Geographical Context Influence on Co-design Practice Between Indonesia and the UK Context

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Abstract: This paper describes and evaluates experiences of co-design practice from two different contexts, Indonesia and the UK. It draws on multiple case studies consisting of three co-design projects in each context. The focus of discussion is to better understand the influence of the geographical context on the application of co-design and how it informs the characteristics of the co-design practice. This comparison of practices in both contexts has been conducted through examination of their respective processes in relation established criteria. The study in the Indonesian context finds notable effectiveness in its support for collaboration and flexibility, while the decision-making process appear less democratic. By contrast, in the UK context effectiveness is identifiable in almost all aspects of the process. The paper concludes with a discussion of the similarities and differences in the characteristics of co-design in both contexts.

Keywords: Co-design, Context, Contextual Factor, Characteristic

1. Introduction

The benefit of co-design compared to traditional design methods has been widely cited, and in particular is the view that co-design has a better understanding of user needs (Acre, 2004). Co-design is also considered able to accommodate the views and roles of users in determining the design decisions (Stappers, Visser & Kistemaker, 2012). Carroll & Rosson (2007) have stated that user involvement in co-design is considered important because of two factors: morally because the user is the one affected by the design and therefore should be heard, and pragmatically because the user involvement is deemed to produce a more successful design.

As a method that involves users in the design process, co-design is influenced by the context in which it is carried out (Puri, Byrne, Nhampossa & Quraishi, 2004; Elovaara, Igira & Mörtberg, 2006). However, the degree to which contextual factors influence the process is not understood. Since co-design has its roots in the participatory design (PD) tradition in Scandinavia (Sanders & Stappers, 2008), its character is also determined by the contextual factors of the Scandinavian countries. The study on the character of Scandinavian PD or wider in western countries, has been widely carried out. Ehn (1993) stated the importance of democracy as a prerequisite of PD in industrial environments. Gregory (2003), meanwhile, highlights the existence of contextual factors that shape the Scandinavian PD character, namely traditions in a working environment, unionization, relative homogeneity and small size of populations, established relationships between designers, university researchers, workers, unions, and companies. These factors determine three characteristics of Scandinavian PD, namely: commitments to democracy and democratisation; discussions of values in design and imagined futures; and how conflicts and contradictions are considered as resources in design. The application of co-designs outside Scandinavia is therefore likely to produce different co-design characteristics depending on context.

Experiments on the application of co-design outside the western context have produced many examples of adaptation (Hussain, Sanders & Steinert, 2012; Reyes and Bottero, 2012). This paper presents an investigation of comparison between co-design practices in two different contexts, Indonesia and the UK. This study aims to understand how differences in geographical context affect

each co-design process and how it shapes its characteristics. The paper reports the results of case studies from six co-design projects, drawing on three from Indonesia and three from the UK.

2. Co-design in Different Context

The advantages of co-design in Western countries have considerable demonstrated (Bowen et al., 2013; Nilsson, Peterson, Holden & Eckert, 2011; Steen, Manschot & De Koning, 2011). Hence, there has been an attempt to applied co-design outside the western context. These experiences give us an understanding of the complexity of co-design application in a different context. Puri et al. (2004) in their investigation of three case studies of the health system in South Africa, India and Mozambique concluded that there is a necessity to conduct different participatory approaches in each context. In South Africa, there is a strong tradition of community participation and a collective decision-making model, so that people are relatively easily involved in participatory processes. While in India, social interaction models that tend to be hierarchical top-down, as well as the practice of bureaucratic involvement, lead to the government official's inclusions in its process. Whereas in Mozambique, mediators were needed as intermediaries between government officials and the community to ensure co-design works effectively. In this regard, academics were considered to be appropriate mediators for the Mozambican context.

Meanwhile, Yasuoka and Sakurai (2012) in the action research on the application of participatory design (PD) in Japan provided insight that the implementation of PD in a different socio-cultural context from Scandinavia is still possible. In the beginning, they had considered the difficulties of applying PD in Japan because of its socio-cultural context. They stressed that a very hierarchical Japanese work culture and a tradition of being obedient to orders from seniors would be a significant challenge. Furthermore, they elaborated about the small opportunities to implement democratic dialogue and equal power relations in teamwork. However, their experiment on PD application was considered success. In this case, they stated that the key was the exceptional situation of the context: the condition of Japan after the tsunami disaster. In the post-disaster circumstance, PD succeeded since the hierarchical relations model could be eroded in respect to emergency and the ardent desire of the people to work together for disaster recovery. Outside the circumstance of disaster, they doubted the PD implementation would be effective in Japan. This research indicated that the effectiveness of PD could be determined by its context.

The comparison of co-design applications between different contexts carried out by Man, Lu, Brombacher & Ying (2014) has revealed some useful insights on the variances context might shape. In their research, they compared the influence of Chinese and Dutch bi-nation cultures on the performance of the design team, especially in the process of design ideation and group communication. The research indicated, first, that in design ideation, the Dutch team initiated the process from the individual ideas of each member. Conversely, the Chinese team tried to produce the ideas collectively from the beginning. Second, in the communication process, the Dutch team worked explicitly and directly, while the Chinese team conducted implicitly and indirectly. This research confirmed that the member's cultural background effect on how both teams conduct the co-design process.

Inability to anticipate the context's influence would possibly lead to the ineffectiveness of co-design application. Takeyama (2014) in a co-design project to develop a weaving motif design with a community of artisans in Laos, emphasised the strong influence of Laos culture has affected the design process. From the beginning, the design team has considered the artisan's traditional practice of 'learning by doing', a kind of Asian apprenticeship. However, the output of the process was under

their expectation. They expect the participants (traditional weavers) to try to develop new motives beyond what they usually create. However, the participants were consistently practising their customs by imitating motifs from the previous generation. Eventually, the design team (facilitator) need to carry out many interventions to create the end motifs were acceptable. This project indicated even though the cultural context (Asian apprenticeship) has identified, but inappropriately anticipation leads to the less effectiveness of co-design application.

3. Research Method and Strategy

This research was conducted by comparing co-design practices between two different contexts, the UK and Indonesia. The study employed multiple case studies method to do the empirical investigation which focused on understanding the characteristics of co-design practices. There are six case studies, in which both Indonesia and the UK consisting of three cases. Data collecting was performed by conducting a series of interviews on designers, facilitators, and participants who were involved in the co-design process. Moreover, documentation studies were carried out by examining documents and publications related to the project (e.g., project reports, workshop notes, and news articles in the mass media). In particular, observations were also conducted to the case studies which were still an ongoing process. The cross-case analysis was performed to data findings of the field research. The analysis was carried out in 2 stages. Firstly, analysis within the context where the data from whole cases within a context had compared each other to eliciting the result points of each context. Then, both results compared in the second stages to find out the conclusion.

A theoretical framework needs to be established to address the objectives of the study. This study's aim to understand the context influence on co-design. Therefore, contextual factors have to be identified first. This research adapted contextual factors based on a combined framework produced by the National Research Council (Dietz & Stern, 2008) and the National Network for Collaboration (NNCO, 1995). The factors adapted from those theories were grouped into four categories:

- Socio-cultural factors: History of working together, connectedness, Social Capital
- Political Structure factors: Political Climate, Regulation, Legal mandate
- Resources factor: Funding, Human Capital, Disparities participant
- Catalyst factors: The Purpose of the process, Reason for collaboration

The influence of the context will shape the characteristic of co-design. To conceive the characteristic of co-design in both contexts, it is essential to establish the criteria of effective co-design. Based on parts of the theories on the principle of co-design of Bradwell and Marr (2008), Burkett (2012), Sanders and Stappers (2008) and Author (2014), this study has identified a range of principles that had been adapted and then employed as criteria of effective co-design. These criteria are presented below.

- Decision-making power
- Collaborative
- Flexibility
- Outcomes-focused

4. The Case Studies

4.1 Indonesia context

Indonesia for 32 years was under the rule of the authoritarian Suharto regime. As one of the consequences of the authoritarian regime, the development planning was carried out in a centralised model; there is no opportunity for local community involvement in determining the plans (Shirasi, 2006). Only in 1998, after the fall of Suharto, Indonesia embraced democracy. The conditions change after democracy spreads. The central government began to decentralise the power into the regions. In such circumstances, some initiation of citizen involvement in planning was arising. The case studies in Indonesia is part of this initiation action.

There are three projects investigated in the Indonesian context. These three projects were deliberately chosen because of differences in the cultural and social backgrounds of the people involved.

1. First, the Prototype House project in Jakarta, this project is an initiation from an NGO to support a protest of a group of residents who inhabit the Ciliwung riverbank area who threatened by eviction of the city government (Munk, 2016). The co-design project was conducted by Architecture Sans Frontieres Indonesia (ASF-ID) team, involving the resident threatened by the eviction ("AID - Co-housing Project at Ciliwung Riverfront", 2016). The characteristic of the community is urban poor people with the time priority is their livelihoods. This project focused on planning and building a prototype of a communal house, a 3-story house for four families. The residents were included in the process from planning to building, especially the prospective families of the house (Figure 1). Even, after the house was finished and occupied, residents continue to make design adjustments as part of the post-use evaluation process.
2. The second case is the Bamboo Church project in Malang. Since the location is in rural areas, it makes the people's characteristic still bound by traditional institutions and values, especially Javanese philosophy (M1 Media Chanel, 2018). One strong social value is the primacy of maintaining social harmony, even though in reality there are many conflicts among them. This lead to a situation where conflict was mostly colouring this project. The time spent by the design team to organise design work is almost the same as the time spent on managing conflict. The co-design process took place starting from the selection of the church site location, bamboo material selection, to the church interior space programming. Activities carried out ranging from ideation workshop, 3D modelling workshops, to making prototypes of bamboo structures on site-location.
3. The third case is the public space project in Solo. This project is not a single project, but rather a collection of several community facilities projects (e.g. public toilet, community playground). The character of the community is a mixture of urban society but is still strongly influenced by traditional values. This project initiated by a team from a local university, as part of the lecture programme. The aim was giving the students experience in implementing a participatory design model in a real context. The lack of understanding towards socio-cultural aspects of the people, causing several times of misunderstanding. Therefore, the final output of the project is deemed inadequate to address the initial planning.

Figure 1 The building process of the prototype house project in Jakarta conducted by involving the residents and designers. Image reproduced with permission of the rights holder, ASF-ID (ASF-ID, 2015)

4.2 The UK context

The UK design landscape has extensive experience with participatory design practices since the 70s at the Tavistock Institute. Unlike the Scandinavian approach to PD, which is oriented to the union empowerment through "collective resources", the British researchers focused on autonomy in workgroup organisations through "socio-technical systems design" (Asaro, 2000). These experiences provide a good foundation for practitioners, researchers, and academics in the UK who are concerned with participatory design issues. While in the urban development regulation, the concern on public engagement arose after the Skeffington Report was released in 1969 (Shapely, 2011). This report led to the enactment of legislation in the early 70s which includes a requirement for publicity and consultation with local communities in each proposal of development plans (Townsend & Tully, 2004). Furthermore, The Mandatory Planning and Purchasing Act 2004 and then The Localism Act 2011 are assessed giving stronger emphasis on public engagement. This background is an essential insight to examine the three UK case studies below.

1. The first case study is Rough Sleeper project in Adur and Worthing. This project was the city council initiative to tackle the problems of homeless people living in the high-street area ("Adur & Worthing: Using co-design to create a lasting legacy", 2016). In 2015, the city council consulted with the Design Council regarding opportunities for design interventions to address this problem. Design Council then facilitate an associate designer to conduct a design intervention by running a co-design process involving all stakeholders. The co-design process started with initial meetings to clarify the problems and formulate the project objectives. Then two co-design workshops were conducted to address the issues. The workshop series produced 4 proposed programs initiative to tackle the homeless problem. At the end process, all those proposals were realized by building the prototype and tested in the real context.
2. The second case study is Beyond the Castle project, carried out in Lancaster in 2012-2013. Initially, the project's named was City Park project which aims to develop green areas around Lancaster Castle (PROUD, 2012). The City Park was launched by the city council which try to involve the people through traditional consultation meeting. However, this approach was considered less effective in accommodating people's voice. Therefore, a team from Lancaster

University (LU) tried to propose a different approach by conducting a co-design process. Then, the City Park project was given a new name, Beyond the Castle (BTC). BTC involved the people in the design process as co-designers, while the designer positioned themselves as facilitators. There are 3 phases, starting with the preparation phase, where the designer team was set up and created an initial public event as socialisation to the whole city. The second phase was a series of workshops with the community, some of it designed involving the general population, and the others were engaging the selected participant. In the last phase, the results of the workshop were then exhibited in an exhibition which was designed as an interactive exhibition.

3. The third project is a redesigned interior of the ambulatory unit at Whittington Hospital London. To increase the quality of service, the head of the unit wants staff and patients to be involved in the design process. After consulting with the Design Council, the redesign project received a recommendation to be conducted with a co-design process. The hospital then collaborated with TILT studio held co-design process to produce a conceptual design (Marlow, 2016). TILT Studio organised workshops with more than 70 people consist of managers, doctors, administrators, infection prevention and control staff and patients (Finnegan, 2017). These workshops provided an opportunity for everyone to speak out in the design process. Then Levitt Bernstein Architect was hired to develop the conceptual design to conform to the standards and technical requirement.

5. Findings

From the two contexts above, we focused examined how contextual factors influence the effectiveness of the co-design process. The examination on its respective context carried base on established criteria.

5.1 Contextual factors influence in Indonesian context

Case studies in Indonesia were conducted in three different cities. Although all three have distinct socio-cultural characteristics, they are attached by the umbrella of Indonesian collective culture. The evidence of collective culture arose in the form of *gotong-royong* (mutual cooperation). Notably, in the case of Malang, the derivate practice of *gotong-royong*, called *sayang*, was a prominent factor that encouraged participants to be actively involved in the co-design process. This socio-cultural factor makes people motivated to participate because they feel part of the whole community. They perceive to be responsible for addressing their common interest. This nature of collectivism drives the collaborative aspect in the co-design process in Indonesia.

While the socio-cultural factors are considered to strengthen co-design collaboration, conversely, the political structure factors affected the co-design proceed less democratic. There are two political structure factors that could be identified. First is the political climate. The memory of the authoritarian regime in the past adequately embedded in the people consciousness. This situation leads the participants to be more careful in expressing their voices. For the example, in the case of Solo, although collaboration is considered reliable, reluctance in expression engenders the decision-making process tend determined by only a few people, by the community leaders or the designer. If there is disagreement, the participants are also reluctant to convey openly. The second factor is regulation, although decentralisation in development policy is ongoing (Sindre, 2017), the regulation to engage the people in the planning process is considered weak. There is a policy to conduct the Musrenbang process (a kind of consultation meeting), but at the end of the process, the decision is

determined by political interest in the city council. This system shapes the opportunity for people to contribute in making decision becomes ineffective.

Moreover, the deficient of freedom of expression, especially in the case of Malang and Solo was also influenced by Javanese philosophy. Javanese people are emphasised to 'maintain harmony and avoid conflict' (Magnis-Suseno, 1997). Therefore, they prefer to keep silence even though they disagree. This behaviour was quite noticeable during the co-design process and even led to the rise of latent conflict in Malang's case study.

In term of flexibility, there are two traces that we can identify in Indonesian's co-design process. The first is flexibility in the process sequence. Although at the beginning the design team had designed the co-design activities, the implementation turned out flexible. Spontaneity in changing the stages occurred frequently. For example, in the Jakarta case, a part of construction structure that has been recently built could be dismantled and redesigned during the house building process. This instance gives an understanding that the process of design, production, and evaluation was conducted flexibly and simultaneously. The second flexibility is on how the co-design obtain the tools for its process. In all three cases, it was noticed that designers and participants had utilised tools and materials that they found spontaneously from their surroundings. Even in Malang's case, design process was often carried out by drawing the concepts on the ground and directly created the mock-up with any material they can find (Figure 2). One participant in Malang said he was easier to understand the design concept by directly making the product, rather than discussing the idea, drawing then prototyping, as like a traditional design process. We identified the ability of the people to utilise their environment strongly influenced by the proficiency of the craftsmanship which obtained hereditary as collective wisdom in their community.

Regarding priorities, the case studies in Indonesia incline to focus on the outcome. The indication is all the project deliberately aims to produced functional products, ranging from housing, a church, to toilets and parks. Nonetheless, it does not mean that they ignore the process. The process was persistently focused on supporting the realisation of the project's aim. This priority is arguably driven by the catalyst factor, in this regard, the purpose of the collaborative process.

Figure 2. Spontaneous flexibility demonstrated in the design and prototyping process in the workshop of the bamboo church project in Malang's case study. Image reproduced with permission of the rights holder, ASF-ID (ASF-ID, 2016)

5.2 Contextual factors influence in the UK context

The cultural context of the UK is certainly different from that in Indonesia. The long history of democracy embraced by British society, especially freedom of speech in the public space, has become the political climate which influenced the co-design practices. The freedom of speech is expressed by some participants and applied in their daily practice. Therefore, when they are offered to involve into a collaborative design process, they have no difficulties to do the process democratically. A decision-making process by the stakeholder has its evidence in the three cases. We also identified the emergence of the notion of "participant is an expert because of their experiences", especially in the Whittington hospital case.

In addition to the democratic tradition, the regulation factor also encourages democracy in the co-design process. As a consequence of the implementation of the Locality Act (2011), the local people must be involved in every environmental planning. This system makes the people were familiar with an engagement process through consultation meeting, although they consider their contributions has an insufficient effect. Therefore, when the co-design method which promising more power to them was offered, they enthusiast to take part.

The collaborative aspect of the process has clearly shown. All the cases showed a considerable number and diversity of the participant. The consciousness of the people that they have a right to determine their environment encourages them to participate in the engagement process. A participant from BTC project said as a local resident around the project site, he believed that he had the right to speak up, and he was pleased the co-design process accommodated his aspiration.

The high enthusiasm of participants to engage in the process was parallel with their expectations to the results. Participants and the organiser agreed to focus their priority on the outcomes. However, there is an example where a distinct perspective arises between participants and the organiser in perceived the process outcomes. A participant of BTC project felt to be disappointed because the outcomes of the project were considered less concrete. Indeed, rather than producing a concrete plan, for instance: a design drawing, the BTC effectively has built a methodological framework for subsequent co-design processes. These outcomes were assessed less concrete by one of the participants.

The findings also convinced that the co-design have flexibility in its process. Participants were given opportunities to express their potential with various methods and tools. This wide range of opportunity to engage has increased the participant's diversity. The various tools ranging from writing and drawing on paper or making 3D models with clay and stick were provided during the workshop in BTC project. Another example comes from Whittington project where the designer built 1:1 scale interior mock-up so that the participant could experience the space dimension and circulation movement in actual size. Flexible methods for attracting participants were also demonstrated, for example by offering pizza to teenagers in BTC project, or in the Rough Sleeper project by giving high flexibility of time of workshops according to the availability of participants. The designers with their capability were the human capital that designs the flexibility of the process. They were part of the resources factor that shapes the characteristic of the co-design process.

6. Discussion

The application of co-design in both contexts shows the influence of the contextual factors on the co-design process. Socio-cultural factors and political structure factors are the dominant factors that

influencing the process (Table 1). This section discussed each criterion to examine the effectiveness of the co-design process by comparing the finding from both contexts.

6.1. Decision – Making Power

How the decisions are taken is the core principle that distinguishes co-design from traditional design approaches. Co-design shift the role of the designer to all participants in making decisions (Bratteteig & Wagner, 2014). This transformation means that power relations between designers and users are equal. The comparison of the decision-making process between the two contexts shows a distinction. In the UK democratic decision-making processes proven applied effectively, while in Indonesia the democratic process is less successful.

The findings indicate the effectiveness of decision-making processes in the UK is influenced by two elements of political structure factors. The first is political climate, where the value of democracy is inherent in the daily lives of British society, especially the tradition of freedom of speech. The second is the regulation, which requires every development plan engaging local people in its design process. On the contrary, in Indonesia, political structure factors lead to the ineffectiveness of the democratic decision-making process. Indonesian political climate, where the residue of authoritarianism still firmly embedded in society makes the co-design process mostly conducted in a guided approach. While the cultural factors of Javanese philosophy, prioritise 'harmony' over the ‘disagreement’, engender the freedom of speech is harder to establish.

6.2. Collaborative

Co-design also emphasises the principle of collaboration between designers and users. Steen in his exploration for understanding co-design argues that: “Co-design can be understood as a process of collaborative design thinking: a process of joint inquiry and imagination in which diverse people jointly explore and define a problem and jointly develop and evaluate solutions”. (Steen, 2013). Comparison of the collaborative criterion between the two contexts indicated that both produce an effective performance. The indication is not only both were able to run co-design with a high number of participant, but also the intensity of cooperation during the process was well presented. However, both contexts have differences in the people’s motivation to participate. In Indonesia due to the influence of collective cultural, people feel they have an obligation to involve in the collective action. Whereas in the UK, participants' motivation to involve in the collaborative process is due to the consciousness that they have a right to determining decisions that affect their lives. This difference of motivation led to the distinction of collaboration character. In the UK, active collaboration interpreted by the intention of the participant to explore many different ideas to solve the problem. While passive collaboration in Indonesia, tend to seek harmony and agreement. Therefore, they likely to find the reference from the tradition to solve the problem.

However, this character difference does not reduce the value of collaboration in each context. Collaboration between participants and designers, as well as other stakeholders, intensely carry out. Indeed, the process in Indonesia tends to lead by the designers, but there are efforts to encourage participants actively involve as co-designer.

6.3. Flexibility

In co-design, flexibility is a principle that ensures all participants get the appropriate way to contribute according to their creative potential (Cruickshank, 2014). Flexibility can be examined through the tools and methods used to accommodate the various types of participant's contributions. The result from the field confirms both contexts have a flexible process. In the UK

context, flexibility emerges in the availability of tools and methods employed during the process. The design team, who deliberately designed a flexible co-design was considered as a factor that affects the flexibility. This design effectively embraces diverse types of participants, from various ages, sexes, and visual language abilities.

As for the Indonesian context, it has similar flexibility, in term of various tools and methods. However, different from the UK, the flexibility in Indonesia rooted in its tradition of collective work (*gotong-royong*). That makes the flexibility have contained spontaneous characteristic. *Gotong-royong* in Indonesia could be learnt, for example, from a neighbourhood who builds communal facilities. The people usually conducted the building without preliminary design; they directly build adjusted with the site with any adjustment carried out in spontaneous action. Each person seems to understand their position and contribution to the building process. Comparing to Indonesia with its spontaneous, the UK's co-design flexibility perceived more designed and prepared. The designer conscious to design the process with consideration of flexibility aspect.

6.4. Outcomes-Focused

Co-design is focussed on developing practical, real-world solutions to issues facing individuals, families and communities (Burkett, 2012). From this standpoint, co-design tends to focus more on the result to address the problems of the participants. Both contexts have similar priority in co-design, outcomes-focused. The three cases in Indonesia aim to solve real problems and focused on creating functional products as the solution. Even in the Jakarta case, outcomes of the project are important for the communities since it has a symbolic meaning as tools of resistance against eviction. Therefore, from the beginning, the co-design process has realised the necessity to produce a real-world solution.

While in the UK, all cases are also outcome-focused. Of the three cases, the clearest identified of its outcome is the Whittington hospital project with the interior design. Whereas in the other two cases, rather than functional products, the outcomes are a system framework (the BTC project) and social programs (the Rough Sleeper project). However, there are slight differences in perceptions about the notion of outcomes, especially in the BTC project, so participants perceived that the process was resulting in less concrete outcomes.

From both contexts, Indonesia and the UK, we identified that the catalyst factor, precisely the purpose and reason for collaboration, influenced the priority of the co-design process. Co-design as a method has effectively employed as a problem solving for real-world problems.

Table 1. Comparison of the characteristic of co-design

Criteria	Indonesia context		UK context	
	Contextual factor	Characteristic	Contextual factor	Characteristic
Decision-Making Power	Political Structure Factor: Political climate, residue of the authoritarian regime; Regulation of development: centralistic Socio-Culture Factor: Javanese philosophy	Decision making process: less democratic	Political Structure Factor: Political climate, embedded democracy in society; Regulation: involvement of local citizen	Decision making process: democratic

Collaborative	Socio-Culture factor: collective culture	Motivation to participate: Social obligation	Political Structure factor: Awareness of citizens' rights	Motivation to participate: Right to determine themselves
Flexibility	Socio-Culture factor: collective action, craftmanship	Spontaneous flexibility	Resources Factor: Human capital (the designer)	Designed flexibility
Outcomes-focused	Catalyst factor: Purpose of collaboration	Output: Functional product	Catalyst factor: Purpose of collaboration	Vary, depend on the purpose

7. Conclusion

The discussion above has highlighted several important factors to understand the influence of different contexts on co-design practices. Participation and how to participate must negotiate and adapt to the local settings (Elovaara et al., 2006). What then needs to be understood is how the process of participation could adapt to the context. Case studies in both contexts, Indonesia and the UK, have provided a clear insight into the influence of contextual factors in shaping the characteristics of co-design practice.

Co-design in the UK has effectiveness in all the criteria investigated, especially regarding decision-making and process flexibility. A democratic political climate, as well as regulation support for public involvement in the development of the environment, are the dominant contextual factors that determine the characteristic of the co-design. Whereas in Indonesia, the effectiveness could be found in collaborative and flexibility criteria. Cultural factors, especially the collective culture is believed as the dominant factor for this effectiveness while political climate and regulation could be the factor that affects the ineffectiveness in the democracy of the decision-making process.

This paper attempts to understand the influence of contextual factor to the co-design in a different context. Our analysis found that the contextual factor has shaped the characteristic of the co-design. In the next research phase, understanding the co-design characteristic in both contexts will be exploited to develop a co-design framework in Indonesia. The lesson learnt from all the cases could be applied to establish a more adaptive co-design method to Indonesian context.

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