underlying processes. By critically reviewing the literature from a process perspective, I identified a gap in investigating processes and began reasoning on the temporal dynamics of relationships and their role in orchestrating resources by accessing and mobilising social capital. The outcome of this reflection resulted in PAPER B "Toward a Process Model of Social Capital Actuation: Integrating Cognitive, Emotional and Temporal Lenses".

During the summer term, I participated in a research project sponsored by the Institute for Family Business (IFB) led by Professor Joseph Astrachan (Kennesaw State

University, GA) and Dr. Claudia Binz Astrachan (University of Lucerne, CH) in collaboration with the University of Strathclyde (UK) and Lancaster University's Centre for Family Business. As a member of this team, I was appointed to conduct open-ended interviews and transcripts of family firm members on the topic of branding. The study aimed to investigate how and under what circumstances family firms benefit from promoting the fact that they are family-owned and some of the key issues they should consider in doing so. The IFB research experience was a great opportunity for me to familiarise myself with qualitative methods and learn how to manage the interview process. I conducted 11 interviews with 5 family firms across the UK including renowned firms such as Warburtons (baking industry) and the Wates Group (construction industry). The output of this research was a report presented at the annual IFB meeting in London. This project allowed me to interact and collaborate with eminent scholars in the family business field, learn how to participate in a research project involving actors from different continents and build my social network. In terms of the contribution to this thesis, my first interactions with qualitative methods and data collection led towards a preference for ethnographic techniques and multiple-case studies, triangulating multiple data types and sources as a method of inquiry.

At the beginning of the second year, I selected the empirical context to conduct my data collection in line with the elected methodology and qualitative techniques, the industrial experience and the contacts with organisational actors I had before embarking on this study. I decided to focus on a single geographic area (Northern Italy) and industry (textile) to narrow the context and focus on the relevant processes². The intensive data

² The research project was reviewed and approved by members of the Faculty of Arts and Social Sciences and the Lancaster Management School Research Ethics Committee according to the forms in the Appendix (Reference Number RS2014-45).

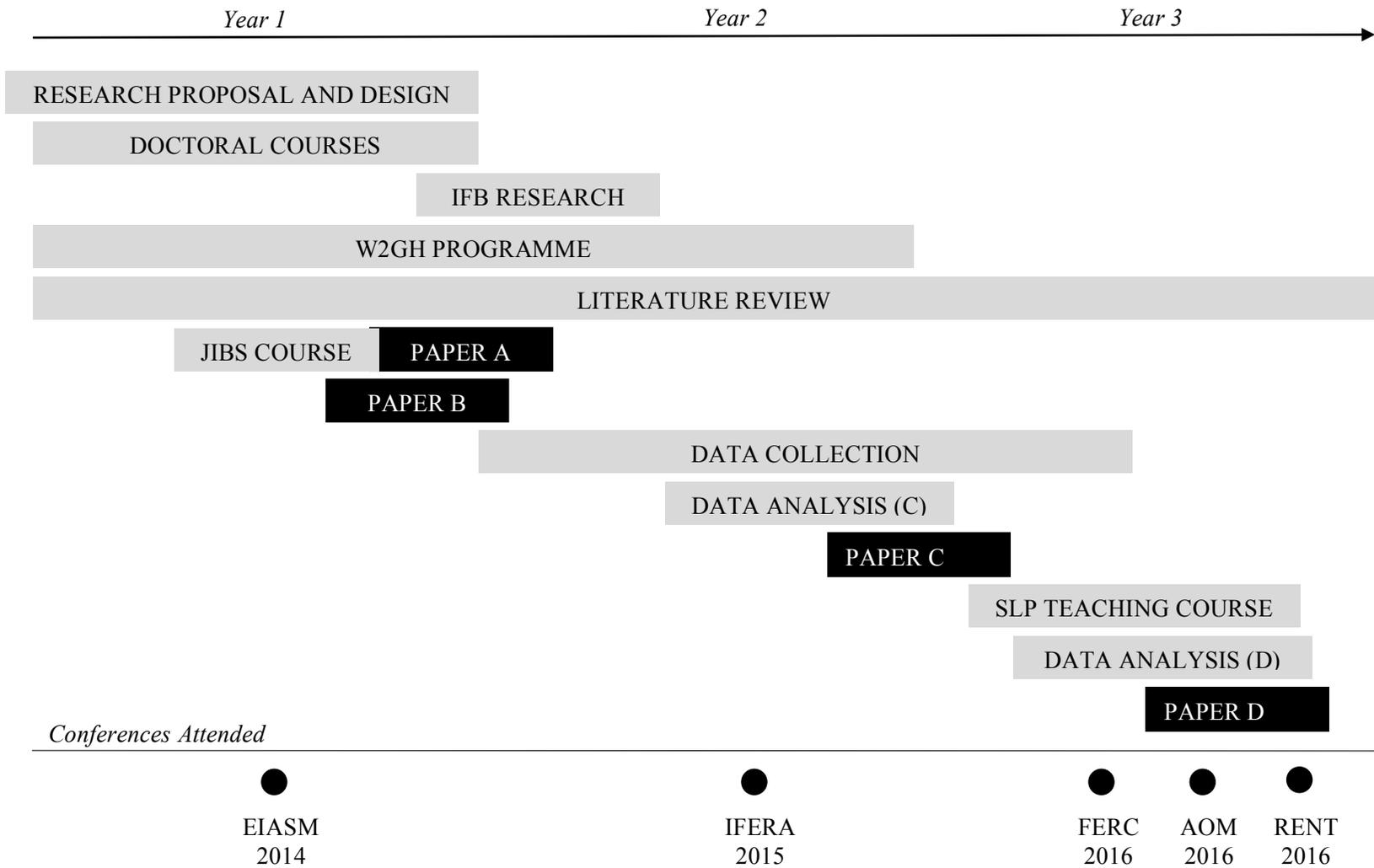
collection included open-ended interviews, non-participatory observations and reviewing archival documents. To develop PAPER C “Somebody that I Used to Know”: A Process Model of Latent Ties’ Reactivation”, I analysed the data focusing on the temporal perspective of social capital. More specifically, I investigated the dynamics of reactivating latent ties – past relationships that had been active and then suspended (Mariotti & Delbridge, 2013) – in the context of family firm innovation. Meanwhile, the data analysis conducted to develop the first empirical investigation generated further research questions on the practices adopted in the organisation to orchestrate a wider range of resources beyond social capital. I consequently employed a multiple-case study methodology in the same empirical setting and thereby identified and analysed eight cases in relation to resource orchestration processes and practices. This research resulted in PAPER D “Toward a Process Approach of Orchestrating Resources in New Product Development”. By adopting a temporal perspective, I developed a more nuanced framework of how organisational actors implement resource orchestration practices in new product development to drive value creation from a competitive advantage.

The last year of the doctoral programme was dedicated to advancing the research and developing my teaching skills. I started the Supportive Learning Programme designed to provide a framework for academics delivering learning opportunities by developing practical teaching and wider academic skills through exploring and critically reflecting on the teaching and learning experience in higher education. The activities and reflections developed are summarised in the “Portfolio” in Chapter 6 of this thesis³. This experience helped me become a better critical thinker, particularly with regard to the transition from

³ After 10 months, I completed the accredited programme that led to a SEDA Supporting Learning Award and entitlement to register as Associate of the Higher Education Academy - the HE sector's professional body for teaching and learning.

learner to teacher. This deep reasoning helped me understand my evolution from a mere knowledge user as a student to the interwoven articulation of knowledge use and creation I aim to develop as a researcher. Throughout the three years of the doctoral programme, I had the opportunity to present my research at international conferences. The insightful feedback I received enabled me to improve the articles included in this thesis. Furthermore, the conference experiences were crucial to building my network of relationships in the field and exchange ideas for future research projects with national and international scholars.

FIGURE 1 - Doctoral Journey: Process



1.3 RESEARCH METHODOLOGY

The link between data and theory is an issue that philosophers have discussed for many centuries, debating research ontology, epistemology and methodology (Easterby-Smith, Thoep, & Jackson, 2012). Ontology relates to the nature of reality and existence to study the essence of phenomena (Gill & Johnson, 1997). The philosophical concept of epistemology refers to the theory of knowledge and how we develop knowledge of the external world (Abercrombie, Hill, & Turner, 1984). The methodology consists of a combination of methods and techniques to inquire into a particular situation (Easterby-Smith et al., 2012). Easterby-Smith, Thorpe, & Jackson (2012) discuss the ontological paradigms adopted in social science and Table 1 summarises the main assumptions.

TABLE 1 - Key Features of Ontological Perspectives (Adapted from Easterby-Smith et al., 2012)

Ontologies	Realism	Internal Realism	Relativism	Nominalism
Truth	Single Truth	Truth exists but is obscure	There are many truths	There is no truth
Facts	Facts exist and can be revealed	Facts are concrete but cannot be accessed directly	Facts depend on the observer's viewpoint	Facts are all human creations

Ontologies imply two main epistemological assumptions: positivism and social constructionism. Table 2 provides a description of the two positions and key features.

TABLE 2 - Contrasting Implications of Positivism and Social Constructionism (Adapted from Easterby-Smith et al., 2012)

Epistemology	Positivism	Social Constructionism
The observer	Must be independent	Part of what is being observed
Human Interests	Should be irrelevant	The main drivers of science
Explanations	Must demonstrate causality	Aim to increase general understanding of the situation
Research progresses through	Hypotheses and deductions	Gathering rich data from which ideas are induced
Concepts	Need to be defined so that they can be measured	Should incorporate stakeholder perspectives
Units of analysis	Should be reduced to the simplest terms	May include the complexity of whole situations
Generalisation through	Statistical probability	Theoretical abstractions
Sampling Requires	Large numbers selected randomly	Small numbers of cases chosen for specific reasons

Furthermore, Easterby-Smith et al. (2012) provide a rigorous framework that interlocks the ontological and epistemological assumptions with the related methodology.

TABLE 3 - Methodological Implications of Different Epistemologies (Adapted from Easterby-Smith et al., 2012)

Ontologies	Realism	Internal Realism	Relativism	Nominalism
Epistemology	Strong Positivism	Positivism	Constructionism	Strong Constructionism
Aims	Discovery	Exposure	Convergence	Invention
Starting points	Hypotheses	Propositions	Questions	Critique
Designs	Experiment	Large surveys, multi-cases	Cases and surveys	Engagement and reflexivity
Data types	Numbers and facts	Numbers and words	Word and numbers	Discourse and experiences
Analysis/ interpretation	Verification/ falsification	Correlation and regression	Triangulation and comparison	Sense-making, understanding
Outcomes	Confirmation of theories	Theory testing and generation	Theory generation	New insights and actions

Despite the categorisation, all approaches to social science are based on interrelated sets of assumptions regarding ontology, human nature and epistemology (Burrell & Morgan, 1979). Understanding philosophical issues is crucial to researchers, since this helps clarify the research configuration, the suitable research design and even create a design that is outside their experience (Easterby-Smith, Thorpe, & Jackson, 2012).

The focus of this study is to explore how actors and firms implement resource orchestration processes with the aim of investigating the underlying mechanisms and generate process models in relation to the orchestration dynamics. Concerning the theoretical perspective, this study is grounded in process thinking. An in-depth discussion of process thinking ontology, epistemology, methodology and relevant methods is developed in PAPER A “Process Thinking and the Family Business”. I here illustrate the evolution of the ontological and epistemological perspectives I embraced as a researcher.

At the beginning of the doctoral programme, my engineering background steered me towards positivistic ontology and particularly the structured framework of Easterby-

Smith et al. (2012) drove me to define the epistemological assumptions and methodological approach of my research design. According to my approach to nature and the existence of reality, I should have to investigate the hypotheses and propositions mainly through numbers. However, in further exploring social capital literature in PAPER B “Toward a Process Model of Social Capital Actuation: Integrating Cognitive, Emotional and Temporal Lenses”, I recognised the virtues of qualitative methods enabling nuanced fieldwork and broadening the empirical setting. I thus faced the dilemma of constancy with my background (more realistic) and exploring a new perspective (more relativistic) in research design.

In refining the research questions, I intended to empirically investigate, I relied on process thinking and the related methodology, which enabled me solve the dilemma. Process thinking is grounded in constructivism and assumes realist ontology and relativist epistemology (Mir & Watson, 2000). In the last decades, researchers have highlighted the potential of constructivism as a methodology for strategy research (Spender, 1996). Distancing from the positivist notion of the researcher as a detached subject investigating phenomena as objects, constructivism considers the researcher as an actor embedded in a network that creates knowledge and guides practice (Mir & Watson, 2000). As actors, researchers play a role in the community of practice, sharing assumptions and conversations to develop a better understanding of the theories and stories of the field. In terms of the epistemological assumptions, constructivism is non-positivist, since rules and principles do not exist independently of the related theorisation developed. The roots of constructivism go back to Socrates and his conception of knowledge as perception. More recently, Thomas Kuhn (1970) provided the roots for modern constructivist research proceeding through the powers of paradigms and the “characteristic set of beliefs and perceptions” held by a discipline (Kuhn, 1970:12). Constructivism considers research as

an act of sculpting that combines an artist's imagination (theory-base) with the phenomena investigated to create knowledge.

In the empirical investigation, the choice of method led me to ethnographic techniques. Ethnographic research allows qualitative researchers to get "inside the minds" of the informants to be studied, aiming at understanding the values, meanings, motivations and logics that govern their actions (Curran & Blackburn. 2001:113). Observations in particular settings are the basis of ethnographic research (Silverman, 2000) according to "naturalist modes of inquiry" (Gill & Johnson, 1997:96). Ethnographic techniques aim to understand the way people behave (Easterby-Smith et al., 2012) and therefore require the researcher to immerse him/herself in a setting for a period of time and participate in the group under study. Observations and semi-structured interviews prevail as data collection techniques and methods (Gill and Johnson, 1997). Using constructivism, process thinking and ethnographic techniques, I implemented the empirical inquiry at the base of PAPER C "Somebody that I used to know": A Process Model of Latent Ties Reactivation".

Thereafter, the definition of a broader research question investigating the underlying processes of resource orchestration led me to a multiple-case study, drawing on Eisenhardt (1989) and Eisenhardt & Graebner's (2007) methodological suggestions. Easterby-Smith et al. (2012) define Eisenhardt's epistemology as an intermediate point between positivism and constructionism. A case study consists in understanding the dynamics in a single setting, involving one or multiple cases and different levels of analysis (Yin, 2013), typically combining data collection methods including archives, interviews and observations to develop a new theory (Eisenhardt, 1989). Providing eclectic advice on the methodology, Eisenhardt (1989) suggests a roadmap to implement case studies according to a replication logic and conducting both within and cross-case analyses. Following Eisenhardt's recommendations, I selected 8 of the firms investigated with

ethnographic techniques in the previous study to further analyse these cases in relation to the research question.

The transition from ethnographic techniques to a multiple-case study relates to the change in the unit of analysis from individual actor's reactivation of latent ties to processes that firms and practices that actors implement in orchestrating resources. Ethnographic techniques and multiple-case study methods are consistent with the ontological and epistemological assumptions of process thinking in delving into the organisational dynamics. Further details on the selection of the empirical setting, the data collection and the analysis are provided in the next section.

1.4 EMPIRICAL SETTING AND DATA COLLECTION

1.4.1 Background

I come from Northern Italy, more specifically, from the second most important industrial province in Europe: Bergamo. With 9.7 billion value added and 156 thousand employees, the key drivers of outstanding performance are entrepreneurial spirit, product and service quality, and strong specialisation in innovative manufacturing (Fortis, Galizzi, & Realacci, 2015). I grew up in a family engaged in the textile industry. During high school and as an undergraduate, I served two internships with textile firms in the province. Through these experiences, I learned the relevant terminology, the basics of the manufacturing processes and met some of the key actors in the local business network. These preliminary experiences in the textile industry increased my understanding of the relevance of tacit knowledge, and even more importantly, the need to know the right people to contact. This sparked my interest in investigating the dynamics of social capital and led me to this empirical setting. As previously mentioned, ethnographic techniques require the researcher to become immersed in the locality for a period of time (Easterby-Smith et al., 2012). My personal embeddedness in the

environment, which proved an ideal setting to implement the methodology in question, granted me a level of access that enabled overcoming the potential issue of gaining certain insights that other organisations would not have been able to provide (Siggelkov, 2007).

1.4.2 Empirical Setting

The textile district of Bergamo has historical roots dating back to the 19th century when after World War II the downturn pushed families to start small textile businesses. These family firms have been resilient throughout the economic crisis and many have been handed down across generations (Tinaglia & Gandola, 2015). In the 70s, the labour intensive production required high employment with over 40,000 operators in the sector. The increasing cost of labour together with competition from emerging economies rendered mass production unprofitable with the consequent crisis of the Italian textile industry (Alberti, 2006). This turning point led the surviving firms to either delocalise abroad to lower labour cost markets or to boost innovation to develop products and processes targeting high-quality market niches. Today, the sector accounts for under 7,000 employees and the remaining firms, almost all family owned and managed, maintain the entire value chain (from fibre to final products) within the district (Tinaglia & Gandola, 2015). However, the production process is fragmented across many small and medium size firms, rendering inter-firm interactions and relationships important.

The textile firms in the region participate in local, national and international business networks (e.g., Confindustria, SMI-ATI, Tex Club Tec, EURATEX) primarily to coordinate and synergise innovation projects. The products and processes range from fashionable garments for *haute couture* designers and technical fabrics for industrial applications. By leveraging on their creative and technical skills, these firms try to differentiate from low-cost markets by developing high quality and innovative products.

1.4.3 Data Collection

The empirical data collection began with the introduction of the research project to the textile division of the local business association of manufacturers in March 2014 at a social event. I was invited to present the research, which legitimised my presence at the meeting. Moreover, the high reputation of Lancaster University enabled me to begin the study with some initial interviews with close family members in the area. However, I soon realised that relying on only a few cases to investigate the dynamics of social capital would limit my study. For this reason, I moved from a case-based focus to a more nuanced approach that embraced the textile district as a whole as well as key actors in firms and institutions. This transition was enabled by leveraging on my link with the local university that granted access to further businesses for observations and interviews. Throughout the data collection process, I regularly attended local business association meetings (once per month) to observe executives, verify the inclusion of textile businesses and recruit new informants. This continuity helped me build trust with business members and contributed to understanding the underlying orchestrating and social capital processes.

During the initial interviews and social events, I realised that exhibitions play a crucial role in building/re-activating social capital and presenting innovations to the public. I therefore attended the two most important international exhibitions held in Northern Italy where I met existing and new informants. In addition to local business associations, the firms belong to national and international textile business networks (e.g., Sistema Moda Italia, Euratex) and I participated in the annual meetings and conferences to observe the interactions among the actors and the reactivation of latent ties.

The data collection was conducted from March 2015 to August 2016. After a preliminary reflection on the cases investigated, the first round of data was collected according to ethnographic techniques (Golden-Biddle & Locke, 1993) to investigate the

dynamics of latent ties in innovation. To select the firms, I began from a list of firms subscribing to the local textile business association. I emailed family firm members to present the research project and requested an interview. This endeavour led to 14 firms agreeing to be involved in the project. I triangulated 67 open-ended interviews with over 25 non-participatory observations and gathered almost 500 archival documents as summarised in Table 1. Here below follows a brief description of the type of data triangulated.

Archival search. To familiarise myself with the textile context and the individual firms, I used archival documents both before and after the interviews to understand the firm characteristics and the themes emerging from the interviews. The archival documents were collected first through a press review using keywords⁴ and searching for articles from January 2010 until March 2015. A second press review took place in June 2016. Moreover, I reviewed company and business network websites and downloaded the available documents.

During the interviews, I asked informants about their firms in general and innovation projects in particular. In addition, I collected documents and product innovation artefacts, such as samples of yarns, fabrics and garments. In autumn 2015, the local textile business network sponsored the development of a monograph collecting interviews from textile firms in the district (Tinaglia & Gandola, 2015). The secondary interviews proved insightful for data triangulation. Finally, the financial data of the investigated firms were collected from the AIDA⁵ database for performance and investment information.

⁴ The keywords used for the press review related to the textile district, business associations (local national and international) and names of textile companies in the district.

⁵ AIDA is a private database of Bureau Van Dijk providing accounting and ownership information on around 130,000 Italian firms.

Interviews. I interviewed three categories of actors: company members, institutional actors and key suppliers. The primary source of data consisted in face-to-face interviews (except one via Skype™) conducted in the informant's mother tongue (the majority in Italian, some in English and French). The interviews were recorded and transcribed verbatim, and some transcripts were discussed with informants for verification. First, I conducted 57 interviews with 47 organisational actors lasting between 30 minutes to 3 hours with a total duration of around 80 hours. The majority of the actors interviewed were family firm members and delegates in the local business associations. Some of the informants were leaders of local, national or international business associations. Second, I conducted 5 interviews with 4 institutional actors to foster internal validity, since the institutional perspective is insightful in understanding the type and level of support required from these key actors as well as the industry trends. These interviews lasted from 1 to 2 hours with a total length of around 6 hours. Third, to understand the industry dynamics and the role of relationships outside the district, I interviewed 5 key partners, selected according to the interviews conducted. These interviews lasted from 20 minutes to 1.5 hours, 4 hours in total.

Observations. Business meetings, business network gatherings, social events, workshops, conferences and exhibitions constituted the primary sources of non-participatory observations. This type of data is crucial to understand the insider perspective and directly observe actors orchestrating resources. The observations were audio-recorded and transcribed together with field notes, photos and onsite videos.

1.4.4 Data Analysis

Ordering data and constructing interpretations in qualitative research is more difficult compared to quantitative research (Curran & Blackburn, 2001). I reflected on and analysed the data throughout the collection process to refine the focus of investigation and

narrow and deepen the empirical inquiry. Although my perspective embedded in my own province was crucial for data collection, this was complemented by a subsequent analysis conducted at Lancaster University. A large amount of the data collected had to be sorted to be analysed and distance from the setting enabled discriminating between useful data and interesting stories. The cultural and geographical distance from the field allowed me to develop a critical reflection on the assumptions that I would not have considered had this phase been conducted in the same environment as the empirical setting. I searched the interview transcripts, field notes, observations and archival documents for information relevant to addressing the research questions of each study that overall constitute the main research question of this thesis. The raw data were written up first as ethnographic accounts and then as case studies, thereafter analysed and coded to determine the categories, patterns and processes (Saldana, 2012; Miles, Huberman, & Saldana, 2014). Further details on the empirical inquiry are provided in the methodology sections of the articles in this thesis.

TABLE 2 - Data Collected

Type of Data	Data source	Number	Description
<i>Archival data</i>			
	Company-related press	181	Articles in local, national and international newspapers about the textile district and companies within it (the documents relate not only to the companies interviewed but also to others for an overall picture).
	Company financial statement	14	2014 balance sheets and financial data provided by AIDA - Bureau Van Dijk.
	Company-related reports	53	Books, brochures and other documents directly produced by the companies and relating to their stories, growth and core activities.
	Business associations' reports	84	Early accounts of textile trends at the local, national and European level developed by the main textile business associations (e.g., EURATEX, SMI-ATI, Tex Club Tec and CELC)
	Industry's reports	150	Documents produced by consultancies or observatories on the textile industry depicting macro and micro-trends. Articles from local, national and international newspapers on the trends of the textile industry in the world.
<i>Interviews</i>			
	Semi-structured interviews	67 (90 hours, 1,800 pages of transcripts)	57 interviews with organisational actors in textile companies. 5 interviews with 4 actors in the district in different roles at the institutional level.
	Informal conversations	>60	5 interviews with 6 key raw material and textile machinery suppliers to understand the preliminary phases of the supply chain outside the district. Informal talks with employees, institutional actors, customers and suppliers in the Bergamo textile district, ranging from longer talks to brief exchanges. These conversations took place before and after meetings or during exhibitions and conferences.
<i>Observations</i>			
	District textile business association meetings	10 (35 hours)	Non-participatory observation of events, local business associations' board and periodic meetings.
	Conferences, events and workshops	9 (40 hours, 150 pages of transcripts)	Non-participatory observations of meetings organised by local institutions and textile associations (audio-recorded and verbatim transcribed)
	Commercial Meetings	7 (100 pages of transcripts)	Non-participatory observation of commercial meetings between sale managers and customers, innovation managers and external partners.
	Exhibitions	2 (7 full days)	Participation in leading textile industry fairs: <i>ITMA – International Textile Market Association</i> (Milan, 12-19 November 2015). <i>FILLO – International Yarns Exhibition</i> (Milan, 29 September-1 October 2015).
	Plant visits	10	Attending production process clarification (audio-recorded and verbatim transcribed).
	Photos and videos	118	Photos of products, machinery and projects.

1.5 THESIS OVERVIEW

After explaining the rationale for the focus of this work, how it fits with existing knowledge and the journey that led to its development, the following provides an overview of the thesis with a concise illustration of the theoretical and methodological approach, the issues explored, the key findings and the intended contributions. Figure 2 offers an overview of the overall framework of the thesis. Figure 3 describes the development of the articles and the pattern of the thesis evolution. Table 5 summarises the key points of each article and information on the status.

1.5.1 Research Positioning

This thesis is underpinned by an extensive review of three broad, but diverse literature streams to develop a strong and rigorous understanding of the area under investigation: resource orchestration, social capital and process thinking. This enables acknowledging the breadth and depth of academic interest in each of these areas and constitutes the foundations of pre-understanding. The deconstruction of various views from literature was instrumental to identifying the key elements that constitute the relationships among the fields investigated and the subsequent synthesis. Comparing and contrasting patterns in literature allows identifying the real essence and develop informed understanding. The literature review led to empirically investigating the development of the relevant issues and the related research questions.

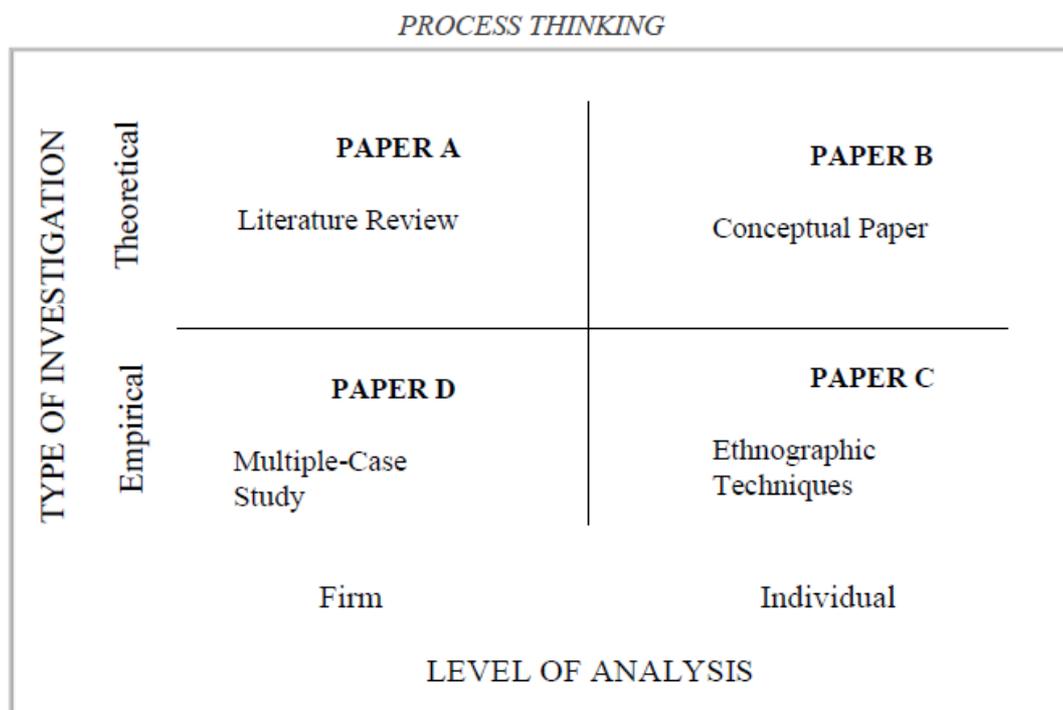
The literature review elicited my interest in process thinking as an insightful approach to investigating a wide range of organisational issues. Furthermore, the W2GH Programme catalysed my interest in connections among firms and the role of social capital in boosting organisational performance by recognising, accessing and mobilising resources in a wide range of phenomena such as innovation and alliances. I thus began to focus my main research question towards the “how” and the underlying processes. This dissertation

lies at the intersection between process theory and resource orchestration, with particular attention to social capital. In addressing this niche, I investigate the following research question "How do firms and organisational actors implement the resource orchestration process?" My commitment to contribute to both theory and practice defined my focus on the innovation process as the organisational context to investigate resource orchestration processes and practices and thus social capital.

1.5.2 Thesis Structure and Research Issues Explored

This thesis is composed of four articles, as shown in Figure 2. The framework underpins the coherence of the overall rationale as well as the nuanced approaches adopted. The heterogeneity of the inquiry provided different perspectives to address the research question and enabled developing thorough contributions to both theory and practice.

FIGURE 2 - Thesis Structure: The framework of the Four Articles



The main research question "*How do firms and organisational actors implement the resource orchestration processes?*" is distilled into four distinct research questions.

Figure 3 shows the evolution of the research journey, the issues, research questions and related outputs. PAPER A “Process Thinking and the Family Business” explores process thinking ontology and epistemology as suitable methodological approaches in family business research. This article (book chapter) analyses the process thinking and sense-making potential in family business research to investigate "how" questions in relation to organisational phenomena. In fact, family firms constitute an idiosyncratic context to implementing process studies due to the relevance of time and the link between the past, present and future. The article offers contributions to theory and practice. First, in providing an overview of process thinking and the related research methodology, it offers family business research the opportunity of “giving back” to sister disciplines by analysing practices over time. Second, by presenting a range of available methods and critically reviewing the literature, the article stimulates further interest and research in organisational processes and the underlying dynamics. The two theoretical contributions lead to practice-oriented knowledge and consequent managerial implications.

From the in-depth analysis of process thinking, I started exploring organisational issues to observe through this perspective. Social capital prompted my focus on the analysis of the practices of organisational actors. PAPER B “Toward a Process Model of Social Capital Actuation: Integrating Cognitive, Emotional and Temporal Lens” conceptually examines social capital actuation, conceived as the process that involves the potentiality, activation and mobilisation phases through which an individual selects and accesses available resources through his/her social network. This research project entailed a thorough literature review from which two main issues emerged. First, social capital is largely explored according to variance theory while process investigation is generally lacking. Second, the scant integration of the social capital and social network research fields neglects the actuation mechanisms. The temporal perspective grounded in process

thinking and using emotional and cognitive lenses led to developing a framework of social capital perception. Moreover, the adoption of a temporal perspective of the actors' practices enabled developing a process model of social capital actuation. The study contributes to social capital theory by first providing a refined definition that opens the black box of the link between social relationships and available resources. Second, the study investigates the misperception of social capital and related consequences. Third, the process perspective in exploring social capital highlights both its situational and temporal dynamism. While the perception of social capital changes according to the situation that triggers individuals to scan their network and select whom to activate, it is also influenced by the time that elapsed from the last interaction and the tie's decay. Regarding the managerial implications, the social capital actuation model sheds lights on the actuating (active) and actuated (passive) roles that organisational actors may play in the process. The social capital mechanisms enable understanding the underlying foundations as well as the potential levers that can be adopted to influence others' social capital perception.

The conceptual investigation of social capital actuation prompted my interest in the temporal dynamics of relationships and how time exerts an active role on ties. Controversial findings emerge from literature on the role that time exerts on relationships. On the one hand, time has a negative influence on relationships, causing them to wither and decay. On the other hand, a growing body of research has begun to analyse the resilient value of latent ties or relationships that have been suspended for a long time. PAPER C "Somebody that I used to know": A Process Model of Latent Ties' Reactivation" delves into how individual perceptions of relationships change over time and considers the reactivation process according to three phases: activity, latency and reconnection. This empirical study, coherently with the process thinking methodology, employs ethnographic techniques to explore the empirical setting of the textile industry in Northern Italy.

Furthermore, by implementing the temporal bracketing strategy, I selected new product development as the change phenomenon in an organisation that triggers latent tie reactivation. The interviews and observations focused on a restricted timeframe wherein informants reactivated their latent ties. The longitudinal data collection gathered different types of data whose triangulation ensured the internal validity of the study. The findings that emerged from the evidence collected enabled developing the *social slack* construct, defined as the cushion of relational resources that emerges from the positive discrepancy in perceived closeness developed by two actors in a dyad, influencing the outcome of the reactivation process. The two-fold contribution of this study first consists in depicting the underlying dynamics of latent ties by developing a process model of their reactivation, while the social slack construct acknowledges the strategic value of latent ties in seeking to access and mobilise relational resources through reconnection.

The focus on the dynamics of social capital in resource mobilisation and the consequent adoption of such resources to boost new product development inspired my interest in the processes through which resources are orchestrated. PAPER D “Toward a Process Approach of Orchestrating Resources in New Product Development” explores the resource orchestration process of organisational actors. In contrast to the resource-based view that attributes value to possessing valuable, rare, inimitable, non-substitutable and non-transferable resources, resource orchestration concerns how executives access and use resources. However, empirical research has thus far only tested the model and the relations among the variables that link resources to performance, without considering the theoretical mechanisms underlying such relations. Through a multiple-case study involving eight theoretically sampled firms, this study investigates the processes through which organisational actors orchestrate resources. The abductive approach, coherent with process thinking, guided the development of a model of how executives orchestrate resources,

adding further phases and sub-processes to the extant framework and exploring the relevant practices. This study contributes to resource orchestration literature by providing a more nuanced framework and emphasising the relevance of rhythm and timing in the orchestrating process. The managerial implications inform practitioners on the actions undertaken in resource orchestration and the influence of intellectual and social capital in value creation.

Finally, in addition to the four research articles, this thesis includes the portfolio developed for the Supportive Learning Programme. This section provides an overview of the teaching experience developed as well as a critical reflection on my role as a teacher.

FIGURE 3 - Thesis Overview

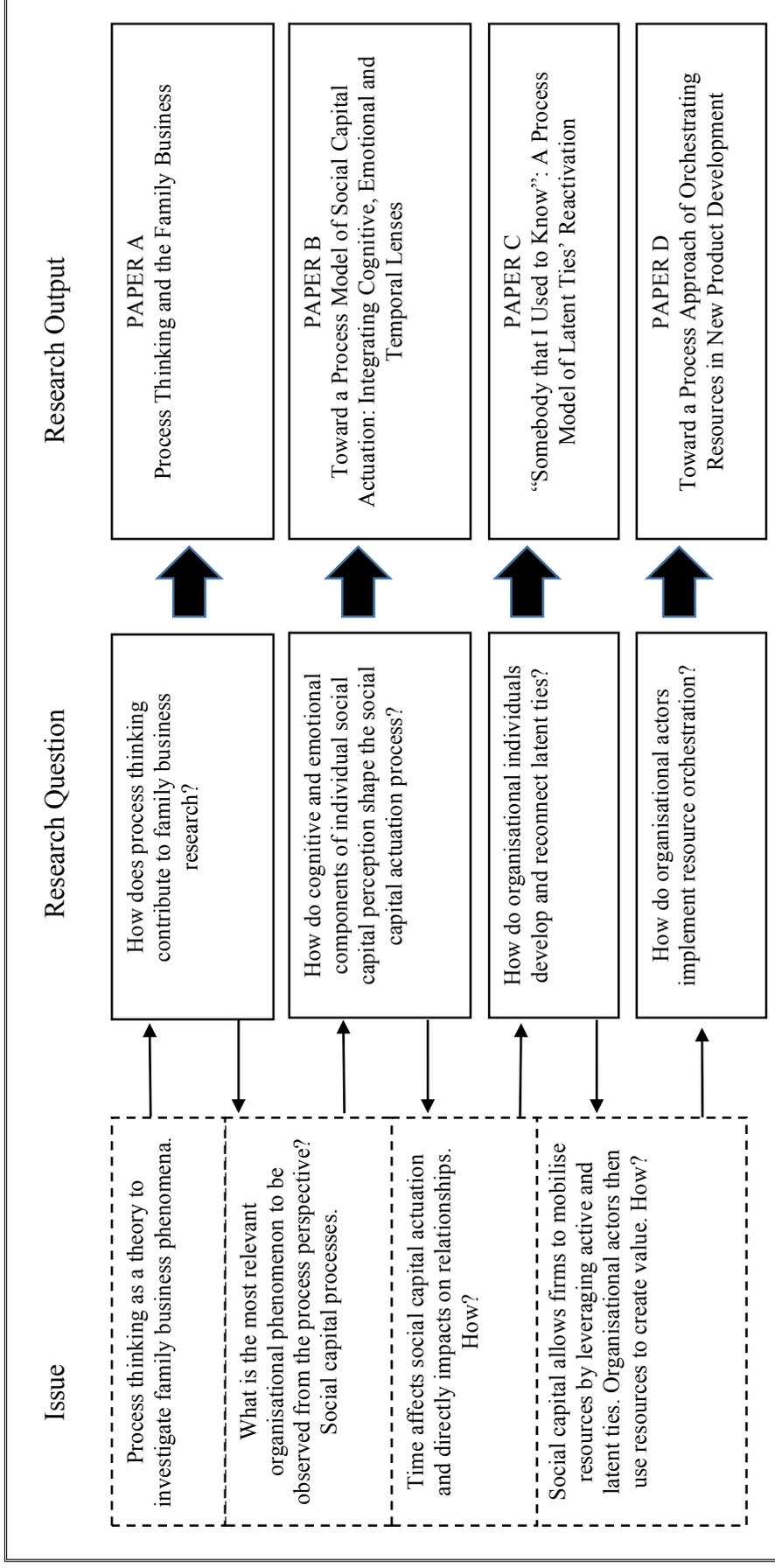


TABLE 3. Article Structure

Paper	Title	Author(s)	Type of Investigation	Keywords	Status
A	Process thinking and the Family Business	Emanuela Rondi (100%)	Literature Review	Process Thinking, Family Business, Time, Sense-making	Published as a book chapter
B	Toward a Process Model of Social Capital Actuation: Integrating Cognitive, Emotional and Temporal Lenses	Emanuela Rondi (70%) Josip Kotlar (10%) Alfredo De Massis (10%) Sarah Jack (10%)	Conceptual Paper	Social Capital Cognition Emotion Social Network Process Model	Presented at the 76th Annual Meeting of the Academy of Management
C	“Somebody that I Used to Know”: A Process Model of Latent Ties’ Reactivation	Emanuela Rondi (100%)	Empirical Ethnographic Techniques	Paper: Latent Ties Social Capital Process Model	Presented at the 76th Annual Meeting of the Academy of Management
D	Toward a Process Approach of Orchestrating Resources in New Product Development	Emanuela Rondi (100%)	Empirical Multiple-case study	Paper: Resource Orchestration Process Model Family Firms	Presented at the RENT XXX Conference

1.6 CONCLUSIONS

This introductory chapter, which lays the foundations of the thesis, thoroughly examines the research issues and illustrates the fit of the study with existing knowledge. The presentation of the issues, theoretical background, methodology and contribution of each study positions this thesis in relation to existing knowledge and draws a coherent overall picture. By adopting different methods of inquiry in addressing the research questions, this investigation has enabled me to explore resource orchestration and the dynamics of social capital in depth and to start conducting academic research with the aim of contributing to both theory and practice.

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1.8 APPENDIX: RESEARCH INFORMATION SHEETS

1.8.1 Participant Information Sheet

My name is Emanuela Rondi and I am conducting this research as a student in Ph.D. programme in Management at Lancaster University, Lancaster, United Kingdom.

1.8.1.1 What is the study about?

This study analyses the dynamic processes of social capital in fostering product innovation in the context of family business. This Ph.D. project aims to address these under-investigated areas by focusing on the processes through which individuals might benefit from social capital to boost innovation in family firms. In particular, this study focuses on the processes of reconnection with previous existent ties that were active in the past, suspended and the renewed (latent ties) in order to access others' resources in the process of product innovation in family firms.

1.8.1.2 Why have I been approached?

You have been approached because this study requires information from people who operate in the firms of the textile industry in Northern Italy and play a crucial role in the innovation process within these family businesses.

1.8.1.3 Do I have to take part?

No. It's completely up to you to decide whether or not to take part. You can withdraw at any time and your data will not be included, although if you withdraw more than 2 weeks after the interview your data may have been anonymised and/or aggregated and therefore cannot be removed.

1.8.1.4 What will I be asked to do if I take part?

If you decide you would like to take part, you would be asked to participate in a semi-structured interview in person lasting around 30 minutes, to develop a constructive conversation about the themes relevant to the research. Ideally we would like to interview family and non-family members responsible for the innovation projects and external individuals who have contacts with the firm.

1.8.1.5 Will my data be identifiable?

The information you provide is confidential. The data collected for this study will be stored securely and only the researchers conducting this study will have access to this data.

- Audio recordings will be destroyed and/or deleted once the project has been submitted for publication/examined.
- The files on the computer will be encrypted (that is no-one other than the researcher will be able to access them) and the computer itself password protected.
- The typed version of your interview will be made anonymous by removing any identifying information including your name. Anonymised direct quotations from your interview may be used in the reports or publications from the study, so your name will not be attached to them.
- All your personal data will be confidential and will be kept separately from your interview responses.

1.8.1.6 What will happen to the results?

The results will be summarised and reported in my doctoral thesis and may be submitted for publication in an academic or professional journal.

1.8.1.7 Are there any risks?

There are no risks anticipated with participating in this study. However, if you experience any concerns or complaints about the project you are encouraged to inform the researcher and contact the resources provided at the end of this sheet.

1.8.1.8 Are there any benefits to taking part?

Although you may find participating interesting, there are no direct benefits in taking part. I will share the output of this research with you once they will be published if you express this interest.

1.8.1.9 Who has reviewed the project?

This study has been reviewed the Faculty of Arts and Social Sciences and University of Lancaster Management School Ethics Committee.

1.8.1.10 Where can I obtain further information about the study if I need it?

If you have any questions about the study, please contact the main researcher:

Emanuela Rondi: e.rondi@lancaster.ac.uk

Ph.D. Student in Management at Lancaster University Management School.

<http://www.lancaster.ac.uk/lums/people/emanuela-rondi>

1.8.1.11 Resources in the event of concerns or complaints

Should you feel distressed either as a result of taking part, or in the future, the following resources may be of assistance.

Professor Sarah Jack, s.jack@lancaster.ac.uk

Professor Alfredo De Massis: a.demassis@lancaster.ac.uk

1.8.1.12 Complaints

If you wish to make a complaint or raise concerns about any aspect of this study and do not want to speak to the researcher, you can contact:

Professor Sascha Walter; Head of Department

s.walter@lancaster.ac.uk

Department of Entrepreneurship, Strategy and Innovation

Lancaster University

Lancaster

LA1 4YX

Thank you for taking the time to read this information sheet

1.8.2 Consent Form

We are asking if you would like to take part in a research project aimed at investigating the role of relationship in innovation processes.

Before you consent to participating in the study we ask that you read the participant information sheet and mark each box below with your initials if you agree. If you have any questions or queries before signing the consent form please speak to the principal investigator, Emanuela Rondi.

- I confirm that I have read the information sheet and fully understand what is expected of me within this study;
- I confirm that I have had the opportunity to ask any questions and to have them answered;
- I understand that my interview will be audio recorded and then made into an anonymised written transcript and the audio recordings will be kept until the research has been examined;
- I consent to anonymised information and quotations from my interview being used in reports, conferences and training events;
- I consent to Lancaster University keeping written transcriptions of the interview for at least 10 years after the study has finished;
- I consent to take part in the above study.

Name of Participant _____ Signature _____ Date _____

Name of Researcher _____ Signature _____ Date _____

2 PAPER A: PROCESS THINKING AND THE FAMILY BUSINESS

Author: Emanuela Rondi

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136.**

Process Thinking and the Family Business

2.1 ABSTRACT

Time in family businesses plays a crucial role, connecting past, present and future in a non-linear flux. Despite the centrality of time to the change and becoming of organisations, particularly of family firms, currently the research in this field primarily relies on variance theory. In this chapter, I aim to show the potential for process thinking and sensemaking in family business research to investigate how dynamic phenomena evolve over time. After having briefly introduced the process approach and its development, I review how it has been used in the family business field to cope with a wide range of phenomena as social capital, business failure and portfolio entrepreneurship. Family business is an idiosyncratic context for implementing process studies due to the relevance of time and social actors' interaction. Process thinking may provide us with a better understanding of already studied phenomena analysed from a different perspective while also enabling the investigation of new areas evolving in time.

Keywords: Family business, Process thinking, Time, Sensemaking

2.2 INTRODUCTION

Family businesses are characterised by the entanglement of the family and the business; this entanglement creates a unique connection between the heritage of the past, the present identity and future development. Despite the critical role of time, some claim it has suffered a ‘quiet perseverance’ since being planted in the very first issue of the *Family Business Review*, and it is still commonly overlooked (Sharma et al., 2014b). Numerous articles in the family business literature assume a long-term perspective across different areas of research, such as succession (for example, Sharma et al., 2003), strategic goals (Miller and Le Breton-Miller, 2006), patient capital (Zellweger, 2007), the role of chief executive officers (CEOs) and decision making (Lumpkin et al., 2010), inherited culture and identity (Salvato et al., 2010), research and development investment (Chrisman and Patel, 2012). Although these studies address a long-term horizon, many of them include time as a control variable without implying process ontologically.

The family business field has a strong focus on variance-based theory (Sharma, 2004; Chrisman et al., 2010; Reay and Whetten, 2011), and it has primarily focused on the antecedents and consequences of phenomena analysed through dependent and outcome variables (Sharma, 2004; Chrisman et al., 2010). Unfortunately, according to Bergson (1946, cited in Tsoukas and Chia, 2002, p. 571), this type of analysis is a fictional representation of change where processes are studied through static events, subordinated to speculation about the facts and logic mechanisms depicted to understand causation. Change is often described by being broken down into stages through developing process models that convert the temporal progression of activities into a series of static positions (for example, Craig and Moores, 2010). However, as stated by Tsoukas and Chia (2002), the decomposition of a process into steps as static snapshots reduces it to a series of immobilities, which are antithetical to the concept of flux. Dawson and Hjorth (2012)

directly address this issue by claiming that family business research has not been very receptive to processual theorising, thereby losing the opportunity to analyse phenomena from a process perspective.

Thus, despite the claimed relevance of analysing the temporal pattern of phenomena, process theory has been scantily applied in organisational studies in general (Langley, 2007) and family business research in particular. Currently, as shown by Bartunek et al. (2006), there is an increasing interest in process thinking in literature. In a survey, these authors asked the editorial board of the *Academy of Management Journal* to assess the most interesting articles in management, and among the 17 most frequently mentioned, ten were clearly process studies (the data and theorisation developed were temporally embedded). This shows the relevance of this approach to delve into organisational phenomena and develop impactful research. A process perspective calls for the analysis of events and a deep understanding of how actors interact in shaping the family enterprise. The family business field emerges as a unique ground on which to implement process thinking to develop a deeper understanding of the process of change, enabling us to answer the 'how' and 'why' questions about flux and movement of evolving phenomena (Van de Ven and Poole, 1995; Langley, 2007).

The rationale of this chapter is to show the potential of process thinking as a unique vessel for improving the understanding of processes in family businesses. Furthermore, studying family firms through a process perspective may offer a contribution to the knowledge of sister disciplines and of process theory itself. This chapter is structured in the following way: the first section addresses process theory's key elements, investigating the primary ontological and epistemological assumptions. Section two provides an analysis of how this perspective has been used in previous family business research to show the issues, methods and techniques that have been examined. In the third section, I investigate

how process theory and the family business field may mutually benefit and suggest directions for future research. Finally, the chapter concludes by providing implications for process thinking and family business research.

2.3 PROCESS THEORY

In the last two decades in organisational studies, aside from the still dominant *being* ontology, the increasing need for a holistic perspective capable of envisioning the ambiguous nature of organisational life has led a *becoming* ontology to emerge (Van de Ven, 2007, p.194). Crossing the boundaries of causation questions about the ‘how’ and ‘why’ of phenomena are now addressed, with a focus on continuous ‘in the making’ relationships, rather than on individuals or organisations as separate entities (Chia and MacKay, 2007; Hernes and Weick, 2007). Hence, as claimed by Weick (1969), it is necessary to transform nouns into verbs by studying ‘organising’ and not just ‘organisations’ or ‘strategising’ and not just ‘strategy’ because verbs ‘keep things moving’.

The becoming ontology in literature is oftentimes depicted through a contrast with the being ontology, and through their clash, different assumptions emerge that open up new ways of thinking (Alvesson et al., 2008). According to this approach in this chapter, I frequently contrast the two ontologies to exact the primary differences. Despite their different roots, these two perspectives are not dichotomous; on the contrary, the interconnected relationship between being and becoming supplement each other (Chia, 1995). Therefore, three dualities are seen as the underlying current development in process research: variance versus process theorising, substance versus process metaphysics and narrative versus logic-scientific thinking (Langley and Tsoukas, 2010, p. 2). Below a brief description of each is provided.

2.3.1 Variance versus Process Theorising

According to Elsbach et al. (1999), organisational theorists have been fascinated for many years by the difference between variance-based theory and process-based theory, reflecting the ontological being and becoming perspectives. As noted by Langley and Tsoukas (2010, p. 6), a process model first addresses events rather than variables, and second focuses on the final cause and not an efficient cause. In this framework, process conceptualisations offer an essential contribution to organisational and managerial knowledge that is not available from most variance-based generalisations (Langley et al., 2013). According to Van de Ven (2007, p. 145), ‘how’ and ‘what’ questions are complementary. While ‘what’ questions are incomplete without an analysis of how events have unfolded to achieve that effect, ‘how’ questions about phenomena tend to be meaningless without an explanation of what induced them or what they will cause.

2.3.2 Substance versus Process Metaphysics

The second duality lies in the concept of process. The ontological interpretation provided by scholars about “process” is twofold: process as a change in things in a world made of things (grounded in substantive metaphysics) and things as ‘reifications of processes’ (grounded in process metaphysics) (Langley et al., 2013). Rescher (1996, p. 7) links the two perspectives respectively back in antiquity to Democritus and Heraclitus. These two schools of thought have led to the development of weak- and strong-process orientations. The former considers processes taking place within existing entities; the latter conceives an evolving becoming of events (Hernes, 2008). As noted by Langley (2007), researchers tend to mix and blend the weak and strong process orientation, resulting in a blurred distinction.

2.3.3 Narrative versus Logic-scientific Thinking

As Bruner (1986, p.11) notes, process metaphysics distinguishes between ‘logic-scientific’ (or paradigmatic) and ‘narrative’ forms of knowing; the author underscores the difference in the types of causality implied in the two modes. ‘The term then functions differently in the logical proposition “If X, *then* Y” and in the narrative récit “The king died, and *then* the queen died”. One leads to a search for universal truth conditions, the other for likely particular connections between two events – mortal grief, suicide, foul play’ (Bruner, 1986, p. 11). Whilst paradigmatic knowing connects actors and situations through an abstraction process, closer to scientific and logical reasoning; narrative knowing places elements in a plot considering a temporal form and providing a concrete idea of causality.

2.3.4 Process Theory in Organisational Studies

Addressing phenomena that consider the crucial role of time, change and flux are identified in process metaphysics, process theorising and narrative forms of understanding. Although process scholars also imply substantive metaphysics to conceptualise the change in things, process metaphysics provides a deeper understanding of the micro-processes that contribute to constituting and reproducing forms of organising over time (Tsoukas and Chia, 2002). The becoming ontology conceives individuals, organisations and society as the outcome of evolving actions, interactions and relationships (Chia, 1995).

Process studies address evolving phenomena by taking into account the temporality of activities as a key element of understanding (Langley et al., 2013), aiming at ‘catching reality in flight’ (Pettigrew, 1992). Numerous studies have investigated the meaning of time, alternating objective and subjective perceptions. Whereas the former, according to Newton, envisages time as an absolute and independent measure of events taking place in the external world, the latter considers Kant’s vision that time is meaningless outside human consciousness (Chia, 2002). In process studies, clock-based time (characterised as

a-contextual, linear, objective and invariable (Wiebe, 2010, p. 214)) is substituted with *kairological* time. An event's significance is assigned by actors; hence, cognition of the event arises when it is experienced together with the understanding of what is going on (Tsoukas and Hatch, 2001). By contemplating the primary role of temporal ordering and probabilistic interaction between entities, it follows that understanding patterns of events over time is the key to developing process theory (Langley, 1999). Whitehead (1929, p. 69) uses the term *prehension* to describe the incorporation of a momentary experience with its predecessors, considering that 'what it is now included what was then'. By this view, Maclean et al. (2012) envision three senses of present: the present of past things (memory), the present of present things (perception) and the present of future things (expectation). In this framework, 'knowledge' emerges as the creative and reweaving experience of comprehension and absorption to develop a coherent and temporal embedded understanding (Chia, 2002). Chia (2002) shows that the subjective conception of time generates three primary epistemological consequences. First, change is indivisible; hence, the past is immanent in the present, and it influences our perception. Second, reality is becoming and what we perceive as things are just temporarily stabilised events. Finally, organisations are 'islands of fabricated coherence' that emerge by institutionalising social habits and behaviour from chaos and change; therefore, they must be investigated. Likewise, Langley and Tsoukas (2010, p. 4) define the organisation as an abstraction, an outcome of a *sensemaking* process implemented to remove equivocality through interlocking patterns of communication.

As Hernes and Maitlis (2010b, p. 27) argue, while process thinking in philosophy has now been widely investigated by numerous authors, such as those mentioned in this chapter, sensemaking is a newcomer in organisational studies. The sensemaking literature emphasises the role of experience; according to constructivism, when people *enact*, they

start from undefined space, time and action, and design their own categories and new labels to develop new features of the environment (Weick, 1995, p.31). Numerous studies in the process literature have investigated sensemaking in organisations, for example, Weick (1995), Balogun and Johnson (2004), Maitlis (2005), Hernes and Maitlis (2010a) and Maclean et al. (2012). As noted by Maitlis (2005, p. 21), ‘sensemaking is a process of social construction in which individuals attempt to interpret and explain sets of cues from their environments’. Taking into account how the interaction of a relatively small number of simple deterministic elements can generate a complicated framework, Langley (1999) provides seven sensemaking strategies to understand and explain the processes of change. These strategies are very insightful and helpful in implementing process studies. In short, they are narrative, quantification, alternate templates, grounded theory, visual mapping, temporal bracketing and synthetic strategy. Narrative and quantification may be considered to be the two extremes of a continuum. Whereas narrative strategy involves the reconstruction of events through an extended verbal account considering the ambiguity of the events, quantification methods decompose and code processes into a limited number of numerical categories that are statistically analysed. Between these two extremes are the remaining sensemaking strategies, acting as alternate templates where the same database is analysed with different lenses. Grounded theory involves an inductive bottom-up approach, and visual mapping implies boxes and arrows to represent a large number of dimensions. Moreover, the temporal bracketing strategy permits different time periods to be considered as distinct units of analysis, while synthetic strategy takes the process as an entire unit of analysis and attempts to analyse the data structure.

Finally, in this introductory section about process theory, it is noteworthy to mention what in my view (according to Langley (2007)) is a subfield of process thinking: *strategy-as-practice*. As noted by Johnson et al. (2003), a shift in the strategy agenda is

needed towards the micro to consider organisation not as entire corporations or business units but as depending on the processes and practices of individuals, groups and networks of people. Strategy-as-practice focuses on micro- activities, aiming to understand how practices shape and are formed by day-to-day activities (Jarzabkowski et al., 2007). According to other authors in the literature, such as MacKay and Chia (2013), this approach involves a different way of thinking from process view that is called post- processual. While process studies focus on individuals and then on their actions, strategy-as-practice addresses the practices and social regularities. Some important references in this context are Johnson et al. (2003); Balogun and Johnson (2004); Jarzabkowski et al. (2007) and Golsorkhi et al. (2011). The next section discusses the potential of process thinking in the family business field by providing theoretical and practical contributions to implement it; further, the section presents some examples.

2.4 PROCESS THEORY IN FAMILY BUSINESS STUDIES

As described by Van de Ven (2007, p. 145), process theory is the shift from a surface to an in-depth analysis, moving from description to explanation. Three different modes of inquiry are depicted to develop process research as parts of an iterative cycle: deduction, induction and abduction. The deduction is theory-driven, the induction infers from direct observation and the abduction is a back and forth process that considers the existing theories but also takes into account surprising patterns emerging from the data and develops propositions based on observations. The heterogeneity of methods involved to fulfil this goal in organisational studies is also reflected in the family business process research.

Starting from conceptual papers, Shepherd (2003, 2009) addresses sensemaking in family business failures and exit, studying grief recovery learning (2003) and time (2009). In the former article, the author proposed a dual process model to enhance grief recovery,

and in the latter, a multi- and mesolevel theory of grief recovery time from the loss of a family business is developed. Another interesting area investigated through process thinking is social capital. In their analysis, Arregle et al. (2007) study the process as opposed to the content of social capital in family firms. According to their view, family businesses are unique because they present both the family's and the firm's social capitals. The authors analyse both the positive and the negative interactions between family social capital and organisational social capital.

Focusing on empirical studies, Sieger et al. (2011) develop a process model of portfolio entrepreneurship in family business. Four longitudinal case studies are implemented to investigate portfolio entrepreneurship; this is a relevant topic because it plays an important role in the economic landscape, but it is largely unexplored in the family business context (Sieger et al., 2011). Furthermore, Helin (2011) studies family meetings through two longitudinal case studies. Two firms are investigated sequentially using multiple tools to develop incremental learning about organisational becoming in family business meetings. In the first company, family and non-family members are interviewed (past analysis); then the emergent need to directly participate in real-time meetings leads the author to 'switch modes from story told to story lived' (p. 101).

A different approach is implemented by Drakopoulou Dodd et al. (2013) to investigate the role of time in family business. The authors conduct multiple case studies by interviewing 12 companies across three countries in different industries and addressing questions about the role of time in family business. What emerges is first that clock-time is perceived as being professional and invoked in the implementation of managerial techniques; second, family and firm threads are intertwined in everyday activity and evolve inextricably together with business and life.

Another interesting area in family business research where process thinking has been implemented is the strategic change. Bhalla et al. (2009), through a questionnaire, a focus group and interviews, investigate the differences in the strategy-making of ethnic and non-ethnic family firms in the UK. In this study, ethnic firms are defined as being controlled by families emigrated from South Asia, mainly Hindu and Sikh who are the dominant ethnic group in Britain. By adopting multiple perspectives, the authors develop a framework of four schools. Their findings claim that strategy formation is a cognitive process that happens in the minds of various individual actors and emerges as the sum of these individual efforts inside the organisation. Other studies investigating strategy in family business adopt the strategy-as-practice approach. Strategy-as-practice 'reorients strategy research towards the work, talk, activities and competencies of individual managers as strategists', addressing the 'how' research questions about day-to-day activities and interacting with the context (Chia and MacKay, 2007, p. 222). In their studies, Nordqvist and Melin (2010) and Nordqvist (2012) implement an abductive approach to investigate both micro- and macro-levels of social interaction among strategists and their practices, considered as the actual doing of strategy (Jarzabkowski et al., 2007).

Nordqvist and Melin (2010), aiming to develop a deeper understanding of the dynamics of strategy processes in family firms, conduct three case studies to understand the roles, dimensions and meanings of strategic planning. Their findings present three dimensions to the practice of strategic planning: planning modes, planning motives and planning arenas. The authors argue that strategic planning is closely connected to both local and family-related rules but also to the global institutionalised norms that guide planning as a common practice and its role beyond a mere analytical tool. More recently, Nordqvist (2012) examines the social actors and the interactions among family members in

influencing strategy formation. This research is based on a longitudinal multiple case study approach and is conducted through interviews, meeting observations (real time), casual conversation and site visits involving three firms over four years.

Salvato (2003) proposes a model for strategic evolution by theorising from multiple case studies. Data were collected through interviews with people both internal and external to the companies, some direct observations and also other documents, such as books, artefacts and internal archives. The research extends the literature on leadership, strategy evolution and dynamic capabilities by incorporating the central role of micro-level processes. More recently, Walsh and Bartunek (2011) address the foundation of new businesses by former members of defunct organisations. The process model developed is composed of four periods of organising: disintegration, demise, gestation and rebirth. Each of these periods is shaped by experiences, interpretive tasks and shared actions.

Aside from case studies conducted primarily through interviews, there is an increasing interest in family business research toward narratives. Process studies do not reject quantitative methods (Van de Ven and Poole, 2005), but narratives are crucial to the study of organisational processes because ‘people do not simply tell stories, they *enact* them’ (Pentland, 1999, p. 711). Narratives better explain development regarding the process order (Van de Ven, 2007) and provide more a concrete rendering of causality (Tsoukas and Hatch, 2001). In a recent article, Dawson and Hjorth (2012) assert the relevance of narratives as an alternative approach to understanding family businesses. The authors define narratives as the study of the ‘stories that people tell’ (Gartner, 2007, p. 615), claiming that life and knowledge should be analysed in accordance with how they are storied and narrated. Due to the simplicity of the inquiry, narratives involve practitioners more naturally and allow us to examine social dynamics as processes by maintaining the temporality and vividness of real everyday knowledge through language

(Dawson and Hjorth, 2012). The article by Dawson and Hjorth (2012) is also an empirical example of the use of narratives in family business research. Starting from two biographies, the authors conduct a narrative analysis by implementing the hermeneutic triad (explication, explanation, exploration) and a dramatist analysis (Burke, 1968). A notable effort in applying narratives to the family business field has been made by Hamilton (2006, 2013) in her investigation of the role of women in family business (2006) and entrepreneurship across generations (2013).

Although process studies have rarely been applied in organisational studies privileging variance-based theory, they may contribute to deepening the understanding of organisational processes by providing a complementary perspective (Zahra, 2007). Not aspiring to be comprehensive, in this section, I presented examples of studies addressing multiple issues by implementing longitudinal case studies, narratives and several techniques for data collection. Although process research does not exclude quantitative methods (Van de Ven and Poole, 1995, 2005; Langlely et al., 2013), it focuses on qualitative methods as narratives as better able to conceptualise the plot of the story as a generative mechanism in itself (Van de Ven, 2007). For a more comprehensive discussion of the qualitative and quantitative methods uniquely adapted to process research, see Poole et al. (2000).

In the next section, I investigate the reciprocal contribution that process thinking and family business studies may develop. Furthermore, suggestions for future research are provided.

2.4.1 The Reciprocal Contribution of Process Thinking and Family Business

Since its inception, family business research has borrowed many theories from sister disciplines, such as economics, sociology, psychology, law and family systems (Wortman, 1994). The implementation of theories from other fields has allowed family

business research to develop and acquire legitimacy. In a more recent period, a need for theories better grounded in family businesses has been expressed (Zahra and Sharma, 2004), and the idea of ‘giving back’ has emerged (Sharma, 2004; Melin et al., 2014, p. 16). ‘Giving back’ means not just drawing on existing theory but both improving existing theories through the unique features of family businesses and developing new theories, potentially to be borrowed by other disciplines as well (Reay and Whetten, 2011). Inferring from Zahra’s (2007) taxonomy of entrepreneurship, research states that contributions may arise from the combination of two dimensions: the phenomenon investigated and/or the theory implemented. Both dimensions may be new/emerging or established, and the combinations of the variables generate four different scenarios. In accordance with this view, this chapter addresses the implementation of process thinking in family business research as a vessel to further discuss the interactions among actors and the becoming phenomena. Considering the potential for analysing change and processes in family business from a time-embedded perspective, I suggest that further knowledge might be gained by applying this approach both to topics already investigated from different angles and to new areas that deserve investigation.

According to Drakopoulou Dodd et al. (2013), the temporal lens of process theory may be beneficial for addressing those issues that the most prominent theories in the literature, such as the resource-based view of the firm and agency theory, have not yet been able to explain fully. Therefore, family business emerges as a perfect context for implementing process studies. As an example, Zahra (2007) claims an involvement of the temporal relationships among key variables in the causal chain to improve the understanding of phenomena, such as decision making, in entrepreneurial firms. The question that now may arise is “why neither organisational studies in general, nor family business studies in particular, have thoroughly applied process thinking yet?” The answer

is not because process thinking is not valuable; evidence shows that the audience is interested in process studies and they can provide fresh and relevant knowledge, as witnessed by Bartunek et al.'s (2006) survey. Numerous authors have tried to address the reasons for this gap. According to Langley (1999), implementing empirical research in process studies is challenging because process data are messy and because it is hard to find an approach that does not reduce flux into some snapshots. Moreover, as claimed by Maclean et al. (2012), conducting process research requires a deep understanding of the context, the individuals and the dynamics to be studied; to gain this understanding, a high level of accessibility is needed. The answer to these questions emerges from the literature: it might be that it is hard to collect, analyse and manipulate process data (Langley, 1999). This issue is challenged by Langley (2007, p. 278), who asserts that 'If process research is seen as something that one does only when one's academic legitimacy is already well established then the prospects for the development of process thinking will remain limited.'

The contribution from implementing process thinking in family business studies is manifold. First, process thinking allows researchers to obtain a greater understanding about the micro-processes of change (Tsoukas and Chia, 2002). Second, the close relationship between the investigated processes and the social interaction involved allows researchers to gather details about how change is accomplished, how plans are translated into actions and how plans are modified and adapted. In family business research, this type of investigation contributes to a shifting focus from individuals and results to relations and processes (Hjorth, 2007; Sharma, 2008). With particular reference to strategy-as-practice, work that involves this approach could make research more relevant for practitioners (Whittington, 2003). Catching the dynamism of real organisational processes by involving process thinking in family business research may generate more actionable knowledge (Langley, 1999). In this regard, the strategy-as-practice approach is more oriented toward

the micro-perspective of actions and interactions to uncover actual strategic activities by directly involving practitioners (Johnson et al., 2003). A further implementation of strategy-as-practice in research may contribute to resolving the growing frustration around connecting academic research with practice in organisational studies in general (Johnson et al., 2003) and family business in particular (Melin et al., 2014, p. 302). Moreover, as noted by Dawson and Hjorth (2012), process studies that investigate ‘how’ questions may contribute to the paradigm-building agenda (Debicki et al., 2009) that currently characterises family business and advance theory development with the narrative approach.

Aside from the possibility of conducting further studies in the depicted areas, there are many other topics suitable for investigation in family firms. Family-owned businesses are oftentimes portrayed to be dynasties (Drakopoulou Dodd et al., 2013); for example, it is not rare to find in the family firm branding portraits of ancestors, iconic objects or sites where the tradition and the heritage of the past shape the present and future (Micelotta and Raynard, 2011). Given a time horizon that spans multiple generations, family enterprises offer a unique context for developing and testing time-related theories. This aspect is defined by Le Breton-Miller and Miller (2014) as both retrospective and prospective: retrospective referring to family history and corporate culture and prospective in leadership and family legacy. This unique context calls for more research to investigate how and when leadership, human resource practices and culture unfold in family firms (Le Breton-Miller and Miller, 2014; Sharma et al., 2014a). Currently, aside from succession, governance and performance, other topics have received greater interest in family business studies, such as goal setting, resource competitive advantage, internationalisation (Zahra and Sharma, 2004), and new venture creation; institutional contexts, innovation and the informal economy are now emerging in family business research (Sharma et al., 2012). All of the cited themes involve time, flux and change and are suitable for analysis under the lens of

process theory, considering the changing nature of the human being and the complex domain of the family business (Zahra and Sharma, 2004). Considering new product development, and more in general, innovation processes by investigating ‘how’ family firms develop and/or acquire new knowledge and capabilities may lead to an understanding of whether and how family businesses differ first from non-family businesses and secondly among themselves in innovation practices. Furthermore, investigating internationalisation and new venture creation through the process approach would elucidate the evolving and change processes that trigger and are triggered by family businesses (Sharma, 2004; Sharma et al., 2012). Depending on the time horizon of interest, different methods are more suitable for implementation. For example, a new product development project may be investigated through real-time tools, such as ethnographies, that maximise the probability of discovering short-lived factors and changes. However, when strategic decisions span an extended period, it would be better to conduct in-depth interviews using retrospective accounts.

An additional area where process thinking could contribute would be the study of growth, as understanding how the involvement of the family in the business affects the evolving processes through *familiness* (Walsh and Bartunek, 2011). Process research on evolution and life cycle may allow us to study the temporality and processes of the family with those of the business to increase our understanding of the relationships between these two souls of family business. Furthermore, the goal-setting process is considered to be an area of interest in family business research (Kotlar and De Massis, 2013) that may be enriched by an analysis of how this process unfolds in time not by studying just stages of development but also how the entangled relationships shape the process of goal setting. Financial and non- financial goal setting and seeking may also be analysed to provide awareness about how the intertwined relationship between the family and the business according to the practices implemented is translated into day-by-day practices. As Van de

Ven (2007, p. 208) suggests, a promising approach is initiating a historical study before the outcomes of a change process become apparent to observe it in real time without compromising the ability to observe short-lived changes.

Unfortunately, currently process research is still primarily cross-sectional, unable to observe real-time change and becoming. Only by implementing longitudinal and systematic research can this issue be overcome (Van de Ven, 2007, p. 197). Thus, family businesses could be a unique ground that might benefit the development of process theory and the implementation of longitudinal process studies, particularly those involving multiple case studies (Van de Ven and Poole, 1995). From a practical point of view, organisational and, more specifically, family business becoming may be studied from a real-time perspective (reconstructing the evolving present) by tracking it back into the past (retrospective studies) or following it forward into the future (Hernes and Maitlis, 2010b).

2.5 CONCLUSIONS

This chapter aimed to provide an overview of process thinking, considering the interest of family business research in processes and time. This approach may develop a reciprocal contribution. Family business research could develop a greater understanding of organisational becoming by analysing practices and evolving events in addressing “how” questions. This would lead to the development of more practitioner-oriented knowledge, which could fill the gap that is now increasing between academic research and practice.

Approaching it from the opposite direction, the idiosyncratic context of family business with its *familiness*, long-term orientation and financial and non-financial goals might provide a unique ground for studying the evolving and intertwined processes of the family and the business. This process may ‘give back’ to sister disciplines by developing new constructs in the family business field that can then be borrowed by other fields to provide further insight related to the operationalisation of process studies.

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**3 PAPER B: TOWARD A PROCESS MODEL OF SOCIAL CAPITAL
ACTUATION: INTEGRATING COGNITIVE, EMOTIONAL AND
TEMPORAL LENSES**

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Toward a Process Model of Social Capital Actuation: Integrating Cognitive, Emotional and Temporal Lenses

3.1 ABSTRACT

We present a theoretical examination of the dynamics of social capital by grafting cognitive, temporal and emotional lenses. Building on our theorisation we develop a framework of social capital perception and explore the process of its actuation, thereby depicting potentiality, activation and mobilisation phases. Studying the dynamics of social capital provides a new avenue for understanding the role of perception of relationships and available resources, providing insight into their impact on social exchange.

Keywords: Social capital, Cognition, Emotion, Social network, Process model.

3.2 INTRODUCTION

Social capital – the goodwill and assets individuals access and mobilise through their social relations within their network of contacts (Bourdieu, 1986, Kwon & Adler, 2002) - is a key resource for individuals and organisations (Nahapiet & Ghoshal, 1998). It is known to be *essential* for entrepreneurial success (Gedajlovic, Honig, Moore, Payne & Wright, 2013), and a boost to organisational phenomena as innovative performance (Carnabuci & Diószegi, 2015), and knowledge transfer (Tsai & Ghoshal, 2005). However, realising the benefits of social capital remains a major challenge for individuals in organisations (Smith, 2005; Srivastava, 2012). Prior to activating contacts and mobilising resources (Smith, Menon & Thompson, 2012), they have to be skilled in assessing the potentiality of their relationships (e.g., Kilduff, Tsai & Hanke, 2006) and determine how and what contacts can contribute. This effort requires some level of cognitive and emotional evaluation (e.g., Brands 2013). Thus, a deeper examination of the processes through which individuals develop knowledge about their contacts and build commitment and cooperation appear crucial to understanding the social capital actuation process (Burt, 1992). While the antecedents and outcomes of social capital have been examined in depth (Schuller, 2007; Payne, Moore, Griffis, & Autry, 2011), the cognitive and emotional mechanisms that characterise social capital actuation and the temporal dynamics of this process remain largely unaddressed.

The significant effort invested in studying social capital in organisation research has contributed to its fast evolution from an “umbrella concept” (Adler & Kwon, 2002) toward a more mature field (Kwon & Adler, 2014). Nevertheless, the lack of attention to cognitive and emotional aspects, and to a temporally contextualised view of these aspects, leaves fundamental issues related to the construct unaddressed; preventing a thorough theoretical understanding of the foundations of social capital and the dynamics underlying

its actuation. First, even though the field has benefited from a pluralism of theoretical approaches and contributions, such diversity has resulted in multiple and often inconsistent definitions, to the point that some scholars prefer not to use the term social capital in their research to avoid confusion (e.g. Kilduff & Brass, 2010). Second, despite social capital and social network research sharing similarities regarding field structure and substantive topics (Moody & Paxton, 2009), the two research streams remain largely disjointed (Kwon & Adler, 2014). It is particularly unfortunate that the rapid growth of social capital research has led scholars to scantily investigate the perspective of individuals called upon to perform social capital processes and the inter-temporal nature of the mechanisms behind these processes. Without understanding how individuals perceive the social capital potentially available in their social network and how they then strive to actuate it, it is hard to conceive how its dynamic processes unfold over time.

How do cognitive and emotional components of individual perceptions shape the process of social capital actuation? In this study, we advance some ideas to further refine the social capital construct and revitalise this field of research. The purpose is to reconcile and theoretically extend existing definitions of social capital by examining the mechanisms that lead individuals to develop their perception of social capital according to cognitive and emotional components, and how this shapes the process of social capital actuation. Our aim is to respond to repeated calls for further integration of social capital and social network research (Kwon & Adler, 2014). Consistent with organisational network research, we develop a theory that emphasises individual agency (Tasselli, Kilduff, & Menges, 2015) and explains the role of individual perception in actuating social capital. The ultimate goal of this article is therefore to conceptualise the combined effects of cognitive and emotional components of individual perceptions in shaping the processes through which individuals scrutinise, evaluate and select the contacts in their social network (Smith et al., 2012) to

mobilise desired resources. By doing so, we develop a process model of social capital actuation that describes the dyadic interactions between individuals throughout the “potentiality”, “activation” and “mobilisation” phases.

The model of social capital actuation has many broad implications that both challenge and extend prevailing thinking about social capital. First, by reconciling the social network and social capital fields of research we shed light on the potential biases that might affect the evaluation of contacts and resources available within a social network. Second, by adopting a temporal perspective, we develop a process model of social capital actuation that identifies three phases through which individuals access the resources in their social network. By doing so we explain the role of information asymmetries in dyadic interactions unfolding over time and how such interactions shape others’ individual perception. Third, by modelling cognition and emotions as key components of social capital perceptions, we explore how individual perceptions reflect personal goals. The model developed suggests that individuals can place greater emphasis on either resources or feelings, thereby one component becomes the *end* of social capital actuation and the other component becomes the *means* to actuate it. Finally, in demonstrating how individuals within organisations actuate the valuable social capital resource by cognitively and emotionally leveraging their social network, we shed light on micro-foundations (Felin & Hesterly, 2007; Lepak et al., 2006) of an important organisational dynamic capability (Eisenhardt & Martin, 2000; Helfat et al., 2007). Thus, the overarching contribution consists in a process model of social capital actuation that not only integrates cognitive, emotional and temporal lenses to yield a theoretically nuanced picture of the foundations of social capital; but it also challenges conventional thinking on social capital and raises many questions requiring theoretical attention.

We start by examining the social capital field of research and discussing two fundamental issues; then we investigate how cognitive, emotional and temporal perspectives contribute to re-conceptualising social capital. By developing the theoretical contribution, we conceive cognition and emotions as the two components of individual perception of social capital and develop a process model of actuating it. We conclude the article by presenting theoretical contributions and suggesting new avenues for future research.

3.3 LACKS IN SOCIAL CAPITAL FIELD

Since its introduction in the mid-1980s, social capital has recalled broad interest (Adler & Kwon, 2002; Koka & Prescott, 2002) and is considered as one of the most successful “exports” from sociology to other social studies (Portes, 1998). In the 1990s research in social capital started examining its antecedents and consequences in relation to various phenomena such as intellectual capital (Nahapiet & Ghoshal, 1998), value creation (Tsai & Ghoshal, 1998) and employment practices (Leana & Van Buren, 1999). Research in social capital in the recent years has focused on contingency factors influencing its effects on organisational performance (Shaw, Duffy, Johnson, & Lockhart, 2005; Tortoriello & Krackhardt, 2010) and processes (Fang, Duffy, & Shaw, 2011).

It is during the mid-2000s that social capital progressively moved from the margins to the mainstream of social science terminology, until being considered a “largely routinised” concept (Woolcock, 2010). Kwon & Adler (2014) argue that social capital has reached maturity evolving from an “umbrella concept” (Adler & Kwon, 2002) into a whole field of research. According to this future look the authors suggest scholars should target niches expanding precise aspects relevant to specific disciplines and topics. Although social capital research has grown and proliferated across multiple literature streams, an unceasing trend of coining new definitions has hindered its conceptual advancement,

emphasising different aspects without developing insightful cumulative knowledge for the maturation of the field. This trend has, at best, given rise to questions on the precise meaning of the construct (Payne et al., 2011); at worst, has even meant authors avoid the use of the term, thereby avoiding confusion it has generated (e.g. Kilduff & Brass, 2010).

Like other capitals, such as physical and intellectual, social capital has multiple characteristics, is substitutable, appropriable and needs maintenance; still unlike other capitals, it is not located in individuals but in the relations with others (Adler & Kwon, 2002). Because of this peculiarity, the individual perception of resources attainable by or through contacts in the network plays a key role in shaping social capital and its underlying dynamics. Despite its evolution, literature in social capital has developed a multitude of competing definitions and has missed the opportunity to integrate perception and dynamics. As a result of the above symptoms of non-maturity of the field, social capital is lacking a consensus definition and is missing the opportunity of integrating social capital and social network fields of research. In the next section, we discuss each of the two issues to understand lacunae and further needs of social capital to become a mature field.

3.3.1 The Enduring Lack of Consensus in Defining Social Capital

Definitions of social capital have flourished in the last three decades (Payne et al., 2011). Through a literature survey, we identify 70 definitions coined across the last three decades. Following the classification scheme developed by integrating criteria adopted in other literature reviews in social capital (Burt, 2000; Lin, Cook & Burt, 2001; Adler & Kwon, 2002; Payne et al., 2011) we classified those definitions according to three dimensions: form, level of analysis and role of resources (Table 4).

TABLE 4 - Classification of Social Capital Definitions (1/2)

Dimension	Illustrative definitions	Citations
<i>Form</i>		
Bonding	"Social capital is defined by its function. It is not a single entity, but a variety of different entities having two characteristics in common: They all consist of some aspect of social structure, and they facilitate certain actions of individuals who are within the structure" (Coleman, 1990:32).	Bowles & Gintis (2002); Brehm & Rahn (1997); Fukuyama (1995, 1997); Knack (2002); Knack & Keefer (1997); Narayan & Pritchett (1999); Portes & Sensenbrenner (1993); Putnam (1995); Woolcock (2010); World Bank (1998)
Bridging	"Friends, colleagues, and more general contacts through whom you receive opportunities to use your financial and human capital" (Burt, 1992:9). "The brokerage opportunities in a network" (Burt, 1997:355).	Belliveau et al., (1996); Bensaou et al. (2014); Burt (1997); Chung et al. (2000); Coleman (1990); Johnson, Schnatterly, Bolton, & Tuggle (2011); Kadushin (2004); Portes (1998)
<i>Level of Analysis</i>		
Individual	"Social capital refers to the resources available through social network and elite institutional ties (such as club memberships) that an individual can use to enhance his or her position" (Belliveau et al. 2006: 1568).	Belliveau et al. (1996); Burt (1992); Coleman (1990); Fang, et al. (2010); Johnson, et al. (2011); Kadushin (2004); McFayden & Cannella (2004).
Group/ Organisation	"Defining social capital in terms of the information benefits available to a firm due to its strategic alliances we present a theory of social capital that conceptualises it as a multidimensional construct" (Koka & Prescott, 2002:795).	Chung et al. (2000); Fukuyama (1997); Knack & Keefer (1997); Koka & Prescott (2002); Leana & Van Buren (1999); Oh et al. (2004); Oh, Labianca, & Chung (2006); Phelps (2010); Putnam (1995); Somaya, Williamson, & Lorinkova (2008).
Community	"The web of cooperative relationships between citizens that facilitate resolution of collective action problems" (Brehm & Rahn, 1997:999).	Ansari, Munir & Gregg (2012); Bowles & Gintis (2002); Knack (2002); Narayan & Pritchett (1999); World Bank (1998).

TABLE 4 - Classification of Social Capital Definitions (2/2)

Dimension	Illustrative definitions	Citations
<i>Role of Resources</i>		
Resource included	"The aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalised relationships of mutual acquaintance or recognition" (Bourdieu, 1985:243).	Ansari & Munir (2012); Batjargal & Liu (2004); Belliveau et al. (2006); Bourdieu & Wacquant (1992); Burt (1992); Fang, Chi, Chen & Baron (2015); Fang et al. (2010); Ibarra et al. (2005); Lin et al., (2001); Nahapiet & Ghoshal (1998); Oh, Labianca & Chung (2006); Phelps (2010); Seibert & Kraimer (2001).
Resource excluded	"Social capital involves an ensemble of networking behaviors and attitudes, including strategies for tie discovery, acts of leverage, targeting, or prioritisation (up, down, out), and even moral codes and beliefs. Social capital is about both an actor's social network (noun) and an actor's social networking (verb)" (Bensaou et al., 2014:30).	Bowles & Gintis (2002); Brehm & Rahn (1997); Burt (1997); Chung et al. (2000); Coleman (1990); Fukuyama (1995, 1997), Knack (2002); Knack & Keefer (1997); Narayan & Pritchett (1999); Portes & Sensenbrenner (1993); Portes (1998); Putnam (1995); Woolcock (2010).

First, definitions varied regarding the form of social capital considered. Bonding (Coleman, 1990) asserts the power of social capital comes through dense networks of cohesive ties, ensuring a positive effect on the production and observation of norms that facilitates trust and cooperative exchanges. Bridging (Burt, 1992, 1997) conceives social capital lying in the connection among social networks. "Bridge is a (strong or weak) relationship for which there is no effective indirect connection through third parties" (Burt, 2005: 24). Thus, social capital is created and leveraged as a result of brokerage opportunities when a *tertius* enters in the "structural hole" between two players or networks, who have not any other tie in common, to act as the broker in the relationship between them (Burt, 1992).

Second, social capital definitions vary in terms of their level of analysis; including individual-level definitions, group and organisation-level definitions and community-level

definitions. Social capital at the individual level is a private good whereby individuals benefit directly from their connections (Kwon, Heflin, & Ruef, 2013). Conversely, at the community level, social capital is a public good whose benefits affect not only those who possess it but also people living for example in the same geographic area (Putnam, 1993; Van der Meer, 2003). In addition to these categories, some definitions adopt either cross-level (Capaldo, 2007) or multilevel analysis (Bourdieu, 1986; Nahapiet & Ghoshal, 1998; Adler & Kwon, 2002; Ibarra, Kilduff, & Tsai, 2005). However, multi-level approaches to defining and studying social capital have yet to realise their full potential (Payne et al., 2011),

Third, definitions of social capital might either exclude or include the resources available by dint of connections in the network. The exclusive approach highlights the complementarity between the social network and accessible resources at its nodes, particularly emphasising the former to remove the risk of rendering social capital an “impossibly broad” concept (Adler & Kwon, 2002: 26). However, these definitions are based on the problematic assumption that the network and resources exist in isolation. On the other hand, comprehensive approach considers both the network and resources at its nodes. However, it assumes social capital as either the over-simplistic linear addition of the social network and resources or as only those resources (Smith, 2005).

The multidisciplinary diffusion of the social capital concept certainly depends on its potential explanatory power in a wide range of phenomena. The variety of multiple plausible definitions could be an advantage if the research were able to capture the fuller range of knowledge accumulation in the social capital field (Harris, Johnson, & Souder, 2013). Unfortunately, the controversy aroused has led researchers to “talk past one another” (Glanville & Bienenstock, 2009: 1507), hampering the development of more accurate theoretical modelling closer to the observed phenomena. Conducting a literature meta-

analysis has proven to be salient in understanding which aspects of social capital remain unexplained and in identifying important research frontiers. It emerges that some scholars have indeed tried to consolidate knowledge in social capital according to the depicted dimensions. A notable example is Payne et al. (2011) who argue that many articles simultaneously combine bonding and bridging forms of social capital. Regarding the level of analysis, some consistency has been reached by coining definitions that specify the level investigated such as “organisational social capital” (Leana & Van Buren, 1999), “governmental social capital” (Knack, 2002) and “group social capital” (Oh et al., 2006). Unfortunately, despite these attempts, there is still no agreement on social capital definitions regarding the role of resources.

The field is witnessing a decline in citations in the last few years. Kwon and Adler (2014) explain this trend claiming social capital has reached maturity and needs greater specialisation. However, we interpret this downturn as a symptom of the limited clarity on the construct that hampers its applicability. Albeit it is a worthwhile effort to specialise toward circumscribed aspect and mechanisms of social capital relevant for specific disciplines and topics (Kwon & Adler, 2014), such specialisation could jeopardise the development of the field if constructive conversations on the theoretical foundations of social capital are downplayed.

3.3.2 Lack of Integration between Social Capital and Social Network Fields of Research

Despite the lack of consensus on social capital definitions, social networks tend to be a common aspect in most if not all the definitions (e.g. Portes, 1998; Bensaou, Galunic, & Jonczyk-Sédès, 2014). However, different perspectives are competing in theorising how social capital and social network fields of research relate to each other. Scholars in social capital conceive social network as a sub-stream, consisting of the structural component

giving rise to social capital (e.g. Nahapiet & Ghoshal, 1998; Belliveau, O'Reilly, & Wade, 1996). Conversely, some scholars have argued against the need for social capital construct, which is seen as “a powerful renaming and collecting together of a large swath of network research from the social support literature” (Borgatti & Foster, 2003:993).

Notwithstanding these competing views, Moody and Paxton (2009) highlighted a strong similarity between the two fields in terms of substantive topics investigated, the trend in the number of published articles and the structure of the fields. Therefore, it is surprising that only 4.5% of abstracts in the social network literature mention social capital, while only 2% of social capital abstracts cite social network (Moody & Paxton, 2009). This scant integration is even graver considering the dramatic growth the two fields have been subjected to in the last decades (Kwon and Adler, 2014). When combined, these two research fields have the potential to yield richer theory and better predictions (Baker & Faulkner, 2009). In fact, investigation in social capital needs to examine the structure of the social network; vice versa social network research cannot avoid contemplating the content of social capital (Moody & Paxton, 2009). However, research lacks direct attention at the intersection between the two fields, masking their implicit connections. Thus, various authors have recently claimed for further cross-fertilisation between social network and social capital research as a particularly promising area for future research (Baker & Faulkner, 2009; Kwon & Adler, 2014, Inkpen & Tsang, 2016).

3.4 GRAFTING COGNITIVE, TEMPORAL AND EMOTIONAL LENSES IN SOCIAL CAPITAL

From their literature review, Payne et al. (2011:503) found that most scholars view social capital as a “black box through which benefits are expecting to flow”, with very limited work examining how it is developed and how it produces benefits. Assuming the multiplicity of contributions in social capital as an advantage to build upon toward

knowledge accumulation, we adopt a model-theoretic perspective (Harris, Johnson, & Sourer, 2013). Therefore, in addressing “how” questions about social capital we graft multiple research traditions, which permit to improve the representation of such a particular phenomenon as social capital. Following the suggestion by Kwon & Adler (2014), we implement cognition and temporal lenses that have the potential to address inconsistencies and enrich the social capital research field. Furthermore, we add the emotional lens to shed light on the role of feelings in social capital perception and dynamics.

3.4.1 Cognitive Lens

Social cognition challenges the “under-psychologised” premises of traditional social network analysis (Kilduff et al., 2006). Differently from behavioural measures of interaction that look at the physical connections that actors develop, the cognitive perspective relies on “cognitions, which live in people’s heads” (Krackhardt, 1987:110). Scholars adopting such cognitive lens have noted a discrepancy between behavioural measures and self-reports about the same social interaction, which is thought to be caused by the inability of those measures to capture actors’ cognition, considered the first driver of individual agency. According to this view, different individuals might perceive the same set of nodes as different, and different individuals who occupy the same position in the network may develop different cognitions about the structure of opportunities and constraints such as the presence of structural holes (Kwon & Adler, 2014). The concept of the cognitive social structure is adopted to capture individuals’ perceptions and expectations concerning their social network. An example of the relevance of cognition emerges when considering the so-called *ghost ties*, which are memories or desires of actors who are no longer or have never been physically present on the network but still influence actors by constraining or enabling their actions (Kilduff et al., 2006).

3.4.2 Temporal Lens

The second aspect – the temporal lens – concerns *potential*, *mobilised* and *latent* ties, different types of ties based on the exchange. This area investigates the situation when actors try to use their ties and the conditions that boost this phenomenon (Lin et al., 2001; Kadushin, 2004; Obstfeld, 2005). This research, albeit limited, helps understand dynamics and processes underlying change in social capital. Unfortunately, the social network literature has mostly implemented cross-sectional investigation, only recently longitudinal investigations are taking into account the prominent role of time in shaping social network. In this regard, the concept of latent - or dormant - ties, defined as “established relationships that are currently inactive in terms of exchange” (Mariotti & Delbridge, 2012:512) is receiving further attention (Levin, Walter, & Murnighan, 2011; Walter, Levin, & Murnighan, 2015).

Based on cognitive and temporal lenses, social network “exists as layer upon layer of relations, built up over time and space in the cognitions of members” (Kilduff et al., 2006:1039). While these ideas have been growing prominent in social network research, social capital research has missed the opportunity to embrace the cognitive and temporal perspective so far. In fact, these two lenses appear to have the potential to explain the dynamics of interaction in social capital, particularly referring to its activation and mobilisation. Adopting these lenses may help solve the lack of consensus on social capital definitions, particularly reconciling the contrasting views about the role of resources. Grafting these lenses may help integrate social capital and social network fields of research. By doing so, we shed new light on social capital perception and underlying mechanisms of opportunity recognition that have been scantily investigated so far (Brands, 2013).

3.4.3 Emotional Lens

Emotions are increasingly attended to in management research (Elfenbein, 2007; Toegel, Kilduff, Anand, 2013). Scholars define the “most elementary consciously accessible affective feeling that need not to be directed at anything” as *Core Affect*, experienced regardless of individual, contextual or cultural differences (Russell & Barrett, 1999:806). Core affect has been conceptualised according to pleasantness and activation dimensions, which combined develop the circumplex model (Larsen & Diener, 1987). External stimuli, defined as the *object*, encompass “person, condition, event or thing which mental state is directed” (Russell, 2003:147). Therefore, a change in the core affect due to an object (real or imagined; past, present or future) leads to an *attributed affect* (Russell & Barrett, 1999). When attributed affect is consciously experienced and engages additional resources for processing, storing and retrieval on demand is defined as *feeling* (Cardon, Vincent, Singh, & Drnovsek, 2009). Without engaging in any actual activity, sometimes individuals desire or imagine engaging in activities and experience associated feelings, so-called *anticipatory feelings*, which subsequently influence their behaviour (Baumeister, Vohs, DeWall & Zhang, 2007).

Despite the central role of emotional attachment in early conceptualisations of social capital (Putnam et al., 1993; Coleman, 1990), few studies have adopted the emotional lens in investigating social capital mechanisms (Moran, 2005; Burt, Hogarth, Michaud, 2006). Although scholars are trying to discard the rational premises of social network literature, such as contact selection and instrumentality of social capital, the scant attention devoted toward emotions and emotional processes in social capital research is limiting it to rational or at best cognitive conceptualisations. A growing body of research

has started examining connections between the individual-level of social capital and cognition (e.g. Srivastava, 2012), however current understanding and theory of social capital do not systematically integrate cognitive and emotional lenses. This aspect is surprising if we reflect on the intrinsic value attributed by social capital construct to relationships. By grafting cognitive, temporal and emotional lenses, we aim at developing a further understanding of social capital construct and dynamics.

According to Portes (1998:21), “the greatest theoretical promise of social capital lies at the individual level”. Hence, we start by adopting an individual level of analysis, investigating cognitions and emotions and their interaction in shaping individual social capital perception. Then, we move toward a dyadic level of analysis, theoretically examining the dynamic interaction between two individual perceptions of social capital in the process of social capital actuation, throughout potentiality, activation and mobilisation phases. By doing so, we do not assert social capital exists only at the individual level; but due to the newness of this approach, we assume the perspective of our speculation might be the starting point for a further multilevel investigation of social capital at higher levels of analysis, such as organisational and community levels.

3.5 DRIVERS OF INDIVIDUAL SOCIAL CAPITAL PERCEPTION

Answering to Kwon & Adler’s (2014) call for further integration between social network and social capital fields of research, here we explore the cognitive lens, and combine it with the emotional lens. As discussed later, this will enable a temporal examination of the dynamic dyadic interaction between two individual social capital perceptions. Our aim is to theorise about how cognitive and emotional components combine and together the shape individual perception of social capital. Social capital definitions so far have highlighted the role of relationships and resources at the nodes as either complements or addends of the social capital construct. This ambiguity is

problematic and worth examining further. By focusing on resource benefit while neglecting the relationship, researchers tend to speculate about resources without understanding the process that leads to exchange them. Vice versa, examining the relationship but overlooking the resource benefit prevents scholars from understanding the underlying dynamic and the causal mechanisms such as reciprocity and solidarity. This lack of investigation has hampered a fine-grained understanding of the strategic role of social capital in accessing resources at the nodes. Therefore, we posit that individual perceive social capital according to two components: the resource outcome (cognitive component) and anticipatory feelings (emotional component).

3.5.1 Components of Social Capital Perception

Cognitive Component: Resource Outcome. Resource outcome is defined as the anticipated discrepancy between the value of resources accessible by dint of a contact and the cost that an individual would meet in the social exchange. In other words, it is the difference between outputs and inputs an individual forecasts regarding the possible social exchange with another individual. In developing his resource evaluation, an individual takes into account not only the imminent social exchange but also previous exchanges with the other individual and related resources exchanged. Regarding inputs and outputs resources have played a crucial role in social capital literature, not only about their inclusion or exclusion in the definition but also regarding the types of resources involved. This conceptualisation involves all the resources that an individual aims to access through his contacts; thus we include intangible resources as information as well as tangible resources such as operational and financial capital. Although it encompasses any form of capital, this approach should not be interpreted as too broad; in fact, it defines the perception an individual develops about the resources available through the relationships of his/her network, not the resources per se. We believe this cognitive component requires

further clarification in particular due to its overlap with another construct in social capital literature. In fact, differently, from Nahapiet and Ghoshal's (1998) conceptualisation of "cognitive social capital" which deals with shared language and norms that enable cooperation among parties, the conceptualisation adopted in this study stems from social cognition literature as the individual perception of the available resources in the network.

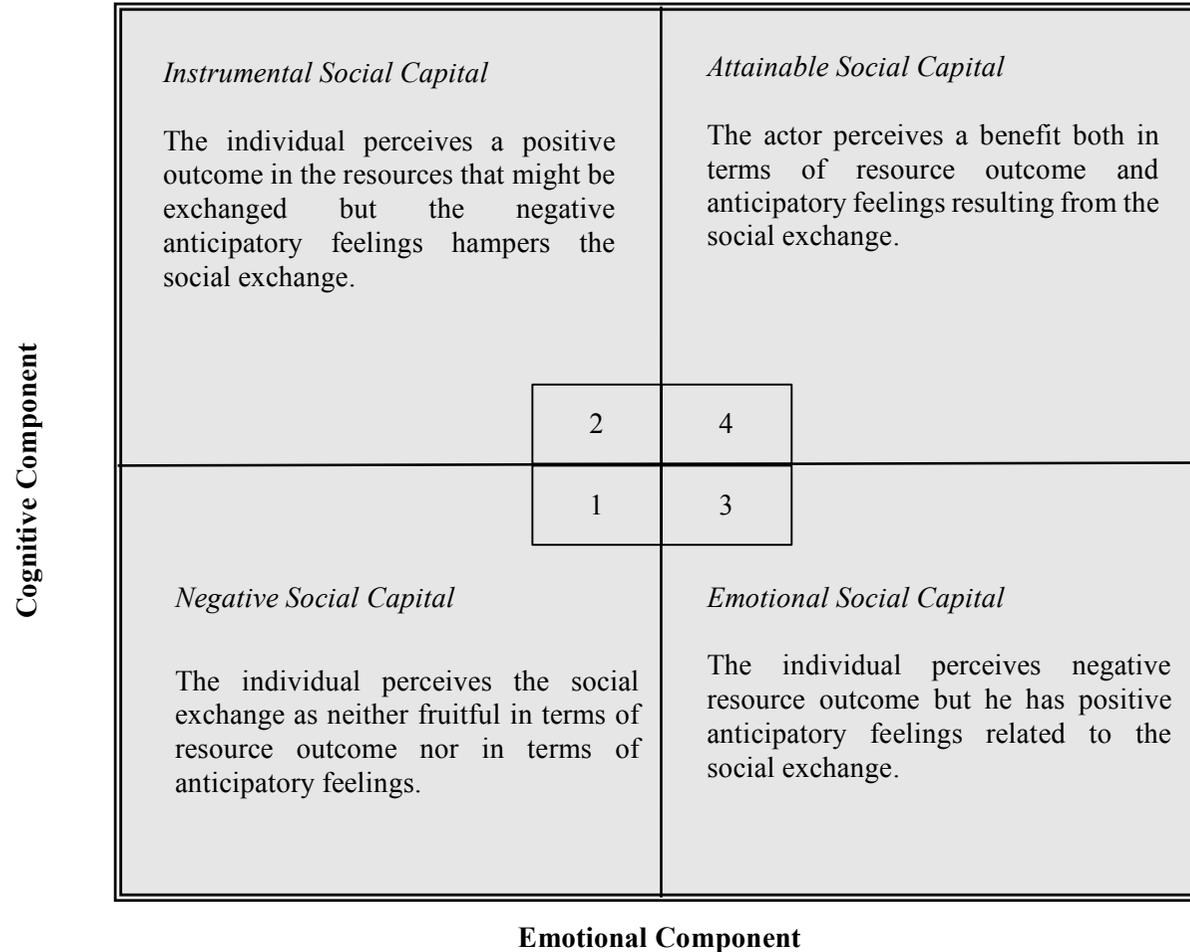
Emotional component: Anticipatory feelings. Anticipatory feelings are defined as the aggregated level of processed pleasant (or unpleasant) attributed affect an individual associated with another individual according to a desired activity (object) and integrated with retrieved and stored previous experiences related to that other. In conceptualising the emotional component of social capital we do not assume an individual feels a single (positive or negative) emotion, but we consider the aggregate level of feelings that lead an individual to develop his perception of the emotional component of social capital according to an object. Therefore, the emotional component of social capital perception is shaped by both pleasant (e.g. happy, excited, enthusiastic, calm, relaxed, and satisfied) and unpleasant (e.g. angry, nervous, tired, unhappy, depressed, and disappointed) feelings.

The combination of cognitive and emotional components of social capital results in the framework depicted in Figure 4, with the cognitive component on the vertical axis and the emotional component on the horizontal axis⁶. Consistent with the depicted definition and understanding of cognitive component, we assume a positive (negative) resource outcome when the value of the resource output exceeds (is inferior to) the value of the resource input. Moreover, relatively to the emotional component, we posit positive

⁶ It is necessary to specify that developing a measure of emotions and cognition is beyond our scope. Furthermore, by assuming emotion and cognition as two components of social capital perception, we do not assert that they are unidimensional. Indeed, the literature has discussed the multidimensionality of both cognition and emotion (see for example Allison and Hayes (1996) and Kahneman (2003) for the former and Larsen and Diener (1992) and Russell and Barrett (1999) for the latter). Differently, we state that individual perception of social capital individual has two components, cognitive and emotional, whose combination leads to different types of social capital.

(negative) anticipatory feelings when the individual perceives the relationship as a viable pipe characterised by happiness, excitement, enthusiasm and satisfaction (angry, disappointment, nervousness). According to the bi-dimensional framework (Figure 4), four prototypical social capital conditions have been identified: negative resource outcome/negative anticipatory feelings (Negative Social Capital), negative resource outcome/positive anticipatory feelings (Emotional Social Capital), positive resource outcome/negative anticipatory feelings (Instrumental Social Capital), and positive resource outcome/positive anticipatory feelings (Attainable Social Capital). Each social capital condition presents distinct challenges and characteristics.

FIGURE 4 - Social Capital Perception: Bi-dimensional Framework According to Cognitive and Emotional Components



Because social capital depends on the interaction between cognitive and emotional components, social capital perception can be modelled as a function to understand how the magnitude and weight of the two components varies in relation to different parameters that influence the social capital perception. Therefore, any relationship between an individual (A) and another contact (N) in his/her network can be plotted as a point in the bi-dimensional framework depicted in Figure 4. By considering social capital as the result of the interaction between anticipatory feelings and resource outcomes, social capital can be reinterpreted as an isoquant linked to its components through a Cobb-Douglas function⁷:

$$Social\ Capital_{(A,N,A)} = Cognitive\ Component_{(A,N,A)}^{\alpha_A} * Emotional\ component_{(A.N.A)}^{\beta_A}$$

In this formulation, it emerges that the two components of social capital might assume different weights represented by α_A and β_A , defined as the elasticity of social capital in relation to resource outcome and feelings. Thus we assume α_A and β_A are a function of (a) individual characteristics in evaluating social capital, (b) the desired goal that triggers social capital perception and (c) contextual factors. We conceptualise individual characteristics as shaped by genetics, personality and demography (Tasselli et al., 2015). The desired goal might be more focused more on either the instrumental or emotional side of social capital. Furthermore, we assume the context shapes norms and sanctions that an individual feels. Therefore, an individual, according to individual characteristics (genes, personality and demography), the desired goal and contextual factor, develops two weights for feelings and resource outcome (estimated value of α_A and β_A) in a virtual social exchange.

⁷ The notation used to describe social capital perception by individual A mimics the notation used in cognitive social structure studies of network perception. In details it represents the perception of social capital by A in the relationship between individual A and any individual N in the network (A, N, A) (see Krachardt, 1987).

According to social capital function, we present two extreme scenarios. In the organisational context, the first scenario $\alpha_A < \beta_A$ (Figure 5a) describes an individual who presents emotional characteristics, is more focused on feelings within relationships with other individuals rather than on exchangeable resources; thereby attributes a greater value to Emotional and Attainable social capital. The second scenario, $\alpha_A > \beta_A$ (Figure 5b), represents the situation of an individual with very instrumental characteristics who strives for reaching resources belonging to other individual(s) in his/her network, thereby attributes a greater value to Instrumental and Attainable social capital.

As Figure 5a and 5b show, Negative social capital represents in either scenario the lowest level of social capital, since the individual perceives both negative resource outcome and negative anticipatory feelings. Conversely, Attainable social capital assumes positive values of social capital in both cases, according to the positive resource outcome and positive anticipatory feelings from the relationship. Nevertheless, Instrumental social capital and Emotional social capital assume different values in relation to the shaping forces that drive weights (α_A and β_A) of the two components in social capital function and are more interesting to explore in their distinct challenges.

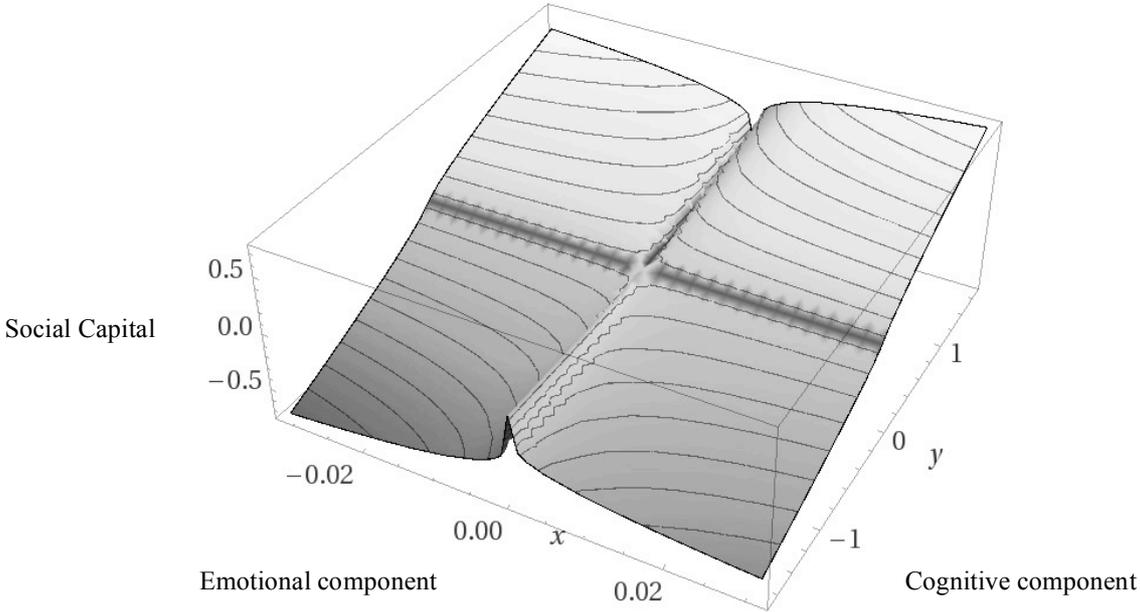
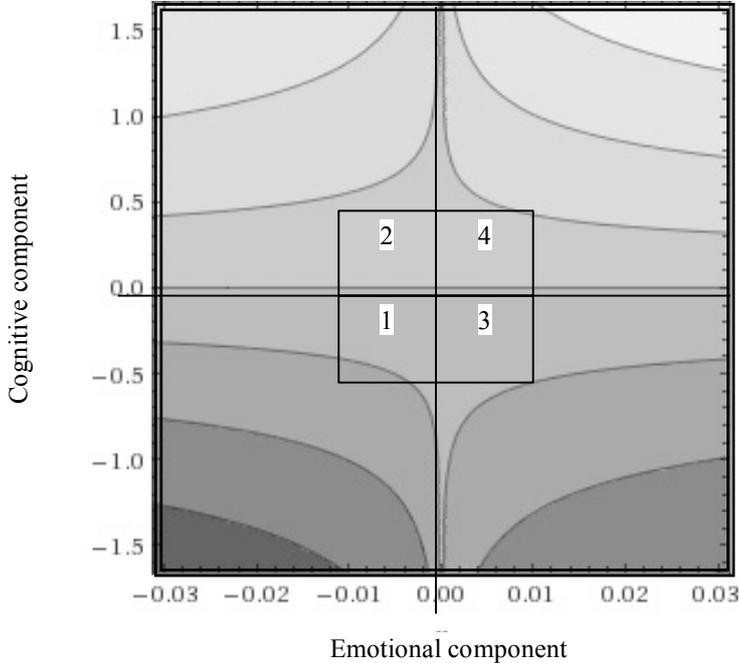
Between the two extreme scenarios, wherein we assume any individual perception of social capital falls, we conceptualise emotional and cognitive components as alternatively means or end of social capital maximisation. Thus, in Scenario 1 (Figure 5a) the emotional component has a stronger impact, resource outcome is considered less relevant in shaping the value of social capital and acts as corroborant in achieving higher values of social capital. In this case, we assume emotional component as the end and cognitive component as the means, the individual is so focused on the emotional aspect of the exchange that is willing to compromise the cognitive component (even little negative values) in order to maximise social capital. Conversely, in Scenario 2 (Figure 5b) the

instrumental focus attributes higher weight to the cognitive rather than the emotional component, that acts as corroborant. Thus, the end relies on the resources and emotions are means through which individual can reach higher levels of social capital. In this case, the individual is so focused on the instrumental aspect of the exchange that is willing to compromise the emotional component (even negative values) to maximise social capital. Hence, we define:

Social capital perception is the means-end relationship between cognitive and emotional components that an individual associate to each salient relationship in personal network.

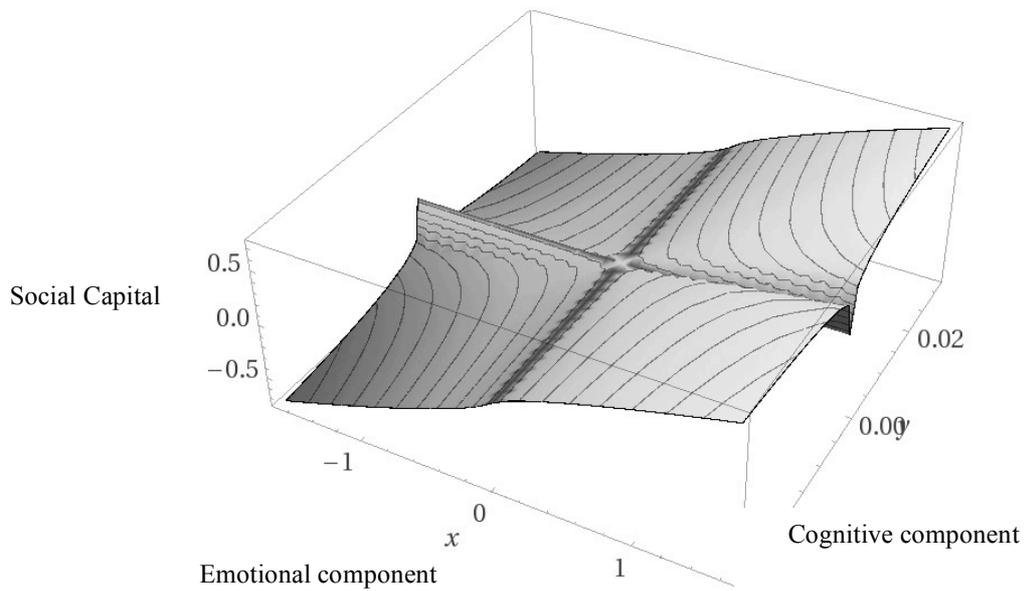
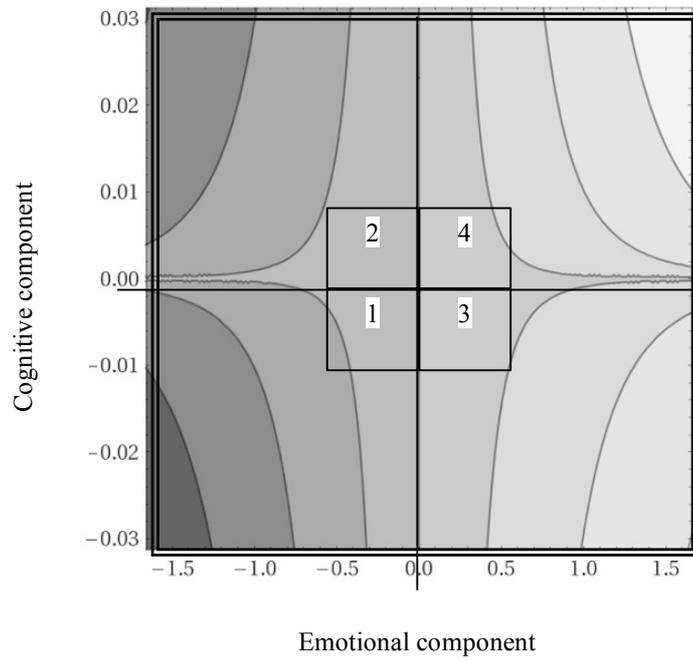
Different combinations of means and end might lead to the same level of social capital (isoquants), which can be depicted on the three-dimensional graph of the social capital surface (Figure 5a and 5b). In the next section, we conceptually explore how individual social capital perception evolves in a dyad throughout social capital actuation and varies according to the either actuating or actuated role that an individual plays.

FIGURE 5a - Social Capital Function with Anticipatory Feelings as End and Resources as Means



Assuming $\alpha_A = 0.2$ and $\beta_A = 0.6$. The surface generated presents isoquants where the maximisation of social capital lies in Cell 2 and Cell 4.

FIGURE 5b - Social Capital Function with Resources as End and Anticipatory Feelings as Means



Assuming $\alpha_A = 0.6$ and $\beta_A = 0.2$. The surface generated presents isoquants where the maximisation of social capital lies in Cell 3 and Cell 4.

3.6 A PROCESS MODEL OF SOCIAL CAPITAL ACTUATION

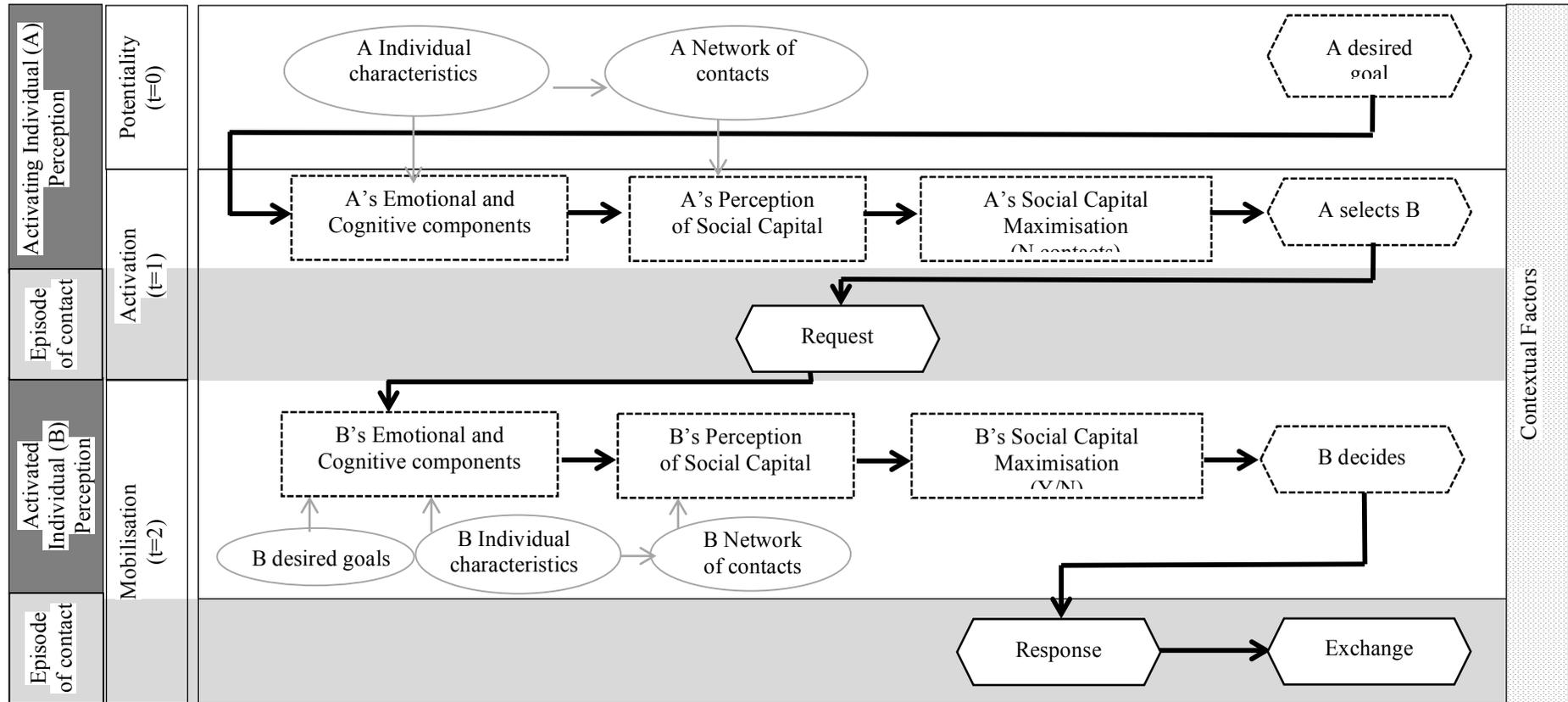
In conceiving social capital perception and related dynamics, we assume that networking behaviours and outcomes depend on individuals. According to the organisational behaviour perspective, individuals strive toward desired goals, albeit their motivation depends on individual's psychological makeup and social context characteristics (Barrick, Mount, & Li, 2013). Stemming from the theory introduced, we speculate on the dynamics of social capital processes in a dyad. Our aim is to explore how playing different roles in social capital actuation shapes the individual's perception of social capital over time, according to cognitive and emotional components (Figure 6). For simplicity, we examine two individuals playing different roles in social capital dynamics. The first is the *Actuating Individual (A)*, who scrutinises his network and selects whom to activate. The second is the *Actuated Individual (B)*, who receives the request, develops perception and decides whether or not to accept to undertake the exchange. Therefore, we take a dyadic perspective, moving from intrapersonal to interpersonal level. The bi-dimensional framework of social capital perception (Figure 4) is adopted to explore social capital processes, starting from the desired goal and eventually leading to social exchange.

In answering to Kwon and Alder's (2014) call for the further implementation of the temporal lens in social capital research, we elaborate a process model of social capital actuation (Figure 6). In this regard Smith et al. (2012), by adopting a cognitive perspective to social network, distinguish among potential, activated and mobilised network. According to their definitions, the potential network is the full set of contacts people have at their disposal. The activated network is the subset of the potential network that comes to mind of the help-seeker in a given situation. The mobilised network is the subset of the activated network that people solicit resources from when they engage in help-seeking behaviours. Although we limit our speculation to the dyadic interaction, we later discuss

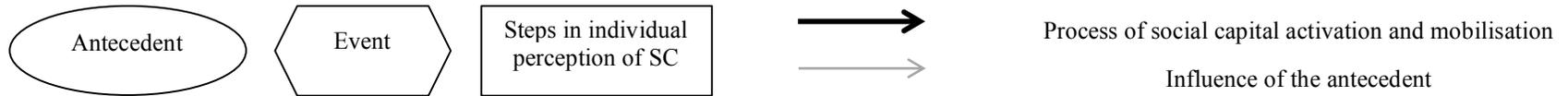
the possibility of simultaneous interactions of the actuating individual with multiple actuated individuals.

In theorising about the process of social capital actuation in time, by adopting extant literature as a platform, we distinguish three main phases. First, *potentiality* phase ($t=0$) represents the embryonic condition of individual social capital perception, which is shaped by individual's characteristics, contextual factors, contacts and inherent resources an individual can rely on. When desired (explicit or implicit) goal stimulates one individual to look for resources within his network, *activation* phase begins ($t=1$). The actuating individual recalls some salient contact in his network, scrutinises them according to the triggering goal, among those selects the most suitable combination of emotional and cognitive components that maximises the social capital function. Once the actuating individual has selected whom to activate, interacts with him and communicates his needs, this is the start of the *mobilisation* phase ($t=2$) that triggers the dyadic interaction of the two individuals and consequently of their perceptions of social capital. In this phase the actuated individual has higher decision making power, because according to the request can decide whether to accept or deny the exchange, by evaluating the perception of social capital related to that relationship. If the actuated individual agrees, the social exchange happens. Otherwise, some feedback effect induces the actuating individual to either activate someone else or to reshape perception of social capital. In the next section, we thoroughly analyse the social capital dynamics related to potentiality, activation and mobilisation phases.

FIGURE 6 - Process Model of Social Capital Actuation throughout Potentiality, Activation and Mobilisation Phases



Note: Steps with bold boxes are externally visible whereas those in dashed line are internally executed



3.6.1 Potentiality Phase (t=0): Embryonic Perception of Social Capital

In *potentiality* phase, wherein an individual lies when not triggered by the desired goal requiring social interaction, we assume he presents personal characteristics, has a network of totipotent contacts and is embedded in a context. First, as regarding personal characteristics Tasselli et al. (2015) assert actor's attributes are fundamental to understand the micro-foundations of social network. Stemming from this theorisation we assume individual differences contribute to shaping also individual's perception of social capital (e.g. genetics, personality and demography) related to both emotional and cognitive components. Although a deeper discussion of these factors is beyond the scope of this study, we assume them, together with contextual factors as antecedents of individual social capital perception. Second, the network of contacts an individual perceives he can rely on is the outcome of previous social exchanges, and the starting point of recalling a portion of salient contacts in the activation stage.

3.6.2 Activation Phase (t=1): From Desired Goal to Salient Contact Selection

When the actuating individual sets (or incurs) in a desired explicit (or implicit) goal that craves the agreement of another individual to be fulfilled, it triggers the activation phase. In the organisational context, goal might be accessing technology, knowledge or information belonging to someone else (Inkpen & Tsang, 2005), or developing an economic partnership or alliance (Das & Teng, 2002). According to this aim the actuating individual starts by attributing the role of means/end to the cognitive (α_A) and emotional (β_A) components according to desired goals, individual and contextual characteristics [*A's emotional and cognitive components*].

According to this analysis, the actuating individual subsequently recalls salient contacts in the network and scrutinises them according to the cognitive and emotional components aspiring to maximise the social capital function. Noteworthy, not all the

contacts perceived at the potentiality phase are recalled during activation phase. The perception of social capital evolves like a funnel that progressively filters the contacts according to their salience about the desired goal. Therefore, actuating individual develops the perception of social capital [*A's Social Capital Perception*] according to the salient contacts recalled. Actuating individual evaluates each relationship as a point in the bi-dimensional framework (Figure 4) with two coordinates and, as a function of the value attributed to each component (α ; β), evaluate the perceived social capital as a point on the social capital surface of the three-dimensional framework (see Figure 5a, 5b). Consequently, the actuating individual scrutinises the social capital perceived as available and selects the contact to activate by striving to maximise the function of social capital perception⁸ [*A's Social Capital Perception Maximisation*].

However, the high uncertainty that actuating individual has to bear at this phase requires implies the range of possible outcomes of each hypothesised social exchange. Thereby, together with the positive response of the actuated individual, the actuating individual also evaluates the social capital perception that would result from a refusal. Thus, we assume the actuating individual elaborates two different perceptions of social capital in case of (i) positive answer by actuated individual and (ii) negative answer by actuated individual. In (ii), the actuating individual considers the resource outcome and feelings as the difference between the missed output and the saved input from the social exchange. The two possible outcome of the mobilisation are then multiplied by the likelihood of occurrence, assuming a loss aversion principle (Kahneman & Tversky,

⁸ $Max [Expected\ Social\ Capital_{(A,N,A;t=1)}]$

1979)⁹. Once the actuating individual has selected whom to contact [*A selects B*], the mobilisation phase starts with first episodes of contact [*Interaction*]. The next phase implies the interaction between two individuals and involves the dyadic interaction of two distinguished social capital perceptions.

3.6.3 Mobilisation Phase (t=2): From Dyadic Interaction to Social Exchange

In the first episode of contact, we assume the actuating individual interacts with the actuated one by presenting his/her request. This interaction is crucial in shaping actuated individual's perception of social capital since it allows the actuated individual to acquire information about the social exchange request and lower the asymmetric information. Moreover, it is crucial how the actuating individual formulates and presents the request. The interaction but also personality, desired goal, contextual factors as well as previous exchanges of actuated individual shape the perception of social capital. Therefore, actuated individual develops social capital perception mirroring the process of actuating individual in the activation phase, but differing in the level of information.

After the first episode of contact, we theorise the actuated individual develops his perception of social capital in two steps. First of all by conceiving emotional and cognitive components' weights of social capital (α_B, β_B) [*B's emotional and cognitive components*], secondly by developing his/her perception of social capital [*B's social capital perception*]. Actuated individual evaluates social capital according to emotional and cognitive component following the bi-dimensional framework (Figure 4). However, differently from the actuating individual, actuated individual bears lower uncertainty as decision maker,

⁹ Actuating individual's perception of social capital considering the two scenarios is the formulated as:

$$\text{Expected Social Capital}_{(A,N,A;t=1)} = p^+ \left(\text{Emotional intensity} + \frac{\alpha_A}{(A,N,A;t=1)} * \text{Resource benefit/loss} + \frac{\beta_A}{(A,N,A;t=1)} \right) + (1 - p^+) \left(\text{Emotional intensity} - \frac{\alpha_A}{(A,N,A;t=1)} * \text{Resource benefit/loss} - \frac{\beta_A}{(A,N,A;t=1)} \right)$$

developing two separate perceptions of social capital related to either (i) acceptance or (ii) refusal to the exchange. In (i) resource outcome will be the difference between the perceived value of output-input and anticipatory feelings related to the acceptance of exchange. Conversely, in (ii) social capital is conceived as the difference between the missed output and the saved input from the social exchange and the feelings resulting from a denial. Actuated individual maximises his function of social capital perception by comparing the expected social capital according to acceptance and refusal scenarios [*B's social capital maximisation*]¹⁰. Thus, we assume that the actuated individual's function of social capital perception approximately mirrors actuating individual's function; however, it differs in terms of the level of information and decision-making power. The actuated individual has richer information about the request, which helps him evaluate the possible outcome of the social exchange; since it is developed after the first episode of contact and relates to just one individual (A) in the network, rather than to the potentially activated contacts (N).

Afterwards, the actuated individual decides [*B decides*] and communicates the decision to the actuating individual in the second episodes of contact [*Response*]. In case of acceptance, this step might be followed by actual social exchange [*Exchange*]. This condition has been vastly investigated in literature (e.g. Das & Teng, 2002; Flynn, 2005) thus we do not cope with the mechanisms unfolding in the exchange, but we assume a feedback effect from the exchange that influences future social capital dynamics. Conversely, in case of negative response, the actuating individual has to take further steps, such as starting a new interaction, trying to persuade the same actuated individual,

¹⁰
$$\text{Max} [\text{Expected Social Capital}_{(A,B,B;t=2)}] = [(\text{Cognitive component} + \frac{\alpha_B}{(A,B,B;t=2)} * \text{Emotional component} + \frac{\beta_A}{(A,N,A;t=1)}); (\text{Cognitive component} - \frac{\alpha_B}{(A,B,B;t=2)} * \text{Emotional component} - \frac{\beta_B}{(A,B,B;t=2)})]$$

mobilising another actor who maximises the social capital function, or revising the social capital maximisation function. Thus, we can assume a reiterated dynamic game where the mechanisms depicted unfold in time, with the actuated individual always bearing lower asymmetric information than the actuating individual and holding higher decision-making power. Therefore, it emerges how the individual perception that shapes the social capital maximisation function complicates the predictability of the outcome of social capital actuation.

3.7 DISCUSSION

In this article, we develop a deeper understanding of individual social capital perception by emphasising the means-end relationship between cognitive and emotional components and develop a model of social capital actuation. Social capital has been heterogeneously theorised in literature, lacking consensus on the definition and leading to a fragmentation of the field. Furthermore, the scant integration between social capital and social network research has hampered a deeper understanding of its underlying processes and dynamics. By grafting cognitive, emotional and temporal lenses, we re-conceptualise social capital according to the perception of individuals shaped by emotional and cognitive components and we develop a social capital actuation model unfolding in time throughout potentiality, activation and mobilisation phases. In a dyad, two individuals play different (actuating and the actuated) roles and develop intrapersonal (perception) and interpersonal (episodes of contact) processes. At intrapersonal level, the process of social capital perception performed by the actuated individual in the activation phase mirrors the actuating individual's social capital perception at the mobilisation phase but differs in terms of level of information and decision-making power. Below we describe four contributions of this study, connect each of them to current theoretical debates, and suggest new related research avenues.

3.7.1 Integrating Social Capital and Social Network Fields of Research by Grafting Cognitive, Emotional and Temporal Lenses

Despite the shared substantive topics and structures, social capital and social network research fields have been scantily integrated so far (Moody & Paxton, 2009). The model developed assumes cognitive and emotional lenses in social capital, in order to integrate the two research fields. This approach has been implemented in social network research (see Brands, 2013 for a review of cognitive social structures) by adopting cognitive lens and has been called for implementation in social capital studies as a new research direction (Brands, 2013; Kwon & Adler, 2014). Thus we assume that social network shapes the individual perception of social capital by framing the contacts an individual activates, scrutinises and selects according to maximisation principle depending on the resource outcome component.

Research in social network considers a perception of ego's network as accurate when one individual reports a tie that is confirmed by the other individual of the dyad. Therefore, an inaccurate view in ego's network involves an individual who reports relationships with contacts that are not confirmed by those contacts (Brands, 2013). According to Brands (2013: S93), "Implicit in the work on systematic bias in network perceptions is the assumption that accurate perceptions of networks are somehow advantageous". This assumption also holds in the means/end relationship of social capital, since the accuracy of perception is crucial for social capital maximisation. However, the cognitive and emotional components of social capital perception involve some bias. Individuals in social network develop perceptions of social capital according to both their former states and hopes for their future states (Emirbayer & Mische, 1998). For example, memories influence the perception of latent ties - relationships that were active in the past and then suspended (Levin et al., 2011; Mariotti and Delbridge, 2013, Walter et al., 2015).

As another example, people perceive an imaginative relationship – ghost tie – with celebrities or high-status individuals that exert some influence, although they have never met (Kwon & Adler, 2014).

These biases in social network perception are likely to influence social capital perception. A further investigation of the role of accuracy and bias in social capital perception would provide further understanding of the processes that make some tie more salient than others to the actuating individual in the activation phase, and influence the actuated individual's willingness to accept the exchange at the mobilisation phase. This effort would contribute to both social capital and social network fields of research, where the consequences of misperceiving social networks have been largely neglected, particularly in their role of influencing individual's decisions and behaviours (Brands, 2013). Furthermore, in this conceptualisation we assume emotional and cognitive components as distinguished; however, literature has analysed the interaction between the two. The empirical investigation should focus on the heterogeneity of resources as well as of feelings and possible reciprocal influence in shaping individual's perception and subsequent behaviour.

3.7.2 Examining the Role of Resources and Feelings in Shaping Social Capital Perception

Our second contribution consists in the definition of social capital perception that clarifies the role of resources by overcoming the simplistic additional relationship between resources accessible by dint of the connections in a network (Bourdieu & Wacquant, 1992; Nahapiet & Ghoshal, 1998). In doing so, we first include feelings; and second theorise on how resources and feelings relate to each other in shaping social capital perception and maximisation. Further research building on the developed model could speculate beyond the dyadic interaction between two individuals, towards group level of analysis. This effort

could be driven in two directions. First, by coping with various actuation processes simultaneously, an actuating individual might undertake towards multiple actuated individuals at the same time. Secondly, research could consider further links in the network, as second and third links that would provide a more refined understanding of the interactions conceived as a net of means/end relationships. This exploration would contribute to understanding how individuals can play both actuating and actuated roles and clarifying complex phenomena such as social capital as prisms (Podolny, 2001).

3.7.3 Developing a Dyadic-Process Model of Social Capital Actuation

While previous studies started looking at the multilevel aspects of social capital activation (Smith, 2005), we theorise a dynamic model of social capital actuation through three phases. The process perspective permits to address the role of asymmetric information and decision-making power stemming from the episodes of contacts. This assumption explains how individual social capital (as individual social network) is not just temporally dynamic in the long run when relationship decay (Burt, 2000), but are also situationally dynamic according to the event-related triggers that prompt individuals to continually reconstruct the activated social capital (Smith et al., 2012). According to this temporal perspective, further research is required to understand the role of past and future social exchanges in influencing the individual perception of social capital with a long-term view. Status and reputation, considered as most relevant individual characteristics in social capital activation (Smith, 2005) worth further investigation in affecting the perception of resource outcome and anticipatory feelings.

3.7.4 Managerial Implications

This article also provides many implications for managers. In processes of collaboration or organisational change social capital perception has a strong impact on individual behaviours. Therefore, being aware of social capital dynamics and

understanding the leverages to influence social capital perception bring strategic advantages. Selecting the right partners might improve the performance of a firm by providing valuable resources (Davis & Eisenhardt, 2011). This strategic view of social capital emphasises how individuals shape their approach to social exchange and challenges the assumption that the mere existence of social ties implies value creation. Conversely, it is the value of the resource outcome and anticipatory feelings that translate social capital into actual performance outcomes (Maurer, Bartsch, & Ebers, 2011).

In this regards, playing actuating or actuated role brings both advantages and drawbacks that managers should be aware of in interacting with others. As actuating individual, a manager benefits of the first mover advantage and can select which individuals to actuate. On the other hand, the high asymmetric information in the activation phase and level of uncertainty complicate the scrutiny. As actuated individual, a manager bears lower asymmetric information by knowing what are the actuating individual needs. In both cases, it is paramount to enhance skills in evaluating people and their resources to develop a reliable social capital perception. Moreover, ability persuade other actors in episodes of contact is crucial to influence their own social capital perception and their consequently willingness to accept the exchange. In this regards the framework in Figure 4 is a useful tool to map relationships in the network according to the cognitive and emotional components to scrutinise and select which relationship(s) to mobilise. Furthermore, this framework is a useful tool for the actuating individual to hypothesise his position in actuated individual's perception of social capital in order to estimate the likelihood of successful exchange.

The leverages an individual can use to influence other's perception of social capital are related to resource outcome and anticipatory feelings. Regarding the first, an actor might increase the perceived value of the output resources as well as decrease the perceived

value of the input required. According to feelings, an actor might increase the perceived positive emotions in the relationships. For example, by conveying empathy – understanding other’s thoughts and feelings – contacts may feel of being understood, and this induces a desire for either form or maintain the relationship (Kleinbaum, Jordan, & Audia, 2015). According to a long-term view, it is crucial to limit the persuasion strategy without falling in deceiving; otherwise, future exchanges could be compromised.

3.8 CONCLUSIONS

We note that social capital is far from being a mature field of research, but it requires further investigations on the mechanisms underlying its actuation. In this regards, the integration with social network research is a promising road for further understanding. In exploring this topic, we grafted cognitive, temporal and emotional lenses and developed a bi-dimensional framework and function of social capital perception and a process model of its actuation according to potentiality, activation and mobilisation phases.

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**4 PAPER C: “SOMEBODY THAT I USED TO KNOW”: A PROCESS
MODEL OF LATENT TIES’ REACTIVATION**

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“Somebody that I Used to Know”: A process model of latent ties’ reactivation

4.1 ABSTRACT

A growing body of research is drawing attention on the importance of latent ties, defined as relationships whose interaction has been suspended for long time. By conducting an investigation through ethnographic techniques in a textile district in the Northern Italy, I inductively develop a process model of practices and cognitive mechanisms enfolded in the reactivation of latent ties. Through this study, I begin shedding light on how individual perception of relationships changes throughout time, according to three phases: activity, latency and reconnection. Grounding on evidence from this research, I build theory about how discrepancies in perceptions within a dyadic relationship create “social slack”, a key driver in the reactivation of latent ties.

Keywords: Latent ties, Social capital, Process model.

4.2 INTRODUCTION

“Mother Nature has been so democratic with the whole humankind to give each of us exactly 24 hours per day - nothing more and nothing less. We are all aware that time is paramount and scheduled in advance; however unexpected events happen now and then. Some weeks ago I received a phone call from John; he asked me some information that I was happy to give. It had not heard from him in 3 or 4 years” (President, W2 textile company in Bergamo’s district).

In situations of trouble or under changing circumstances, people may find support in relationships within their social network. Social ties are precious and hard instruments to orchestrate since they allow to access crucial resources but require the willingness of both parties to engage in exchange (Adler & Kwon, 2002). The benefits of relationships are a trade-off to the limited amount of time people can deploy to maintain connections during life (Mariotti & Delbridge, 2012). In fact, individuals can maintain only a small portion of their social network as active in interaction, while the remaining part drops in a state of inactivity that might last for a long time (Jack, 2005). These inactive relationships are defined as *latent ties* – or dormant (Levin, Walter, & Murnighan, 2011). By purposefully or accidentally reconnecting with past contacts, individuals can reactivate latent ties after a suspension period and can access resources through those reconnected relationships.

The social network literature has investigated the role of time in relationships with controversial findings. Time has been claimed to negatively influence social ties, leading them to wither and decay (Burt, 2002). Conversely, a growing body of research has begun revealing that latent ties can exert some influence despite the absence of any interaction. Latency in social networks has been so far investigated in a small range of organisational phenomena; such as, the mobilisation of financial capital through angel investors (Steier &

Greenwood, 2000), the acquisition of novel knowledge (Levin et al., 2011) and the formation of entrepreneurial interpersonal ties (Vissa, 2011). Furthermore, scholars have investigated the role of technological instruments in facilitating reconnection (Quinn, 2013). Research along this line is gaining a momentum and is further deepening the understanding of the role played by time in relationships. Moving away from under-psychologised premises of social relations toward models that emphasise actor's¹¹ centrality (Kilduff, Tsai, & Hanke, 2006), scholars have identified biases in the individual evaluation of ties that influence reconnection (Walter, Levin, & Murnighan, 2015). Individuals develop perceptions about relationships that shape their ability to recognise opportunities available through contacts and consequent social capital mobilisation (Kwon & Adler, 2014). Therefore, latent ties emerge as a prominent area of investigation for understanding how actors' cognition of ties evolves over time. However, research in this area has still to embrace a dynamic perspective fully.

To improve understanding of processes underlying the development of latent ties reconnection, I empirically investigated their dynamics through ethnographic techniques applied in a textile district in the Northern Italy. I considered this setting as appropriate for my research purpose because of its distinctive characteristics: the fragmented value chain and the importance of individual competencies irregularly distributed within the district, crucial to be accessed in order to achieve competitive advantage (Tinaglia & Gandola, 2015). Following an abductive approach (Van de Ven, 2002) I reason on the micro-foundations of latent ties reconnection, striving to answer the following research question: *How do organisational individuals develop and reconnect latent ties?* By triangulating multiple data sources as archival data, interviews and non-participant observations, I

¹¹Although the term “actor” is used in literature to depict various levels of analysis, I here adopt this term referring to individual level.

combine individual and dyadic levels of analysis to investigate practices and cognitive mechanisms involved in latent ties reconnection. From the inquiry, I elaborate a process model of latent ties and investigate the individual perception of closeness in relationships (Marsden & Campbell, 1984), identifying various shaping forces. By discriminating between reconnecting and reconnected actors as active and passive characters who play distinct roles in the process of reconnection, I develop the construct of social slack - a cushion of relational resources that emerges from the positive discrepancy in perceived closeness developed by the two actors, influencing the outcome of the reactivation process.

The insights of this study offer two contributions to research on social network and social capital. First, by developing the process model I depict underlying dynamics and practices unfolding in a dyadic relationship throughout latent ties development and reconnection. Second, the construct of social slack sheds light on the strategic value of latent ties for organisational actors, seeking to access relational resources by reconnecting with their latent contacts. I start by reviewing the literature on latent ties and linking it to social capital research. Then, I describe the theory-building ethnographic study conducted in the Bergamo's textile district, providing details on the methodology implemented. Building on collected data I develop a process model of latent ties' dynamics according to activity, latency and reconnection phases. Later on, I define the construct of social slack and conclude with a brief discussion of contributions, limitations and further research directions.

4.3 THEORETICAL BACKGROUND

Research on network ties is rooted in Granovetter's (1973:1361) exploration of ties' strength - "the combination of the amount of time, the emotional intensity, the intimacy (mutual confiding), and the reciprocal services which characterise the tie". Organisational actors take advantages from whom they are linked, and their success partially depends on

being well connected (Vissa, 2011). Actors develop and accumulate thousands of ties during their lives (Killworth, Johnsen, Bernard, Shalley, & McCarthy, 1990); however, it is difficult and to some extent impossible to maintain all of them as active (Walter et al., 2015). Scholars identify two main challenges that organisational actors need to manage to benefit from their relationships: decay and overload. First, tie's decay is the tendency of relationship to weaken and disappear (Burt, 2000). Actors need to feed and strive to maintain relationships alive to avoid their dissolution (Burt, 2002) by investing resources such as time. Second, dense networks are characterised by strong ties which are likely to provide redundant resources due to the high level of embeddedness. Network redundancy – duplication of resources and reduction in the relevance of the knowledge obtained from existing ties (Mariotti & Delbridge, 2012) - is a drawback of ties' accumulation that organisational actors need to solve to achieve network diversity. Research has identified a dilemma in these two challenges, an extensive array of contacts is beneficial as far as diverse; however, much effort is required to feed relationships (Steier & Greenwood, 2000).

Despite the paramount role of time in relationships, the large majority of studies reviewed so far have investigated phenomena in social networks according to at best selected moment and at worst “temporal reductionism” (Granovetter, 1992:34). Without taking into account time and change in network and relationships (Parkhe, Wesserman, & Ralston, 2006), scholars have missed the opportunity to examine how ties evolve in time and consequently how actors can strategically manage those relationships. Recently a stream of research has started shedding light on relationships' change through the exploration of latent (or dormant) ties - established relationships that are currently inactive (Mariotti & Delbridge, 2012). Latency is a status of relationships that may consciously or unconsciously occur owing to several reasons such as physical distance or change in

employment of an individual in a dyad (Mc Carthy & Levin, 2014). However dormant ties can be converted into active as actors reconnect (Jack, 2005). By benefitting of a sense of helpfulness and useful advice in reconnecting latent ties (Mariotti & Delbridge, 2012), actors may access to resources (Vissa, 2011) and support (Quinn, 2013). Scholars investigating latent ties are addressing questions about the value of reconnecting relationships, particularly as sources of knowledge (Levin et al., 2011), private information to use in the stock market (Cohen, Frazzini, and Malloy, 2008) or even financial capital (Steier & Greenwood, 2000). In investigating how network affects the intention of tie formation Vissa (2011) finds strong evidence that prior entrepreneurs are more likely to get a successful exchange by reconnecting dormant ties rather than forming new one. More recently Mc Carthy & Levin (2014) explored the relevance and implications of dormant ties even in the absence of reactivation, while Walter et al. (2015) examine the antecedents of contact selection and identify critical biases in reconnection preferences.

The crucial relevance of latent ties was already suggested by Granovetter (1992:34), “Built into human cognitive equipment is a remarkable capacity, depressingly little studied, to file away the details and especially the emotional tone of past relations for long periods of time, so that even when one has not had dealings with a certain person for many years, a reactivation of the relationship does not start from scratch, but from some set of previously attained common understandings and feelings”. Despite the high importance of latent ties for organisational phenomena, this handful of contributions has grounded its speculations in heterogeneous constructs according to three different conceptualisations of latent ties. First, latency is depicted as a stage of ties’ strength that evolves in time, strong relationships become latent after no interaction and can either be reactivated as strong or fall into weak ties (e.g. Jack, 2005; Mariotti & Delbridge, 2012). Second, latent ties consist in a distinct dimension of the typology of relations. Separate from ties’ strength, latency is

a temporal dimension of relationships that ranges from activity to latency according to interaction among actors (e.g. Levin et al., 2011; Walter et al., 2015). Third, dormant ties differ from inactive, consist in ties that were operational but have withered under stressor factors as time, distance and circumstance (Quinn, 2013). This heterogeneity extends also at empirical level, where the latent tie construct has been operationalised through various measures. Albeit the insightful theoretical speculation and cogent practical contributions that little qualitative and mainly quantitative investigation have developed; the scant homogeneity in research about latent ties hampers the debate and knowledge accumulation.

When actors purposefully reconnect relationship they aim at accessing resources belonging or available to the other actor in the dyad. However, research on latent ties has focused mainly on the characteristics of relationships, so far missing the opportunity of examining the content of those relationships consisting in social capital (Moody & Paxton, 2009). Social capital affects and is affected by the latency of ties, when actors do not actively interact they are constrained in identifying and mobilising social capital accessible through contacts in the network (Smith, Menon, & Thompson, 2012). Therefore, the examination of latent ties through social capital theory might be helpful in examining their dynamics and contributing to grasp the overall phenomenon according to the processes that unfold in time.

4.3.1 Latent Ties and Social Capital

Ties are pipes through which resources flow (Podolny, 2001). When a relationship is active actors can access resources that would not be able to achieve alone (Field, 2008). According to Nahapiet and Ghoshal (1998:243), social capital is “The sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit. Social capital thus comprises both the network and the assets that may be mobilised through that network”. Social capital

has been claimed as a powerful source of organisational actors' success (Adler & Kwon, 2002), it has been proven to influence various phenomena such as employment (Seibert, Kraimer, & Liden, 2001), knowledge (McFadyen & Cannella, 2004; Maurer, Bartsch, & Ebers, 2011) and managerial performance (Moran, 2005). In order to access resources in the network, individuals need to mobilise social capital by actively interact with contacts; therefore, active relationships are required to benefit from those resources. Investigating dynamics of reconnection acquires greater relevance when linked to social capital. Therefore, mirroring social network research, research in social capital assumes relationships require maintenance and costly effort to avoid decay (Adler & Kwon, 2002; Coleman, 1990).

According to Granovetter (1973), cognitive mechanisms are compelling in latent ties dynamics. Social cognition challenges the “under psychologised” premises of traditional social network analysis (Kilduff et al., 2006:1035). Differently from behavioural measures of interactions that look at the physical connections actors develop, cognitive perspective relies on “cognitions which live in peoples' heads” (Krackhardt, 1987:110). In fact, different individuals might perceive the same set of nodes differently (Kilduff & Krackhardt, 1994). Cognition plays a crucial role also in the social capital, since not only the cognition of the structure but also of the content of relationships shapes actors' perception of opportunities (Kwon & Adler, 2014). Research in cognitive social structure – defined as the cognitive representation of social network (Krackhardt, 1987) – investigates relationships according to each member's points of view (Brands, 2013). An obvious example of the relevance of cognition and its discrepancy from behavioural metrics of interaction emerges from *ghost ties*, imaginary relationships with high-status actors who have either never or no longer been present in the network, but influence actor's actions (Kilduff et al., 2006). However, ghost ties differ from latent ties, since the latter

imply a period of activity before becoming latent. As an outcome of human agency (Emirbayer & Mische, 1998), social networks carry memories of their past states, as well as hopes of their future states in the cognitions of their members (Kilduff et al., 2006). Therefore, investigating the underlying dynamics of social cognition in social capital might contribute to the understanding of its role in shaping individual agency.

Research on relationships has examined the dual role of time. When actors do not put any effort into maintaining relationships, time actively exerts a shaping force by drawing ties toward latency and withering (Coleman, 1990). Conversely, when actors enact their agency, time consists in a scarce and costly resource that is deployed to nourish relationships (Paldam, 2000) for building and cementing trust (Krackhardt 1992), vital for cultivating enduring ties. Social capital usefulness emerges from lasting relationships requiring time and energy (Bourdieu, 1986); according to actor's agency scholars have distinguished between having social capital and using it (Kwon & Adler, 2014). The rationale is that social capital remains latent until individuals activate the relationship (Srivastava, 2012); however, accessing social capital does not guarantee its mobilisation (Smith, 2005). Incorporating time in social capital research offers tremendous potential to understand underlying dynamics (Payne, Moore, Griffis, & Autry, 2011); nevertheless, research has only recently started shedding light on the mechanisms of social capital evolution in time.

Research has highlighted the relevance of latent ties for numerous organisational phenomena and ties' activation as trigger for both relationship and resources. Thereby, latent ties emerge as promising arena to investigate social network and social capital dynamics. First, according to cognitive perspective, individuals might differently perceive the relationship and related opportunities attainable by latent contacts in the network.

Second, time acting as a shaping force might rust relationships or be deployed to nurture them.

4.4 RESEARCH SETTING AND METHODOLOGY

4.4.1 Research Design

Based on ethnographic techniques, I investigate latent ties' dynamics by observing and engaging in the activities of the textile district in the North of Italy. This research is mainly based on qualitative longitudinal data collected between March and December 2015. According to the temporal nature of the research question, retrospective and anecdotic accounts enriched data collection and allowed to expand time brackets beyond the period of the study. Focusing on a district rather than on single organisations was paramount since the interest was on relationships among individuals across the network. Furthermore, the long historical background (tradition and experience) combining with innovation, fragmented value chain (specific activities patronised) and the strong relevance of individual competencies (tacit knowledge) (Tinaglia & Gandola, 2015) emerged as idiosyncratic in investigating latent ties. By implementing ethnographic techniques, I triangulated different data sources to analyse latent ties and related social capital to develop further understanding about how key organisational and institutional individuals in the district recall latent contacts and interact to activate them. Aiming to deepen the conversation with the interviewees linking latent ties to organisational processes, I adopted innovation as the entry point to analyse the reconnected relationship triggered by the need for innovative resources as main driver of change.

4.4.2 Empirical Setting

Settled in the Northern Italy, this textile district was selected as a prime venue for examining latent ties dynamics. This empirical setting emerged as distinctive according to its combination of innovation and tradition, the fragmented value chain involving

numerous manufacturing firms, and the high relevance of individual competencies. With deep historical roots since XIX century, the setting has witnessed dramatic changes. In the 1970s it employed more than 40,000 operators; nowadays, employees are 7,000 (Tinaglia & Gandola, 2015). This drop is due to the economic crisis that Italian textile industry has suffered (Alberti, 2006), and to the evolution of processes and textile-machineries that have allowed the industry to innovate and decrease its dependence on labour. Nevertheless, firms have internationalised and delocalised some of their activities; the technological development has permitted to maintain all the value chain within the district, a unique situation in Italy. Despite the investments in technology, labour still represents the main production cost and related competencies are very hard to be codified. Therefore, the experience of organisational actors at all levels is considered as crucial to the development of high-quality and innovative products. Nowadays, the textile district counts more than 250 small and medium size enterprises, mainly family firms. It constitutes an example of Italian excellence and cradle of Made in Italy (Tinaglia & Gandola, 2015).

Even though companies in the district belong to the same industry, their heterogeneity relies on products, production stages performed and fibres handled. The wide range of output includes not just fashionable goods as fabrics and stitches for clothing or soft furnishing, but also technical textile adopted in automotive and aerospace industries. Companies need to differentiate to be competitive with firms from countries with cheaper labour by developing high-quality and innovative products. Differentiation is sought through researching activities both to improve technical and design aspects of the product. In the past, firms in the district consistently internationalised in more than 70 different countries and preferred to develop their innovating projects and research activities within the company boundaries to protect industrial secrets. More recently, the economic downturn forced the textile district to gather in business associations (e.g. Confindustria

Bergamo, SMI-ATI, Tex Club Tec, EURATEX). The objective is to synergise and coordinate innovative projects, stimulate local education in the field and promote advertising campaigns. Since innovation constitutes the primary source of competitive advantage for these firms but the high specificity of competencies makes them hard to be codified; knowing the right actors and being aware of their skills pose a benefit for evaluating economic impact and technological feasibility of innovation, which has an impact on value creation and organisational performance.

4.4.3 Data Gathering

After having presented the research project to the local textile business association, I was invited to join monthly events as a non-participant observer. This invitation legitimated my presence in the field and eased the interaction with actors, ensuring access to people and documents. Throughout ten months in the field, from March to December 2015, I performed my data collection following recommendation for ethnographic techniques (Golden-Biddle & Locke, 1993; Van Maanen, 2011; Yin, 2010); triangulating archival search, interviews and observations, as summarised in Table 5. Since my aim was to develop further understanding of processes in latent ties, differently from other studies grounded in general reconnection (e.g. Levin et al., 2011), I focused on processes of social capital mobilisation for innovation purpose. Although triggers of reconnection might be both casual and purposeful, my empirical investigation focused on latent tie's dynamics of purposeful reactivation processes boosting innovation. I framed my investigation on innovation-generation as an entry point into the investigation, a condition when actors in the firms seek external resources and reconnect their contacts in order to get access to them (Ahuja, 2000).

TABLE 5 - Data Collected between March 2014 and December 2015 (1/2)

Data type	Data source	Number	Description
<i>Archival data</i>	Company-related press	181	Articles on local, national and international newspapers about the Bergamo's textile district and inner companies (documents relate not only to the companies interviewed but also to others in order to grasp the overall picture)
	Company-financial statement	17	2014 balance sheets and financial data provided by AIDA- Bureau Van Dijk.
	Company-related reports	53	Books, brochures and other documents developed directly by the companies and related to company's story, growth and core activities.
	Business Associations' reports	84	Yearly account of textile trends at local, national and European level developed by the main textile business associations (e.g. EURATEX, SMI-ATI, Tex Club Tec and CELC)
	Industry's reports	150	Documents developed by consulting companies or observatories about the textile industry depicting macro and micro-trends. Articles from local, national and international newspapers about trend of textile industry in the world.
<i>Interviews</i>	Semi-structured interviews	52 (67 hours 1460 pages)*	42 interviews with 38 organisational actors in textile companies (Table 2). 5 interviews with 4 actors in the district playing different roles at institutional level (Table 3). 5 interviews with 6 key raw material and textile machinery suppliers in order to understand the preliminary phases of the supply chain unrepresented in the district. (Table 4)
	Informal conversations	>60	Informal talk with employees, institutional actors, customers and suppliers of the Bergamo's textile district. Ranging from longer talks to brief exchanges, these conversations took place before and after meetings, or during exhibitions and conferences.

TABLE 5 - Data Collected between March 2014 and December 2015 (2/2)

Data type	Data source	Number	Description
<i>Observations</i>	District textile business association meetings	5 (15 hours)	Non-participant observation of events local business association's board and associates periodic meetings.
	Conferences, events and workshops	7 (30 hours 120 pages)*	Non-participant observations of meetings organised by local institutions and textile-business associations (Audio-recorded and verbatim transcribed)
	Commercial Meetings	7 (100 pages)*	Non-participant observation of commercial meetings between sale
	Exhibitions	2 (7 full days)	Participation in leading fairs for the textile industry: <i>ITMA – International Textile Market Association</i> (Milan, 12 th -19 th of November 2015). <i>FILO – International Yarns Exhibition</i> (Milan, 29 th September-1 st October, 2015).
	Plant visits	9	Attendance of production process explanation. (Audio-recorded and verbatim transcribed)
	Pictures and videos	118	Pictures of products, machineries and projects.

Note: * The transcripts are written in 12 Times New Roman double-spaced.

Archival search. In familiarising with the organisational context and complement primary data source (interviews and observations), archival documents were fundamental for grasping a historical perspective, crucial for the investigation of phenomena unfolding in time. The collection of archival search started with a press review performed by keywords¹² searching for articles from January 2010 until March 2015. I conducted a second press review in December 2015, after the completion of interviews. Additional documents were gathered through companies and business associations' websites (e.g. historical books about the organisation, company profiles, leaflets), during interviews (e.g. brochures, Master thesis developed about the companies, project resumes) and observations (e.g. meeting minutes, industry reports). Furthermore, I collected some artefacts as samples of the innovative products developed by the firms. During the period of data collection, the local textile business association sponsored a monograph about the textile local district (Tinaglia & Gandola, 2015) collecting interviews from the companies and stakeholders proved useful for verification. To complement the qualitative data collection, I also gathered financial data of the companies investigated from AIDA¹³ database.

Interviews. According to the individual-level of the analysis and the intimacy of the theme investigated, individual semi-structured interviews together with informal conversations were the primary means of inquiry. I endeavoured to interview three main categories of actors related to the textile district: company members, institutional actors and key suppliers. All the interviews were conducted *de visu* except for one conducted via SkypeTM. I conducted all the interviews in the interviewees' mother tongue. Therefore, the

¹² The keywords used to perform the press review were related to the textile district, business associations (local national and international) and names of the textile companies in the district.

¹³ AIDA is a private database by Bureau Van Dijk, providing accounting and ownership information for about 130,000 Italian firms.

majority of the interviews were in Italian, whereas interviews with few foreigner actors were conducted in English and French to ease the conversation. All the interviews were recorded and transcribed verbatim. Interview protocols were customised to the informants and included three sections: the role of relationships in the district, main innovation projects developed in the company in the last five years and related latent ties. Throughout the data collection period I engaged in many informal discussions with stakeholders in the textile district, these contributed to supplement the understanding of the empirical phenomena.

To select the companies, I started from a list of the firms subscribed to the local textile business association. I emailed the delegates by presenting the research project and asking them for an interview, 16 companies accepted to be involved in the project. According to my observations and archival data collection, they also emerged as the most active in the business association's activities. Within each of these companies I asked for the possibility to conduct more than one interview, this happened in all cases except for two. In total I collected 42 interviews with 38 organisational actors, in all out of one company I interviewed the entrepreneur(s), with a duration ranging from 30 minutes to 3 hours, a total of about 57 hours. The majority of the interviewees are delegates for the company in the local business associations; some of them have major roles as president of local, national and European textile-business associations (Table 6).

TABLE 6 - Data source: Companies Characteristics and Actors Interviewed

Firm	Turnover 2014*	Production stages	Main products	Main fibres handled	Interviewed, number of interviews
W1	30-50	Yarning, weaving	Flax yarn	Flax	CEO, 1 Managing Director, 1 R&D Manager, 1 (BA) Sales Manager, 1 Operations Manager, 1 Product Manager, 1
W2	70-100	Yarning, weaving, dyeing, finishing, sewing	Soft furnishing fabrics	Cotton, wool, flax	CEO, 2 (P) President, 1 (BA) Managing Director, 1 Sales Manager, 1 Project Manager, 1
W3	>100	Growing, yarning, weaving, dyeing	Shirt fabrics	Cotton, flax	President, 1 (BA) Marketing Manager, 1 Sales Manager, 1 Product Manager, 1 Quality Manager, 1
W4	70-100	Weaving, dyeing, finishing	Fabrics for interior and exterior furnishing	Cotton, man-made	Marketing Manager, 1 R&D Manager, 1 (BA)
W5	70-100	Weaving, knitting, dyeing	Sportswear, industrial applications	Man-made	Vice-president, 1 (BA)
C1	20-30	Cutting, Sewing	Work-wear	Man-made	CEO and President, 2 (BA) Product Manager, 1
C2	10-20	Cutting, Sewing	Sportswear, Outdoor clothing	Man-made	President, 1 (BA) Sales Manager, 1
C3	10-20	Cutting, sewing, printing	Sportswear	Man-made	CEO, 1 (P) Marketing Manager, 1 R&D Manager, 1
C4	10-20	Cutting, sewing, retailing	Underwear, Home-wear	Cotton, flax, man-made	CEO, 2 (BA)
C5	< 10	Cutting, sewing, retailing	Clothes	Cotton	CEO, 1 (BA)
C6	<10	Cutting, sewing, retailing	Underwear	Cotton, flax, man-made	CEO, 2 (BA)
D1	30-50	Printing, finishing	Under contract	-	CEO, 1 Managing Director, 1
D2	10-20	Dyeing, finishing	Under contract	-	CEO, 1 (BA) Sales Manager, 1
D3	<10	Printing, finishing	Advertising flags	Man-made	CEO, 1 Accounting Manager, 1
D4	<10	Dyeing, finishing	Under contract	-	Managing Director, 1 (BA) Sales Manager, 1
D5	<10	Dyeing, finishing	Under contract	-	President, 1 (P)

Note: * In Millions of Euro

(BA) Representative in business associations

(P) Leading role in business associations

Fibres treated depends on the client request of product transformation

According to ethnographic techniques (Yin, 2010), I interviewed other key stakeholders for the textile district to foster internal validity of my qualitative study: institutional actors and key suppliers. Four institutional actors were involved through five in-depth interviews about their roles in the textile district (Table 7). The institutional perspective was helpful in grasping the support and requirements called from main actors, but also in understanding the macro-trends of the district, support from institutions and the behaviours of individuals involved. These interviews lasted from 1 to 2 hours with a total of about 6 hours.

The value chain in the textile district is almost complete, and the missing part relates to raw materials purchased from abroad. In order to understand the dynamics of the industry and key relationships with suppliers I interviewed five key partners of the whole textile district (Table 8), selected according to the interviews conducted in the companies. The interviews lasted from 20 minutes to 1,5 hours with a total length of about 4 hours.

TABLE 7 - Institutional Actors Interviewed

Actor	Institution	Role, # interviews
I1	University of Bergamo	Professor – Responsible for the Textile-Chemical Research Laboratory, 1
I2	University of Bergamo	Professor – Responsible for the Textile-Mechanical Research Laboratory, 1
I3	International Bank (Branch of the district)	Managing director, 2
I4	Technical Textile Business Association	President, 1

TABLE 8 - Raw Material and Textile Machinery Suppliers Interviewed

Actor	Company's activity	Country	Role, # interviews	Language
S1	Flax grower	Belgium	CEO, 1 Sales manager, 1	English
S2*	Flax grower	France	Former CEO, 1	French
S3	Cotton grower	Egypt	CEO, 1	Italian
S4	Textile Machinery designer	Italy	Sales Manager, 1	Italian
S5	Textile Machinery designer	Italy	Marketing Manager, 1	Italian

Note: * Interview conducted via Skype.

Observations. The third focal source of data consisted of observations of various events and meetings as a non-participant observer. Since ethnographic approach requires close involvement in organisations, I adopted this means to grasp an insider perspective and detailed understanding of actor's realities (Easterby-Smith, Thorpe, & Jackson, 2012). According to the main phenomenon investigated, the observations were conducted in events of actors' interaction. Meeting observed took a variety of forms across ten months: business association meetings, conferences, events and workshops, commercial meetings, exhibitions and plant visits. The data collection was conducted by audio recording and transcribing verbatim the events, taking pictures and video onsite and writing field notes with general observations both during the observations and at the end of each day. The observed events included both professional (e.g. board meeting, conferences, workshops and textile laboratory visit) and recreational (e.g. visit to a local museum, lunches) activities. The possibility to observe organisational individuals engaging in professional and personal conversations was crucial for the data collection, due to their strong relevance for the phenomenon of interest. Two of the most important fairs for the worldwide textile industry (FILO and ITMA) represented the perfect ground to observe real-time reconstructions. During the exhibitions many actors of the district were present either as exhibitors or visitors. More private conversations were observed in commercial meetings, usually between two companies of the district engaging in conversations about innovation.

4.4.4 Data Analysis

Following the recommendations by Elsbach and Sutton (1992), I conducted the analysis of the data in several steps of a systematic, iterative and abductive process of reasoning, by moving back and forth between empirical data and theoretical conceptualisations. In an early stage of the analysis, I imported all the archival data collected into a database using NVivo® software (Version 10.2.2) for qualitative analysis.

This phase was crucial in acquiring the specific language of the field and common ground to interact with people during the data collection. Second, transcripts and other types of data collected during observations and interviews were also imported and analysed to understand the textile district's dynamics of interaction, particularly according to the practices in latent ties' dynamics (Miles, Huberman & Saldana, 2013). Later on, I used the qualitative data collected to investigate the cognitive mechanisms enfolding in processes of latent ties. First-order categories emerged from this phase (Locke, 2001; Gioia, Corley & Hamilton, 2013). By combining first-order categories into more theoretical and broader second-order categories, I built a grounded conceptual framework linking practices with cognitive mechanisms, relevant for each phase of activity, latency and reconnection.

During the categorisation, ongoing discussion and deliberation were beneficial for the analysis and interpretation (Denzin & Lincoln, 2000). Anecdotal accounts permitted to speculate on the cognition behind investigated processes and provided a temporal perspective according to the collected narratives. Although recollection about past events during interviews might be subjected to retrospective bias, the interviews focused on the activities performed in reconnecting or being reconnected rather than the outcome of the interactions. Therefore, in interpreting this data, retrospective bias should not be a crucial issue (Vaara, 2003). Emerging interpretations contributed to the development of a multiphase process model with multiple levels, taking into account the roles played by individuals in the latent ties' dynamics. To increase the reliability of the overall reasoning, at various stages of the analysis I submitted my interpretations to some informants for collecting feedback. In the next sections, I present the emerged interpretive framework.

4.5 TOWARD A PROCESS MODEL OF LATENT TIES' REACTIVATION: ACTIVATION, LATENCY AND RECONNECTION PHASES

In the empirical context investigated, latent ties emerged as crucial, as remarked by one of the interviewees:

Latent ties in our industry are fundamental, even more than in other sectors because the know-how is still based on experience. Probably in other sectors, such as Medicine, knowledge is more codified, analysed and studied; there are protocols, operators can rely on statistics and case records about every treatment. This is not the case in our job. There are many unwritten recipes that belong to whom elaborated them. In a case of need, I have to know who has those competences and call them. (MD, W2)

In fact, the textile manufacturing process requires numerous stages including spinning, weaving, knitting, dyeing, finishing and sewing. Raw materials are produced abroad, either directly by the companies or purchased after few stages. While few firms in the district have vertically integrated their production process through merger and acquisitions, the majority has decided to focus on core processes by outsourcing auxiliary activities to other firms in the nearby, benefiting from the geographical proximity. This specialisation has caused further fragmentation of the value chain in the district, forcing companies to collaborate to accomplish their production processes. As noted by an informant:

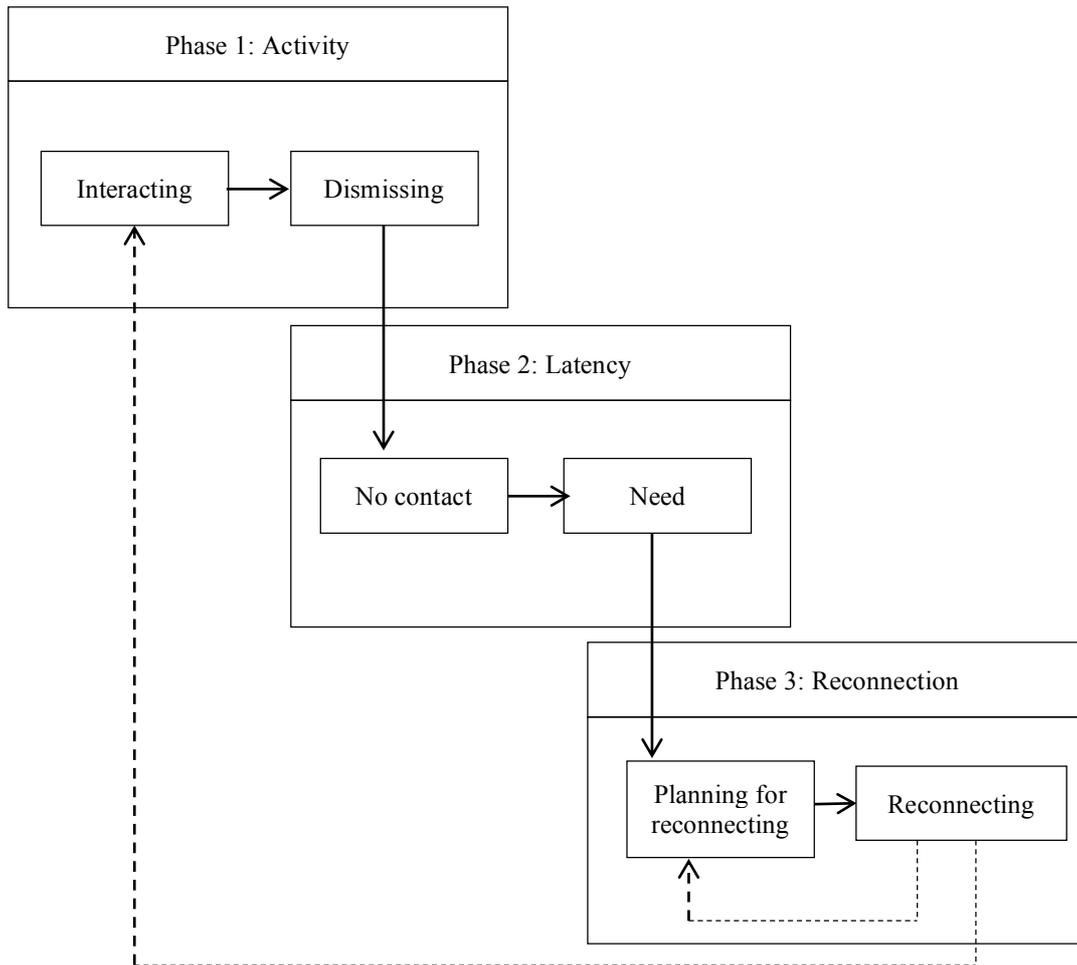
In the context of a few kilometres, there are great choices; so we tend to buy local. Suppliers give us service, competencies and responsiveness. [...] Distance is a criterion of supplier choice, as our business model does not include storage of large stockpiles and requires short delivery times according to the orders received (CEO, C3).

Differently from other Italian districts that are homogeneous in the fibre handled - such as silk in the district of Como (Alberti, 2006) - companies in this textile district handle different types of natural (e.g. cotton, wool, flax and silk) and human-made (e.g. Nylon, Lycra and polypropylene) fibres. This heterogeneity helps firms to collaborate, as illustrated by an interviewee:

In this district companies do many different things, therefore there is not a proper district, anyone is specialised. I think that being set in a district would be advantageous but dangerous since tends to be too inner-centred. Differently, here we undertake such different production processes that we do not overlap and risk to compete. (CEO and President, C1).

The heterogeneity in goods, production stages and fibres leads organisational actors in the district to develop specific skills throughout their experience and being key actors to connect with in case of need. First, I identified the practices in latent ties according to activity, latency and reconnection phases depicted in literature (Levin et al., 2011). Figure 7 models the process according to collected evidence, according to informants I unpacked the practices and depicted sub-processes; dotted lines indicate that the process is iterative in time.

FIGURE 7 – Model of Practices in Latent ties



During *activity* phase actors interact and communicate with high frequency. Once the interaction ends, they more or less deliberately dismiss and latency starts. In *latency* phase, individuals do not interact until one of the two incurs in need and initiate the *reconnection*. As informants observed:

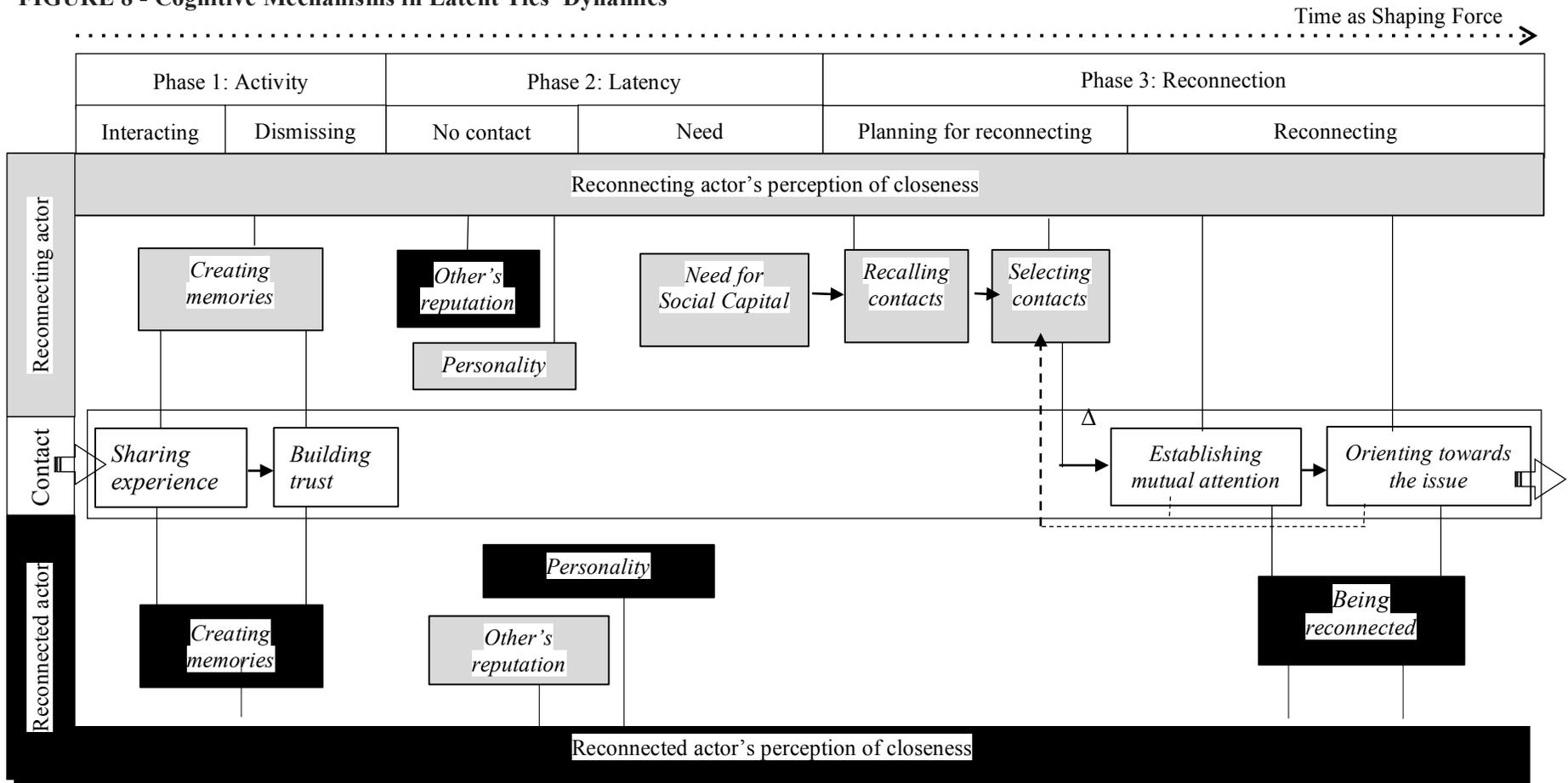
Relationships cannot be totally forgotten, and there will always be a wire between us. (CEO, W2)

When the relationship is good everything is eased, it is a means to achieve some goals. (R&D Manager, W1)

After this initial examination of the practices unfolding in latent ties’ dynamics, I developed a theoretical interpretation by intertwining detailed narrative of ethnographic

observations with theoretical insights emerged from conducted interviews. Triangulation of different data types sheds light on cognitive mechanisms of organisational actors involved in practices. First of all, I distinguish between reconnecting and reconnected actors, according to the role each individual plays in the reconnection phase. While activity and latency phase are the same, reconnecting actor incurring in need actively triggers the reconnection by planning and starting it. Conversely, reconnected actor passively experiences the reconnection and chooses whether or not to satisfy other's need. Second, in analysing cognitive mechanisms, I assume that each actor individually adjusts the perception of the relationship. In a dyad, actor's perceptions simultaneously co-exist as *perceived closeness*. According to Marsden and Campbell (1984:499) "a measure of closeness, or the emotional intensity of a relationship, is on balance the best indicator of the concept of tie strength among those available to us". Therefore distancing from the assumption of latency as a stage between strong and weak ties (e.g. Mariotti & Delbridge, 2012), I conceive it as a temporal dimension of relationships that influences the perception of tie's strength, here conceived as closeness. Stemming from the evidence of data analysis, the theoretical framework depicted in Figure 8 combines process model with cognitive mechanisms. Time is represented by a dashed arrow since the duration of each phase might vary. Table 9, 10 and 11 respectively display selected quotes supporting the interpretation. In the remainder of this section, I provide a comprehensive overview of the three phases in latent ties' dynamics.

FIGURE 8 - Cognitive Mechanisms in Latent Ties' Dynamics



Note: Second-order coding reported in Italic.
 Δ Discrepancy in actors' perceptions of closeness

4.5.1 Phase 1: Activity

Interaction [*Sharing experience*] allows individuals to build (or damage) trust according to the effort deployed in feeding the relationship and mutual esteem [*Building Trust*]. Personal moral and code of conduct influence experience both in action and perception. Although perception is individually developed, by interacting through positive (or negative) experiences individuals co-develop shared language, narratives and norms that constitute the cognitive dimension of social capital depicted by Nahapiet and Ghoshal (1998). Actors develop a personal perception of closeness stemming from a common ground, by co-developing their sensemaking about the relationship and aligning their perceptions. For these reasons networking activity has a strong relevance, since it permits individuals that have not interact for a period to re-engage in conversation and re-shape their interpretations about relationships, according to more recent events.

After the active experience individuals dismiss. From the empirical investigation, it emerges the importance of parting in positive relationships to ensure the possibility for future collaborations. Each actor, stemming from the same interaction, creates personal memories that act as lasting mark in individual perception and are likely to shape future interactions [*Creating Memories*]. This is also linked to the norm of reciprocity, intensively investigated in literature of social capital (Adler & Kwon, 2002). As noted by an informant:

When you have a job relationship is always wrong to sever. [...] If it is possible, I never slam the door when leaving a situation. I have never done and I will never do that! Otherwise, I would leave a bad memory and then it would be hard, if not impossible, to recover. (Sales Manager, W1)

4.5.2 Phase 2: Latency

Latency phase has not a starting point; relationships smoothly become latent when individuals do not directly communicate for a period. As research has struggled in setting

latency threshold in time, I had the same difficulty in the empirical investigation. According to previous research, I oriented respondents toward 3 years of no contact to guarantee common ground across different interviews (Levin et al., 2011), however I left them free to reshape their timeframe relevant to the construct. I started the empirical inquiry by defining latent ties as those relationships requiring effort to be reconnected, however informants reported heterogeneous interpretations of latency according to different periods of no contacts, ranging from 6 months to 10 years of no communication.

In the past, scholars conceived time as the only shaping force in ties' decay, assuming that the stronger the relationship is, the longer it takes to wither (Burt, 2002). Research in latent ties contradicted this assumption by showing the lasting relevance played by relationship kept as dormant for a long time (Walter et al., 2015). This incoherence also emerged from my empirical inquiry. On the one hand, time acts as a shaping force; hence individuals might forget about memories and people. As emerged from a non-participant observation:

When you are in need, you need to light the fire; but when you are not in need, you must keep the embers burning. Otherwise, if the fire goes out, long time is necessary to rekindle it. (Sales Manager talking with a colleague, W1)

However, sometimes time acts as a mitigating force that appeases issues. Relationships may even last in time without being cultivated, as noted by another informant:

Five years were passed, but I felt like we had met last week. (I1)

This investigation led me to identify other factors that influence the individual perception of closeness, besides time: personality and reputation. Individual characteristics such as empathy and character, synthesised in the term personality, affect the perception of the relationship in time [*Personality*]. Furthermore, reputation has a strong influence on

the perception of closeness, both at individual and organisational levels. Gossips and news about another contact that purposefully or accidentally acquaints an individual shape perception of closeness. From my investigation, it emerges that not just individual but also organisational reputation might indirectly influence the perception of closeness. However, organisational reputation affects individual perception of closeness only when the information received during the period of latency is directly ascribable to the actor [*Other's Reputation*].

So far the two actors examined played the same role and their practices mirror. However, when a need emerges and is related to social capital, latency phase ends for the reconnecting actor but continues for the reconnected until interaction. For reconnecting actor, latency phase ends when needs resources belonging to another individual with whom there has not been any interaction for long time and needs to be reconnected [*Need for Social Capital*]

4.5.3 Phase 3: Reconnection

In the reconnection phase, I consider two perspectives: reconnecting and reconnected actors, with their cognitive mechanisms. At the beginning of the reconnection process, informants reported they identify whom to reconnect with by relying on the former and present information [*Recalling contacts*]. Former information consists of lasted memories about shared experiences and reputational news gained throughout time by third parties. Present information consists in sought news that an individual might now search online or through third parties.

I either search information or information casually arrives. World Wide Web has amplified these phenomena, some news arrives much more quickly and easily. This is an advantage because when I need to make a decision I can get

information about people I might even not remember. I just need to dig what I am looking for and their profile comes out. (CEO, C6)

When selecting whom to reconnect, informants scrutinise contacts [*Selecting Contact(s)*]. First, according to the relevance of their competencies about the need. Second, reconnecting individuals also evaluate the level of trust. Third, a compelling aspect in reconnection that emerged from the empirical investigation is the conflict of interest that the request would cause in the reconnected actor. Therefore, the reconnecting individual evaluates the discrepancy there would be between his/her goal and the assumed goal of the reconnected actor. This evaluation has both instrumental and moral values. Reconnecting actor evaluates in advance whether a request would cause reconnected actor to struggle between having the ability but not the willingness to help, since this might also undermine the relationship.

First of all, when you reconnect you have to avoid asking things that would put the other party in trouble or difficulties. (President, W2)

Once the reconnecting actor has selected the individual(s) to contact, the modality of reconnection varies according to the relationship and the type of request. It may involve emails, phone calls, texts and personal visits. Sometimes the reconnection attempt might lead to no interaction, in this case, a new selection stage starts. Otherwise, the conversation usually starts with pleasantries and recollection of memories operated by either one or both individuals. As mentioned before, this interaction allows individuals to align and reshape their perceptions of closeness according to the new interaction. To create a good atmosphere and establish mutual attention, the reconnecting actor usually engages in personal and work-related conversations to create a common ground to formalise the request [*Establishing Mutual Attention*]. Afterwards, reconnecting actor orients the reconnected one toward the issue by confirming mutual esteem and appreciation of the

competencies, and then presents the request. According to informants in the study, if the situation requires further discussion a meeting is set [*Orienting towards the Issue*]

Cognitive mechanisms of reconnected actor differ from reconnecting's ones. Being reconnected implies receiving recognition of esteem since the reconnection choice rebounded on that individual to either offer or seek something. However, according to memories and issues, reconnected individual reshapes closeness and consequently decides whether or not to fulfil the request [*Being Reconnected*]. In this process, the conflict of interest perceived by the reconnected individual has a strong impact on the willingness to undertake the exchange. In fact, the reconnecting individual cognitively elaborates an evaluation of the potential conflict of interest but the reconnected actor determines its actual existence after the request has been presented. In this reconnection phase sensemaking and sensegiving are intertwined, the interaction shapes each individual perception, that consequently influence practices of new shared experience.

TABLE 9 - Analytical Categories for Phase 1: Activity (1/2)

Second-order coding	First-order coding	Representative quotes
Sharing experience	Negative experience	“I had a bad experience with a university professor. He had an excellent know-how, but it was impossible to collaborate with him. I had to interrupt the project we were working on since he was not able to focus on it. If you do not focus on something we are working together, I will not call you a second time”. (R&D Manager, W4)
	Positive experience	“The working experience we shared was satisfying, or we had not the chance to work together but knowing him personally I think he could be a valid resource”. (CEO, C6) “I had a good experience in working with her, we travelled a lot together and worked on the same projects”. (R&D Manager, W1)
Building trust	Feeding relationships	“In this companies, we very often build long-term relationships without customers and this permits the creation of fundamental trust” (President, W3) “Interpersonal relationships are built in time because it goes beyond the single job. It needs time. Customers trust you when you seriously seek to solve their problems It is not just a mere commercial transaction, you need to invest in building the relationship to make your customer loyal” (Sales Manager, D2) “Cultivating the ties is the first step to developing trustful relationships with entrepreneurs” (I3)
	Mutual esteem	“We work for common goals, with honesty but, above all, loyalty. The unity of purpose and mutual commitment are the foundations for a collaboration. When I pick up the phone to call someone I am sure about his willingness to participate in new projects”. (I1) “A relationship can last in time as long as it is grounded and built upon mutual esteem. One of my colleague and best friend told me last month ‘I estimate you so much that you can ask me whatever you want, whenever you need it’ “ (President, W2) “In our case it is crucial to have a good relationship with customers based on mutual confidence and esteem” (Sales Manager, W1) “At the end is all about mutual esteem” (President & CEO, C1)
Creating memories	Networking	"Sometimes, even if you would instinctively prefer to avoid someone, you need to be friendly because at the end this is work and it requires goals. [...] You must do this because, in the end, this is a little world with few people. For example, I attended an art exhibition with representatives of the textile district. These are events when you greet and meet people, even if you do not have a direct conversation, just seeing each other is enough to feed the relationship. Then in one year you can call them without feeling uncomfortable. Hanging out in the field and meeting people allows you not to miss the opportunity to make a cold call to someone after four years of no contact". (Quality Manager, W2)

TABLE 9 - Analytical Categories for Phase 1: Activity (2/2)

Second-order coding	First-Order-coding	Representative quotes
(Continued) <i>Creating Memories</i>	Reciprocity	<p>“When you ask to someone for something, you tacitly accept to be in moral debt. You must be aware that the other party can ask you to pay the debt back whenever, he wants. If I want to avoid this mechanism, I just have to avoid creating the conditions for this debt. It apparently is for free, but you have to give back what you received, nothing is for free”. (President, W2)</p> <p>“I cannot always take; I must also give”. (CEO, D4)</p>
	Parting in good relationships	<p>“I always want to keep good relationships, even if I am dismissing, because you never know what will happen in the future [...] Honestly, I believe that after few years of collaboration, if I dismissed someone in good relationships it is easy to reconnect and start a new collaboration”. (President and CEO, C1)</p> <p>“When I dismiss my customers, I rarely cultivate the relationships, but if the relationships were good the door is left open for possible future collaborations”. (Product Manager, C1)</p> <p>“When I receive a big favour from someone I ask my boss whether I can give a present to my contact, one of our product such as a pair of blankets or a bed cover coherent with the information I received. It is a reward for his help and evidence about my good manner. In the future he will remember I gave him a worthy present of 600 euros, it is like a final blandishment” (Quality Manager, W2)</p>

TABLE 10 - Analytical Categories for Phase 1: Latency (1/2)

Second-order coding	First-order coding	Representative quotes
<i>Time as shaping force</i>	Lasting relationships	<p>“I have some close colleague that I know we can avoid hearing each other for a long time and we will always be friends” (President, W2)</p> <p>“Relationships cannot be fully forgotten. My latent ties are never deleted” (CEO, W2)</p> <p>“I have a couple of contacts that, even if months elapse, when we get in touch again suddenly we feel as if we said goodbye the day before” (I1)</p>
	Time as mitigating force	<p>“Sometimes we do mistakes and lose our customers. We wait to let him blow off the steam and then go back to recover” (Vice-president, W5)</p> <p>“I think in all situations there are some cyclic dynamics, in relationships too. Nowadays in our business it is the cycle of collaborators and suppliers for that sector, in two years’ time there might be another cycle and I will spend more time with someone else” (President and CEO, C1)</p> <p>“There is a cyclic nature, by operating this way I periodically gratify and reconnect with someone and I do not stick on few contacts who might get annoyed and deny to collaborate” (I1)</p> <p>“Time mitigates relationships” (R&D Manager, W1)</p>
	Time of latency	<p>“In this field, the turnover is very high. When we talk about latency we should count six months, from one season to the next one” (C6, CEO)</p>
<i>Personality</i>	Empathy	<p>“There is some relationship that individuals can manage, based on empathy, collaboration and manner of interacting. I think I am lucky because I have a natural talent in establishing relationships that last in time and do not die even if there is no interaction” (I1)</p> <p>“During my experience as A’s president, I met many Turkish entrepreneurs. My compatibility with them allowed our relationships to linger even if I am not in charge anymore” (W2, CEO)</p>
	Character	<p>“You must have a very sociable and friendly character to establish connections with certain people. Especially when they are likely to be useful” (Quality Manager, W2)</p> <p>“I believe that a relationship based on sympathy and empathy among people facilitate the interaction (Operations Manager, W1)</p> <p>“I can have left a good memory to someone, even far away in time, albeit we met many years ago and still remember me. Conversely, one of my collaborator I worked with until yesterday I might have a different impact. This is personal, subjective” (Sales Manager, W1)</p>

TABLE 10 - Analytical Categories for Phase 1: Latency (2/2)

Second-order coding	First-order coding	Representative quotes
<i>Reputation</i>	Individual reputation	<p>“Reputation and some friendship allow you to call someone after time and solve issues that otherwise would take ages”(CEO, W2)</p> <p>“Through word-of-mouth, I heard that he was unemployed Therefore, I thought he needed help” (R&D Manager, W1)</p> <p>“Nowadays Facebook has substituted local gossip; you get information about someone else without interacting with your contact” (MD, W2)</p>
	Organisational reputation	<p>“Word-of-mouth or news that arrive at me through third parties might influence my feelings about someone. For example, I collaborate with A company and they always invite me to their events, so I feel involved! Another company B periodically organises events in fancy locations and invites me to join to make me feel part of their community and keep me updated about their initiatives” (I1)</p> <p>“The reputation of my company would have negatively influenced the willingness of the contact to collaborate since he was a former employee and had a bad experience” (R&D Manager, W1)</p> <p>“If someone always keeps changing his job, or the company he used to work for failed. If I hear he changed job three times and all three companies failed it means he is part of the problem!” (CEO, C6)</p>
<i>Need for social capital</i>	Means to achieve goals	<p>“We have to tune some recipe, and I had to contact our former employees, now working for a chemical company. I had a goal and used my contacts to fulfil it” (R&D manager, W1)</p> <p>“When I have a situation to understand, face and solve; a problem I am struggling in interpreting, so I ask to my contacts” (MD, W2)</p>
	Help seeking	<p>“I had to find an agent for the French market, so I asked for help. It is a little world of relationships” (Sales Manager, W1)</p> <p>“I say ‘I need to find this thing, who could I ask to?’” (CEO, C3)</p>

TABLE 11 - Analytical Categories for Phase 3: Reconnection (1/4)

Second-order coding	First-order coding	Representative quotes
<i>Recalling contacts</i>	Collecting information	<p>“I have a telephone book with more than 3000 contacts so I keep track of people I am connected. However, some research is needed since if some years have passed since something might have changed. Nowadays, much research is done online. you might search for something and the name of someone, that you might even have forgotten, comes out. I use LinkedIn a lot, sometimes after ages you reconnect with someone because the system suggested you this contact and you discovered he changed his job and is working in the company of your supplier” (CEO, C6)</p> <p>“I asked my representative ‘Do you know remember anyone who elaborates this process?’ He said ‘Of course! Why do not you ask A company?’ Suddenly I remembered we worked together on similar projects some years ago with them” (Quality Manager, W2)</p>
	Memories	<p>“This textile district is a little world where people know each other. It happens that people with whom you used to work come to my mind in relation to a specific job” (MD, W2)</p> <p>“An individual need to make his decision according to the owned information, that is the memories of past interaction” (CEO, C6)</p> <p>“Maybe I recall this guy to my mind. He is only the representative of that firm, but he might have connections to someone else. So I call him for help. In such a local district the word-of-mouth helps a lot”. (CEO, C1)</p> <p>“I worked with these men in a project, after some years they came into my mind to perform some technical measures and I am going to call them next week” (R&D Manager, W4)</p>
<i>Selecting contacts</i>	Competences	<p>"It would be useless to ask people to satisfy my need or answer hard questions if they do not patronise the issue. If I know that someone has not connections or cannot solve my problem, I would avoid him" (President, W2)</p> <p>“I select people exclusively according to their competencies. Unfortunately, I am a Manichaeon. The world is divided into smart and stupid people [...] in the professional area I judge only according to skills and reliability. Then there might be a personal feeling with the other party but I try not to take this into account in professional area” (R&D Manager, W4)</p> <p>"The relationship helps, but if there is not the know-how, what is its relevance? I do it sometimes, even this morning. Knowing that the person has some competence, I exploit the relationship. [...] Relationships are fundamental because once I have the connection, and I know which competencies the other owns, I can go to him and ask. However, if I do not have a good, feeling it is hard to go and ask something specific. Indeed, to develop the relationship" (R&D Manager, W1)</p>

TABLE 11 - Analytical Categories for Phase 3: Reconnection (2/4)

Second-order coding	First-order coding	Representative quotes
<i>(Continued) Selecting contacts</i>	Competences	<p>“I try to be objective, when I find someone unpleasant but I know he possesses precious competencies, I try to overcome my personal limits. [...] I think this is role of the entrepreneur but also of the manager: going beyond personal feelings. It is not about friendship, it is business” (CEO and President, C1)</p> <p>“There are specific technical aspects in this field, I need to know who exactly is the person to contact to solve a specific issue. Maybe it is a product characteristic that I know only that actor patronises, so he is the right person to contact. But I also need the skills to understand what others know” (Quality Manager, W2)</p>
	Conflict of interest	<p>“In A project one of our partners is the competitor of a business of our holding; therefore, when we did some tests our board did not allow me to make these collaborators visiting us. The board did not like that competitors observed pieces of machinery installed in our plant” (CEO, D4)</p> <p>“If I think that asking something to that person would put him in a conflict of interest I do not go to ask him. I think it is not fair. It is the first screening I do” (R&D Manager, W4)</p> <p>“It is clear that if I am reconnecting contacts for a project, I cannot gather competitors or individuals there was some friction between [...]. Sometimes this aspect is undervalued, but it is paramount” (I1)</p>
	Trust evaluation	<p>“Before going into details with a supplier or a partner I need to be sure that this guy will go out without saying a word about our discussion to anyone else, neither that is working with us” (R&D Manager, W4)</p>
<i>Establishing mutual attention</i>	Past experience	<p>“The mode of reconnection depends on the relationship we had in the past. The first contact was on the phone, then we met for lunch outside working context. This other guy I contacted him via SkypeTM” (R&D Manager, W1)</p> <p>“I sent him some emails; then I called him” (CEO, D4)</p> <p>“It depends on the topic I want to discuss and the level of confidence I have with the other person. If I think it requires one hour, I would not involve this person in an endless phone call but I’d rather ask for a meeting” (President, W2)</p> <p>“ ‘Hello, I am A, I need to ask you” (R&D Manager, W4)</p> <p>“Do you remember that project? It performed well!” (I1)</p> <p>“Hi, I am A! Do you remember me? We did the Master together” (Quality Manager, W2)</p>
	Conversation about personal affairs	<p>“I always start the conversation with personal questions. When I reconnect with someone I need to recreate good feelings, then I talk about what I need. To reconnect I need a common ground, since my need is not his need. My family and his family are our common concerns, so I start from there. A neutral zone. Pleasantries according to the level of confidence we used to have” (R&D Manager, W1)</p> <p>“‘How are your kids?’ ‘Send my greetings to your father” (CEO, D4)</p> <p>“‘How are things at home?’ ‘How are you?’” (I1)</p>

TABLE 11 - Analytical Categories for Phase 3: Reconnection (3/4)

Second-order coding	First-order coding	Representative quotes
(continued) <i>Establishing mutual attention</i>	Conversation about work	<p>“Here discussions with latent contact start with different topics, ‘how is your company performing’ we exchange information about raw material and final markets. We discuss events happening in the textile industry or our supply chain. It is useful to break the ice and create an appropriate environment to get to the point. We invest much time in that to get rid of formality” (Operations Manager, W1)</p> <p>“I think reconnecting latent ties is pleasant because I get in touch and we update each other, exchange views about topics both parties are passionate about” (MD, W2)</p>
<i>Orienting toward the issue</i>	Confirm reciprocal esteem	<p>“I ask to someone because he is regarded as an expert, I think he is competent. Therefore, who receives this request receives a declaration of esteem” (President, W2)</p> <p>“I am convinced that after few years of no contact, if someone calls me and shows me trust, I would have the same feeling toward them as in the past” (I1)</p>
	Presenting the issue	<p>‘I would like to develop this new product with these technical characteristics, can you help me?’ (Quality Manager, W2)</p>
	Setting a meeting	<p>‘Listen, I have this situation, could you please suggest me? Could you please help me? Can we meet up?’ It happens all the time!’ (President, W2)</p> <p>“I called A and I said ‘Listen, I would like to develop this item, I am calling you since during your plant visit two years ago and I saw you perform this process. Can you help me?’ (Quality Manager, W4).</p> <p>“If I think the time of this person is very precious and is both a friend and a colleague and the topic is work-related, I have no rush and I talk with his secretary first” (President, W2)</p> <p>“‘Come to me, or we meet up midway in that restaurant and have lunch together to talk about this’. Alternatively, ‘I am coming to your city if you will be around, we can have lunch together. I will tell you what we want to do and we will see whether you can help me or not’” (Quality Manager, W2)</p> <p>“‘Can we meet up for dinner?’ ‘Shall we have lunch together?’ ‘Can we meet up, I need to briefly talk with you’” (President, C2)</p> <p>“‘I need to ask you something, may we meet up for lunch or dinner?’” (R&D Manager, W1)</p> <p>“I wrote to her the day before yesterday, she is going to be here in two weeks and we will talk about creating a partnership” (CEO, W2)</p> <p>“I can make three examples. First, I invited A for dinner because we were friends in the past and we travelled a lot together. Second, I called B and we went out for an aperitif, quite informal but quick. Third, with C I asked him to meet in my office, our relationship was only work-related therefore I set the meeting in a working environment” (R&D Manager, W1)</p>

TABLE 11 - Analytical Categories for Phase 3: Reconnection (4/4)

Second-order coding	First-order coding	Representative quotes
<i>Being reconnected</i>	Esteem recognition	<p>“When someone else contacts me after some time and ask me for advice it is a demonstration of esteem” (MD, W2)</p> <p>“I appreciate when they call me and ask ‘How are you? How is your family? If a new project comes out call me’ it revamps the relationship” (I1)</p> <p>“We collaborated with A company, but we were not interested in working under contract; therefore, we said ‘no, thanks’ to become their suppliers. Some years after they called us saying they changed strategy and interest in our offer. This was possible since we fairly behaved in the past” (C4, CEO)</p>
	Memories	<p>“When there are memories from both sides it happens more often to be reconnected” (CEO, C3)</p> <p>“The president of a famous company the day before yesterday sent me an email saying ‘I met a woman who has a light furnishing website and is looking for an Italian partner. Can you suggest someone?’ I answered ‘I do not need to suggest anyone; we can be her partner. Give me her contact, and I will write to her. We ended up we knew each other already” (CEO, W2)</p> <p>“When someone calls me the phone call passes through the secretary. I ask her to filter the messages. With her professionalism, she can set priorities, update about situations and remind me who is calling” (President, W2)</p>
	Receiving an offer	<p>“He called me after two years. Since we had a good collaboration, I think this person thought that my skills could only have improved in two years of work” (Product Manager, C1)</p> <p>“The suppliers I had quality troubles with calls me back after some time and says ‘I solved that issue, I developed this new product’ and I might realise he has realised interesting innovation” (CEO, C3)</p> <p>“Very latent ties, after many years, try to reconnect with me. The majority of them are inconvenient. They might want to sell you something, since they were my supplier a decade ago but they are not aware my business has changed and for me their phone calls are a waste of time” (CEO, D4)</p>
	Conflict of interest	<p>“I was contacted by a former colleague and friend, with whom I pleasantly worked in the past. He needed to develop a new product. but I knew that in few years’ time my company would have entered that market, becoming a competitor. Therefore, I clarified the situation, and I said ‘I cannot help you because the commercial strategies of our companies would clash.’ He said ‘Thank you anyways’ and hung up” (R&D Manager, W4).</p>

4.6 SOCIAL SLACK IN LATENT TIES DYNAMICS

Before discussing the theoretical implication of my investigation, further examination of the cognitive processes unfolding in latent ties' dynamics is necessary to understand their link with social capital. During the activity (Phase 1), each actor in a dyad shapes sensemaking and sensegiving by interacting; therefore, the cognitive mechanisms drive the alignment of perceptions of closeness towards a similar level. However, moving to latency (Phase 2), this study has identified personality and others' reputation as influencing forces that affect how an individual perceives the relationship with another. By reconnecting latent ties, individuals may benefit from existent trustworthiness created in the past but also rely on experience and resources that the reconnected individual has developed during the period of latency (Levin et al., 2011).

Due to the individual nature of social cognition, aligned perceptions of closeness at activity phase might diverge during latency phase, creating a discrepancy in perception of closeness between individuals. This divergence also extends to the perception of accessible resources available through that relationship – in other terms social capital. I observed that in reconnection (Phase 3), when reconnecting and reconnected actors perceive similar levels of closeness, a positive interaction is expectable. However, when the discrepancy in the perception of closeness is wider, two alternative scenarios might occur. First, the reconnecting individual may perceive higher level of closeness than the reconnected one. As an informant observed, this causes awkward situation in establishing mutual attention:

I called him after few years of no contact 'Hi I am [name and surname], how are you?' He was silent, and then repeated my name twice and asked 'Please remind me, when and where did we meet?' It was very awkward. I remembered him, but he had forgotten about me! So I had to explain all the

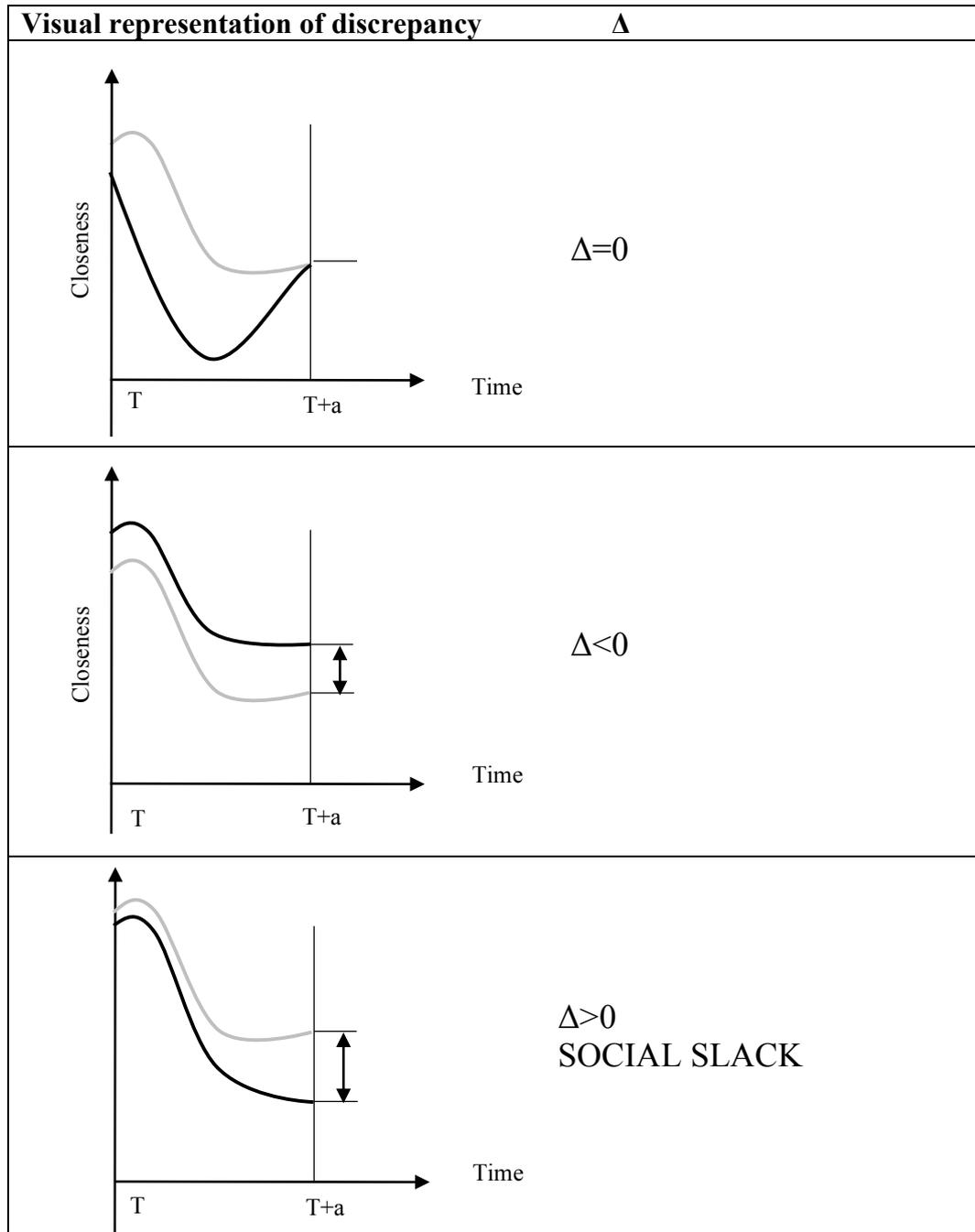
experiences we had shared and contacts we had in common. After a couple of minutes, he realised who I was. (Quality Manager, W2)

Conversely, reconnecting individual might perceive a lower level of closeness than the reconnected one. This causes either avoiding the reconnection or an excessive deployment of resources in order to reconnect, as an informant reported:

In the past we were colleagues and I had negative experiences with him. [...] Some months ago I needed to find someone to cover a role and I knew he could be the right person according to his skills. I thought a lot before calling him, thinking about some alternatives. Then I decided to call him. He immediately realised who I was and he was happily surprised by my phone call, up to the point that he was unexpectedly friendly and accepted my invitation for a meeting. (R&D Manager, W1)

By conceiving perception of closeness as a continuous dimension varying in time, I investigate the evolution of the two perceptions from the event of interaction (T) to the moment of reconnection (T+a). I summarise the previous three scenarios as three alternatives in the discrepancy between the perceptions of closeness (Figure 9). In the first case, both actors perceive a similar level of closeness ($\Delta=0$); therefore, the reconnection is properly managed. In the second case, reconnecting actor perceives higher closeness than reconnected one ($\Delta<0$). Reconnecting actor would put lower effort than expected to reconnect and this might lead to a negative reaction from the reconnected. In the third case, the available closeness to the reconnecting individual is higher than expected ($\Delta>0$), the reconnecting individual might put lower effort or miss the opportunity to reconnect with some helpful contact. According to this third scenario, I theorise the surplus in the perception of closeness benefitted from the reconnecting actor in relation to reconnected one as *social slack*.

FIGURE 9 - Discrepancy between Reconnecting and Reconnected actor's Perception of Closeness



Note ——— Reconnecting actor's perception of closeness

· ——— Reconnected actor's perception of closeness

T = Former interaction

T + a = Moment of reconnection

$$\Delta_{(T+a)} = (\text{Reconnecting actor's closeness}) - (\text{Reconnected actor's closeness})$$

The notion of slack was introduced by Cyert and March (1956) as a pool of excess resources that helps firm adjust to unexpected fluctuations. Although slack resources are costly – and are hence often seen as a source of inefficiency, they serve as a cushion that can prove crucial in facing tough times. Slack consists in “potentially utilisable resources that can be diverted or redeployed for the achievement of organisational goals. These resources vary in type (e.g., social or financial capital) and form (e.g., discretionary or nondiscretionary)” (George, 2005:661). Despite the interest towards resource slack, research on this topic has privileged financial and operational resources over the others (Lecuona & Reitzig, 2014); developing a lacuna related to human resources, which have been only recently started to be investigated according to slack construct. Among the few studies focusing on human resource slack, both the empirical studies of Nohria and Gulati (1996) and Miscina, Pollock, and Porac (2004) analyse the impact of financial and human resource slack respectively on innovation and growth. Lecuona & Reitzig (2014) analyse human resource slack with particular reference to intellectual capital (distinguishing between tacit and codified knowledge). Moreover, in their comprehensive study Voss, Sirdeshmukh, and Voss (2008:150) take into account financial, operational, human and customer relational slack. Interestingly, customer relational slack is defined as “the slack attributable to relational, or committed, customers, who are valued resources providing tangible benefits to an organisation”. To my knowledge, the latter is the unique attempt to conceive a slack in relational resources.

The difficulties that research has encountered in conceiving a slack of social capital might derive from idiosyncratic characteristics of social capital as low appropriability, since owning social capital does not directly imply its mobilisation (Adler & Kwon, 2002). However, according to the theoretical framework presented in this article, I depict the crucial role of the perception of closeness together with the willingness of reconnected

individual to mobilise the social capital necessary to the reconnecting actor. Thus, the perceptions of closeness developed by the two actors influence reconnection. Social slack emerges in case of negative discrepancy between reconnecting and reconnected perceptions of closeness. The reconnecting actor in a situation of need benefits of a higher level of closeness than expected. According to extant literature, interaction contributes to the alignment in perceptions, driven by shared narratives and norms. As the time elapses from last interaction other forces contribute to shape perceptions of closeness and might cause their misalignment.

4.7 DISCUSSION

This study based on the investigation of the textile district in Northern Italy produces a fine-grained account of the practices and cognitive mechanisms involved in the dyadic process unfolding in latent ties' dynamics and contributes to shed lights on underlying dynamics that occur when people engage in the activity, latency and reconnection phases. By unpacking practices and cognitive mechanisms, my study answers to "how" questions about latent ties both concerning actions and cognitions undertaken. According to my conceptualisation of the perception of closeness, I develop the new construct of social slack. Coherently with the research in slack of resources, social slack consists is a cushion of social capital available to reconnecting actor both in terms of relationships and resources attainable through that relationships.

4.7.1 Understanding Processes in Latent Ties' to Solve the Trade-Off between Decay and Overload

Discussed findings on the dynamics of latent ties advance theory on social network and social capital dynamics by adopting a temporal perspective. Literature shows that having a wide array of contacts to rely on is a strong advantage in case of need (Smith, 2005); therefore, adding ties increases actor's awareness of potential fruitful resources, as

well as of opportunities to mobilise it (Maurer et al., 2011). Relationships that are not cultivated wither and decay in time (Burt, 2002), but maintaining relationships as active is costly and time-consuming (Steier & Greenwood, 2000). An excess of active ties in the social network would lead to its overload that might fall to the redundancy of information collected, decreasing the efficiency of the social network in providing resource benefits (Zaheer & Bell, 2005).

By overcoming “temporal reductionism” (Granovetter, 1992:34) in analysing social network and social capital dynamics through a temporal perspective, I aim at delving into the trade-off between decay and network overload. My research explores dynamics through which individuals might leverage latent ties to access needed resources. According to my findings, while some relationships wither in time, others are kept alive, since shaping forces act on individual perception of closeness. However, this process is not suitable to infinite reiterations, norms of reciprocity hamper the excessive exploitation of the same relationships to be reconnected only in case of need. According to my findings, alternation is required in selecting whom to reconnect, in order not to insist on the same relationship and exhaust the willingness of the reconnected contact to provide resources.

4.7.2 Managing Relationship Strategically to Develop Social Slack

Inter-organisational relationships allow individuals to get access to further and even complementary resources (Van de Ven, 1976). Recent research on alliances has highlighted the importance of prior ties to foster exchange (e.g. Lioukas & Reuer, 2015). By conceptualising the construct of social slack, I contribute to the extant literature exploring the possibility to capitalise on social relationships through latent ties. Reconnecting temporarily inactive relationships is beneficial for accessing resources that the reconnected actors either owned since the past interaction or has accumulated during latency. From this investigation, it emerges how crucial is the ability to orchestrate the individual network of

contacts (Parkhe et al., 2006). The strategic role of ties acquires greater importance according to social slack; since individuals might rely on a cushion of social capital by leveraging the discrepancy between personal and other's perceptions of closeness. Therefore, being able to positively condition other's perception of closeness, for example pushing personal reputation forward, increases the level of social slack available to an individual in case of reconnection. As an example, renowned individuals with good reputations are more likely to receive help in case of need. In this process, the ability of the reconnecting actor to recognise available resources through the range of contacts in the social network is fundamental to extract actual resources from social slack.

4.7.3 Limitations and Future Research Directions

Despite the theoretical advancements, there are several limitations to this study. First, the findings are based on ethnographic techniques and qualitative data (archival documents, interviews and observations) about latent ties, speculating on different roles played by the same individual as reconnecting and reconnected. Although this approach allowed me to examine the impact of other forces as personality and reputation according to the twofold role played by one actor, so far I have missed the opportunity to investigate both parties involved in the same reconnection. Future research should investigate the same process of reconnection according to two different points of view, to grasp further understanding of the intertwined cognitive mechanisms in a dyad. Second, this qualitative study is explorative in nature and based on a specific empirical setting. Therefore, presented insights should be rigorously tested through empirical investigation to achieve external validity and move the research toward more robust models about latent ties. Third, emerging research in latent ties has started highlighting the relevance of other aspects of relationships that have not emerged in this study, such as the role of hierarchy in shaping reconnection (Levin et al., 2011) or the novelty and engagement (Walter et al., 2015); the

process of reconnection modelled in this study might be affected by these elements. Further light should be shed on the influence that hierarchy exerts on reconnection and how the process in reconnecting with the leader of a big firm differs from reconnecting with a peer. Furthermore, this research does not distinguish between the types of relationships organisational individuals have developed (e.g. alliances, partnership, friendship). Future research should analyse how characteristics of the relationships between two actors shape the process of reconnection. Fourth, my inquiry explores individual and dyadic levels of analysis. By investigating how the depicted processes unfold at the group and organisational level of analysis, further research will contribute to understanding the temporal dynamics of latent ties and is likely to identify other forces that shape reconnection processes at multiple and intertwined levels of analysis.

4.8 CONCLUSIONS

The most basic conclusion that follows from this study is that latent ties are paramount in accessing and mobilising social capital; therefore, it is crucial to orchestrate the reconnection process. In contrast with prior research considering time as negative for relationships, since without interactions ties wither and decay; this study shows the strategic value of latent ties in solving the trade-off between the issues of keeping a wide social network alive and network overload. The perception of closeness is crucial in extracting the strategic value of latent ties, it is shaped not only by past interaction but also personality and reputation affect it. In conceiving the discrepancy between perceptions of closeness, this study contributes to extant theory by theorising and showing the existence of a new type of slack in resource, defined social slack.

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**5 PAPER D: TOWARD A PROCESS APPROACH OF
ORCHESTRATING RESOURCES IN NEW PRODUCT
DEVELOPMENT**

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Toward a Process Approach of Orchestrating Resources in New Product Development

5.1 ABSTRACT

In order to be competitive on the market, firms need to create value for their customers by using resources. While resource-based theory assumes the possession of valuable and rare resources as crucial to value creation; more recently scholars have devoted further attention to the process of *resource orchestration*, investigating how managers structure, bundle and leverage resources in order to create value for customers. Although this framework has started shedding light on the mechanisms of using resources, empirical research has scantily adopted the processual approach so far, missing the opportunity to investigate how firms and organisational actors enact the “orchestrating” process. Among organisational processes, innovation - triggering resource renovation, technological and creative capabilities development, and creation of innovative outputs - emerges as salient to investigate resource orchestration. By implementing a qualitative longitudinal investigation conducted through multiple cases, this study explores how firms orchestrate resource in product innovation. The empirical investigation involved eight theoretically sampled cases in the textile industry all located in the same geographical area in Northern Italy. The research contributes to resource-based theory and practice by developing a more nuanced framework of orchestrating resources.

Keywords: Resource Orchestration, Process Model, Family Firms

5.2 INTRODUCTION

Creating and maintaining value are the primary pursuits of organisations (Conner, 1991). Firms' resources drive value creation through the development of competitive advantage (Ireland, Hitt & Sirmon, 2003). Valuable, rare, non-imitable and non-substitutable resources are considered the source of competitive advantage in resource-based theory (Barney, 1991, Barney, Ketchen & Wright, 2011). Considerable evidence suggests that more than possessing resources, it is the combination and exploitation of those resources that permits to create value (Sirmon & Hitt, 2003). However, research has relied chiefly on the stock of resources as the source of a firm's competitive advantage, leaving the processes by which it is achieved scantily examined (Priem & Butler, 2001). Despite the call for further attention towards processes, the few instances of empirical work on the use of resources in organisations tend to treat it as a matter of performance, according to variance-base theory (e.g. Crook, Ketchen, Combs, & Todd, 2008).

Two parallel streams of research emerged in this area. Resource management logic (Sirmon, Hitt & Ireland, 2007) coping with the phases through which resources are structured in a portfolio, bundled in capabilities and deployed to achieve value creation for customers and owners. This approach has been crucial to integrate the internal focus, typical of the resource-based view, with the external perspective. dealing with environmental munificence and uncertainty. On the other hand, stemming from the construct of managerial dynamic capabilities, asset orchestration logic (Helfat et al., 2007) has focused on search/selection and configuration/deployment of resources. The two streams of research partially overlap, maintaining distinctive elements. The integration of these two streams led to the resource orchestration construct, delving into the role of executives (Sirmon, Hitt, Ireland & Gilbert, 2011). However, resource orchestration does not provide a specific framework of phases through which it occurs, missing the

opportunity to integrate the two streams of research it stems from fully. Furthermore, resource orchestration as so far depicted consists of a repetitive sequence of variation, selection and retention events triggered by the competition for resources in an environment characterised by munificence (scarcity or abundance of critical resources), rivalry and uncertainty (level of available information). Although resource orchestration literature aims to investigate the role of executives in creating value from firm's resources; scholars have focused on the relation between resource stock and performance (e.g. Chadwick, Super & Kwon, 2015), without exploring how the process of orchestration is enacted and fosters value creation. Indeed, the organisational competitive advantage is achieved through a complex set of practices in orchestrating resources, calling for a process approach that research has still to embrace fully.

Therefore, the purpose of this article is to move from a variance approach of *resource orchestration* toward a more nuanced framework of *orchestrating resources*, helpful to depict related processes. Consequently, the research is guided by the following question: *How do firms and organisational actors enact orchestrating resources?* Abductive investigation (Langley & Tsoukas, 2010) emerged as appropriate for the phenomenon of interest, by integrating deductive hints from the extant literature with evidence emerging from the inductive investigation. In doing so, I adopted qualitative methods (Yin, 2015, Eisenhardt, 1989), particularly suitable in areas of nascent theory (Edmondson & McManus, 2007). To conduct an in-depth analysis of the phenomenon, I needed to contextualise the decision-making process triggering resource reconfiguration and deployment. Since change is a critical success factor of firms often played through product innovation (Brown & Eisenhardt, 1997), I identified new product development as a suitable to investigate how firms enact the process of orchestrating resource. Specifically, I selected the textile industry for its seasonality and high rate of change.

Thereby, eight multiple case studies involve small and medium size family firms in the textile industry in a single geographic area to limit heterogeneity among cases. Multiple case studies typically provide a strong base for theory building by enabling comparisons that clarify if a finding is idiosyncratic or consistently replicated by several cases (Eisenhardt, 1989). To develop a broader exploration of the research question and theoretical elaboration, I sampled the firms according to replication logic and polar types (Eisenhardt and Graebner, 2007). Since the central construct of the study is resource orchestration, I selected extreme cases according to the either internal or external input of technological and creative resources, crucial for the product innovation process. Two cases represent each of the four combinations, aiming at understanding processes, relationships, and logic of the focal phenomenon.

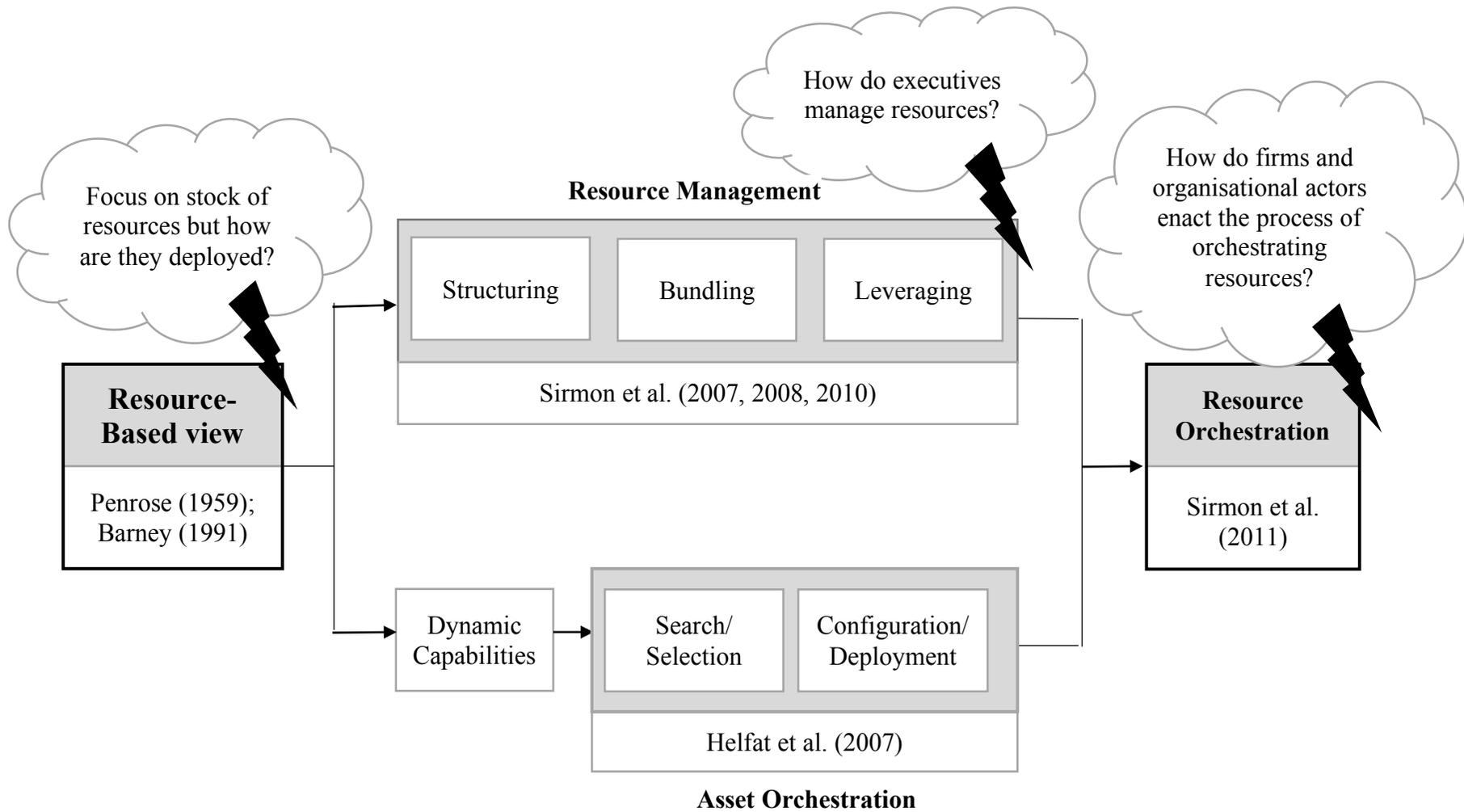
By drawing on the analysis, several insights emerged from the results of this study. First, I identify additional processes and sub-phases to those depicted in the resource orchestration framework. Second, by considering the role of time, I shed light on the complexities of orchestrating resources and related managerial mechanisms that executives implement. According to Colquitt and Zapata-Phelan's (2007) taxonomy of theoretical contributions, this study adds to the literature on the resource-based theory by offering a twofold contribution. First, I develop a more nuanced perspective on orchestrating resources by expanding the framework and identifying relevant practices implemented by executives. Second, I show the relevance of rhythm and timing in orchestrating resources and their effect on executives' practices. From the practical perspective, this study informs executives and consultants about the influence that actors' intellectual and social capital exert on orchestrating resources and the need of patronising different managerial skills to create value and achieve competitive advantage.

5.3 THEORETICAL BACKGROUND

5.3.1 Resource Orchestration

Combining resources is at the heart of business management and strategy (Sirmon et al., 2007). Firms create value through their competitive advantage heterogeneity (Ireland et al., 2003), ex-post and ex-ante limits to competition and imperfect mobility of resources (Peteraf, 1993). The relevance of organisational resources recognised by earlier works (e.g. Penrose, 1959) took shape in the 1980s; moving away from focus external to the firm, scholars started devoting attention within organisation boundaries (Hoskisson, Hitt, Wan, & Yiu, 1999) giving birth to the *resource-based view of the firm* (Wernerfelt, 1984). According to resource-based view, resources are tangible and intangible assets controlled by a firm, whose value, rarity, isolation from imitation and substitution constitute the basis for value creation (Barney, 1991; 2001). During the last decades, the resource-based view has evolved and reached maturity as a theory prominent for “describing, explaining and predicting organisational relationships” (Barney et al., 2011:1300) – see Figure 10 for a roadmap of the literature. Scholars have theoretically and empirically investigated it in relation to a wide range of organisational phenomena such as entrepreneurship (Foss & Ishikawa, 2007), performance (Crook, Ketchen, Combs, & Todd, 2008), innovation (Terziowski, 2010), reputation (Boyd, Bergh & Ketchen, 2010), human capital losses (Shaw, Park & Kim, 2013) and resource vulnerability (Le Breton-Miller & Miller, 2015).

FIGURE 10 - Literature Road-Map: From Resource-Based View to Resource Orchestration



However, the resource-based theory has been silent regarding how to use resources to entail value creation (Priem & Butler, 2001). Albeit combining resources is more important than owning them, when competitors hold similar stocks of resources (Sirmon, Gove & Hitt, 2008); the processes of managing resources to create and maintain competitive advantage remain not well understood (Sirmon et al., 2007). Aiming at filling this research gap, scholars have investigated *resource management* as a framework of actions including structuring the resource portfolio, bundling resources in new or altered capabilities and leveraging those capabilities to create value (Sirmon et al., 2007). The main contribution of resource management framework lies in the integration of internal and external foci; since authors investigate the management process of internal resources in relation to environmental contingencies as munificence, rivalry and uncertainty. Empirical investigations of resource management framework showed that only the subset of bundled and deployed resources contributes to competitive advantage, rather than the entire resource stock held by the firm (Sirmon et al., 2008). Theoretical resource management framework has been empirically implemented in literature to investigate phenomena as competitive rivalry (Sirmon et al., 2008), performance (Ndofor, Sirmon, & He, 2011), managerial ability (Holcomb, Holmes & Connelly, 2009) and temporary competitive advantage (Sirmon, Hitt, Arregle & Campbell, 2010).

Alongside the development of resource management literature, scholars focusing on dynamic capabilities developed the *asset orchestration* logic, calling for further attention “not only [on] what organisations do, but also how they do it” (Helfat et al., 2007:2). Dynamic capabilities - “Higher-level competences that determine the firm’s ability to integrate, build, and reconfigure internal and external resources/competences to address, and possibly shape, rapidly changing business environments” (Teece, 2012:1395) – are required for changing. Among dynamic capabilities, dynamic managerial capabilities

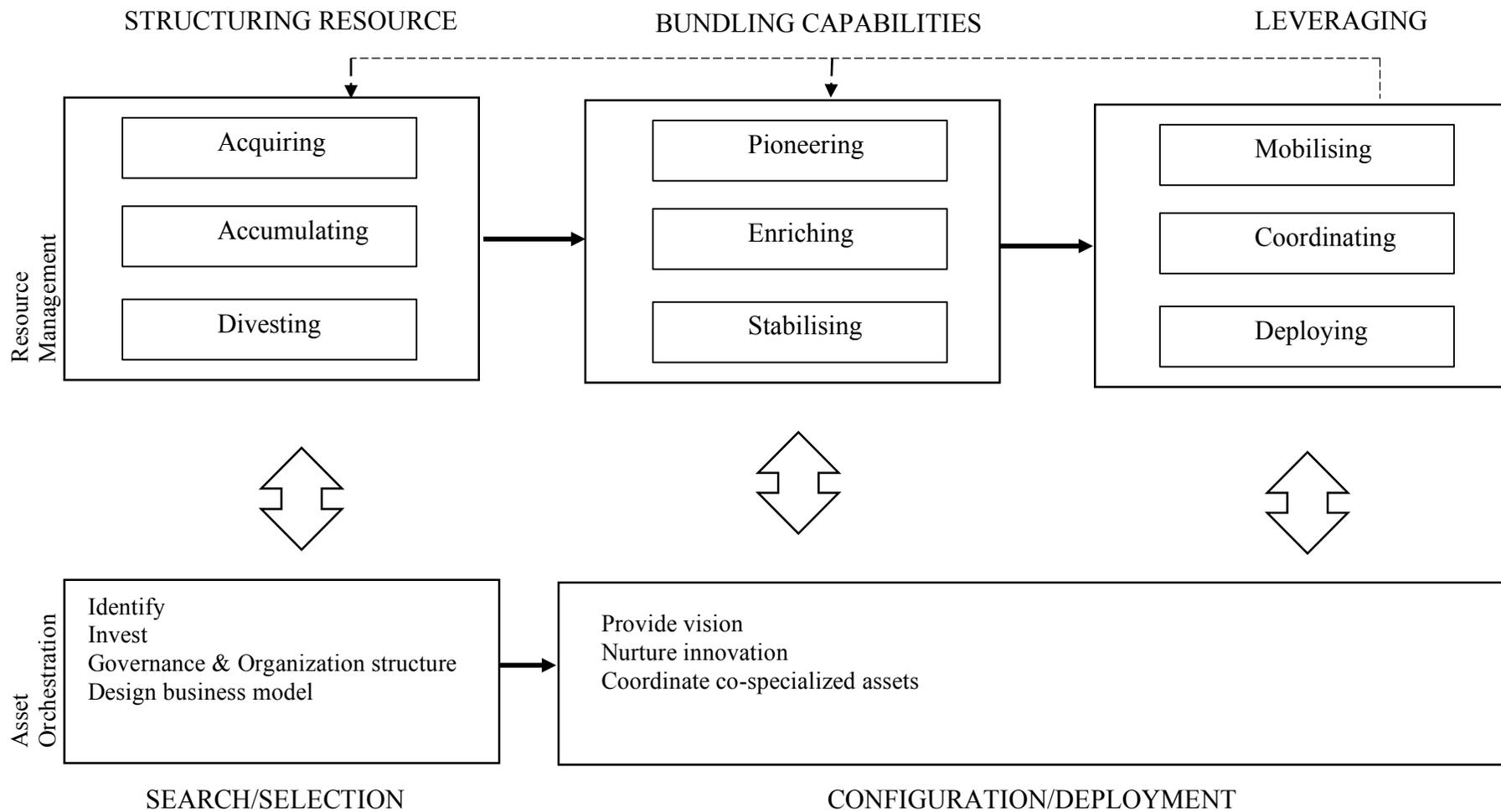
– “capabilities with which managers build, integrate, and reconfigure organisational resources and competences (Adner & Helfat, 2003:1012)” arise from executives’ prior knowledge and experience, including asset orchestration. Search/selection and configuration/deployment are the two phases of asset orchestration (Helfat et al., 2007). Mirroring resource management framework, asset orchestration includes characteristics of the external environment. “Thin markets” with a low level of appropriability, fuzzy property rights and co-specialisation require a reconfiguration of resources through alignment and adaptation (Helfat et al., 2007). Asset orchestration is influenced by individual executive’s skills and knowledge and can be routinised only at some extent, often tied to complex corporate histories (Teece, 2012). Therefore, managers with dynamic managerial capabilities play a unique role, involving astute decision-making and entrepreneurial capacity (Helfat et al., 2007). The empirical investigation of asset orchestration has examined inter-organisational systems (Zhang, Xue & Dhaliwal, 2016), acqui-hiring (Chatterji & Patro, 2014) and cognitive capabilities (Helfat & Peteraf, 2015). Although less empirically investigated than resource management framework (Sirmon et al., 2011), asset orchestration offers insights about the evolution of resources and capabilities over time.

By theoretically integrating the two literature streams on resource management and asset orchestration, Sirmon et al. (2011) develop the construct of *resource orchestration* as the process through which managers affect a resource-based competitive advantage (Figure 11). Beside the overlaps, the two frameworks present complementarities. In introducing resource orchestration, the authors link it with firm’s breadth, depth and life-cycle. The breadth of resource orchestration is addressed by examining its impact on corporate strategy, business strategy and competitive dynamics in industries in developing temporary competitive advantage. Neither asset orchestration nor resource management logic identify

the level of manager to which their theoretical argument apply; this aspect is analysed in the depth of resource orchestration by investigating the role of managerial levels in coordination and synchronisation. Resource orchestration also depends on the phase of the life-cycle a firm has reached (Carnes, Chirico, Hitt, Huh, & Pisano, 2016). At each stage of maturation, specific actions may be prioritised, requiring different forms of governance. In exploring future research directions, referring to breadth at business strategy level, the authors suggest investigating how the internal and external social networks and social capital of managers affect the implementation of diversification strategy (Sirmon et al., 2011).

Empirical research adopting resource orchestration framework is still nascent (Chirico, Sirmon, Sciascia & Mazzola, 2011). Research to date has adopted variance approach, thereby explaining change in terms of dependent and independent variables (Van de Ven & Poole, 1995). Scholars have quantitatively investigated the relationship between resources and competitive advantage regarding strategic entrepreneurship (Hitt, Ireland, Sirmon, & Trahms, 2011, Wright, Claryss & Mosey, 2012), entrepreneurial orientation (Chirico et al., 2011; Wales, Patel, Parida & Kreiser, 2013), supply chain management (Ketchen, Wowak & Craighead, 2014) and human resource management (Chadwick, Super & Kwon, 2015). However, the process approach, aiming at explaining how a sequence of events leads to some outcome (Van de Ven & Poole, 1995), has yet to be fully embraced in resource orchestration studies. Albeit it constitutes the focus of resource orchestration, little is known about the underlying drivers and mechanisms adopted by executives to foster competitive advantage using resources. This lack of investigation is regrettable since resource orchestration framework is suitable to shed light on a broad range of organisational phenomena and related micro-processes, targeted to answer “how” questions on value creation, typical of a process perspective.

FIGURE 11 - Resource Orchestration Framework (Adapted from Sirmon et al. (2011))



Processes can be a source of competitive advantage if, starting from the same stock of resources, their use drives a firm to net benefits that exceed those of rival firms. This logic fosters focus on executives' behaviour considering whether and how they generate, extend and modify the resource base to create value. Helfat et al. (2007) suggest venues for future research in asset orchestration logic that are suitable to be implemented in resource orchestration research. Specifically, decision-making process operated by executives should be more contextualised; authors suggest among proper contexts innovation and social capital. Therefore, investigating resource orchestration in relation to innovation would provide a contextualised decision-making process to examine organisational actors' practices to develop innovative outputs, seeking competitive advantage through change. Social capital would contribute to defining the context and historical condition of the firm regarding internal and external accessible resources that can be selected and acquired through the managers' network of contacts.

5.3.2 Orchestrating Resources in Innovation

Nowadays, organisations operate in dynamic environments, hence the ability to change constitutes a core capability of successful firms, oftentimes operated through product innovation (Brown & Eisenhardt, 1997). Particularly in highly competitive and high-velocity markets where innovation acts as a trigger of competitive advantage (Bresman, 2013). As an important driver to change, innovation is reflected in new products and production processes, novel organisations or services and advances in communication technologies (Poole & Van de Ven, 2004). New product development includes "all activities needed to conceive, design, produce, and deliver a product to market (Sheremata 2000:392). Following the theory on resource orchestration, innovation influences breadth, depth and life cycle of firms (Sirmon et al., 2011). In strong competitive markets firms need to be innovative; however, rarely own all the necessary internal resources to maintain

a sustainable competitive advantage over the long-term (Sirmon et al., 2010). Therefore, firms might externally access to complementary resources to develop innovation (Sirmon et al., 2011).

Executives by leveraging on external relationships might access resources and capabilities of other actors within their social network. How executives view resources and capabilities influences the creation, extension and modification of the resource base (Helfat et al., 2007). Relational capabilities consist in the capacity of purposefully create, extend or modify the firm's resource base, augmented to include the resources of partners. Boundary spanning relational capabilities have been discussed in alliances; however, Dyer & Kale (2007) assert this construct might also apply to other contexts. In orchestrating resources, social capital – “the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit (Nahapiet & Ghoshal, 1998:243) - reinforces the identification and mobilisation of resources. Firms without powerful relational capabilities would limit to undertake alliances or acquisition until those required capabilities are developed (Helfat et al., 2007). Vice versa, high level of social capital increases the likelihood that the capabilities will be coordinated effectively (Sirmon & Hitt, 2003). According to Teece (2012), it is impossible (or prohibitively expensive) to maintain a full-range of transformational capacities within the organisation, particularly for those needed only occasionally; firms have to combine the internal and external source of resources, oftentimes by mobilising social capital. However, there are almost no studies on this topic that needs further research (Teece, 2012).

5.4 METHODOLOGY

5.4.1 Research Setting

Research design. The existing literature on resource orchestration has adopted quantitative methodologies to test hypotheses. Distancing from the variance approaches implemented so far, I used a multiple-case research design (Eisenhardt, 1989) as the basis for abductive theory development. In-depth qualitative research allows explicit observation of orchestrating process and the action executives take to perform it. By integrating extant literature together with empirical evidence, I aim at understanding how organisational executives enact the process of orchestrating resources. This study aims at expanding the theory (Colquitt & Zapata-Phelan, 2007) on orchestrating resources by recognising “patterns of relationships among constructs within and across cases and their logical argument” (Eisenhardt & Graebner, 2007:25).

The goal is to characterise event sequences in orchestrating resources by understanding developmental patterns (Poole, Van de Ven, Dooley & Holmes, 2000). In order to ensure the relevance of this study, I rigorously implemented case study protocol, developed a database and triangulated the data according to various sources and collection strategies (Gibbert, Ruigrok & Wicki, 2008). In order to accomplish this goal, I collected longitudinal data on eight comparable cases for studying orchestrating processes in new product development, coupled with systematic analytical methods through the elaboration of a data file (Poole et al., 2000). The limited number of case studies is representative of polar types in which the orchestrating resource process is “transparently observable” (Eisenhardt, 1989). The cases involved in this study were sampled according to theoretical criteria to develop robust theory, deeply grounded in empirical evidence (Eisenhardt & Graebner, 2007). Performing theoretical sampling enabled replication logic in which cases are treated as a series of independent experiments (Yin, 2013). Recursively cycling among

case data analysis, emerging theory, and existing literature led to theory-building (Eisenhardt & Graebner, 2007).

Process theories best capture organisational change and innovation, since they give a deep understanding of the generative mechanisms that drive process (Poole & Van de Ven, 2004). These theories take into account path dependence, the role of critical events and overall they incorporate human agency in change (Poole et al., 2000). In this study, process perspective provides links to action, offering a way to delve into the micro-mechanisms that support and guide resource orchestration in action; thereby, facilitating the answer to “how” questions with the fine-grained detail of a process-based approach. Adopting this perspective can shed light on the dynamic interrelationships among context, actions, timing and positions along the path (Helfat et al., 2007). Therefore, I collected interviews, observations and archival documents, addressing the three fundamental issues of process theory: people, space and time (Poole, 2004). Primary data are key to understand the role of agency in resource orchestration, identifying the actions that executives undertake in orchestrating (people). Through observations and archival documents, I examine space, interpreted as the context wherein the individuals operate and market dynamics, crucial in the interpretation of orchestrating processes. The role of time emerged as prominent in shaping the rhythm of orchestrating, particularly in such a seasonal context with fixed deadlines for new product development.

Empirical setting. The research presented here is the result of a sixteen-month study of new product development at eight manufacturing firms, all located in the same textile district in Northern Italy. The value chain in the textile industry is highly fragmented,

involving multiple specialised producers¹⁴. The context investigated is one of the few districts in Europe where all the phases are still present. The deep historical roots since XIX century have permitted the firms in this district to develop strong technical competencies and has led it to become a cradle and excellence of Made in Italy (Tinaglia & Gandola, 2015). Almost all of the 250 small and medium enterprises involved in the district are family businesses with a strong heritage of terms of knowledge and reputation.

In the last decades, the textile industry in this district has suffered Eastern firms' competition, forcing the companies to implement differentiation strategy through product innovation to stay competitive. Products are innovated according to two main drivers: technology and creative design. Technological innovation consists in upgrading the functionalities of either yarns, fabrics or final products, for both fashion and industrial applications. Some examples of technological innovation are: strengthening the bio-based fibres like wool and hemp, increasing product sustainability, traceability throughout the value chain. On the other hand, creative design is similar to design driven innovation – the process of “making sense of things, relies on the aesthetic and style of products (Verganti, 2008:452). By combining technology and design the investigated textile firms develop new products for furniture, clothes and industrial applications.

Orchestrating resources in the empirical setting. In the last decades manufacturing in Italy has been considered as anti-economic, due to the high labour, energy, taxation and bureaucracy costs. However, firms in the textile industry are reluctant to give up their expertise and experience developed over centuries and passed down through generations. In this study the focal organisational process is new product development, an attracting

¹⁴ The textile production process in the district can be summarised in five phases: (1) spinning, from natural or synthetic fibres into yarn, (2) weaving - from raw yarn into fabrics, (3) converting – from raw to finished fabric, (4) tailoring - realising the first prototype of the garment in one single size, and (5) sewing – from the prototype to final product.

choice since each firm orchestrates internal and external resources in capabilities deployed to perform an innovative output by combining technology and design. Therefore, firms in the textile district provide an excellent setting for a nuanced examination of orchestrating process over time. Low appropriability of product and highly dynamic markets force firms to seasonally re-orchestrate input resources to develop and deploy capabilities to develop new products. Therefore, innovation constitutes the primary source of temporary competitive advantage. As noted by one of the informants:

“Today, we cannot produce commodities by competing on price anymore. We need to be strong in our specialisation, with high value-added and specialised products highlighting the aesthetics, this refers to the fashion market with stylistic and product innovation. [...] With the seasonal pace – spring/summer and fall/winter collections - we keep renewing the products. I always wonder what other industry besides textile changes its product every six months” (WeaveOne, President and shareholder, Observation).

“Competing on the high-end of a niche market, we need to innovate other product and develop new fabrics in terms of design and technology” (WeaveTwo, CEO and Shareholder, Interview).

Due to the high-fragmented value chain, firms need to synergise capabilities and develop business networks to share resources to boost innovation. Business associations have been promoted at local, national and international level (e.g. Confindustria, Sistema Moda Italia, Tex Club Tech, EURATEX). Despite the heterogeneous goals, each association contributes to building a network of relationships crucial to output realisation.

5.4.2 Theoretical sample

“To identify patterns, uncover narratives, and discriminate among developmental models requires detailed longitudinal data on a number of comparable cases, as well as a number systematic methods for analysing these observations and the context in which they

are embedded (Poole et al., 2000:112)”. According to Eisenhardt (1989) from 4 to 10 case study provide a sound platform for analytical generalisation. Among the firms in the district eight comparable cases were selected according to theoretical sampling. Preliminary interviews with textile industry experts and leaders of business association were crucial to select the companies to sample. The selected eight firms were identified for their leadership in the market and high degree of innovation. In terms of common attributes, sampled firms are SMEs, family owned and managed, operating in the textile industry. Despite these similarities, firms are clustered according to the main input nature of design and technological resources, crucial for new product development (Table 12). In other words, each two companies are representative of a unique combination of the internal or external source of design or technological resources. Moreover, I avoided to include direct competitors, selecting firms that serve heterogeneous markets in order to develop a broader overall picture able to capture underlying dynamics of orchestrating resources in the textile district according to heterogeneous value chain. I drew on my personal network to identify the initial two cases. I accessed the other six cases by attending the symposiums held by the local business association and engaging in conversation with organisational actors that proved to be available for getting involved in the study.

TABLE 12 - Descriptive Firm Data

Firm	Turnover	Year of Foundation	Number of employees	Activity performed	Targeted Niche Market	Theoretical Sampling Criteria	
						Technological input	Creative input
WeaveOne	143	1876	1300	Spinning, Weaving, Finishing	Shirting Fabrics	Internal	Internal
WeaveTwo	75	1891	390	Spinning, Weaving, Finishing,	Furniture and Homeware Fabrics	Internal	Internal
WeaveThree	37	1873	770	Spinning, Weaving	Flax Yarn and Fabrics for Clothes and Furniture	Internal	External
WeaveFour	90	1959	350	Spinning, Weaving, Finishing	Synthetic Fabrics	Internal	External
SewOne	24	1969	55	Sewing	Workwear	External	External
SewTwo	14	1976	370	Sewing	Trekking and Outdoor Wear	External	External
SewThree	19	1910	100	Sewing	Underwear	External	Internal
SewFour	14	1965	75	Sewing	Cycling Race-wear	External	Internal

5.4.3 Data collection

Longitudinal data were collected from March 2015 until April 2016. Altogether I increased the reliability and integrity of my data analysis by combining and triangulating different data sources (Miles, Huberman & Saldana, 2013). Interviews were the primary source of data, non-participant observations and documents provided crucial additional information. In order to contextualise the analysis, for each firm I identified a new iconic product of the last three years and investigated its developmental process. Information about data collection are summarised in Table 13.

Open-ended interviews. Nine representatives of the most relevant local, national and international textile business association together with institutional actors were interviewed to understand textile industry mechanisms and delve into the crucial role of networks. Afterwards, I conducted more than 30 interviews, not including numerous follow-up conversations. Primary data encompassed 21 interviews with firms' members at top management and project level (36 hours, 800 pages of transcripts), 22 non-participant observations (business and association meetings, exhibitions) and site visits. All the interviews were taped and transcribed verbatim. The interviews lasted between 40 minutes and 3 hours. I structured the interviews around a guide that contained open-ended questions. The interview began with background information about the firm, the family and the products developed by the company. During the interviews it emerged the key role of innovation and iconic new product were identified. Following the discussion, questions about how the innovation process was orchestrated were addressed.

Non-participant observation. At the beginning of the data collection, I gained access to two symposiums organised by the local textile business association. The first was an entire day dedicated to the innovation in textile industry organised in collaboration with the local university. The second was an afternoon dedicated to the market trends and

funding opportunity in textile innovation at national and European level. Throughout the longitudinal data collection, I regularly kept attending business association meetings, once per month. Furthermore, I attended management meetings, conferences, workshops and exhibitions. Exhibitions, in particular, proved crucial to understanding innovation in the field and observing the seasonal presentation of new collections. Business discussions was complemented with more private conversations – during lunches or networking events.

Documents. In order to gain consistency primary data were triangulated with business documents provided by the firms. I had access to secondary sources from the eight companies analysed as well as industry reports and specific press. I collected public data about the firms through their websites, presentations and reports. I also gained access to private information such as mission statements, brochures, internal documents and annual reports. Secondary data were useful for engaging interviewees in discussion and learning about firms' products and processes. Finally, at the end of each day on the site, I wrote field notes to be added to the case data set.

5.4.4 Data analysis and Coding

In addressing “how” questions the analysis was conducted by first and second-cycle coding (Miles, Huberman & Saldana, 2013). Thereby, adopting a process perspective (Langley, Salman, Tsoukas & Van de Ven, 2013) I looked for micro-processes of resource orchestration. In doing so, I performed within- and cross-case analysis with no a priori hypotheses, following recommendations for theory building grounded in multiple cases (Eisenhardt, 1989). To perform the coding process, I started by identifying practices from data triangulation. The iteration between data and theoretical insights improved the understanding of relationships among constructs.

In building individual case histories I first performed the in-depth within-case analysis. The within-case analysis was very informative to depicting idiosyncratic

processes of orchestrating resources in new product development within each firm. By developing a schematic representation of each firm's orchestrating resource process I framed the different phases and identified idiosyncratic elements. I also began identify key elements that supported and contributed to the refinement of the interpreted scheme within each firm, by keeping these constructs "close to the case" (Galunic & Eisenhardt, 2001). As coherent phases (macro) can be identified from sequences of shorter (micro) events (Poole et al., 2000), I explored and modelled each case as independent. After careful analysis of individual cases, I conducted cross-case analysis to identify similarities and differences and to construct a conceptual framework (Miles et al., 2013). Cross-case analysis was performed to compare and contrast evidence (Yin, 2013). Hence I started comparing firms with the same characteristics regarding theoretical sampling to evaluate the pattern within each cluster of cases.

Since the beginning of my data analysis, it soon became clear that the emerging findings did not align with the linear process model of orchestrating resources depicted by Sirmon et al., (2011). The misalignment increased in the comparison among cases, highlighting new sub-processes and complex patterns of orchestrating resources. This methodology contributed to the identification of constructs across multiple cases and to the examination of whether similar patterns emerged in multiple settings. A significant component of this data analysis is based on interviewees' recollection of past events; this may entail recalling problems as halo error, due to the retrospective bias of the outcome of the new product development process. However, having selected iconic products for each firm developed in the last three years allowed to limit the retrospective bias issue when interpreting the findings of this study. Distancing from former empirical investigations on resource orchestration, the study does not explore firm's performance, but the processes that firms adopt to create value leveraging innovation as driver of competitive advantage.

TABLE 13 - Information about Data Collection

Firm	Number of Interviews	Interviewees (Role)	Interview Length (Minutes)	Documents Collected (Pages)	Observations Conducted
WeaveOne	5	CEO & Shareholder, Head of Marketing	165	250	6
WeaveTwo	7	CEO & Shareholder, President, Vice-president, R&D manager, Project Manager, Technical Manager	670	130	3
WeaveThree	10	CEO, R&D manager, Product Manager, Sales manager, Supply-chain Manager	550	350	6
WeaveFour	1	Vice-president	100	50	2
SewOne	3	CEO & Shareholder, External Designer	240	150	3
SewTwo	1	President & Shareholder, Sales Manager	165	50	2
SewThree	2	CEO & Shareholder	120	100	2
SewFour	2	CEO & Shareholder, Sales Manager, R&D Manager	145	70	1

5.5 ORCHESTRATING RESOURCES IN NEW PRODUCT DEVELOPMENT

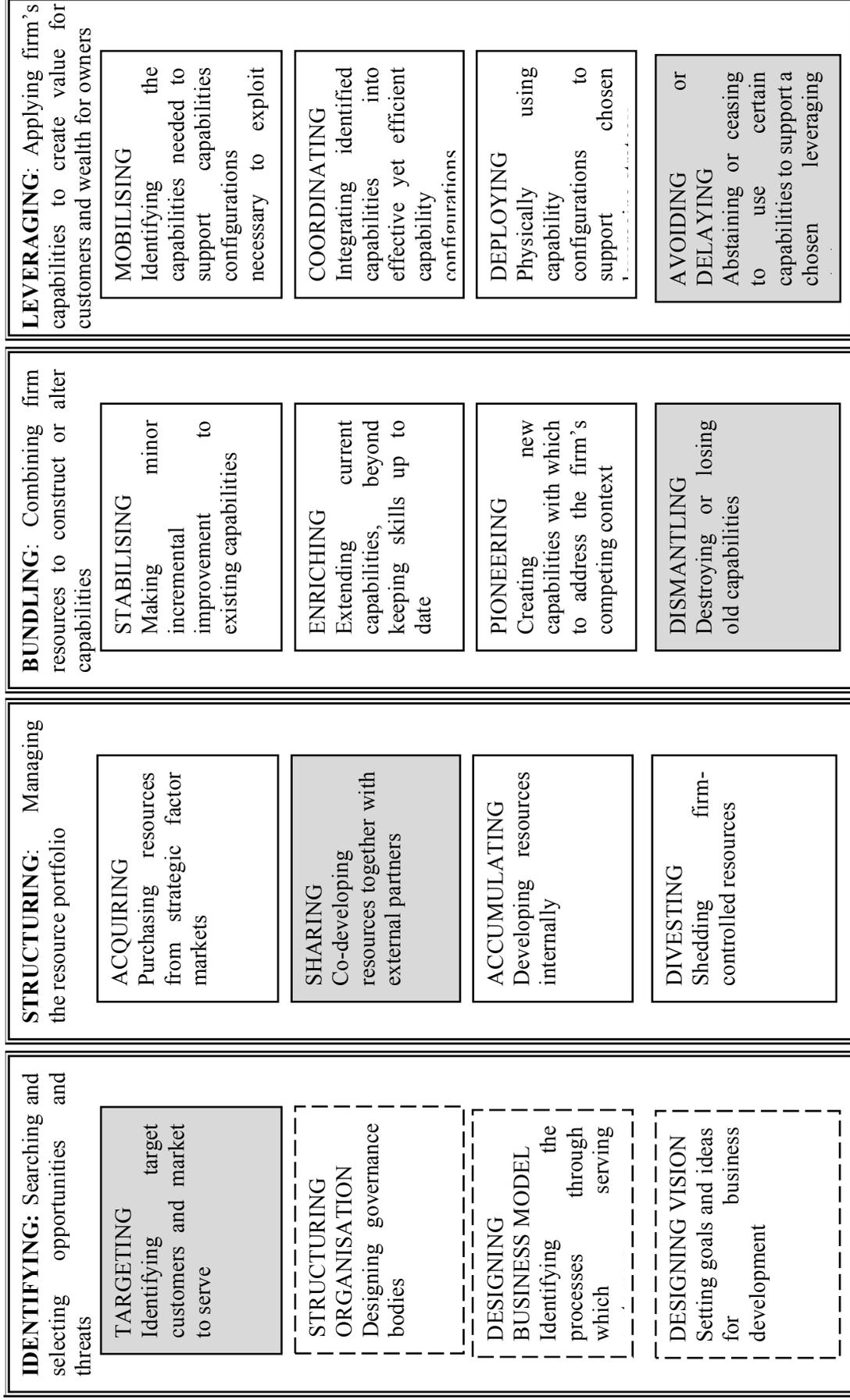
From this rich body of data, a detailed account of the orchestrating resource process was outlined. First of all, the research setting emerged prominently for the investigation of how executives enact the process of orchestrating resources. Various informants adopted a cooking metaphor to describe new product development in this field, considered as similar to the art of orchestrating high-quality ingredients to prepare the best dishes.

“Like in a gourmet restaurant, we have to use the best raw materials to create the best food” (WeaveOne, CEO and Shareholder, Observation).

“To make an example, WeaveTwo is like a larder full of the best products you can find in an Italian fry shop. Project K is like a chef who can combine them to prepare a delicious dish. If you ask me ‘what is innovation for WeaveTwo’, well we mean this!”(WeaveTwo, Product Manager, Interview).

By integrating the resource management and asset orchestration frameworks with evidence from collected data, I captured the orchestrating process in relation to macro-, meso- and micro-level. Macro level is constituted of four phases: identifying, structuring, bundling and leveraging. Meso-level presents sub-processes through which executives accomplish each phase’s goal. Figure 12 presents a general overview of the macro and meso-levels of the process. Micro level is composed of the practices emerged from field data that contributed to refining upper levels of the process and is illustrated in Tables 14-17, with representative quotes from all cases. Table 18 summarises macro-, meso- and micro-levels, providing a framework of phases, sub-processes and practices identified through the analysis of empirical data.

FIGURE 12 - Orchestrating Resources Framework



Dashed Square: Asset Orchestration Logic. White Square: Resource Management Framework. Grey Square: Newly Defined Sub-Processes

5.5.1 Identifying

How does a firm elaborate decisions about its resource base? Identifying phase is strongly influenced by managers and their behaviour (Helfat et al., 2007), particularly in this setting where new product development is constrained by high time pressure, making this process similar to a crisis resolution (Sheremata, 2000). Resource orchestration literature has considered search/selection phase of asset orchestration logic in overlap with the structuring phase of the resource management framework. Conversely, collected data decouple the strategic decision-making nature of identifying phase from the resource embedded structuring phase. The central activities of the “Identifying” phase involve the “as is” analysis of the firm regarding products, services and structure; as well as what the company aims “to be” in terms of business model and vision.

Orchestrating resources requires executives to know the market where the firm is competing; therefore, meso-level involves the definition of the niche to compete in. I refer to this sub-process as “Targeting”. The investigated firms serve small niches with very focused products, ranging from shirting fabrics (WeaveOne), cycling clothes (SewFour) and workwear (SewOne). All selected cases compete in the high-end of the market and are leaders of each segment served. For instance, WeaveOne is committed to competing globally in a very narrow niche:

“Since 1876 our commitment has been to offer our customers the most beautiful shirting fabrics in the world while protecting the environment, ensuring safety, contributing to the welfare of our employees and the communities in which we operate” (WeaveOne, Brochure).

Furthermore, governance modes are crucial to the resource orchestration process since they are linked to decision-making power and managerial behaviour. I refer to this as “Structuring Organisation”. In terms of ownership, all the analysed firms are family owned.

While family members directly manage the majority of these firms, WeaveThree belongs to a holding and the family is not directly involved in running the day-by-day. The family nature of these businesses shapes the innovation processes (De Massis, Frattini & Lichtentaler, 2012) and how executives orchestrate resources. In terms of structure the actual configuration of the firm is a starting point to take some opportunities, analytically it allows to understand whether the vision and the current structure of the firm are coherent or require further investment concerning resource orchestration to foster an alignment. New product development might lead to a change in the business model. I refer to this sub-phase as “Designing Business Model”. The firms investigated implement heterogeneous business models, particularly depending on the level of the value chain they occupy. Those businesses that want to serve their customers with exclusive products internalise the design process, such as SewFour. Vice versa, firms serving through stock service prefer to externalise the design input since it does not constitute a crucial feature of their products, as SewOne. The example of designing a business model explained by the product manager of WeaveTwo about Project K is a case in point:

"Throughout an analytic investigation, we found out a gap in the market offer that we could fill with our production process until that serving only the homeware industry. Our basic product is broadcloth, washable and produced with natural fibres. Taking these elements to the furniture market where fabrics are usually small, not washable and synthetic; it made us able to develop a new product to offer a plus to customers, both concerning quality and service, that so far is hard to imitate". (WeaveTwo, Product Manager, Interview)

In relation to future goals, “Developing Vision” sub-phase constitutes a stimulus to orchestrating resources and a trigger to the structuring phase. Vision is mostly related to the development of a wider range of product to serve existing market or to enter new markets. As WeaveFour’s ambitious vision:

"We aim at entering new and heterogeneous markets: automotive, lingerie, helmets, hosiery and beachwear" (WeaveFour, Marketing Director, Press).

Ambitious goals require structuring the portfolio by evaluating existing resources and consequently revise the resource base.

5.5.2 Structuring

How do firms structure the resource portfolio? According to Sirmon et al. (2007) managers must adjust the sub-processes of structuring in relation to environmental uncertainty and munificence. The triggers of identifying phase lead firms to modify the resource base. Stemming from the resource management framework, the resource base might be amended by buying resources from the strategic factor market ("Acquiring"), developing resources internally ("Accumulating") or shedding resources controlled by the firm ("Divesting"). The data from this study, as seen in Table 15, present a more nuanced picture. Although not contradicting the literature, what emerged was an additional sub-phase, I named "Sharing". Investigated firms oftentimes accessed to resources by neither acquiring nor accumulating them, but co-developing resources together with external partners.

"Acquiring" refers to purchasing resources from strategic factor markets (Barney, 1991). Available resources range from tangible (e.g. machinery), intangible resources (information), and complex sets of tangible and intangible resources through merger and acquisitions. Intangible assets, besides the core activities and competencies relevant to the core textile industry, new product development activities are strongly influenced by the fashion industry that sets seasonal trends. Thereby, companies relying on external designers as WeaveThree acquire information from external networks:

"We acquire information through meetings on trends and fashion committees in Milan, the global fashion capital. Style agencies and business networks provide us with seasonal colour charts from which we get inspiration in developing our new collection." (Product Designer, Interview)

The acquisition of another company with related resources is far more complex. Consider the acquisition of a supplier operated by SewOne, purchasing tangible assets as the equipment and plant together with the intangible intellectual capital of human resources. The set of resources avoided the firm to incur higher costs as building new relationship with another company or accumulating internal resources:

"We acquired our software house, a family business as us. They used to develop software for payroll services. After a thorough analysis, we realised it would have been costlier to invest in collaborating with another software house rather than acquire this one." (SewOne, CEO and Shareholder, Interview)

The ambiguity that uncertainty creates about the resources needed to generate and maintain competitive advantage leads firms to develop slack resources to be more flexible. However, the excessive cost of keeping slack resources leads firms to prefer *real options* (Bowman & Hurry, 1993) to full-scale investment in specific resources. Real options consist in acquiring resources to guarantee preferential access to future opportunities. An example is vertical integration sought by WeaveTwo in the acquisition of DyingCo, to overcome the low munificence of the market:

"We realised that the number of dying firms, a crucial phase of our process, was decreasing. Furthermore, entrusting the finishing of a new collection to an external company meant losing part of our know-how. Therefore, the board of directors decided to acquire DyingCo, a family firm that had been in the field for decades, so that we could conduct R&D and keep it

internal. Vertical integration ensures us a greater control of the process. We test new products choosing the number of cycles to run and keep this information internally.” (WeaveTwo, Quality and Innovation Manager, Interview)

Resources can also be built internally by “Accumulating” sub-process. In the context investigated, the high level of specific and tacit knowledge increases the need to develop resources internally. Therefore, strategic factor markets are unlikely to provide the needed resources. The goal of accumulating is double. First, internal development of resources fosters isolating mechanisms, limiting the threat of imitation. Consider the case of WeaveOne that internally developed raw materials to ensure excellent products, becoming the first firm in the world producing shirting fabrics with such quality:

“We have developed our production of the best longest, finest and at the same time strongest varieties of cotton. They represent the 0,4% of the annual Egyptian cotton production, the most precious, and we have developed and cultivated them to develop our best products.” (WeaveOne, President, Observation)

Second, accumulating internal resources enables firms to respond to unexpected opportunities. Therefore, a firm internally generates real options, thereby anticipating future needs.

“We have a department dedicated to designing our machinery, and this allows us to patronise deep knowledge about the production process. By exploiting the skills of our technicians in setting the equipment, we can offer a wider product range and greater versatility than our competitors” (WeaveThree, CEO, Interview).

Accumulating resources internally rather than relying on external purchases guarantees the firm to control the resources and ensures the high level of quality necessary

to value creation. The vast majority of the investigated firms aims at achieving vertical integration by internalising the resources and completely control the process. Consider the following comment by the CEO of SewOne:

“Our goal is to monitor the process to ensure quality and traceability, so we carry out the most salient phases of the process internally.” (SewOne, CEO and shareholder, Interview)

Distancing from the resource management framework, I decouple the internal accumulating sub-process from the access to resources through strategic alliances. Since using alliances neither allow to internalise accumulated resources completely nor to acquire them; empirical data triggered the definition of an independent sub-process, I refer to as "Sharing". Also in this sub-process managers can rely on real options, particularly thanks to the social capital developed with other firms. The trust accumulated in sharing resources allows firms to rely on their partners in exploiting future opportunities. Sharing allows firms involved in the alliance to co-develop resources. As described by the CEO of SewThree:

"We buy the yarn, and a partner produces the fabric. It holds our machines and looms. In doing so, we learn together how to operate the machines and improve the product" (SewThree, CEO and shareholder, Interview).

Shedding of firm-controlled resources is the fourth sub-phase of structuring, named “Divesting”. Besides expanding the resource portfolio, to maintain or achieve competitive advantage, firms need to release lower valuable resources to develop some slack to acquire, accumulate or share valuable resources (Sirmon & Hitt, 2003). The divesting process might involve various types of assets as sell-offs specific assets and layoffs human capital. Divesting allows to increase efficiency as WeaveTwo that selected valuable human resources to retain:

“We selected the most relevant human resources. From 75 we went down to 54. We kept the most skilled able to help us develop new products for the furniture market.” (WeaveTwo, Quality and Innovation Manager, Interview)

Resources to divest might have been accumulated, shared or acquired. As in the case of SewFour that stopped acquiring creative competencies from outside and started accumulating it inside by hiring designers:

“In the past, we used to rely on external designers’ competences. Since a few years ago we do not do it anymore, we hired six of them in the last five years.” (SewFour, CEO and Shareholder, Interview)

Executives can rely on a wide range of resources from the structured portfolio, however having resources available is not sufficient to create value for customers; they need to bundle resources into capabilities to extract their potential value.

5.5.3 Bundling

Forming capabilities consists in combining resources to create value for customers, thereby “bundling” unique combination of resources produces specific capabilities. According to a specific goal, different sub-processes are undertaken. Resource management framework depicts three main sub-processes, according to the level of capabilities’ improvements involved “Stabilising”, “Enriching” and “Pioneering”.

Stabilising consists in maintaining capabilities up to date. In a context of low munificence, practices of stabilising involve slight human capital improvement and equipment update. As an example, WeaveOne adopts empowering practices for the employees:

“We firmly believe in the development and career enhancement of our staff; so we organise various kinds of courses – foreign languages, computer

science, marketing and quality – with the purpose of forming and building upon internal resources” (WeaveOne, Brochure).

Current research has assumed stabilising as an approach implemented by firms already holding a competitive advantage. However, empirical evidence shows that stabilising might also be forced by low munificence. In other words, when the market is not able to offer innovative resources as machinery, the firm is obliged to stabilise related capabilities. As sewing machines for both SewOne and SewTwo.

“Producers of sewing machines in the past were in strong competition. The best machines came from Germany, while the Italians had lower quality. However, in recent years, machinery's innovation has improved performance without dramatically innovate, hence our process has steadily remained the same.” (SewTwo, CEO and Shareholder, Interview)

“Enriching” sub-phase consists in extending capabilities beyond the current state by adding resources to extant capabilities or extending the repertoire of skills. WeaveThree conducts research to analyse whether current products are able to serve the market:

“We conduct focus groups with a sociologist that selects people from the whole country to discuss our current products and see whether they are able to satisfy their needs.” (WeaveThree, CEO and shareholder, Interview)

The integration of complementary resources leads to higher-level capabilities, this phenomenon is oftentimes linked to grafting (Puranam, Singh, & Zollo, 2003). Meanwhile, firms might learn new skills with currently available resources and therefore enrich their capabilities. WeaveTwo combined the intellectual capital of internal human resources with the current process to extend the product range and create new value for customers:

“We started from the idea of using the same production capacity for a new market segment. Therefore, we adapted the software, quality tests and

services and developed the new product" (WeaveTwo, Product Manager, Interview).

Besides incrementally develop current capabilities, firms need to explore and create new capabilities to maintain competitive advantage and avoid the risk of imitability. This sub-process is named "Pioneering". By bundling new resources from strategic factor market, firms aim at creating new competitive advantage. In the context of the fashion industry, creative capabilities can not only be stabilised or enriched but require renovation and innovativeness. Therefore, the most relevant pioneering activities for those companies with internal design input consists in renewing creative capabilities. As SewFour that hired a new designer, to synergise internal creative department and the new resource to develop innovative creative capability:

"The company has decided to entrust an Irish designer to develop the product. She was hired one year ago as an employee of the company to foster our creativity in current and future collections." (SewFour, Book¹⁵)

Another example comes from WeaveTwo, every year the firm launches a prize for one young artist called to develop an innovative collection, distant from the classics of the traditional collections. By using the most advanced digital printing technologies available at the headquarter, the artist develops original fabrics presented as part of the firm's product collection in the exhibitions. For those companies relying on internal technological inputs, the pioneering sub-processes are more focused on machinery and materials.

"Flax's machines evolution is very slow and relies on autarkic R&D.

We created the mechanical technology division to research and modified the

¹⁵ Among the collected documents during the same period of data collection the local press together with business association promoted a book (Tinaglia & Gandola, 2015) gathering interviews from the leader of textile firms in the district. All the eight cases investigated in this study are included in the book. Reported quotations refer to either interviewees or authors who studied the companies.

production process to develop new products" (WeaveThree, Innovation Manager, Interview).

In addition to the three sub-processes discussed in the resource management framework, I inductively observed that firms not only bundle resources by combining valuable capabilities but also increase their competitive advantage by destroying old or obsolete capabilities. I refer to this process as “Dismantling”. Differently from divesting, dismantling consists in eliminating bundles of resources, for example by outsourcing phases of the production process. WeaveTwo is an illustrative example of this sub-process. Since the added value of executing brushing phase was very low, the company decided to develop a partnership with suppliers and completely outsourced this phase by vertically disintegrate the process. By doing so, the process became leaner and the product quality increased.

"We dismantled part of our production process of brushing the flax. We lost the know-how about that process but increased productivity and lowered the costs" (WeaveThree, Innovation Manager, Interview).

5.5.4 Leveraging

Capabilities must be applied to generate value for customers and owners; this phase is referred as “Leveraging”. Both resource management and asset orchestration frameworks discuss leveraging phase, involving related sub-processes since firms have different alternatives to leverage capabilities and create value. In fact, the deployment phase of asset orchestration considers the implementation of capabilities. Capabilities may be leveraged to serve customers with similar needs in new markets, offer different products to the same clients in the current market or serve additional customers in the same market niche. Resource management framework articulates three sub-processes of leveraging phase, namely “Mobilising”, “Coordinating” and “Deploying”.

Mobilising consists in the identification of the capabilities to deploy and the definition of the leveraging strategy. According to the resource management framework, leveraging phase can involve three distinct strategies. First, *resource advantage strategy* consists in leveraging capability configurations that produce a distinctive competence. By relying on distinctive competencies and capabilities, firms are able to create value to generate competitive advantage. In the empirical investigation this strategy was the most implemented. Thereby targeting market niches, WeaveOne has developed peculiar raw materials that structured in capabilities led to the finest shirting fabrics in the world. The same strategy was envisioned by WeaveThree, by handling distinctive mechanic-textile competencies and belonging to a holding allow it to produce valuable new products that made it unique on its market. As an informant discussed:

“Since we belong to a holding patronising a broad range of fibres, we have greater opportunities than our competitor to innovate by developing original blends. So we have been the first to study and develop the flax-silk, flax-cashmere and flax-wool blends.” (WeaveThree, CEO, Interview)

Second, *market opportunity strategy* consists in deploying the capabilities a firm holds to exploit new opportunities. Across the firms investigated I observed firms taking opportunities close to current markets. For example, SewThree as the market leader in the male underwear acquired a new brand and decided to offer female underwear by leveraging on the same production process.

“We combined the strength of our competencies in male underwear to widen our product range by acquiring a brand in woman lingerie. Retailers called for an enlargement of our product offer and we aimed at increasing our turnover.” (SewThree, CEO and shareholder, Press).

Besides close markets, firms might discover new opportunities in more distant markets. SewFour, the leader in the production of cycling suits, aimed at extending the

product range to other sports like running and triathlon. Third, the *entrepreneurial strategy* consists in producing new goods (or services) by leveraging on innovative capability configurations to serve customers in a new market. WeaveTwo, originally targeting garment manufacturer in homeware sector, launched Project K and by leveraging on the current production process designed a brand new collection to serve architects and designers in the furniture sector.

“With Project K we serve customers interested in service and quality. Using our industrial manufacturing capacity, we built a new team with complementary competencies to design a collection of furniture fabrics. By doing so, we moved downstream and started competing in another market. By offering new specific products, Project K is going to become another division of our company” (WeaveTwo, Innovation Manager, Interview).

Similarly, SewOne leveraged on capabilities from the original products of workwear in manufacturing sectors together with an external designer and launched Project A, a new collection of uniforms for hoteliers.

“The good thing of this family firm is that the young generation leaders are open-minded. They understood they had a static product that did not properly fit the market and were willing to change by looking for alternatives to expanding the business.” (SewOne, Product designer, Interview).

As an extreme example of the entrepreneurial strategy, WeaveOne’s passion in sustainability triggered the development of a new business unit devoted to offering consultancy about energy savings in textile and other sectors. Selected leveraging strategy needs to be implemented by coordinating and deploying capabilities.

“Coordinating” sub-process is constituted by the effective and efficient integration of mobilised capabilities to generate their configurations. Intellectual and social capital are crucial to integrate capabilities in such sets that generate values for customers and benefits

for owners. Intellectual capital consists in the knowledge related to individual capabilities together with the tacit and explicit knowledge about how to integrate them (Nahapiet & Ghoshal, 1998). For example, the team built by WeaveTwo to design the collection of Project K integrates competences that are able to transform a creative idea into a product. Therefore, the coordination of technical capabilities together with creativity allowed to develop a configuration:

"Project K's team is led by the architect X, he is helped by a textile expert whose task is to translate architect's aesthetic taste and drawings into fabrics" (WeaveTwo, Product Manager, Interview).

Intellectual capital of different actors must be integrated and to do so social capital within and outside firm's boundaries facilitate the knowledge sharing. As WeaveThree, that develop a long-term relationship with raw material suppliers benefitting of the shared know-how in leveraging capabilities:

"Our understanding of new products, together with the competencies of our suppliers, led us to find innovative solutions triggered by market needs" (WeaveThree, Supply Chain Manager, Interview).

Regarding social capital, the fact that investigated firms are all family business highlights an interesting phenomenon in the practices undertaken to coordinate capability configurations. An extreme example is the new product development collaboration between WeaveFour and SewFour. The two family firms streamline the process through the direct connection of the daughters of the respective founders who collaborate and coordinate the information exchange to speed up the tests.

"We collaborate a lot with SewFour. For example, product Y was tested by them, they helped us develop it and afterwards they had it as an exclusive for few years. We used to give them some samples and they sent it to their sportive teams to test during the training. After some months they came back and said

"look, this has to be modified this way" the same process was applied to many innovative items" (WeaveFour, Vice-president, Interview).

A similar collaboration happens between WeaveOne and WeaveTwo that exchange information about inventory capabilities. The latter firm was inspired and guided in the development of its stock service capitalising on the long-term relationship between the two families. The coordination of capabilities was made easier by the existence of strong trust between the directors of the two firms who were willing to share secret information to help each other, as not direct competitors.

"The idea of developing our stock service for the homeware sector was inspired by WeaveOne's stock service. They shared with us information about their procedures, then we adapted their process to our firm" (WeaveTwo, Innovation and Quality Manager, Interview).

"Deploying" consists in implementing the leveraging strategy by physically using capabilities configurations. Firms often implement all the three strategies at appropriate times, even simultaneously to create value for customers and gaining competitive advantage. This is the case of most of the companies investigated. WeaveOne for example beside exploiting the resource advantage strategy through its distinctive competencies created a new market by inventing a flax yarn for knitting.

"We were the first introducing flax yarn for rectilinear knitting, creating a new market" (WeaveThree, CEO, Interview).

To deploy capability configurations, intellectual and social capital are still crucial. Intellectual capital concerning specific and oftentimes tacit knowledge allows organisational actors to manage capability configurations. Especially in family businesses wherein the past plays a pivotal role in shaping innovations (De Massis, Frattini, Kotlar & Wright, 2016). As reported by WeaveOne:

"Sometimes we start from our old drawings and fabrics; usually we do not take them as they are but we reinterpret them to make them more up to date. We recolour these old fabrics and we adopt innovative materials. However, the trigger comes from the past. It is paramount to have archives and know the past, but it is also fundamental to modernise" (WeaveOne, President, Interview).

Intellectual and social capital allow executives to reconfigure and redesign capabilities, this flexibility is fundamental to keep being competitive in such highly uncertain environment.

"I have never seen any other job as complicated as ours. Thinking about joining 20 or 30 suppliers of fabrics and accessories and the designers who come with the lens to check the shade of each colour" (SewTwo, President and Shareholder, Interview).

In addition to the three phases depicted in the resource management framework, the analysis of collected data drove the definition of a fourth phase, I refer to as "Avoiding or Delaying". So far deployment of capability configurations has been considered beneficial in implementing leveraging strategy and developing value for customers. However, firms might also decide to avoid or delay launching new products developed by deploying capability configurations to increase the value for customers. For example, SewThree deployed its capabilities to develop a new product but decided not to launch it since it would not create value for customers due to its close similarity to past collection. Differently, WeaveFour decided to delay the launch of a new product because it perceived the timing was wrong and customers would not perceive the product as satisfying their needs.

"We developed this fabric with a unique finish that makes it dry in five minutes. Unfortunately, we scouted the market and realised customers were not

interested in paying a mark-up for such improvement; therefore, we waited”

(WeaveFour, Vice-President, Interview).

This sub-process might either consist in elimination or postponement of deployed capability configurations aimed at creating value for customers and maintain competitive advantage.

5.5.5 The role of time: temporal competitive advantage

In the orchestra, good instruments are necessary to generate the melody, as ingredients in the cooking metaphor mentioned by informants; but sole resources are not sufficient to create value. Their orchestration makes the difference and timing is fundamental. Indeed, knowing when to start playing an instrument during a pièce or to add ingredients in a recipe is sometimes more relevant than the quality of the inputs. Despite this relevance, so far the role of time has been considered in the resource orchestration framework only in terms of firm’s life-cycle. From the empirical investigation conducted it emerges that time acts as a shaping force in the process of orchestrating resources. Time relevance is threefold.

First, the duration of each process and sub-process influence the ability of firms to create value for customers, fostering competitive advantage. The textile industry is particularly extreme to investigate this aspect. In the eight cases, the seasonality of new product development exalts the role of time. In fact, the high uncertainty of the environment leads few firms to innovate and others to imitate products launched. This phenomenon involves all the eight cases and it is prominent in shaping firm’s strategy. Informants from WeaveTwo linked this aspect to the design of organisational structure:

“Nothing is brand new! As soon as the product is launched on the market, it is copied by someone else. The reason why we decided to integrate our value chain vertically is to keep information about the development of our

new product secret as long as possible” (WeaveTwo, Innovation and Quality Manager, Interview).

Being the first on the market permits exploiting a temporary competitive advantage.

“The world today is super quick. In this market rapidity is fundamental due to the seasonality of products. The new collection will be launched in September and we started in February working on it. Time is even more important than price because it takes months to develop new products and combine different raw materials to develop the collection” (WeaveThree, Innovation Manager, Interview).

“When I develop a new product competitors copy me, but the time lag between the launch of our product on the market and the moment when my competitor launches its imitation gives me a competitive advantage in terms of time” (SewOne, CEO and Shareholder, Interview).

Exhibitions set the rhythm of the market; firms develop new collections to present in two or three important exhibitions per year for each sector. As noted by informants:

“To design and produce the new collection of underwear we took almost one year, because we have to distinguish ourselves from competitors. Collections must be presented at the exhibitions and the dates are fixed - obviously we cannot postpone the exhibition! - so if something goes wrong and we have wasted some time...Well, we got to run!” (SewThree, CEO and Shareholder, Interview).

Second, the family involvement in these business acts as an accelerator of innovation processes in speeding up orchestration by leveraging on external and internal family’s social capital. This is particularly evident in WeaveFour-SewFour and WeaveOne-WeaveTwo partnerships. As highlighted by an informant:

“Since we are both members of the families we can pick up the phone and call each other [WeaveFour Vice-president] whenever an issue arises. I

have a good relationship with her and it is very quick for us to find a solution, without negatively affecting our relationship. When I collaborate with big multinational corporations, I have to speak with the technician who has a boss, with another boss and the turnover is so high that I cannot even record their names that they already moved" (SewFour, CEO, Interview).

Third, time is also relevant regarding the link between past, present and future orchestrating process. The reiterative nature of the dynamic process generates a spiral of experience that shapes the next processes. Timing and rhythm of new product development influence orchestrating activities by shaping firms' routines. In structuring resources, bundling and leveraging capabilities; orchestrating leads to a dynamic process that is embedded in the market and tries to influence it.

Through this analysis, I identified three different processes of resource orchestration, depending on the internal or external input of technological and creative resources. Although all companies at the macro-level enact identifying, structuring, bundling and leveraging phases, at lower levels they follow different paths. Companies using internal inputs follow the linear structuring-bundling-leverage stages by combining sub-processes within each stage before moving forward. They accumulate resources (structuring), enrich and pioneer them to build capabilities (bundling), and by mobilising, coordinating and deploying (leveraging) these capabilities they develop new products. Second, companies orchestrating by using external inputs acquire and accumulate external resources (structuring), pioneer them in technological and creative capabilities (bundling), and finally, coordinate and deploy them in new products (leveraging). Third, companies using external technological and internal creative inputs start by pioneering (bundling) technological capability, acquiring and accumulating (structuring) external resources, enriching (bundling) them with internal capabilities and then coordinating and deploying to develop new products. When resource orchestration relies on external creative and

internal technological inputs the process only involves acquiring (structuring), enriching (bundling) and coordinating (leveraging) capabilities to develop new products. Family members operationally involved in innovation accelerate orchestration since they quickly understand necessary inputs and thanks to their social capital and connections with other companies' access external tangible and intangible assets as inputs of the orchestration process.

“We cannot industrialise products sequentially as it is written on the books, step by step. We have to do everything simultaneously; otherwise, our new fashionable goods would be copied by someone else. We always race against the clock! We do things in the best way, respond to the market and meanwhile industrialise products to make good quality. It is not easy because of everything keeps changing” (WeaveOne, President and Shareholder, Interview).

TABLE 14 - Identifying Phase: Representative Quotes (1/3)

Firm	Targeting	Designing Structure & Organisation	Designing Business Model	Designing vision
Wave One	<p>“Since 1876 it is our goal and ambition to create the most beautiful shirting fabrics in the world [...] The combination of our innovation with the fact that we master the market makes our firm a reference point in shirting fabrics worldwide” (President and Shareholder, Observation).</p>	<p>“We have eight productive sites, 5 in Italy and 1 in the Czech Republic and 2 in Egypt. We have more than 1300 employees in the world, about 850 in Italy” (President and Shareholder, Observation) “The Board of Directors counts 13 shareholders, all linked to the family; four of them are actively involved in the firm as directors” (Press).</p>	<p>“Every year we have to propose to our customers more than 20.000 new items, new variants which can be collections, personalisation for single important customers, exclusive designs which can be stock service for the more basic things” (President and Shareholder, Observation).</p>	<p>“In the future we aim at developing the commercial activities in new countries, widening our product range with accessories and growing in the renewable energy sector” (Chief Financial Officer and Shareholder, Press).</p>
Wave Two	<p>“Our mission is to create excellent and unique natural fabrics as jacquard fabrics furniture and homeware, wool yarns for prestigious carpets, chenille yarn for upholstery. We have complete control of the production process reached through vertical integration” (Website).</p>	<p>“The M family has entered in the business at the end of the XIX century. Nowadays the holding is owned and run by the second generation, two brothers, and an external shareholder and CEO. The business is differentiated in 3 plants in Italy and 1 in Romania” (Press).</p>	<p>“We develop two lines of product: one is made to stock the other is exclusively designed with our customers. We are trying to grow the business by moving out from the high-end homeware niche toward the home furniture sector” (CEO and Shareholder, Interview).</p>	<p>“We aim at being the global reference point for furniture and homeware sectors” (Website).</p>
Wave Three	<p>“We produce flax yarns addressed to the high-quality fashion industry, furniture and homeware. In the market, we are renowned as the flax innovation leader” (CEO, Interview).</p>	<p>“Recently the holding owned by F and M families has been restructured into three divisions. We are part of one division and are the only firm producing flax yarn. Our plants are located in Italy, Tunisia and Lithuania” (Innovation Manager, Interview).</p>	<p>“We offer a wide product range, wider than our competitors, thanks to our 360-degree know-how on flax” (CEO, interview).</p>	<p>“Spinning for fashion clothing and homeware will always be our core business. However, we need to start looking for something in the third sector, technical textile” (Innovation Manager, Interview).</p>

TABLE 14 - Identifying Phase: Representative Quotes (2/3)

Firm	Targeting	Designing Structure & Organisation	Designing Business Model	Designing vision
Weave Four	<p>"WeaveFour is a cutting-edge firm for warp-knitted, and circular knitted fabrics" (Book). "WeaveFour has been the reference point for innovative synthetics fabrics for many years. Our success is due to constant research and need to differentiate in a continuous evolving market" (WebSite).</p>	<p>"WeaveFour was founded in 1959. Today it counts three plants, two in Italy and one in Malta. The second generation has recently taken the lead after the death of the founder" (Press).</p>	<p>"WeaveFour's first goal is to solve customers' issues. We do not just develop new fabrics but we customise them thanks to our know-how, high flexibility and the ability to provide a professional service" (WebSite).</p>	<p>"We strive for further specialisation, both concerning technology and eco-sustainability" (Vice-president and Shareholder, Book).</p>
Sew One	<p>"We sell workwear to people who own firms, so fashion trends less influence our product. The price/quality ratio is very competitive; the product must be cheap but also pleasant. So far we are the leader in the market" (CEO and Shareholder, Interview).</p>	<p>"We are a family business, my father was the founder and now my two sisters and I run and own the firm. We have recently moved to this big headquarter" (CEO, Interview).</p>	<p>"We offer 12000 items, 2500 product with colour and size variation. We deliver our products within 24-48 hours from the order. I never know what I will produce the day after tomorrow. So we need to stay competitive and always have products ready to be shipped. This implies high logistics and stock investments" (CEO and Shareholder, Interview).</p>	<p>"With our products, we have always targeted manufacturing companies. In addition, we recently added accessories and three product lines for hotels, catering and cooking" (CEO and Shareholder, Interview).</p>
Sew Two	<p>"SewTwo does mainly cutting, manufacturing, taping work. Recently ready-made garments come to occupy a greater share. We guarantee to our customer the highest-quality products, thanks to decades of experience in the technical and sports clothing sector" (WebSite).</p>	<p>"The firm is led by husband and wife together with her brothers and one brother-in-law. Recently, the third generation has started being involved in the business management. The company has three production sites one in Italy and two in Romania" (Book).</p>	<p>"The principal objective of SewTwo is to provide the best service to customers. We start with an accurate analysis of the design (supported by experts). Then we develop prototypes and patterns, produce samples and make any changes" (WebSite).</p>	<p>"High quality and new product development are the building blocks of SewTwo. I hope next generation will invest in developing our brand" (Press).</p>

TABLE 14 - Identifying Phase: Representative Quotes (3/3)

Firm	Targeting	Designing Structure & Organisation	Designing Business Model	Designing vision
Sew Three	<p>"We compete in the high-end underwear market, including vests, boxers, T-shirts, hosiery, pyjamas and homewear. We sell to mass retailers and department stores and manage four brands, three for men and one for women" (CEO and Shareholder, Interview).</p>	<p>"There are not many family companies with a centuries-old tradition. We got here and are proud of that. Four generations of the P family have successively lead the SewThree so far, and we now export our products to 60 countries. [...] Our headquarter is among the finest Italian industrial artistic buildings and we own two stores" (WebSite).</p>	<p>"Our production is dedicated to continuing items. In this case, we buy the yarn weaved by a third party; then another partner finishes it. Here we cut it and it is sewed abroad. The seasonal collection is designed here and produced abroad for our brands" (CEO and Shareholder, Interview).</p>	<p>"Our constant dedication to innovation is aimed at bringing benefits and wellbeing to our customers. We keep investing in product design and all that provides added value" (CEO and Shareholder, Book).</p>
Sew Four	<p>"Traditionally we are the market leader in cycling clothes. When I entered into our family business, customers were around 50 years old, so I tried to lower the age group. We had to work a lot on our brand image. [...] So we invested a lot in recent years and focused on innovation to show we are a 40 years old brand but still reinvent ourselves. So we invested a lot on product renewal and marcomms" (CEO and Shareholder, Interview).</p>	<p>"The founder and his two daughters are respectively president, CEO and marketing director of the company. [...] The firm owns a production plant and two stores" (Book).</p>	<p>"Our core business is to customise products for cycling teams, both athletes and hobbyists. [...] Recently we started serving the triathlon and running markets" (Marketing Manager, Interview). "The company produces 3000 items per day, whose 80% is exported" (Book).</p>	<p>"I believe successfully leading the company and reach the same esteem that I see in other people looking at my father is the dream we all have. [...] Soon we will start launching swimming clothes" (CEO and Shareholder, Book).</p>

TABLE 15 - Structuring Phase: Representative Quotes (1/3)

Firm	Acquiring	Sharing	Accumulating	Divesting
Weave One	<p>"We bought two well-known brands in England and in 2000 another one near Monza. We bought the brands, the archives - very nice archives! - and a bit of the commercial organisation" (President, Observation).</p> <p>"The textile industry is capital intensive. In the past ten years, we have invested 130M € in acquiring new machinery and factories" (President and Shareholder, Observation).</p>	<p>"We help MecCo to develop looms that fit our needs of shirting fabrics, defining dimensions and settings. This way we obtain machines that qualitatively and quantitatively fit our needs" (Plant Director, Press).</p> <p>"WeaveOne has developed a spinning plant with the latest generation of machines for a niche production of very high-quality through a leasing to use agreement with YarnCo" (Press).</p>	<p>"First of all, we invested in our industrial sites. [...] In most of our factories we have achieved energy efficiency actions that allow us to annually save more than 2300 tonnes of oil" (Brochure).</p>	<p>"We replaced old light-fuel oil boilers with modern systems for natural gas, the windows with polycarbonate panes and electric radiators with fan coil fitted with hot water that ensures less heat loss" (Brochure).</p> <p>"We substituted chemical agents in order to develop a no-pollution production process" (President and Shareholder, Interview).</p>
Weave Two	<p>"A significant innovation was purchasing digital printers for broadcloth" (Product Manager, Interview).</p>	<p>"MecCo installed the new looms for six months in our plant, they worked with us for six months to set it, there is a strong collaboration and we follow their innovation" (CEO and Shareholder, Interview).</p>	<p>"The machinery was old and obsolete. So we modified and resettled all of them with a huge investment from the family" (Quality and Innovation Manager, Interview).</p>	
Weave Three	<p>"Innovation in our company also means observing what is happening in other sectors and acquire innovative technologies to adapt. We cannot have all the knowledge inside the firm" (Innovation Manager, Interview).</p>	<p>"In our sector the relationship with raw material suppliers is crucial, since the market is very concentrated. [...] They hold our machines that work exclusively for us. We did not sell them, we loaned them for use" (Supply Chain Manager, Interview).</p>	<p>"Well, we produce our brushing machines from the first to the last screw. [...] The same is for the preparation process" (Technical Manager, Interview).</p>	<p>"In the past decade, we moved our production process abroad to decrease labour cost. We had to fire human resources and sell a part of the headquarter" (Innovation Manager, Interview).</p>

TABLE 15 - Structuring Phase: Representative Quotes (2/3)

Firm	Acquiring	Sharing	Accumulating	Divesting
Weave Four	“We have an external collaborator to design colour charts. We believe each one has to do his job, so we trust in her professionalism” (Vice-President and Shareholder, Interview).		“Technical competences are internal. We have the quality manager, the R&D manager and the marketing manager all internal” (Vice-President and Shareholder, Interview).	“Employees signed the job-security agreement as part of the extraordinary wages guarantee fund cutting their shift by 40%” (Press).
Sew One	“We have an external designer designing our collections. It is a good solution since having an internal resource would be too expensive and less contaminated by external inputs” (CEO and Shareholder, Interview) “We acquired our payroll software house.” (CEO and Shareholder, Interview).	“In Northern Africa and Eastern Europe, we provide our suppliers with all the required raw materials (zipper, buttons and all the accessories) and they work with our standards exclusively for us. We tell them how to cut the fabrics, and they follow our requirements and standards” (CEO and Shareholder, Interview).	“We buy the fabric, colour and finish it. When the fabric is ready we cut the sheets and sewn it” (CEO and Shareholder, Interview).	“Nowadays young generations study a lot, and it is very hard to find someone willing to do manual jobs. This is a problem since the old are retiring and people willing to start doing this job are fewer and fewer” (CEO and Shareholder, Interview).
Sew Two	“As concerning the research on materials, we rely on our suppliers since we cannot do everything. It happens very rarely” (Sales Manager, Interview).	“We have the license to use Gore-Tex. So we are authorised to adopt the family of materials developed by the brand in our new products” (President and Shareholder, Book).	“We have these women we call them <i>maestre</i> , they are crucial to us because they know how to transform a drawing into a cloth” (President and Shareholder, Interview).	“Two or three times we bought machines just to get an agreement, but never used them and will never use them again. Sometimes it happens” (President and Shareholder, Interview).

TABLE 15 - Structuring Phase: Representative Quotes (3/3)

Firm	Acquiring	Sharing	Accumulating	Divesting
Sew Three	<p>Last year we acquired LS brand, we expanded our range of product by including the female line. Furthermore, we acquired HNZ, a famous brand in male beachwear" (CEO and Shareholder, Interview).</p> <p>"Micro modal is a particular material adopted in the SewThree's XT product line. it was born from a fibre developed by LM company in Austria" (Press).</p>	<p>Sometimes we buy a particular circular machine with specific diameter and we install in the plant of our third party. So we invested in the machine, it belongs to us, but he runs it" (CEO and Shareholder, Interview).</p>	<p>3 years ago we invested in redesigning the website we did it internally: implemented e-commerce platform, and started social-media management" (CEO and shareholder, Interview)</p> <p>"Having internal designers working close with product developers makes the difference. The prototype development is run by our internal resources" (CEO and Shareholder, Interview).</p>	
Sew Four	<p>In the recent years we improved our cutting department by purchasing new cutting machines. We have hired and mentored young employees to bring new blood to the company" (CEO and Shareholder, Interview).</p>	<p>To sew our fabrics, we rely on third parties. We have strong relationships with them, they are located close to our plant and know our quality standards" (CEO and Shareholder, Interview).</p>	<p>We have a strong heritage. Our firm was founded fifty years ago, and we have strong and valuable internal competencies regarding products and marketing" (CEO and Shareholder, Interview).</p>	<p>In the past, we had external consultants for product design. Maybe they were the best in their job and had great ideas, but they did not fit our soul" (CEO and Shareholder, Interview).</p>

TABLE 16 – Bundling phase: Representative Quotes (1/3)

Firm	Stabilising	Enriching	Pioneering	Dismantling
Weave One	<p>“We organise and carry out safety courses aimed at the prevention of accidents in the production departments and offices” (Brochure).</p>	<p>“The new employees were educated and supervised at our headquarter with a continuous collaboration between the two sites” (Industrial Director, Press).</p> <p>“We installed new looms and drawing machines to increase efficiency, flexibility and reactivity” (Industrial Director and Shareholder, Press).</p>	<p>“Seasonal collections require product renovation. We need to hire technicians and creators, or even better creative technicians” (President and Shareholder, Observation).</p>	<p>“Some years ago WeaveOne planned to enlarge the dying plant. [...] However, when the project was ready a lot of bureaucratic work hampered the plan, issues arose and WeaveOne renounced to pursue this project” (Press).</p>
Weave Two	<p>“We invested in the sales and marketing team, now able to serve 75 countries in the world. Finally, we improved textile technical competences” (CEO and Shareholder, Book).</p>	<p>“In the last years we sponsored new engineers without a textile background to attend the Master in Textile Technologies at the local university” (CEO and Shareholder, Interview).</p>	<p>“In the next future we need an art director to develop a spin-off collection with a different stylistic imprinting” (Product Manager, Interview).</p> <p>“Our project for young artists offers talents the opportunity to design a collection of fabrics using the most advanced digital printing technologies” (CEO and Shareholder, Interview).</p>	
Weave Three	<p>“Continuous improvement of machines requires everyday technological updates” (Website).</p> <p>Dexterity and knowledge about how to intervene on the machines are the most relevant skills to keep updated” (Innovation Manager, Interview).</p>	<p>“We have the drawings of this machine and we developed it in the past, so we keep it updated by modifying it from time to time” (Head of Mechanics Division, Interview).</p> <p>“People need to be aware of the machine’s upgrades” (Product Designer, Interview).</p>		<p>“We tried to cultivate our own fibre in Europe, but it was unprofitable so we gave up” (Innovation Manager, Interview).</p> <p>“We dismantled the brushing phase losing related know-how” (Technical Director, Interview).</p>

TABLE 16 – Bundling phase: Representative Quotes (2/3)

Firm	Stabilising	Enriching	Pioneering	Dismantling
Weave Four	"Our keen market orientation incentivises constant technological updating process, carried out in direct cooperation with constructors" (Website).	"Clients certify us; audit requirements stimulate improvement in process and product quality" (Vice-president and Shareholder, Interview). "We updated our plants together with mechanical constructors" (Website).	"We keep working on fabrics' design, pushing our creativity and originality. Our customers help us through their challenging requests" (CEO, Book). "We observe external trends to understand different athletes' needs" (Vice-president and Shareholder, Interview).	
Sew One	"A weak aspect of the textile sector is that the mechanics has not evolved. In many things we work as 30 years ago. Machines are quicker and perform better, but the concept behind is always the same" (CEO and Shareholder, Interview).	"We invested in our infrastructure, automation and production process; by keeping focusing on quality and product specialisation" (CEO and Shareholder, Book).	"Since I also work for other companies I foresaw the incredible potential of this company regarding production capabilities. I understood the CEO was keen on expanding the product range, so we started" (Product Designer, Interview).	"In the past, we used to sew internally, but in recent years we externalised the sewing phase since it is the one providing the lowest added value" (CEO and Shareholder, Interview).
Sew Two	"We invest in mentoring the new engineers to teach them the tricks of the trade" (President and Shareholder, Interview).	"In our training school sewers have the opportunity to learn the job and gain experience mentored by a supervisor" (President and Shareholder, Interview).	"Sometimes we have to do the "lab deep", the study of the colour, it is very complicated" (Sales Manager, Interview).	

TABLE 16 – Bundling phase: Representative Quotes (3/3)

Firm	Stabilising	Enriching	Pioneering	Dismantling
Sew Three	<p>“We invested in new human resources to bring competences from clothing and textile fashion but also from other industries into the firm. To each person we hire after a couple of months we ask ‘what would you suggest us to do to improve our business?’ we believe what in Japanese is called Kaizen, meaning continuous improvement” (CEO and Shareholder, Interview).</p>	<p>Our research is helpful in the development of new products to understand whether innovation is interesting to customers and if better pilling or washability are relevant to clients” (CEO and shareholder, Interview).</p>	<p>“We have two macro-topics in mind, and we are looking for the right partners in terms of medical and scientific competencies to validate ideas we have in mind and support us in developing the new fabrics” (CEO and Shareholder, Interview). “Acquiring a new brand required us a big leap in competencies, structure and management of logics we were not used” (CEO and Shareholder, Interview).</p>	<p>“Until 20 years ago we were fully integrated, from the bale of cotton to the t-shirt. Then the context and the market changed, we had to outsource some phases of our process to stay competitive. We do not weave and sew our products anymore” (CEO and Shareholder, Interview).</p>
Sew Four	<p>“In these years we hired and kept designers to make them feel the spirit of our company, understanding what we want and transfer it into the design of the products” (CEO and Shareholder, Interview).</p>	<p>“We keep introducing new young human resources since this is the only way to stay at the edge” (CEO and Shareholder, Interview).</p>	<p>“Very often I suggest my employees to go watch other markets than cycling, as fashion clothing and motorcycling, to foresee innovative implementations” (CEO and Shareholder, Interview).</p>	

TABLE 17 - Leveraging Phase: Representative Quotes (1/3)

Firms	Mobilising	Coordinating	Deploying	Delaying or Avoiding
Weave One	<p>"In our hands are some of the best and most ancient brands and archives of the textile industry, meaning a great heritage, real stories and real narrative we can tell to our customers" (President and Shareholder, Interview).</p> <p>"We put together what is happening today with the heritage and the experience and taking from our rich historical archives" (President and Shareholder, Observation).</p>	<p>"We do not totally outsource; we collaborate with our partners to keep the process under control. We aim at vertically integrate and trace the whole production process" (Marketing Director, Interview)</p> <p>"We have to synergise creativity and technical competences. With complete traceability, we know where every meter of our fabric was made" (President and Shareholder, Press).</p>	<p>"We created a spin-off giving consultancies to other firms about how to improve sustainability." (President and Shareholder, Observation)</p> <p>"This new fabric testifies the research in the best raw materials, sensitivity toward eco-sustainable processes, craftsman approach and the most up to date technologies" (Press).</p>	
Weave Two	<p>"We were the first in the world to use Gize45 in homeware goods. The same happened for silk-cashmere yarn" (Product Manager, Interview).</p> <p>"To enter in the furniture segment, we studied all the extant products on the market from our competitors" (CEO and Shareholder, Interview).</p>	<p>"The creative team is able to combine the flair with technical textile competences" (CEO and Shareholder, Book).</p>	<p>"Last January we realise the 1400 thread count after 7 years of intense work. While our main collection offers a broad range of products, Project K embodies a syntonie and harmonic nature. Its elements are beautiful not just in their individuality but as a whole" (Product Manager, Interview).</p>	<p>"The 99% of our customers uses velvet in their collection. Velvet is the 'bread and butter' of the furniture business, but we do not sell velvet. We have espoused this philosophy and we are determined in taking up the cudgels and being different" (Product Manager, Interview).</p>
Weave Three	<p>"We reflect on the information we have, and together with the hints from our customers we study the new collection" (Product Designer, Interview).</p>	<p>"As the sales manager, I collaborate with the product developers, by communicating customers' requests and current trends. In the team, we evaluate what is worth doing and what is not" (Sales Manager, Interview).</p>	<p>"We are developing new exquisite fibres like wool and silk with flax to provide fashion designers with original effects in order to sell our product with a mark-up" (Technical Assistant, Interview).</p>	<p>"We sell our products to India and the market is expanding. Our customers asked us to develop a partnership for producing flax spinning, but after having reflected on the complexities, we decided to wait and see" (Innovation Manager, Interview).</p>

TABLE 17 - Leveraging Phase: Representative Quotes (2/3)

Firms	Mobilising	Coordinating	Deploying	Delaying or Avoiding
Weave Four	<p>"From yarn's characteristics, we start reflecting on what we can do with it, the required finishing, target market and delivery time" (Vice-President and Shareholder, Interview).</p>	<p>"Every year we design and select the fabric for the Italian bike race together with the T-shirt developers" (Book).</p>	<p>"Fabrics for the automotive sector are the result of intensive research, testifying the wide range of products developed adopting proper fibres in relation to the standards" (Website).</p>	
Sew One	<p>"Customers care more about the image, so we must select the right colours and designs, to do that we rely on an external designer" (CEO and Shareholder, Interview).</p>	<p>"When we have to develop new products the designer is more adventurous. As the entrepreneur, I am more pragmatic and want the profit. I do believe we can find a solution only through trial and error since none is able to tell me what is going to work or not. I work with the managers and my collaborator, we share information, take decisions and go on" (CEO and Shareholder, Interview).</p>	<p>"We made a great renewal of our range of products, obtaining excellent results. They are workwear products but are very fashionable and serve new markets" (CEO and shareholder, Interview).</p> <p>"Project A is dedicated to restaurants by adopting a charming style and innovative fabrics. Elegance and attention to details make this lines the flagships of the new collection" (Brochure).</p>	
Sew Two	<p>"During the first meeting, customers present specific requirements for products concerning colour, dimensions and wearability" (Sales Manager, Interview)</p> <p>"The client often comes with creative ideas without knowing what he wants. So together we study the product" (President and Shareholder, Interview).</p>	<p>"This is a prototype and they are working to develop it. It takes us ten days to develop the prototype, then we have to meet up, rectify it, understand the modification and implement them. This information goes to the modelist who develops the paper pattern and the sample" (President and Shareholder, Observation).</p>	<p>"In the last months we are producing the innovative seamless jackets, they are laser cut and glued" (Sales Manager, Interview).</p>	<p>"After having selected the fabric we might need to stop. The sample is ok but we need to stop because the fashion house wants to change a colour or a shape" (Sales Manager, Interview).</p>

TABLE 17 - Leveraging Phase: Representative Quotes (3/3)

Firms	Mobilising	Coordinating	Deploying	Delaying or Avoiding
Sew Three	"Together with one of our suppliers we conducted research to identify the right yarn to weave in order to get a light and very thin fabric. We spent more than one year in analysing different materials" (CEO and Shareholder, Interview).	"Once the fabric is ready we finish it at a third party, then we cut and do the quality check in this plant. The sewing is performed in Eastern Europe" (CEO and Shareholder, Interview).	"We have just presented a product line named L, worked a lot on it to develop a new design, an improvement in terms of productivity and comfort" (CEO and Shareholder, Interview).	"This morning we realise that the new collection contains two excessively classic products. We decided not to present them in the next collection but keep it for another time" (CEO and Shareholder, Interview).
Sew Four	"We have thoroughly worked on the shape and aerodynamics of materials." (CEO and Shareholder, Interview) "We aim at developing an aesthetically pleasant sportswear collection, maintaining the authenticity of the E race and integrating the integrity of our brand" (Innovation Manager, Interview).	"We try to develop the best product; the cycling team test it for us in the wind tunnel and other professional machinery. According to their feedback, we modify the product, they test the new version and so on. Our research is really on the field. We co-develop the product with athletes and suppliers" (CEO and Shareholder, Interview).	"Besides the four official T-shirts, the collection includes products inspired by the most iconic pieces jealously conserved in the historical archive of the company. The firm has developed an innovative patch and the uniform for the most important national cycling race" (Press).	

TABLE 18 - Phases, Sub-processes and Practices of Orchestrating Resources

Phases	Sub-Processes	Practices			
<i>Identifying</i>	Targeting	Seeking product excellence/ quality	Controlling production process	Continuously innovating	
	Designing Structure and Organisation	Keeping family ownership	Growing (production plants)	Delocalising	
	Designing Business Model	Seasonally launching new products	Offering wide product range	Serving and satisfying customers	Internally dedicating to core activities
	Designing Vision	Entering new markets	Strengthening reputation and market position	Expanding product range	Keeping family control
<i>Structuring</i>	Acquiring	Securing brands	Delegating technical/creative research	Buying machinery	
	Sharing	Co-designing machinery	Partnering	Licensing	Alliancing
	Accumulating	Expanding production capacity	Renewing machinery	Keeping internal know-how	tacit Preserving heritage
	Divesting	Firing HR	Retiring HR	Shelving machinery and materials	
<i>Bundling</i>	Stabilising	Keeping HR knowledge updated	Updating machinery/ technologies	Training new HR	
	Enriching	Hiring young HR	Researching product characteristics	Developing new HR knowledge	Renewing plants
	Pioneering	Pushing creativity	Foreseeing new products	Seeking partners for new projects	Grasping and adapting ideas from other industries
	Dismantling	Outsourcing	Failing in integrating the value chain		
<i>Leveraging</i>	Mobilising	Integrating heritage and innovation	Designing new products	Scouting existent rival products	
	Coordinating	Co-developing new products	Tuning innovation phases		
	Pioneering	Presenting new collection	Refining production process	Establishing new ventures	
	Delaying or Avoiding	Abstaining widening the product range	Postponing the product launch	Desist selling in a geographic area	

5.6 DISCUSSION

The empirical investigation conducted allowed to extend the resource orchestration framework by including further phases and sub-processes. In addition, I identified practices through which firms enact orchestrating process, showing the presence of different paths among investigated firms. In order to explore the idiosyncrasies of the orchestrating processes, I developed a multilevel process model to move from empirical evidence to theory building summarised in Table 18. According to Colquitt and Zapata-Phelan's (2007) taxonomy of theoretical contributions, this study examined previously unexplored processes in resource orchestration framework and identified three main findings. First, by longitudinally observing the process of orchestrating resources in new product development, I highlighted additional phases and sub-processes to the resource orchestration framework. Second, I introduced the concept of time in orchestrating resources as a shaping force. Third, by discarding the linear-feedback mechanisms (e.g. Sirmon et al., 2007), I shed light on the complexities of orchestrating resources process due to its intertwined nature. Stemming from these findings, the study adds to the theory on the resource orchestration and more broadly to the resource-based theory of the firm offering two contributions. Firstly, the resource orchestration framework is expanded providing a more nuanced and multilevel perspective exploring a wider range of phases, refined sub-processes and evidence of relevant practices. Secondly, by embracing a process perspective considering time, the framework becomes a process model useful to interpret organisational orchestrating phenomena. Furthermore, this study informs practitioners about the complexity of orchestrating resources in relation to internal and external characteristics of organisations and their actors. Firms competing in dynamic markets benefit from a thorough understanding of orchestrating resources dynamics, enabling the creation of value for customers and, thus, fostering competitive advantage.

5.6.1 One Motor Does Not Fit All: Nested Process Theories in Orchestrating Resources

Resource orchestration framework, stemming from resource management and asset orchestration logics, assumes sequential steps unfolding in time. Despite the attempt to embrace the process theory, resource orchestration slightly embraces the enacting perspective by listing a set of steps through which resources are used. However, as noted in emerges from the findings, the timing and rhythm in orchestrating is fundamental. Unfortunately, the framework of resource orchestration is so far designed according to subsequent phases and feedback loops but is silent about the patterns through which sub-processes happen and unfold in time. The current resource orchestration model depicts a prescribed mode of change together with multiple entities that at macro-level corresponds to the *evolutionary process theory* (Van de Ven & Poole, 1995). According to this approach, orchestrating consists in a repetitive sequence of variation, selection and retention events with a cyclical view of time.

Although at macro-level the evolutionary process theory fits, I argue that resource orchestration is more nuanced than the ideal type (Poole & Van de Ven, 2004); therefore, more than one *motor*¹⁶ may come into play. Different influences simultaneously act on different part of the organisation throughout the orchestrating process, each imparting particular momentum to the change. Therefore, evidence from this study show that different motors interact in the process of orchestrating resources. At meso-level, the sequence among sub-processes might vary involving a constructive mode of change with steps and multiple paths through these steps, determined by exigencies that arise during the

¹⁶ “Four basic types of process theories explain how and why change unfolds in social or biological entities: life-cycle, teleological, dialectical, and evolutionary theories. These four types represent fundamentally different event sequences and generative mechanisms - we will call them motors - to explain how and why changes unfold” (Van de Ven & Poole, 1995:511).

process; is more coherent with a *teleology process theory* (Poole & Van de Ven, 2004). According to teleology process theory, a enfold toward a goal or an end state (Van de Ven & Poole, 1995). The observed cases depicted multiple patterns of orchestrating resources, showing that sometimes agentic executives rearrange the sub-processes according to different patterns as they make sense of what is happening (Weick, 1995) in order to accomplish the goal of each phase.

Regarding micro-level, practices are coherent with *dialectical process theory* – “Organizational entity exists in a pluralistic world of colliding events, forces, or contradictory values that compete with each other for domination and control” (Van de Ven & Poole, 1995:517). Since confrontation and conflict play a prominent role in orchestrating. Many tensions exist simultaneously, internal focus-external focus, interdependence-independence, building-dismantling (Seo, Putnam & Bartunek, 2004). As emerges from data collected, organisation undertake different, overlapping and sometimes contradictory practices that create tension aiming at achieving value creation. Following Baxter & Montgomery (1994) three responses to tension and contradictions emerge from the empirical investigation. First, “recalibration-reframing” was the most prominent, the internal-external foci, instead of opposing forces, are perceived as complementing each other through the combination of resource acquisition and accumulation which bridge the firm boundaries. Second, “reaffirmation” emerged from the acknowledgement of interdependence-independence poles. Social and intellectual capital are crucial in coordinating and interacting with external actors, as well as in mobilising the necessary resources through the connection with other organisations. Likewise, the investigated firms were able to independently undertake internal activities to boost new product development. Third, “balance” the attempt to engage with poles and reducing the pressure from each, in the building-dismantling tension the balance of the two activities increased efficiency and

boosted faster realisation of new products. At the highest-level of analysis, considering the process of orchestrating resources as iterative, *life-cycle* emerges as the suitable process theory explaining relentless change and organic growth. According to new goals, executives are triggered to continuously engage in re-orchestrating processes. Following the cyclical nature of time; the life-cycles exert a strong influence on processes, as a new orchestrating process is influenced by former ones.

Therefore, this study shows orchestrating resource process embodies the four process theories: dialectical (micro-level), teleological (meso-level), evolutionary (macro-level) and life-cycle (multiple iteration). The nested nature of the levels of analysis is mirrored in the integration of process theories, wherein the higher level is constituted by an aggregation of lower-level processes (Poole & Van de Ven, 2004).

5.6.2 Limitations and Future Research Directions

This qualitative study of orchestrating resources is grounded in new product development of eight cases within the textile industry. The exploratory nature of the conducted investigation presents various limitations, addressing them offers venues for future research. First, the firms studied here were small and medium enterprises operating in the dynamic environment of textile industry. They share features with many other strategically relevant organisations, yet they are not representative of all firms. Therefore, the findings may not apply to businesses competing in slow changing markets or stable environments, firms without external deadlines that compel the launch of new products every season. However, evidence is that many firms are increasingly operating continuous change in a wide range of industries (Brown & Eisenhardt, 1997), therefore the findings of this study may be applicable to a broad range of organisations. Second, this study suffered from the usual limitations associated with case study research, trading generality for richness and detailed observed processes (Langley, 1999). The insights presented should

be empirically tested aiming at moving research toward more robust model of how executives use resource to create value and drive competitive advantage. Third, the focus here is on how managers use resources, but I do not delve into the types of resources and their different relevance. For example, does the ability of better orchestrating one type of resources than another lead to higher value creation? Finally, studying orchestrating resources empirically forces to select a specific type of change, namely product innovation. However, firms orchestrate resources in relation to a wider variety of change process e.g. internationalisation, growth. Insights from our study suggest that future research might focus on other types of strategic change and look at how the process of orchestrating resources is enacted by executives in relation to different goals.

5.7 CONCLUSIONS

Prior research has emphasised the importance for a firm of using resources, over owning them, in order to create value and drawing competitive advantage. Stemming from resource orchestration framework this study systematically investigates the process unfolding in orchestrating resources in new product development. By contextualising the analysis according to a specific type of organisational change, I extended resource orchestration framework by including the role of time as a shaping force. Throughout the qualitative longitudinal investigation of eight cases in the textile industry in Northern Italy, this study contributes to developing a process-oriented exploration of orchestrating resources in organisations. Delving into phases, sub-processes and practice, I develop a more nuanced framework of orchestrating resources, opening up to further avenues of research in the dynamic mechanisms operated by managers in using resources.

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6 SUPPORTIVE LEARNING PROGRAMME - TEACHING PORTFOLIO

The Supportive Learning Programme is recognised nationally by the Staff and Educational Development Association (SEDA) and accredited by the Higher Education Academy, the national body for teaching and learning in UK High Education.

This report was submitted in April 2016 in fulfilment of the requirements for Supporting Learning Award.

Successful accomplishment of requirements allowed the candidate to become Associate of the Higher Education Academy.

6.1 INTRODUCTION

In November 2014 during my first teaching experience, I delivered a workshop together with another PhD student. As my first time on the other side of the barrier, the idea of having to stand in front of the class worried me so much that I could not sleep both the night my tutor informed me about my duty and before the workshop. The workshop related to Niagara Paving case study (Sharma & Smith, 2008). I spent three days revising the case, teaching notes and relevant literature to fully address all the questions the students could ask. I was concentrated on the content of the workshop and very stressed about showing I knew the subject and “experienced enough” to deserve the teaching role. This focus on the content did not allow me to pay any attention to the process. I entered in the class, wrote the questions on the white board and asked students to gather in groups. No matter how many or who the students were.

Consequently, the workshop was a nightmare! Students did not recognise my authoritativeness because I was not able to build it. I spoke about theories, without providing any real-life example. Therefore, my words were totally detached from their reality, and they were not able to abstract from the case content. I spent three days reading the case while student read it in class for the first time, I should not have expected they had a thorough understanding. This episode was like a bombshell for me, but the worse had yet to come. At the end of the term, the teacher shared student’s feedbacks with me. I report some of the quotes “There was also a couple of seminars which were rendered completely pointless, for example, week 8 seminar regarding Niagara Paving case study”. “The PhD student workshop was totally useless (and that was quite bad cause it was the succession week). Also, what is the use of the workshop if we just go through the questions in groups? I could do that at home”. Revising the comments was a painful experience, I was hurt by students’ comments and worried about my supervisors’ opinion about my (bad) teaching.

Having partially recovered from that daunting experience and disappointing comments, according to my nature and my learning experience, I looked for the opportunity to learn about how to teach, and I subscribed to the Supportive Learning Programme - Introductory Workshop. From the beginning, I realised how teaching is not a natural attitude belonging to some people, but an activity that requires training and expertise. Like any experience, some failure is part of the game to learn more from mistakes and never repeat them again. After the initial enthusiasm, I discovered one of the requirements was to collect feedback; this made me was very anxious for daunting comments that in this case were even supposed to be attached in the portfolio.

However, this need acted as a waking up alarm. If I wanted my job to be in academia I had to go beyond my limits, learn how to teach effectively and improve students' feedback. Therefore, I first started attending lectures and workshops delivered by those professors with high student evaluations to understand what was missing in my teaching and what I could steal from their way of engaging students. Second, I started reading specific books and other resources about teaching as those suggested from the annotated bibliography. In the next sections, I detail the learning outcomes that improved my teaching skills. First, I introduce myself, personal background and teaching activity. Second, the annotated bibliography is developed according to eight key readings and related reflections. Third, my observations of others' lectures and observations conducted by others attending my workshop are detailed. Afterwards, I reflect on my teaching experience reporting some anecdote, with a particular notice on equality and diversity. This essay ends with conclusions about my learning journey and future directions for improving my teaching.

6.2 EDUCATIONAL BIBLIOGRAPHY

My name is Emanuela Rondi. In 2012 I received my Master Degree in Management Engineering from the University of Bergamo (Italy), and I am currently third year PhD student in Management at Department of Entrepreneurship, Strategy and Innovation at Lancaster University Management School (LUMS). I teach and research in the disciplines of Family Business, Corporate Entrepreneurship and Innovation. My specialist field of practice and research is social capital in innovation, with a particular interest in the dynamics of family businesses.

As my first teaching experience, this term I have been enrolled as the tutor of Master modules in “Corporate Entrepreneurship” (ENSI 505/519) and “Internationalisation and New Technologies” (ENSI 506). My role is to deliver the workshops based on the discussion of case studies discussion, role-playing, and group work. For the former course I deliver three workshops per week (approx. 15 students each), whereas the second course is based on 2 workshops of 1 hour (approx. 15 students). Last year I collaborated in the design and material preparation for both Master and Bachelor modules in Family Business Management (ENSI 314, ENSI 509) helping the convenors of the course.

6.3 LEARNING AUTOBIOGRAPHY

The earliest influences I was able to recognise through the examination of my past are my parents and my sister. I was born and raised in a small village close to Bergamo (Italy). Throughout my childhood, I used to observe my older sister studying. I felt curious and sometimes jealous about those books and thoughts that were able to absorb her as if she were flying with her thoughts, detached from the present. When I started going to school my parents heavily stressed the importance of learning and getting an education, they kept saying “This is your primary and unique goal”. My father was a director in a textile company; he worked hard and daily struggled to provide a better life for our family. The importance of feeling my parents proud of myself has been a constant trigger in studying and striving more. During dinners he used to tell us about his job adventures, as a good storyteller, he was able to translate his days of work into mysterious and intriguing enterprises with unexpected events that he managed through strategic decisions. Those stories were settled either in the company or in lands far away, where he used to travel. In aiming at becoming an adventurer myself, at 12 I decided my destiny was to become a Management Engineer, I would have strived to become a leader in a company in order to travel and live my personal legend.

During elementary and middle school I did well because “I had to do”, together and as all my schoolmates. Things changed when I chose a scientific high school; I felt that decision was the starting point to make the difference and kick-off my personal legend. Soon my strong determination was put in doubt when in the middle of the first year I started doubting about my choice and my abilities, thinking about whether and what would have changed in case I had taken another path. At that moment I did not know it was only the first of many times of doubt. For the first time, I felt my will to fulfil others’ expectations was undermined by my inability to over-perform and achieve good marks. I remember my

first year as a nightmare. I ended with fair marks, no friends, a big frustration and a deep sense of inadequacy. Therefore, I started the second year with the thirst to recoup my losses; however, my interest in the subject was very low and I did not enjoy the relationship with teachers who treated the class as a group of learners to feed with their knowledge.

Luckily my feelings changed when I met Mr. Romeo, teacher of Maths and Physics. With a very easy-going style and a strong passion for his subjects, Mr Romeo became an influential role model for me, strongly shaping my future decision to choose education as a career. Going beyond hierarchy and authority, he was able to develop leadership through his knowledge and dedication, without denying his flaws. His example was crucial to me in understanding that instead of seeking perfection as an adventurer I needed skills to manage and deal with my weaknesses. The second teacher who influenced my decision to enter the teaching profession was Ms Crippa, the Chemistry and Biology teacher. Differently from Mr Romeo's style, she was very demanding and performance-oriented. Anyone in the class was scared of her unexpected tests and high standard; I dedicated so much effort to study her subjects that I still remember texts and figures of my Biology book. I was very fascinated about her womanpower and frankness in speaking about the real world without deceiving students with fake fairy tales. She taught me many lessons, but the most important were that to be an adventurer I needed to fight, struggle and have hard times. In 5 years I accomplished my degree with the highest mark, having moved away from uncertainty and heading toward the university.

Despite my conquered self-confidence, the shift from high school to university was huge and full of pitfalls. During the first year, I struggled a lot with substantial autonomy and long-term deadlines. Exams always looked so far in time that I was sure I could have managed them. By pursuing this attitude, I obviously ended up being overwhelmed, unable to accomplish all the exams of the year. Lesson learned, the year after I started modifying

my studying routines by collaborating with my colleagues. Studying in groups was beneficial, I found older students precious in suggesting me how to face specific exams and courses. These practices helped me a lot, I maintained them throughout my Bachelor degree.

Three years after I had to make a choice for my Management Engineering Master Degree, either the Italian or English programme. I took the risk and started the brand new English programme. I can honestly say that it was one of the best choices I made in my life so far. The Master allowed me to get in touch with people from different countries, varied backgrounds and cultures. This effort became extreme when I participated in a research project in collaboration with Graduated School of Design from Harvard University. For a young girl grown up in a tiny village, engaging in conversations with students from all around the world was like living out a dream. I exploited this opportunity to improve my English skills, I learned how to engage in conversations not totally grounded in my topics, and I enjoyed the process of reconciling different points of view even distant from mine.

During last year of Master, one of my professors asked the class to express interest in academic research. Since I had enjoyed the research project I participated in, I raised my hand, without exactly knowing the consequences of that action. After the lecture he told me about the opportunity to apply for a PhD, at that point I did not even know what a PhD program really was. On the one hand, I was very keen on fulfilling my personal legend and starting working in a company in Italy; on the other, the idea of joining a long-term research project in a different country sounded very exciting. I liked learning and that was the only thing I was sure to be good in since I had been done that for more than 18 years. Therefore, I decided to postpone my entrance in the job market to pursue the highest level of education, thinking a PhD would have been similar to another Master. I could not be more wrong, after 18 years of learning I had to relearn how to learn. At the beginning it looked like

everything I had done in the past was not relevant according to the new project. For the umpteenth time, I had to cast my self-confidence aside and deal with a new way of doing things. The most difficult part of this process was to realise and accept the impossibility to completely patronise the field. I spent 18 years studying all the material of the course to satisfy the requirements and get high marks; now requirements were gone, exams were gone, and I felt lost. My supervisors were precious in this phase, by reassuring me about my abilities and achievements, it was ok to feel lost as far as I struggled to find my way out. Henceforth, I am still in the process of fighting, struggling and having hard times.

In reflecting on how my learning life has influenced my teaching, I would like to highlight four main points crucial for my progress that I aim to transfer to students during my lectures. First of all, ambition, either the goal is clear or fuzzy being ambitious is the engine of action. Second, “failing is ok, as long as you fail fast”, it is crucial to mitigate, learn and move on from a failure toward a bigger success. Third, take risk. Self-confidence is good but stepping out from the comfort zone results in advanced levels of concentration and focus. Four, from my process I experienced that learning cannot be a goal but it is a never-ending process of reinventing myself in order to adapt, achieve and grow and if you do it in a good company is even more exciting. My experience as a learner has been influenced me as a teacher. I do not want to be a mere feeder of content, but a helper and mentor to foster students’ critical thinking. I avoid judging students according to their performance or trivialise their effort by assuming everything is an easy task. Conversely, I aim to spur their curiosity and enthusiasm in striving toward their own goals by providing constructive feedback. I enjoy engaging in conversations with students whose different background can enrich my knowledge and allow me to take different perspectives. Therefore I think, as a teacher, my role is to be an adventurer in acquiring authoritativeness, transmitting knowledge and passion, striving for a goal and learning myself.

6.4 ANNOTATED BIBLIOGRAPHY

The annotated bibliography started by basics of teaching, later on, I collected further specific readings related to the activity I was asked to deliver (workshops, marking, supportive feedback).

6.4.1 Reference 1- Morss & Murray: Theory and Practice. (2005)

Brief Content Recap: In order to foster teachers' confidence in teaching, this chapter provides information about current models and theories in learning and suggests implications for teaching practices. By introducing learning as a process, the authors present theoretical models such as Experiential Learning Cycle (Kolb, 1984) and Race's model of learning (1993) relevant to understand what genuine learning involves. Learning *constructivism* consists in "the process of building up your knowledge by connecting new information with what you know already and forming concepts, or constructs, which are models of reality" (p.13-14). Therefore, new information needs to be linked to extant knowledge and teacher must be careful in avoiding to go straightforward to what they know but have to help students to actively participate in their learning. Moreover, learning consists both in an individual process (each person owns different learning style(s)) and a social process, the latter requires a higher level of *proactiveness*. Ultimately, both in teaching and learning *what the learner does* is the centre of the activity. Therefore, a constructive alignment among the parts of the curricular framework (learning aims, outcomes, activities and assessment) is crucial to make learning and assessment more transparent and avoid to misled students.

Personal Reflection: Reading this chapter was relevant for my understanding about teaching, particularly according to three main points: self-focus, curricular framework and students' motivation. First, before reading this book my focus during teaching was on me and my hesitation. I felt responsible for others' understanding and this hampered my ability

to engage in constructive conversations. I wanted my students to learn at the exact moment I was explaining. However, learning is a process that goes through stages and takes time; therefore, I asked them to reach an impossible and unfair target. Students need time to reflect upon things, forming concepts generalisation and maybe even test concepts through experience. In my next tutorials, I will ask them to reflect upon their own experience and try to link the theory more to the real world in order to facilitate their learning process and stimulate them to generalise and test the understanding.

Second, reading this chapter was useful to engage in conversations with colleagues and module coordinators about the curricular framework. The wording suggested is very insightful and precious for the development of documents as course outlines that in my department summarise all the content depicted in the book as “framework”. As a student, I always hated the inconsistency among learning aims, outcomes, activities and assessment. As a teacher, I underestimated their relevance so far, thinking about them as a formalised and bureaucratic description of the course content. By reflecting on this reading and my personal experience, I started appreciating their crucial role; I am paying more attention to the contents and words used in the curricular framework developed for my next courses.

Third, motivation “what are your student doing during your lecture?”. Every time I explain a theory and someone in the class is chatting I feel hurt as a signal of lack of interest. However, thinking about learning as a social process I started consistently watching students, and I realised many times they are having private conversations about the content of the lecture as a way of collecting information and try to develop a consistent understanding by sharing opinions with a colleague.

6.4.2 Reference 2 - Morss & Murray: Your first Workshops. (2005)

Brief Content Recap: This book chapter focuses on tutorials, designed to help students understand lectures by usually involving some kind of group work. Two kinds of experience arise from a group work: social (how enjoyable the group work is) and task (performance of the work done). Managing the group and inherent relationships is hard and partially influenced by group size, purpose of the task and student learning style. In this regards, as group size increases, student experience of the safety and effectiveness of group work decreases. On the other hand, individual work is more suitable for personal reflection and generating personal data. Pairing people up helps them get to know each other, generates discussion and allows every participant to express personal view. During group learning a facilitator has to deal with multiple functions (listening, questioning, explaining and clarifying, encouraging participation, responding to students as individuals, closing, monitoring and evaluating, providing grounding, managing time, checking attendance) that require diversified skills and experience. The authors suggest tactics to implement to foster conversations among students such as apparently getting on with another task, so that you do not look like you are eavesdropping. Interestingly in the chapter, a list of ways of questioning provides practical suggestions about how to formulate open questions and depicts some common errors in questioning.

Personal Reflection: Coming from another country with a different education system, I have been recently introduced to tutorials. For this reason, I tempted to manage tutorials as lectures, by planning anything in advance and having the full control of the activities. Although having a plan about what to do is essential to make it happen, when I conduct tutorials I always struggle with many uncertainties. By reading this book chapter I realised that many of my worries related to tutorials are not just mine and I also found some strategy to overcome/solve them. In this regards I always feel stressed about the

following issues: (1) “students do not see the relevance of the discussion”, (2) “subgroups start forming private conversations”, (3) “students are visibly bored and complain about the tutorial and the way you are handling it”.

By this reading, I understood that they are all linked to my personal issues with credibility. Since I look much younger than my age and I know many of my students are older and have industry experience, I feel my credibility as low to their eyes. Therefore, anytime I see them murmuring I suppose that they are commenting on me and my way of teaching. I basically assume their talking are either about the *content* of my teaching (“she does not know anything about this topic”) or my *way* of teaching (“she cannot clearly explain”, “is she sure of what is saying?”). This lack of self-confidence is hampering me to build trust with them. Furthermore, by reading among the common errors “too many questions at once” I realised that I often do that (e.g. “Is X true? If yes, why so...?”). Meanwhile, I do not give them enough time to think, since I am so focused on myself and on showing that “I know the subject”. This ends up in me never giving pauses and being intolerant of silences. According to this reading, I will doubt at a lesser extent about myself and my knowledge, trying to spur students to deeply reflect during tutorials by asking one question at a time and giving them more time to think.

6.4.3 Reference 3 - Ramsden: The nature of good teaching in higher education. (1992)

Brief Content Recap: This book chapter focuses on good teaching as the trigger of high-quality student learning. In this regards, the author discards the assumption of an exclusive distinction between learning as only a students' job and teaching as limited to teacher's job. Conversely, good teaching involves a desire to share teacher's love of the subject with students, stimulate and facilitate students' engagement, improvise and adapt to student's demand. By providing examples of what good teaching is and is not in terms of lack of attention toward students and their engagement, Ramsden explores actions to involve students and leverage their thoughts. Six principles of effective teaching in higher education are depicted, together with a critical discussion about their value and implementation:

- Interest and explanations,
- Concern and respect for students and learning,
- Appropriate assessment and feedback,
- Clear goals and intellectual challenge,
- Independence/control/engagement,
- Learning from students.

This chapter closes with a short examination of students' perception of good teaching across disciplines. Results from empirical researches show that there are variations in perceived teaching quality between different courses and subject areas.

Personal Reflection: In reading this book chapter I questioned myself about what good teaching means for me and how I try to deliver good teaching. I appreciated the interaction between teaching and learning, depicted by Ramsden as two sides of the same coin. This strong interdependence allowed me to understand that teaching is not totally depending on me, but I need to put further attention on students' thoughts and activities. Furthermore, during my tutorials I always try to connect lecture material and theories;

however, I did it as a rule of thumb without knowing the actual consequences of omitting this link. By reading this chapter I realised that missing to link tutorials to lectures would cause a lack of connection between practice and theory. Therefore, by ignoring to integrate the theoretical (lecture) and practical (tutorials) activities, I would insinuate that the content of the lecture is irrelevant for real world outside and anything can be understood without the theoretical background.

In the examination of the six principles of effective learning I developed a brief reflection on each of them:

- Interest and explanations: teacher's interest toward the subject makes visible how he/she enjoys working hard at it. In fact, anything requires effort, but this effort should not be unpleasant and showing enthusiasm might be contagious.
- Concern and respect for students and learning: Our consciousness and consideration for students would emerge by avoiding making the subject more demanding and by being available and versatile with students and teaching skills.
- Appropriate assessment and feedback: giving good comments is only part of the feedback process. Although it requires time, providing individual feedback about a piece of work is worthy, since ad hoc comments emerge as one of the first characteristics in good teaching depicted by students.
- Clear goals and intellectual challenge: balancing between freedom and discipline is crucial, particularly during group discussion. I am always prone to listen to students' answers, however sometimes I find difficult to bite my tongue and leave them providing wrong answers before helping with the right one.
- Independence/control/engagement: cooperative learning is beneficial; however, I come from an education system much individual-oriented up to a point to install competition in order to incentivise each student to strive for their best.
- Learning from students: effective teaching requires to elaborate on its effects on students.

In conclusion, this book chapter made me understanding the critical success factors related to teaching and also further actions I can undertake in order to improve my skills and activities as a teacher.

6.4.4 Reference 4 – Riggs & Helleyer-Riggs: Development and Motivation In/For Critical Thinking (2014)

Brief content recap: “It is imperative to persuade students that they can and should think critically, and we must move them toward the motivation to do so”. This article presents the theoretical and empirical investigation of critical thinking development. Although this essay does not provide a clear definition of what critical thinking is, it presents various perspectives and references. The authors motivate to thinking critically by presenting the costs of not doing so. Besides literature review of what critical thinking means in philosophy, the authors depict an outline of a course to help students develop critical thinking. The aim is to move students from being unreflective- to challenged-thinkers, by going beyond facts and use knowledge to judge and act. In doing so, their assumptions and opinions are challenged through activities as acquisition of information that was incompatible with their current assumptions.

Personal Reflection: This reading intrigued me since the beginning, both in terms of personal and teaching skills. It was helpful in understanding critical thinking as a goal. Students entering college tend to use dualistic thinking of seeing and understanding the world, dividing it into right or wrong, black or white. Challenging assumptions allows them to develop “Post-formal thought”, a more interpretive approach toward the shades of grey of the world. Moreover, students realise that experts do not have all the answers and that also their ideas may be valid if tested. This relativistic thinking brings to the development of criteria for judging the validity of different viewpoints.

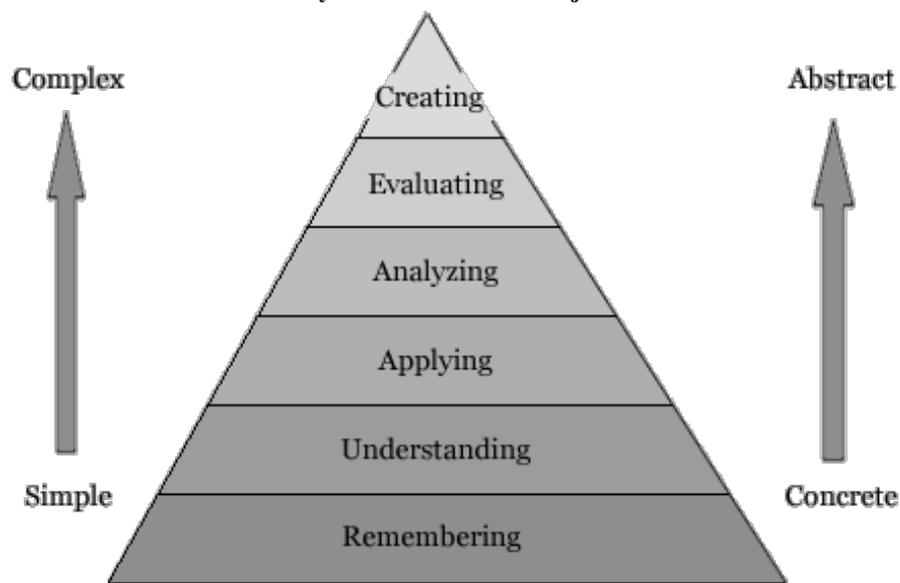
However, to foster critical thinking students must be motivated. One possible way is to present them the cost of not doing so, through concrete examples taken from history and contemporary life. For example, based on commonplaces students present their thoughts about an argument (e.g. The US health system is the best of the world), then they

are provided with controversial information that undermines their thoughts. This activity involves a process composed of accumulating information, interpreting information and seeing cognitive distortions. Through this exercise, students realise the flaw in their thinking and start reflecting on their own and general thinking.

6.4.5 Reference 5 – Connor-Grene: Assessing and Promoting Student Learning: Blurring the Line Between Teaching and Testing. (2000)

Brief content recap: The authors introduce Bloom’s (1956) “Taxonomy of Educational Objectives” from simplest to complex categories of cognitive skills. As it emerges from Figure 13, remembering represents the lowest level of the pyramids. However, tests are oftentimes based only on this category.

FIGURE 13 – Bloom’s Taxonomy of Educational Objectives



Testing plays a crucial role in stimulating student learning. However, test items based on the same questions addressed in class lose their cognitive challenge by relying on memorisation. On the other hand, “Daily quiz” approach boosts multiple levels of thinking rather than simple recall, as making connections between previously discussed ideas and new material. In the activities presented by the authors, due to the short time, students were encouraged to convey their ideas concisely and clearly either by outlines or diagrams rather than through complete sentences. The research showed that students’ study behaviour is strongly influenced by tests. Whilst few tests at the end of the semester led to procrastination and last-minute preparation, daily quiz encouraged students to prepare

thoroughly for every class and provided a starting point for the discussion. For each class, quiz must be constructed and graded. Therefore, an effort is required from the teacher.

Personal reflection: This reading was motivated by the discrepancy between the approach adopted to test me when I was a student and the evaluation methods I am asked to perform in this university. The need for coherency between learning outcomes and testing method is oftentimes undervalued. As an example, lectures and workshops might be structured to deliver content and theories, but then the test is based on critical thinking or vice versa. In the workshop I conducted, students with different backgrounds asked me many times about the exam since they are used to be tested according to mathematical exercise or quiz and do not know how to develop an essay. This issue might be overcome by using different methods of assessment for the same course. From this reading, I understood that testing could be a journey rather than a static measure. In my personal experience, a test was a source of stress related to the uncertainty of the questions as well as the risk of being evaluated according to just one examination. Although daily quiz method requires strong effort and is time-consuming for teacher and students, according to this research it is worthy and helpful in satisfying learning goals.

6.4.6 Reference 6 – Higgson: Can Arts-based Training Enhance Cultural Competence? (2011)

<http://www.heacademy.ac.uk/disciplines>

According to students' feedback about the introduction of different activities and the use of other types of resources, I decided to analyse this presentation about a very new approach. I am very pleased to have done this reading since the presentation is very clear; it provides key definitions, references, techniques, suggestions for their implementation and analysis of benefits and potential difficulties. Surprisingly, I found this presentation tackle also the international aspect that is very relevant to me (see also Reference 7). I learned that people could be skilled in dealing with intercultural interaction through training and understanding how different people can see the same situation in a different manner.

Moreover, the benefits of arts-based training are crucial to address some of the issue I encountered in class, since (1) it allows to make people communicate deeply (even without speaking their own language), (2) "It is fun!" and involves physical activities (e.g. theatre practice and dancing), (3) it is "Ice breaking" and helps build rapport among participants, (4) by developing a non-academic environment and level-playing it encourages reflections. According to the references provided I am going to analyse deeper these methods to engage more students and foster a playful and interacting learning experience.

6.4.7 Reference 7 – Parselle & Jones: The Induction Process and the Management of International Students (2010)

<http://www.heacademy.ac.uk/disciplines>

I chose this reference since the majority of the students I tutor are international. I appreciated the beginning of the presentations, since it made me thinking about my background. When I was an Undergraduate, student my fellows were 99% homogeneous in terms of the mother tongue, ethnicity and culture. Coming to Lancaster, I found internationality as a great resource and an opportunity to share and understand different perspectives from mine in a small environment. On the other hand, I think this heterogeneity requires a lot of education to be dealt with since it is very easy to act according to personal background and maybe result rude or offensive to someone with a different cultural background.

Although the presentation at the beginning was interesting, moving forward the slides looked as grounded in commonplaces and very “generic”. The aim should be moving away from stereotypes, but it actually creates other “narrower” stereotypes. Put it differently, the presentation wants to increase awareness about international students’ expectations but it develops the discussion as “we” vs. “they”, “our expectations” vs. “their expectations”. Moreover, I did not like the way Indian and Chinese students are presented as a bundle, all with the same (quite naïve) expectations. As an example, it maintains “Other International students: national, ethnic groups tend to not to integrate outside of the classroom”. This assumption is quite strong and I do not appreciate this kind of generalisation. I know from my experience at Lancaster that internationalisation is very relevant and I attended the Equity and Diversity module, hence this attitude in dealing with very sensitive topics hurts me.

Nonetheless, I appreciated the bullet points to consider; for example, the need to teach how to do group-work and the benefits that students can get from encouraging “cultural mixing” group exercises.

6.4.8 Reference 8 – Teaching Discussion Sections

<http://gsi.berkeley.edu/gsi-guide-contents/discussion-intro/>

This website provides a wide range of suggestions and resources for maximising student learning through discussion sections. By reading the material, I learnt a lot about how structured can a group-work be. So far, I designed group-work sections leaving students free to discuss the topic provided. I have now run several workshops and overall the students engaged really well. However, this website was open-minding in terms of details that can ease and make the conversation more insightful for students. For example, “remind students of the need for respect, openness, and sensitivity” was an important reflection trigger for me. I always ask students to discuss and justify their thoughts, but encouraging them to be open and sensitive is even more crucial.

Besides group-work techniques that I was aware of, this website suggests alternatives as Think-pair-share and more elaborated activities as Paired annotations. I am looking forward to trying these new techniques with students in workshops, since they asked me for more engaging activities like role-playing which they enjoyed a lot.

6.5 OBSERVING AND BEING OBSERVED

The contribution of observing and being observed has been crucial to understanding the strategies and tricks to catch students' attention and foster their engagement in workshops. The next two sections present the description and reflective comments on observations.

6.5.1 Observation 1 – Observations of other people's teaching

Name of Teacher: Josip Kotlar

Name of Observer: Emanuela Rondi

Date: 19th November 2015

Length of Observation: 2 hours

For SLP participants when you are observing your mentor – please include here a brief outline of the session aims and plan to contextualise the comments that follow:

As part of the ENSI509 – Family Enterprise Management module, this workshop is delivered to MSc students. Since the assessment of this module is based on presentation (50%) and a quiz (50%), case analysis and presentation are considered as exam training. Each week all students are required to gather in different groups and present a new case. Although the exam is in week 10, in each workshop students receive feedback about their performance by both tutors and colleagues, according to the evaluation form through which they will be evaluated during the exam. This week students are addressing the Torres case in 3 pre-assigned groups. They need to read the case study in advance (24 pages) and prepare a PowerPoint presentation (to be delivered in 10 minutes), following the outline below:

- Introduce the case and questions (2 minutes)
- Identify key dilemmas/problems inherent to the questions (2 minutes)
- Identify possible options/alternatives (2 minutes)

- The proposed solution (4 minutes).
 - Each presentation will be followed by 5 minutes of Q&A, plus 10' feedback.
 - The case study is about succession, values and corporate social responsibility (CSR) in family businesses.
 - Comment on the session in the context of the planning – to what extent did the session match the plan in terms of any/all of the following, and where it diverged, what were the reasons?
 - The aims and objectives and intended learning outcomes of the session,
 - Teaching and learning activities, including student involvement,
 - Pace, organisation and timing,
 - Subject content,
 - Use of resources and equipment,
 - Assessment of learning,
 - Any specific concerns raised in the briefing discussion
- Students knew in advance both the content and the schedule of the session. Josip

gave very clear instructions both before and during the workshop. His ability to set a professional but also informal atmosphere fostered a constructive session wherein students paid attention to both colleagues' presentation and subsequent Q&A session. Time was managed by an alarm in order to allocate the same slot to all groups. Learning aims and objectives were intentionally not stated in advance since the goal was to make them emerge from the session. The subject content was driven by the following key points asked to be presented in the workshop on slides uploaded in advance on Moodle.

- Discuss the Torres family values and mission statement, identifying the most original or controversial elements.
 - How effective are the family's initiatives regarding sustainability and social responsibility?
 - Does CSR "sell" – i.e. do companies engage in CSR for reasons of self-interest? To what extent is this true in Torres?
 - How sustainable is CSR? List the issues you have with CSR policies in general and discuss how they apply to Torres.
- Each presentation is assessed by tutors and colleagues according to an evaluation

form. This informal evaluation is considered developmental in terms of feedback; insightful and useful comments are provided to foster improvements in next presentations

and prepare students for the exam presentation. In performing their presentations students are allowed to use any kind of resource; however, none has used other material than slides and text.

- Summary of qualities of session
- Clear outline
- Effective time management
- Informal but professional atmosphere
- Shared assessment process among colleagues and tutors to foster peer-review according to the exam assessment form.
- Specific suggestions for improvement/agreed on discussion points
The main suggestion I would make is related to final comments at the end of the

session. The quality of presentation was very heterogeneous, but beside within-presentation analysis there was not any comparison among the presentations to provide a benchmark about what were the best aspect(s) of each group. Moreover, some students were engaging neither in presentations nor in Q&A session and some team members were missing. Josip let all students ask their questions first and then addressed more theoretical and lecture-oriented questions at the end, putting all groups in stress at the end of their presentations instead of exploiting their fresh minds at the beginning. However, these are minor points as the session was very engaging and students saw its relevance in terms of learning outcomes and link to the final exam.

Although I provided information about one session observed, during the period of the SLP programme I collected various observations in order to explore different teaching styles. I focused my attention on the actions used by professors to capture students' interest by maintaining authority and authoritativeness but allowing them to express their thoughts and engaging a developmental and constructive conversation with me and other colleagues in class. I list the observations I conducted and the positive takeaways below:

- JK's use many real-life examples to apply theories to practical situations students may encounter. Students appreciate this attitude and were able to provide further examples from their personal or professional context.
- SW used not just slides but also videos and images to accommodate different learning styles. He arose questions about one topic in order to introduce it through commonplace and logical knowledge in order to either discard or build on it with theoretical frameworks.
- In lecturing ADM not only cited academic research, but he provided details about the empirical inquiry he personally conducted and described the complexity of data collection and theory building.
- ADC's style of teaching was totally different from the previous three. His approach was very down to earth with undergraduate students and this way of delivering contents through learning-by-playing emerged as paramount with students coming from very different backgrounds at the beginning of their university journey.
- In AM's workshop, I appreciated the time management and the attempt to foster students' identification in real situations through role-playing.
- Conversely, I sometimes found lectures boring and cryptic. Namely, lecturers listing theories without explaining them in depth, assuming students were already aware or would individually expand their understanding. In delivering modules to students with very varied backgrounds, a lecturer cannot assume each student has gone through the relevant literature. In LUMS (Lancaster University Management School) some modules are attended by students from other faculties¹⁷, who lack basic foundations that LUMS students owe. This heterogeneity should be considered as an asset instead of a liability to address the theoretical knowledge into different contexts. Second, lecturers display results from quantitative research (such as correlation tables and complex graphs) without explaining how to read and interpret them. Therefore, students wave those slides off and ask for less theoretical and more practical explanation. Third, presentations count more slides than those the lecturer is able to go through. Hence, students do not know whether to study those not explained slides or avoid them. Finally, workshops are oftentimes based on long case study; but the material is not provided enough before the class to allow students to read it in advance. This raises two issues. The first half of the time that could be devoted to the discussion in groups has to be readdressed to case study reading. Second, students are not able to reflect on the case and link it to the theory in the lecture before coming to the workshop, limiting the constructive discussion.

¹⁷ Examples of other faculties are Engineering, Environmental Centre, Mathematics & Statistics and Computing Science.

6.5.2 Observation 2 – An Observation of my Own Teaching.

Session design, planning, evaluation & peer observation

Name of teacher: Emanuela Rondi

Title/topic of session: “Using technologies to optimise value chains.”

Case Study discussion of technology strategy in relation to disruptive innovation

Day/time/room for session: Friday, 11th of March 2016. Furness College.

Session in context of the whole course

As part of “506-Internationalisation and new technologies” module, this course involves different types of workshops as case study discussion, role-playing and simulations.

This workshop is in week 9. Students have covered various topics related to internationalisation and new technologies.

In this session, they are called to combine different theoretical framework to provide suitable suggestions according to the technology, the industry, the market and internal firm characteristics.

Type of session (formal lecture, seminar, practical, workshop, etc.)

The session is an informal, open book simulation on technological strategies. Working in small groups (3 or 4), students will engage in a role play game and have to choose a company that has been affected by the introduction of a disruptive technology and they have to answer to two questions. They will then discuss their plans with the other members of their group and make improvements when deemed necessary.

Student group and profile (number, experience, background, diversity, etc.)

The heterogeneous student cohort in terms of background has been split into three sessions of approximately 12 students in each workshop session. This is a Master module, so students are supposed to be autonomously able to read reflect and discuss an empirical situation and link it to the theory. Although they come from different programmes and even faculties, so far they have done a number of group exercises and knew others in the course. Having met many students of this group in a previous module (Family Business), I am aware that it is ethnically diverse, with most of them speaking English as their second or third language.

How does this session fit into the context of the whole course?

As this session is part of a bigger whole, how does it link with the rest of the students’ course/module, both in terms of subject matter and teaching approach?

Subject matter: Since this course is entitled “Internationalisation and New Technologies”, dealing with technological innovation is paramount. Workshop 9 is contextualised as part of a whole framework attached in Figure 14. Course overview is recalled at the beginning of each lecture and workshop in order to point out “what we have done so far” and “what this lecture/workshop is about”.

FIGURE 14 - Course Overview Presented in each Lecture and Workshop
Course overview



Teaching approach: According to the previous workshops, this section is implementing a “hands-on” approach by a simulation of a real-life case. Students are called to apply theories and constructs learned from lectures empirically. Moreover, in order to engage students in the discussion, current technologies have been chosen (3D printing, cloud computing, smart connected products, and social networks). Students are allowed to use every material and document they need in order to develop a thorough understanding of the topic. The material can also be used in their presentations to answer the main questions.

What are my objectives for this session – what am I trying to do?

The general aim of the block of seminars this session belongs to is to familiarise students to some basic concepts of internationalisation and new technologies. The goal is to provide the theoretical basis for the empirical analysis of technological strategy and change. This session (Workshop 9) aims to emphasise the consequences of the introduction of new technologies on the value chain of business, its impact on competitive advantage and possible strategies to capitalise on it. Also, it seeks to give students the ability to

understand how disruptive technological innovation that emerges in mass market can influence processes as value chain within companies.

What are my intended learning outcomes for the students from this session?

In relation to the presented technologies, students generally have a basic understanding of their relevance in customers' habits. In this workshop, students will be encouraged to explore potential outcome on business value chain and also to seek opportunities for their implementation in different sectors from those were initially designed for. Furthermore, although the four technologies look very distinct and heterogeneous they are all linked by the concept of sharing. By implementing more than one of these technologies, synergies might be exploited. In particular, the seminar will attempt to get students to reflect on the ubiquity of new technologies and their potential implementation and impact on distant sectors.

What teaching and learning activities am I going to use to address these outcomes?

After having introduced the task, I ask students to gather in a group of 3 or 4 and select the technology they want to examine. Following Figure 15, each group is asked to engage in a role-playing activity by selecting a real company and act as they were working in that company. The three questions are addressed by each group in relation to the specific technology they were assigned and the company they have chosen (possibly in a non-conventional sector linked to that technology). During the second part of the workshop, each group presents itself as the company and addresses the questions as if the technology has affected themselves directly. By making assumptions about business characteristics, groups discuss their plan with the audience first and then answer the audience's questions. The combination of critical thinking together with role-play (hands-on activity), group discussion (talking, listening) and collection of information about the topic (reading,

watching) allows students to engage in developmental conversation, first in small groups and then with a plenary discussion.

FIGURE 15 - Workshop Guidelines

Your task

Prepare a small presentation within 20 min answering the following questions. Use the example of a real company.

- < How does [the new technology] change the value chain of your business?
- < Would you outsource or keep [the new technology] inhouse? Critically discuss.
- < Can [the new technology] yield (1) a competitive advantage and (2) a sustained competitive advantage? If so, how can you promote this?

[new technology]:

Group 1: Facebook

Group 2: Cloud computing

Group 3: Smart, connected products

Group 4: 3D-printing (health care industry)

How will I encourage all the students to be actively engaged in their learning in this session?

I hope that the design of small group workshop and the possibility to select the technology to discuss will encourage students' engagement. The in-group discussion should allow every member to express their opinion and share ideas. During the in-group discussion, I will move in each group to ensure anyone is participating in the conversation and not doing something not related to the workshop. The task also requires the students to present their thoughts to the audience (either by slides or orally); therefore, it would be obvious if they do not produce this work. In addition, during the Q&A activity, I will try to address questions to all the members of each group. During the introduction I will make it clear that engaging in the activity will be a clear benefit to the students' revision and exam practice.

Which aspects of subject content are we going to look at?

The complexity is linked first to the technology and second to the company's characteristics chosen. Furthermore, the three questions require a broad understanding of the lectures' contents according to the constructs of value chains, competitive advantage and sustainable competitive advantage. However, according to the nature of the assessment, I try to encourage students to integrate different theoretical backgrounds and constructs from more than one lecture in order to develop a consistent analysis.

What teaching and learning resources can I use and how will I use them to support the students' learning?

Students are allowed to use any learning resource, as media and teaching material, to present their ideas. I encourage the adoption of theoretical models and references from lectures, consistently with the essay evaluation criteria. While groups are presenting, I will collect the most relevant information on the whiteboard to give them a theoretical framework through which compare the outcome of different groups. This information will be then uploaded on Moodle to provide evidence of the discussion that can be helpful for students that were present but also for those absent.

How will I know how successful the session has been in terms of achieving the intended learning outcomes? When will I know?

Consistently with the convenor's guidelines presented in the handbook of the course there are three levels of understanding adopted to address the questions: logical, empirical and theoretical approaches. The logical approach is the basic one, learning is based on simple concepts and the analysis is superficial. The empirical approach is based on evidence, students present real cases and examples wherein the investigated phenomena has happened and are able to derive interesting learning outcome. The theoretical approach includes construct definitions, frameworks, references and link to the literature adopted to

analyse the phenomena and develop an accurate critical reflection. According to these three criteria, the approach embraced by students in the presentation is crucial to assess their level of understanding and whether intended learning outcomes have been achieved.

How will students know what they have learned from this session? When will they know?

When presenting in front of the audience, each group receives questions from colleagues and I, challenging their assumptions and deepening their understanding. Meanwhile, when one group is presenting, the others are asked to compare and contrast findings with those developed in the in-group discussion.

How will this session link with the next and future sessions, both in terms of subject matter and teaching approach?

Next week will be the last session of the module and will discuss the same disruptive technology for all the students investigated in a role-play (selecting the company, addressing the questions, presenting in front of the audience). Overall, I hope the skills practised and developed in this workshop will influence essay development.

What particular concerns have I got about this session at this point?

In relation to this workshop I have three main concerns:

- I ask students to deal with too many activities,
- The freedom I give to students to select the industry and the company to investigate might lead to cases that I do not patronise and I might lack the specific knowledge to discuss them,
- Students are very international and the majority comes from China. I am undecided whether to foster cooperation among students from the same country to ease their discussion or to ask for mixed groups in order to make the discussion more constructive.

6.5.3 Checklist of some things to think about: (this is not a definitive list)

- The first 10 minutes – how am I going to start the session (bearing in mind the ‘stragglers’) and how am I going to ‘warm’ it up/get everyone focused,
- How am I going to share the aims and the intended outcomes of the session,
- How am I going to link this session with previous and future sessions and any work done outside of sessions e.g. pre-reading,
- How am I structuring the time and varying the activities and pace,
- How much material can I realistically cover,
- What if I run out of time/materials – what contingency plans have I got,
- What actual activities are the students going to be doing,
- How am I going to get all of them to be actively involved and taking some responsibility for the session,
- How am I going to use questioning,
- When and how am I/we going to use resources and equipment,
- How am I going to use body, voice, space to communicate,
- How am I going to address any diversity or disability needs,
- How am I going to identify understanding and address any misunderstanding and difficulty,
- How are we going to identify what they are taking away from the session,
- What do I want them to go away and do next,
- What will the last five minutes involve and how will the session finish.

6.5.4 Running Plan of the Session

Design the layout of this however you wish – it is a description of intended ‘plot’ of the actual event – a loose script to help you rehearse the detail in your head.

TABLE 19 - Agenda of the Session

Approx. times	Teaching and Student activity	Any Notes to remind yourself
First 5 minutes	Connect to previous lecture and highlight the main points discussed in this workshop.	Ask questions about what they have/have not understood.
5 minutes	Presentation of the task: 3 types of technologies, 2 main questions to address, Group formation, Plenary discussion group by group.	Display the slides on the screen and leave them there for the whole workshop.
5 minutes	3 groups formation and spatially gathering in distinctive areas of the room.	Adapt the number of persons per group according to the number of students attending the session. Ask students to move and develop a circle to ease the conversation within each group without hampering others.
15 minutes	Group discussion: defining the company, addressing the 3 questions	Sometimes move around groups to ensure each student is participating in the discussion.
5’x3 discussion	Students of each group have to present their company to the class, main issue the technology has cause and potential opportunity. Describe the designed technology strategy.	Ask question about theoretical principles, ask for justification of choice and stimulate audience intervention through Q&A.
Last 5’	Final comments: Link the three cases into a framework, Wrap up of the main workshop takeaways, Anticipate next week workshop topic and activity.	Ask students what they have learnt and the most relevant takeaways.

6.6 EVALUATING THE SESSION WHERE YOU ARE OBSERVED

In the light of what you planned, evaluate how it went before talking to your observer. Highlight anything in particular you would like to discuss with them when you meet.

In terms of being observed, at the beginning, I felt quite nervous. My deep insecurity made me feel judged and more stressed than usual. However, I asked to one of the lecturers in my department, whom I feel comfortable with, to observe me delivering the workshop. Since I knew him before, he was well aware that was one of my first teaching experiences. Before starting the workshop, he shared some anecdotes of his introduction to teaching experience with me. I knew how good he actually is in teaching, but discovering he also had some difficulties at the beginning made me feel more comfortable and supported rather than judged and monitored. His attitude was very supportive and after having broken the ice I felt his presence as a help in dealing with possible issues. He sat in the back to avoid being too intrusive in my workshop and he justified his presence with an interest in the topic. While students gathered in group, he observed them and me from the distance without standing up or making his presence evident. I appreciated his attitude, even though he has much more seniority in teaching he left the floor to me and did not show off to remark my little experience.

Reflective Comments

Once the workshop ended I stayed in the room until all the students left, some of those came to me to ask some clarification and Josip waited. Soon after the workshop we met and he gave me his first feedback in an informal talk. I enjoyed his appreciation since it was the sign I was moving in the right direction; however, I more carefully listened to his suggestions for improvements. First of all, he suggested me to speak more slowly since some of the students in class came from different culture and their mother tongue, as well

as mine, is not English. I totally agreed with him since I have the same difficulty of speaking too fast even in my mother tongue. Second, he suggested me to provide an outline at the beginning of the workshop in order to state activities and time management. After that workshop I started doing it all the time and students appreciate knowing the agenda in advance. Third, he suggested me to better balance theoretical frameworks with empirical evidence in order to make lectures and workshops more meaningful and connected with other modules. At that point, I realised I did not know anything about the other modules students were attending and even the program they were affiliated so I started collecting information about it both directly from students and from my department.

6.6.1 Teaching Session feedback

Name of Teacher: Emanuela Rondi

Name of Observer: Josip Kotlar

Date: Friday 11th of May 2016

Length of Observation: 1 hour

For SLP participants when you are observing your mentor – please include here a brief outline of the session aims and plan to contextualise the comments that follow:

As part of ENSI 506 module about Innovation and New Technologies, this workshop addresses the impact of new technologies on value chains. In groups, students are called to address three main questions and develop a presentation. The three questions are:

- How does the new technology change the value chain of your business?
- Would you outsource or keep the new technology in-house? Critically discuss.
- Can the new technology yield (1) a competitive advantage and (2) a sustained competitive advantage? If so, how can you promote this?

Each group has to choose an existing firm and analyse how the new technology has impacted on various aspects of the company as value-chain and competitive advantage. Furthermore, groups are asked to select which strategy to implement in order to adopt the technology (outsourcing vs. in-house development).

Comment on the session in the context of the planning – to what extent did the session match the plan in terms of any/all of the following, and where it diverged, what were the reasons?

The information provided in advance was little and concise, although this was useful to narrow the focus, at the beginning students did not understand the task. Time management was tough and Emanuela has to provide groups with further 5 minutes to

allow students to complete their presentations. Students could use all the materials and one group presented the main ideas through a clip. The use of various types of resources allowed keeping students' attention high throughout the whole session. Learning outcome were not stated in the slides but presented after the discussion according to the information presented and those missing.

Summary of qualities of session:

- Emanuela wrote key points on the whiteboard to help follow the discussion and facilitate learning.
- Time management: despite the guidelines, she was able to adapt the session to students' needs. She allowed all groups to present their answers and stopped those who were running out of time.
- The role-playing activity was very engaging and allowed students to act as if they were the decision makers
- Emanuela linked cases to the rest of the lectures, fostering students to adopt theoretical models and theories to examine the impact of technologies on their companies.

Specific suggestions for improvement/agreed discussion points

- Present session outline at the beginning
- Clearer learning outcome
- Speak more slowly
- Give more time to students to reflect on questions
- Further coherence between the time assumed to be allocated to the activity in the slides (20') and time effectively allocated during the session (15').

Signed: Josip Kotlar

Date: 7/04/16

6.7 STUDENT'S FEEDBACK COLLECTION

As mentioned in the background section, the feedback collection was a source of concerns for me. However, after having conducted 15 hours of workshop and having received positive informal feedback (e.g. students asked me for one-to-one meetings, communicated their positive feeling at the end of the workshop about my teaching) I decided to collect formal feedback from students in the three workshops of the ENSI 505- Corporate Entrepreneurship module. The feedback form was divided into three parts. (1) Questionnaire about tutorials and tutor (me); (2) stop-continue-start; (3) grade the workshops of the module. The form of the feedback sheet is provided in Appendix 1a and 1b. Feedback collection was handed out during the last week of workshop. Although it might look too late to improve the ongoing workshop this was constrained by the lack of continuity in the activities delivered. While I conducted the first three weeks of workshops, seminars in week 4-8 were devoted to students' graded presentations. Therefore, to collect consistent feedback with the activity developed by me, I assumed the week between two workshops conducted by me would be the most suitable.

Before collecting the feedback, I stated the paramount importance of students' opinion in contributing to the course design for the next cohort. Meanwhile, I asked for their both positive and negative feedback and ensured the anonymity of the data collected. Students were required to fill the form at the beginning of the workshop, so that while they were developing in-group activities I had time to read the feedback and starting address some of the most immediate requests. Below descriptive statistics of the data collected and some quotations are provided (for further evidence see Table 22 in the Appendix). In addition, I asked the course convenor to share with me the mid-term feedback he collected about lectures in order to develop a more comprehensive understanding of how the students found the module and their related concerns.

Reflective Commentary

I am pleased with the 24 feedback I received, both in terms of scores and comments. Although this activity had worried me a lot in the past, this time it contributed to developing my self-confidence. I was concerned that being a non-native speaker, student would find my speaking hard to understand or hampering the explanation of workshops' content. I am glad that none has reported this point and the feedback about the tutor was overall higher than my expectations. In terms of aggregated mark, the average for workshops was 3,74 with a maximum of 4.925 and a minimum of 2. For each question, average scores are provided in Table 22.

TABLE 20 - Average Scores Per Question

Questions	Average score (1-5)	Questions	Average score (1-5)
The tutorials covered Key Areas And Ideas	4,08	The tutor Was Interested In Students And Their Progress	4,33
The tutorials Were Well Linked To Lectures	4,46	The tutor Recognised That Students Differ In Their Needs, Concerns And Interests	3,58
The tutorials Were Well-Planned And Structured	4,13	The tutor Acted As An Effective Group Leader	4,04
The tutorials Encouraged Students To Prepare Properly	4,04	As a Student I Looked Forward To The Tutorials	3,78
The tutorials Were Lively And Stimulating	3,83	As a student I Enjoyed Being In The Tutorials	3,70
The tutor Helped Students With Any Difficulties They Encountered	4,17	As a student I Learned A Lot From The Tutorials	3,78

terms of qualitative feedback, besides those included in the stop-continue-start framework, students provided personal comments about what would have made the tutorials better. Here below three quotations are attached:

“I found the workshops more engaging and comprehensive than lectures as the teaching assistant would give us individual attention, helping us with no- entrepreneurship background in coping with the strange module. And

the presentation-from-student method matched our level of understanding as their grip on the course was same as rest of the class-fellows” (Student A)

“I have an engineering background so I felt that I got thrown in the deep. Although sufficient help was often given”. (Student B)

*“Just a suggestion, maybe instead of having group presentations we can have discussions and debate about the topics. Sometimes people are only interested in their topics of the presentation and not much interested in taking into all the topics. Maybe we can also have guest speakers for the workshops to get an insight about actual corporate entrepreneurship and how it is done. I think we are missing the practical aspect of corporate entrepreneurship”.
(Student C)*

In Appendix 2 quantitative feedback and quotations referred to stop-continue-start activity are displayed. As it visually emerges, stop-continue-start activity led to much more positive than negative feedback and very interesting ideas to implement. Comments directed toward lectures (content) and overall module (structure of workshop, half led by students and half by tutors) were discussed with the course convenor. The professor responsible for the course was very interested in the issues arisen by students and wants to develop some change for next year course according to the feedback collected. In Table 21 I list the main learning points of both qualitative and quantitative collected feedback referred to workshop I led. Then, I present the actions to address them in Table 22 through a “to do” list.

TABLE 21 - Learning Points from Students' Feedback

Positive aspects	Negative aspects
Students trusted in me as tutor and perceived my leadership	Students would have liked to receive more material in advance
Students enjoyed more workshops led by tutors rather than those led by peers and considered attending students' led workshop a waste of time	Students would have preferred workshops to further address exam's characteristics, techniques and evaluation criteria
Students enjoyed different types of activities as role-playing	Students with different background lack of foundations and were left behind

Students liked the link between lectures and workshops

Students were not very incentivised to come to workshop, only for compulsory attendance

In order to capitalise on feedback, I decided to develop a “to do” list to enact in the next course and revise afterwards according to next year modules’ feedback, to check whether I will have been able to actively shape my teaching and solve negative aspects.

TABLE 22 - "To do" List

Actions to capitalise on positive aspects	Actions to revert negative aspects
Develop and assess the leadership throughout the course. Collect feedback not just at the end but also during the term.	Provide part of the workshop material on Moodle in advance, following Josip’s (observation) example in ENSI509
More tutors’ led workshops not only based on lectures but also dealing with techniques to foster further understanding ex. Development of critical thinking skills (<i>Reference 4</i>) and essay writing.	I cannot provide students with details about the exam in order to move beyond mere memorisation and foster their critical thinking (<i>Reference 5</i>). Exam simulation followed by feedback session
Students have different learning styles. Promoting more activities as role-play, such as those suggested by <i>Reference 8</i> .	Define and ensure the understanding of key constructs in order to bring students to the same level (<i>Reference 2 and 3</i>). Possibility to develop an introductory workshop for those students with a non-business related background.
According to <i>Reference 3</i> the link between theory and practice must be highlighted even more. One possible way to do this is to invite entrepreneurs to present their experience, as suggested by a student.	An ongoing test might be a way to solve this issue and foster student’s engagement, according to <i>Reference 5</i> .

6.8 EQUITY AND DIVERSITY MODULE

Reading Lancaster University Student Disability Policy document and attending the online module raised my awareness about the relevance of inclusion and equality, especially in the role of teacher. The module was very easy to access and the intermediary questions allowed me to revise the information step by step. In terms of content, the module covers a wide range of issues and provides empirical suggestions to address them through examples and figures. Although at the beginning I thought the content would be easy to deal with according to common sense, I sometimes found myself to revise the slides twice to understand the nuances.

Coming from a different country, I was surprised about some of the issues raised in terms of discrimination. The examples presented as discriminating were so common to me that I have never thought about them as discriminating episodes. Besides increasing my knowledge, it also made me more sensitive to episodes not that obvious to detect as discriminating. I appreciate the effort put by Lancaster University in dealing with this topic and the compulsory nature of this module to increase awareness about equity and diversity. Here below I report an anecdote wherein I practically adopted my learning outcome from the module. My certificate for this on-line module can be found in Appendix 3. Due to my interest in this topic, I also collected further information through readings (*Reference 6 and 7*).

The workshops I conduct are based on in-group work followed by plenary discussion and I oftentimes act as moderator. Each student has an idiosyncratic temperament and cultural background that affect how they converse. However, once I had a hard time to manage a conflict in class. A male student was over-talkative, up to a point that he interrupted another female colleague speaking. Even when the girl made him notice he was talking over her, he did not care and kept talking ignoring her. I felt I had to take a

position but I was having a dilemma. On the one hand, I was upset with him since he acted as if a woman talking was not relevant and his turn for speaking was never ending. On the other hand, I could not take it on him personally since it is beyond my role and I have to maintain an academic conversation. In order to politely manage the situation, I first raised my hand, he was very respectful of my status as conversation leader so he stopped talking. I contrasted his rude manners with a very polite request, asking him to permit all the students to engage in a constructive conversation, rather than monopolise time and discussion. Then with a light hand gesture I invited the girl to keep talking. From this experience, I learned that I have to act as leader, guaranteeing equity. Yet I have to balance my feeling with my role as teacher and convey my thoughts in a correct and ethic manner.

6.9 DEPARTMENTAL TEACHING REFERENCE

FIGURE 16 - Head of Department Teaching Reference



Dr Sascha G. Walter
Lancaster University Management School
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Tel: +44 (0)1524 594847
Email: s.walter@lancaster.ac.uk
www.lancaster.ac.uk/lums

April 11th, 2016

To whom it may concern,

It has been my very great pleasure to be Emanuela's SLP mentor 2015-16. Throughout her Ph.D. she has made a significant contribution to the department helping to deliver workshops on two Master modules ENSI506 "Internalisation and New Technologies" and ENSI505 "Corporate Entrepreneurship". If I were to summarize what Emanuela brings to our teaching it would be creativity and enthusiasm. Emanuela's approach to teaching is extremely methodical and systematic - she carefully prepares teaching and thoroughly analyses the material in advance. Meanwhile she fosters conversation among students by asking questions and provoking discussions.

Both before and after each workshop she delivered I offered her the opportunity to discuss about it. She always took this opportunity and showed critical thinking and developments throughout the term. She stimulated students by challenging them with questions and role-play activities, being aware about different learning styles. Moreover, she promoted inclusivity by dealing with inequality situations. During each workshop she collected and uploaded the highlights of seminars' conversation on Moodle to keep absent students on track and allow attending students to recall the discussion in class. The different methods adopted to collect feedback were useful for us as course conveners to understand what can be done to ameliorate the module.

Emanuela has undertaken various developmental opportunities such as participating in designing a workshop within the ENSI506 module. After having received some guidance she was encouraged to design and deliver the workshop to the three cohorts of master students. Emanuela first decided the activity to conduct (role play) according to what engaged the students more during the previous workshops she conducted. She then chose a very appealing technology to discuss (agricultural drones) and intrigue students and inspire the in-group activity by showing a video about the technology into action.

Having familiarized with our departmental policy and procedures and attended various Departmental Teaching Meeting, Emanuela had the chance to listen other lecturers' issues and learn how to address them. Moreover, she acted as invigilator and had the chance to examine assessment criteria and marking policy.

Emanuela is assertive and confident. She is a promising teacher and made great progresses by having participated in the SLP programme. The foundations of teaching and crucial skills she acquired were precious for her present and future teaching activities.

Yours sincerely,

Sascha G. Walter

TRIPLE-ACCREDITED, WORLD-RANKED



6.10 FINAL REFLECTIVE COMMENTARY

In this section, I present a handful of relevant events that happened to me during workshops as a cause or consequence of some change in my teaching activity. For each of them, I also provide a reflection.

According to the annotated bibliography conducted, I started arriving 15 minutes before the beginning of each section and leaving only once all the students have left. I like the moment before the class because students enter one by one and have time to share opinions and ask questions about previous lectures. During one of these episodes, I had a one-to-one conversation with a student. I asked her whether the previous workshops were useful to address the main points of the literature. She replied: “When the lecturer explains I am always like ‘Whaaat?’ but then in the workshop with you, it is ‘Aha!’. While the lecturer is very research-oriented and always speaks about theories, you are much more pragmatic and I like your attitude. You bring theory to practice and make it even more relevant to me and my possible future job”.

Following the annotated bibliography and observations I started noting the different student backgrounds. The main goal was to spread different skills among groups to combine their assets. In this process, I realised students with the most distant background came from Engineering. At the end of workshops, they came to me reporting their concerns and fears. While at the beginning I did not know how to address them, writing my autobiography made me realising how much my background was different from students in LUMS and closer to Engineers. Therefore, I started thinking about the strategies and tactics that, as an engineer, made me feel more comfortable with business studies. One of the most difficult gaps was related to the existence of manifold theories about the same phenomenon. As an engineer, I always thought a mathematical rule was true in every context according to a Positivist ontology. However, in business studies Constructivism

and Interpretivism made me think about my individual cognition as relevant and the existence of manifold realities rather than one unique reality. I shared this thought with some students and they immediately felt understood and asked me more practical tricks about how to cope with this. Second, Engineering students are used to addressing exams by solving mathematical exercises and quiz, but in that course the exam was based on an essays. Indeed, I suggested a strategy that worked for me, not as a general rule but as a possible alternative and provided with some references about how to deal with essays. Overall, sharing with students my Engineering background made them feeling more comfortable and understood in the conversation; they thanked me for having addressed each issue with a systematic approach and pragmatic suggestion.

One of the main lessons learnt from my first workshop – Niagara Paving epic fail - was the need to make students more engaged and raise their interest in the content. After some observation, I understood one way to do this was to combine serious and formal moments with few informal and humorous breaks. However, it is hard to make tricks in a foreign language since humour is very cultural dependant. Hence, the first time I was able to make the all class laughing was very precious and I felt relieved in terms of improvements in engaging skills.

During the term, I had two one-to-one meetings in my office. The first was a MSc student who wanted to know more about research, academic job, PhD and future plans. I tried to be very sincere presenting the expectations I had about the PhD before starting it and how they have revealed after 3 years. I did not want to tell him what I thought it was right to do, of course as I went for a PhD I made my choice and I like academic career, but he was not there to receive an answer. With this aim, I asked him some question about how he sees himself in 10 years, what he likes more doing, whether he is more theoretical- or

practical-oriented. At the end of the meeting, he thanked me for not having imposed my thought but incentivised his reflection about his future and expectations.

In the second one-to-one meeting, an Undergraduate came to ask information about the exam. My first concern related to how much to disclose and what I was allowed saying in order to be coherent with the information provided in class. Since I was stacked in the middle between helping and not advantaging one student over the others, I asked the course convenor some guidelines that helped me dealing with this issue.

In this essay, I resume my learning journey about teaching. Starting from the assumptions that teaching was a natural attitude that I did not patronise; I have understood that teaching consists in a process that requires ongoing training, experience with methods and techniques, and personal development. The Supportive Learning Programme was an eye-opening course fostering me in conducting the literature review, attending in-class lessons, collecting observations, and stimulating personal reflection. The whole Programme allowed me to pay more attention to different aspects of teaching and learning; moreover, it gave me tools to improve my teaching skills. In terms of personal development, I solved part of my uncertainty throughout the activities individually and in class and students benefit from this personal improvement in terms of learning experience. While in the past I almost sailed in sight, I am pleased to have now understood the importance of planning, organising, motivating and supporting students in their learning process. The journey has only started but I am confident in improving my teaching skills through further education, experience and reflection.

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6.12 APPENDICES: FEEDBACK DOCUMENTATION AND CERTIFICATES

Appendix 1a – Feedback Form (Front Page)
FIGURE 17 - Student Feedback Questionnaire

A TUTORIAL QUESTIONNAIRE

Please put a tick in the appropriate box to indicate your response to each of the following statements about the tutorials you attended as part of the course. Thank you very much.

	<i>strongly agree</i>	<i>agree</i>	<i>unsure</i>	<i>disagree</i>	<i>strongly disagree</i>
The tutorials					
• covered key areas and ideas	<input type="checkbox"/>				
• were well linked to lectures	<input type="checkbox"/>				
• were well-planned and structured	<input type="checkbox"/>				
• encouraged students to prepare properly	<input type="checkbox"/>				
• were lively and stimulating	<input type="checkbox"/>				
The tutor					
• helped students with any difficulties they encountered	<input type="checkbox"/>				
• was interested in students and their progress	<input type="checkbox"/>				
• recognised that student differ in their needs, concerns and interests	<input type="checkbox"/>				
• acted as an effective group leader	<input type="checkbox"/>				
As a student					
• I looked forward to the tutorials	<input type="checkbox"/>				
• I enjoyed being in the tutorials	<input type="checkbox"/>				
• I learned a lot from the tutorials	<input type="checkbox"/>				
<i>Please add below any comments about what would have made the tutorials better for you:</i>					

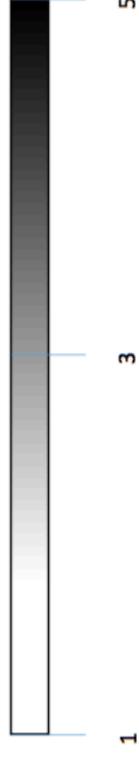
Figure 4.5

Appendix 1b – Feedback Form (Back Page)
FIGURE 18 - STOP-CONTINUE-START Feedback Sheet

WORKSHOPS: Please provide us advice about the workshops

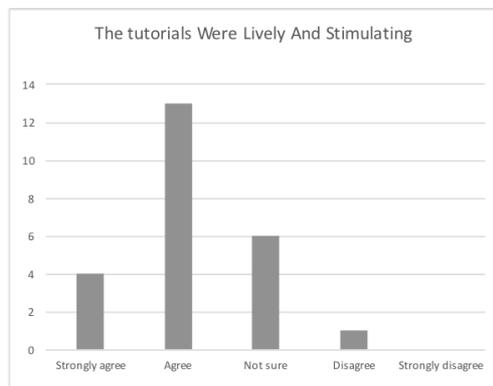
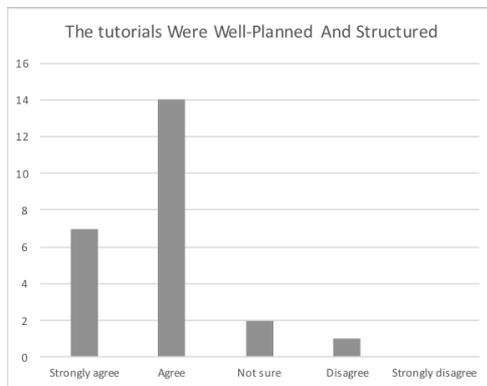
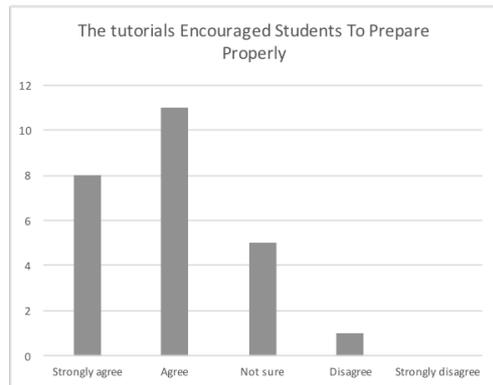
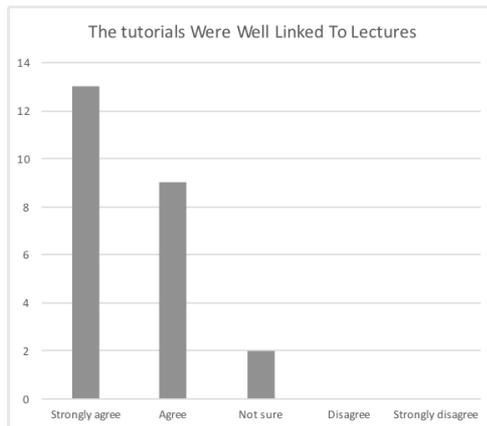
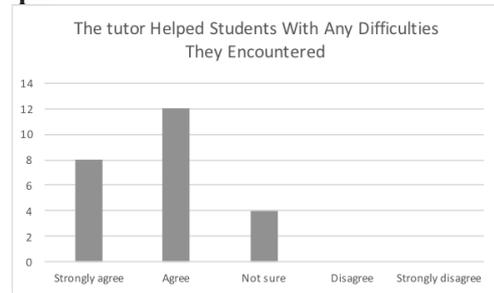
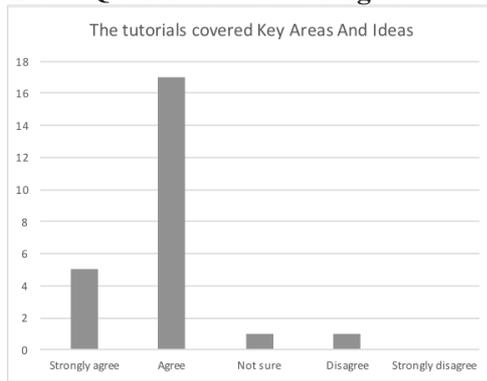
Please stop this	Please continue this	Please start this

Overall the workshops of this module would deserve this grade (1-5)



Thank you very much for your help!

Appendix 2a – Results and data analysis from quantitative students’ feedback
FIGURE 19 - Quantitative Teaching Feedback - Graphs



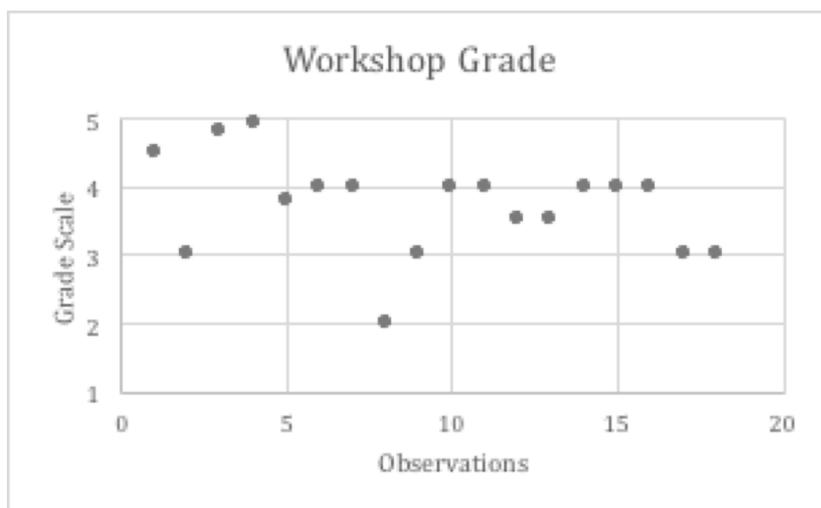
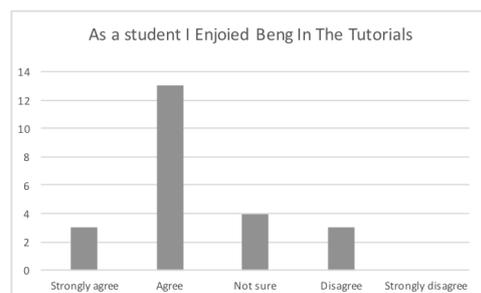
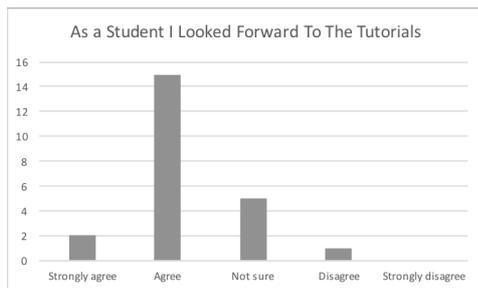
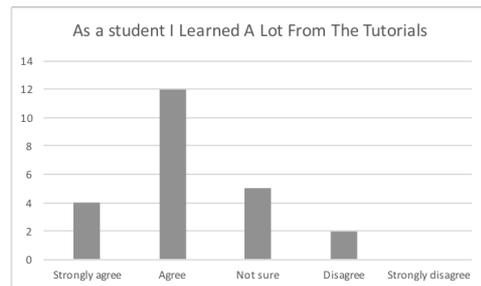
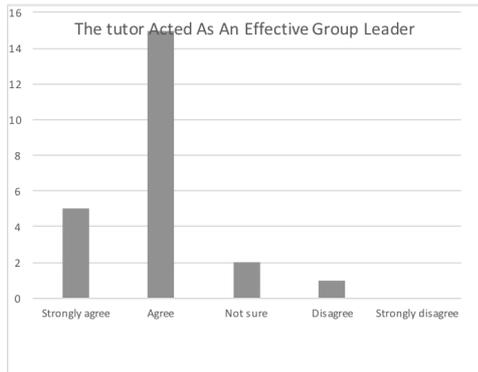
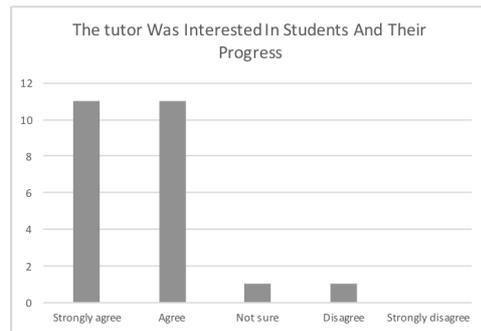
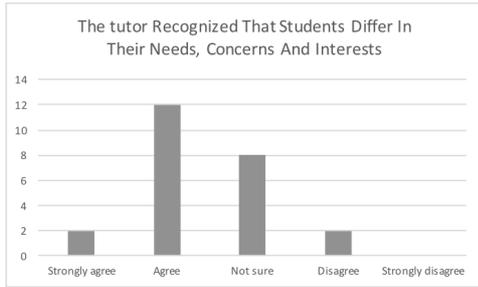


TABLE 23 - Results from Qualitative Students' Feedback

Please stop this	Please continue this	Please start this
<p>“Quantitative based workshops (only relevant for Ph.D’s, a minority)”</p> <p>“Case reading”</p> <p>“Reading heavy literature”</p> <p>“Initial workshops did not take into account the range of backgrounds we were from”</p> <p>“No need for student presentations to be compulsory for other students”</p> <p>“Assessed presentation should take place at another time”</p> <p>“Long academic articles of case studies”</p> <p>“Avoid workshop on Friday from 5 to 6 pm”</p> <p>“Some presentations are too specific and not relevant to the courses”</p>	<p>“Putting the notes from tutorials on Moodle ☺</p> <p>Class discussions being friendly”</p> <p>“More role-play to help us engage in”</p> <p>“Role play”</p> <p>“Let the students organise some workshops”</p> <p>“student presentation workshops”</p> <p>“Presentation from students”</p> <p>“Relevant material in a lecture and workshop each week”</p> <p>“Case studies with more examples”</p> <p>“Group discussion”</p> <p>“Plan the workshop and let us prepare ahead”</p> <p>“being in line with lecture series”</p> <p>“Providing an opportunity for students to lead the workshop. However, students might not convey ot cover or give deep detail for the important points as the tutors can do”</p> <p>“Keep the second session of the presentation which is a seminar to encourage interaction between presenters and audience”</p> <p>“Group discussion-based activities”</p> <p>“Non-technical approach’, translation into non business language makes it easier to follow”</p> <p>“Referring theories to content”</p> <p>“Presenting relevant information regarding lecture content”</p> <p>“Linking the workshop questions to the theories taught in lecturer’s classes”</p> <p>“Engage everyone in the discussion”</p> <p>“Group presentation + workshop”</p>	<p>“It would be nice to have a few more case studies to really show the theoretical research, as I don’t have a background in any business classes”</p> <p>“More case studies as opposed to theories”</p> <p>“Introduction of more brief cases which could apply to the theories”</p> <p>“Explanatory approach post workshop for business concepts that are understood”</p> <p>“Provide some before workshop reading for students who are not presenting”</p> <p>“As well as case study, make it more interactive”</p> <p>“More of one to one interaction”</p> <p>“Essay technique workshops for those from different learning backgrounds”</p> <p>“Maybe doing two presentations in a day, so we have more workshop with some more examples”</p> <p>“Debate should be on corporate entrepreneurship”</p> <p>“15’ of discussion at the end we need more time”</p> <p>“We need more practical”</p> <p>“Use some more vivid material like videos”</p> <p>“More academic led workshops”</p> <p>“Have more workshops about multiple topics from academies no just week 1-3”</p> <p>“If it is possible the group that have to lead the workshop should have a chance to present for the tutors in order to correct or improve or add the missing points before real conducting the workshop”</p> <p>“Encourage every student to get involved”</p> <p>“Give tasks in advance”</p>

“Second element of the presentation”
“Role play”

“Giving exam questions at the end of each workshop in order to better prepare students”
“How each lecture content applies to the exams”
“How to tackle exam questions per lecture”
“More time”
“Maybe watch a video news and discuss about recent events related to the module”

Appendix 3 – Diversity in the Workplace Module
FIGURE 20 - Certificate of Accomplishment of the Diversity in the Workplace Module

