

Cultural Product Design as a Key Strategy for Innovation Capability Development: Evidence from Indonesian Creative Social Enterprises

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Abstract

Background With increasing global competition, to be successful firms must have a clear and significant differences that is related to the market need. Embedding regional characteristics into products appears to be becoming increasingly important to ensure firms' strong identity in the global market. The article deals with the fundamental questions about how to use culture as a starting point for identifying new ideas and how to translate culture into new products that benefit the company.

Methods The research used qualitative exploratory study design with multiple case study. Data collection methods used in the study were semi-structured interviews, literature study and documentation. The research is based on the literature on cultural product design and innovation capability, particularly idea management literature, as well as five case studies of creative social enterprises. Primary data were elicited through semi structured interview with 5 founders and 5 designers who are responsible for product development.

Results The results point out four themes about how Cultural Product Design is used in the five Creative Social Enterprises: First, material culture is the majority inspiration for new product development in creative social enterprises. Second, behavioral, and reflective culture create compelling storytelling. Third, the knowledge of spiritual culture enriches designer's appreciation toward the artifact. Fourth, Cultural Product Design is used as framework for idea management system.

Conclusions By investigating five creative social enterprises in Indonesia who have won numerous awards for their cultural product designs we conclude that cultural product design fosters innovation capability development in creative social enterprises. To illustrate how cultural product design used in the creative social enterprises, the study proposes a framework cultural product design as idea management system for innovation capability development. The framework is developed by modifying the existing cultural product design framework with 6 stages idea management. The framework emphasizes the importance of designers having a holistic view of the cultural layer during idea selection, implementation, and deployment. This study benefits young entrepreneurs, product designers, and other researchers.

Keywords Cultural Product Design, Idea Management, Innovation Capability, Creative Social Enterprise

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1. Introduction

Indonesia is a multi-cultural melting pot of Chinese, Arab, and Indian cultures, with significant Portuguese and Dutch influences (Anggraeni, 2011). This blending has allowed Indonesia to gradually develop its own distinct culture, which is primarily a hybrid of Chinese and Arab influences. The cultural diversity has been mentioned by Jewel (2019) as one of Indonesia's national strengths. The diversity and distinction of Indonesian cultures provide opportunities for to develop innovation based on cultural values. Embedding regional characteristics into products appears to be becoming increasingly important for the global market, as products lose their identity because of functional and aesthetic similarities brought about by globalization. Cultural features are distinct characteristics that can be incorporated into a product to enhance its identity in the global market as well as the individual customer experience (Liu & Wang, 2012). Consumers today demand design that is functional, ergonomic, aesthetically pleasing, and emotionally pleasurable.

The increased attention in Indonesia on localized cultural development exemplifies an ambition to promote the Indonesian cultural theme in the global economic market, as evidenced by the use of East Nusa Tenggara Palmyra weaving as the official merchandise for the 1998 Asian Games in Palembang, Indonesia. Furthermore, there are numerous global exhibitions on the theme of Indonesian cultural identities (Juniarta, 2017).

In the context of promoting Indonesian culture, Indonesian President Joko Widodo established the Indonesian Agency for the Creative Economy (BEKRAF) in 2015, a non-ministerial agency tasked with developing and coordinating policies to harness the enormous potential of Indonesia's creative economy (Bekraf, 2018). Through the existence of BEKRAF, there are 8.203.826 creative enterprises in Indonesia (BPS, 2017). Creative enterprises have a variety of business models, one of which is the social enterprise business model, which is one of the most common business models for creative enterprises in Indonesia (British Council, 2018).

1. 1. What are Creative Social Enterprises?

Creative Social Enterprises (CSEs) are defined as “a type of social enterprise that generates market demand for creative goods and services via intellectual property, ideas, and imagination, while also contributing to a global dynamic shift toward cultural development, social justice, and economic development” (British Council, 2020 p. 16). In other words, CSEs are creative businesses with a social enterprise business model that employ innovative approaches to address social and environmental issues (Gumulya et al., 2022).

According to a study conducted by the British Council on Creative Social Enterprises, CSEs exhibit various distinctive features that support sustainable development. To begin, it employs women and young people by leveraging on their creativity, social, and emotional capacities. Second, it addresses sustainability concerns through the commercialization of disruptive ideas and the development of environmentally and socially sustainable solutions. Thirdly, it is inclusive through the facilitation of democratic governance and the distribution

of innovation and technology to the bottom of the pyramid. Fourth, it instils new vitality and pride in local communities, thereby enhancing the country's global market identity (British Council, 2020). Through these approaches, CSEs provide greater social impact, creative and cultural value, and financial return than traditional business models (Sarosa, 2020). Hence, in many parts of the world, creative social enterprises are regarded as success stories.

There are 75,240 Creative Social Enterprises (CSEs) and are led by young entrepreneurs in Indonesia (British Council, 2020). Many young people aspire to work in fields that allow them to make a difference rather than simply earn a living. The majority of Indonesia's creative social enterprises are start-up small, medium-sized businesses (SMEs) and led by women entrepreneurs (British Council, 2018). The next subsection we explain the definition of cultural product design, innovation capability and how both are related.

1. 2. What is cultural product design (CPD)

Creative social enterprises have recognized the value of associating products with cultural characteristics to increase product value and create strong product identity in the global market. In recent five years there are growing numbers of CSEs use culture as their main strategy (British Council, 2020). CSEs are concerned with preserving culture by developing traditional culture that is linked to a specific community's identity (British Council, 2018). The phenomena of embedding cultural aspect in product development theoretically is called as cultural product design. Cultural product design (CPD) is defined as “a process of rethinking or reviewing cultural features and then redefining them in order to design a new product that can fit into society and can satisfy consumers culturally and aesthetically.” (Lin, 2007 p.47). CPD is about using culture as the starting points for creating innovation (An & Liu, 2014). As mentioned earlier, CSEs address sustainability issues by innovating with local resources and empowering local talent to create environmentally and socially sustainable solutions. Through their ability to innovate with local content, CSEs instill pride in local communities, and this create strong identity for CSEs in the global market. As a result, CSEs make excellent case studies for investigating how CPD is implemented.

1. 3. What is Innovation Capability?

Moalosi & Popovic (2006) asserts that socio-cultural factors increase innovation by generating novel design concepts. To generate innovative design concepts, firms have to develop its organizational capabilities to maintain and create long-term innovation (Patron & Smith, 2016), which has been referred to as innovation capability (IC) in the literature. Innovation capability is defined as, “a firm’s ability to identify new ideas and transform them into new/improved products, services or processes that benefit the firm. (Aas & Breunig, 2017).

Another perspective emphasizes that IC is about the ability to innovate continuously. IC is defined as “a firm’s ability to generate innovation through continuous learning, knowledge transformation, creativity, and exploitation of internal and external resources available to the firm” (Iddris, 2016, p.246). Another perspective given by Lawson & Samson, (2001, p.384), IC refers to “ability to continuously transform knowledge and ideas into new products, processes, and systems for the benefit of the firm and its stakeholders”.

From these definitions, we conclude that IC is concerned with a company's ability to identify knowledge and ideas and transform them into new products, processes, and systems by continuously learning to exploit the firm's internal and external resources. Nurturing IC has become important because, at their core, firms compete not on new products, but on their ability to develop new innovative solutions that address specific market needs (Prahalad & Hamels, 2007). Their ability to keep on innovating are what make firms survive on the long term. Developing innovation capability is not an easy task because it usually necessitates a decision-making process that pushes the firm's ability toward innovation and fosters an innovation culture among employees and throughout the organization (Da Silva & Silva Cirani, 2020).

As mentioned before, CSEs deal with sustainability and cultural issues that are hard to solve and require innovative thinking and approaches. Despite all the problems, CSEs are able to provide sustainable solutions to the market. This makes a strong case for CSEs to have innovation capability.

2. Literature Review

2. 1. Cultural Product Design (CPD) Framework

Culture has been described as “an entire society's way of life” (Leong & Clark, 2003). It is a general term that refers to human activity patterns and the symbolic structures that give such activity meaning. Different definitions of culture reflect varying theoretical foundations for comprehending and evaluating human activity. According to linguistic, anthropological, and sociological studies, culture is defined as the outcome of human civilization's evolutionary process, which includes language, customs, religion, arts, thought, and behavior (Lin, 2007).

Designers play an important role in CPD because they have the ability to improve customer ease of product use, and their graphic and aesthetic abilities help to differentiate competitive product offerings and attract customers (Gasparin, 2018). Furthermore Springer (2020) asserts that designers play an important role in cultural translation because they are educated to be critical, creative, and culturally aware. Additionally, the CPD framework lies on designers' ability to draw insights from what they have sensed and learned in the cultural features, transform them into abstract ideas of theories, then translate those theories back into the domain of practice in the form of tangible solutions (Owen, 1998).

Further is discussed the CPD framework based on the research of (Leong & Clark, 2003; Moalosi & Popovic, 2004; Wu et al., 2004) that culture can be classified into three layers:

- (1) Physical or material culture: cultural artifacts that we can see and touch such as foods, garments, architecture, arts, performing arts, and statues.
- (2) Social or behavioral culture: social or behavioral culture such as human relationship, customs, habits, and social organization.
- (3) Spiritual culture: belief system, values, and philosophy such as religion.

It is further elaborated that CPD consists of three stages (Lin, 2007):

- (1) Identification stage: during this stage designers identify design characteristics from three cultural layers. There are three levels: the outer level, which includes color, form, shape, and texture; the middle level, which includes function, usability, and safety; and the inner level, which includes emotion, cultural meaning, and storytelling. This stage requires designers to analyze and evaluate how to best utilize this cultural data.
- (2) Translation stage: during this stage designers convert the cultural knowledge gained in the previous stage into design knowledge. Throughout this process, designers develop a level of expertise and practical experience with design features while also developing the ability to connect design knowledge to contemporary design problems. Designers foster an understanding of the interplay of culture, technology, and society.
- (3) Implementation stage: during this stage designers are allowed to express the design knowledge derived from cultural characteristics through sketching and prototyping. At this point, the designers' perspective on the meaning of culture becomes interlinked with their aesthetic sensibility. They must be able to incorporate all levels of cultural characteristics into the design of a cultural product.

2. 2. Innovation Capability Development

Following a thorough review of the literature, dimensions of innovation capability were identified: knowledge management, organizational learning, organizational culture, leadership, collaboration, creativity, idea management, and innovation strategy (Iddris, 2016; Lawson & Samson, 2001; Rantala et al., 2019; Saunila, 2016). Additionally, the study will focus on idea management. Because the research is attempting to develop innovation capability through the lens of cultural product design on product development context, the most relatable construct is idea management (Gumulya et al., 2022a).

Idea management refers to as a structured process for producing, acquiring, discussing, and enhancing, arranging, assessing, and prioritizing valuable insight or alternative thinking that would not have emerged otherwise through normal processes (Sadriev & Pratchenko, 2014). Another perspective emphasizes idea management as a system, the structures and systems that are necessary for successful innovation. This includes concept generation, innovation development, and implementation, as well as task organization within the organization (Martínez-Román et al., 2011). De Jong & Den Hartog (2010) elaborates further that idea generation is the process of combining and reorganizing data and existing concepts in order to overcome obstacles or improve performance. Additionally, idea management entails the accessibility of specific methods and techniques that facilitate idea sharing (Janssen, 2000). In addition, it has been identified that idea management plays a significant role in the development of innovation capability (Saunila & Ukko, 2014). Nurgraha & Mulyadi (2018) states the importance of developing ideas from the ground up on idea management, because the starting point of innovation capability is company's ability to identify ideas and knowledge. Hence, having a good idea management system, it will significantly boost firms' innovation capability. We conclude that idea management is a systematic structure managing the method of acquiring and continuing to develop ideas and insights to get the most out of them.

According to (Brem & Gerlach, 2017), idea management is divided into six phases:

- The preparation phase is when managers determine the focus of their efforts in a particular field.
- Idea generation phase: During this phase, creativity is critically needed. It is defined by the ideator's knowledge, imagination, abilities, and motivation. On these stages a variety of distinct types of ideas are generated and that can be classified in a variety of ways.
- Improvement phase allows for the enhancement of suggested ideas via an idea discussion group. Additionally, the ideator can improve the idea by accumulating additional data.
- Evaluation phase: ideas are chosen based on a variety of organizational-defined selection criteria. The criteria should consider the economy's viability, as well as its internal resources and capability.
- Implementation phase: This is the phase in which an idea is put into action, and its success requires clearly defined roles and teamwork.
- Deployment phase: The implemented idea is promoted to the target group which are clients and business partners.

2. 3. Linking Cultural Product Design and Innovation Capability

From the literature review we found that there are many similarities between CPD stages and idea management phases, but the relationship between CPD and IC is rarely discussed, owing to the fact that both paradigms originate from two distinct disciplines (Lin, 2007; Liu & Wang, 2012; Moalosi & Popovic, 2006; Wu et al., 2004). CPD is derived from the design discipline, whereas IC is derived from a strategic management perspective (Aas & Breunig, 2017; Ali et al., 2020; Iddris, 2016; Lawson & Samson, 2001; Saunila, 2016, 2017). Previous research has not yet established a link between these two paradigms.

In addition, although some studies about CPD have discussed new product development using culture feature as main inspiration (Lin, 2007; Liu & Wang, 2012; Moalosi & Popovic, 2006; Wu et al., 2004), none of the studies discusses how CPD is used as a strategy to develop the ability to innovate continuously rather than just developing one new product. Hence, we propose that cultural product design can be applied as idea management system in creative social enterprises. CPD embedded on idea management system will fosters innovation capability development in the long run and create strong identity in the global market.

The paper aims to study how CPD is implemented as an idea management system to develop innovation capability in a creative social enterprise context. The study can be achieved by answering these research questions:

1. How do CSEs identify knowledge and ideas from local culture?
2. How do CSEs transform knowledge and ideas into design feature that bring strong identity to the global market?

Based on the answers, we formulate a framework that embeds CPD in the idea management process as a strategy to develop innovation capability.

Our research contributes to an expanding body of knowledge on innovation management for cultural sustainability. The paper is organized as follows. First, we present a review of the literature on the cultural product design framework and the factors that influenced Innovation Capability Development. Second, we go collect data from five creative social enterprises that have successfully created a strong identity in the market by using a cultural product design approach. Several themes emerged from in-depth interviews about how CPD is implemented as a key strategy for IC development. As a result, we believe that CSEs should continue to develop their ability to innovate through gaining knowledge and ideas from holistic view of cultural layer to strengthen their identity in the global market.

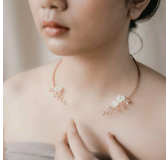
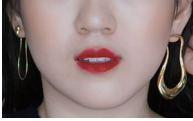



3. Method

The study employs an exploratory qualitative approach with multiple case studies to investigate cultural product design implementation in CSEs and how this leads to the development of innovation capability, conducting in-depth multiple case studies on four CSEs. The study is exploratory in nature because the research questions have not been thoroughly investigated previously (Jali et al., 2021). Semi-structured interviews with five CSE founders and five R&D managers were used to collect qualitative data for this study. Secondary data obtained from social media articles will be used to supplement the information gathered during the interviews (see figure 2). Using multiple sources of evidence to triangulate data and improve thematic analysis accuracy.

Our case selection process began with a six-month intensive research of newspaper articles from Indonesia that mentioned innovations carried out by creative social enterprises. We discovered five CSEs that stand out due to their numerous national and international awards for innovation, such as the MIT Global Challenge and the UNDP SEED award. All CSEs are classified as being in the fashion and handicraft sectors. The cases chosen reflect the nature of Indonesia's creative industries, which are dominated by the fashion and handicraft sectors (BPS, 2017).

We chose to interview two founders from each CSE, for a total of 5 CSE founders and 5 designers. Each oversees the product development process. We chose them because they are relevant to the objectives of our research, which is to learn about the product development process. Then, at the end of each interview, we asked the respondent to recommend other founders who might be interested in responding to our research questions. We employ the snowball method. Interviewee commitment to the topics is critical for obtaining genuine and accurate responses during the discussion (Firdaus et al., 2021). The sample size was calculated using the theoretical saturation principle (Harb & Sidani, 2019). The entrepreneurs were interviewed in Jakarta between May and July 2021, using a combination of English and Bahasa, with all notes taken in English. The duration of these semi-structured interviews varied from one to two hours.

Table 1 The profiles of the Creative Social Enterprises

Cases	Products	Position Interviewees	Work Experience	Signs of Cultural Product Design as key strategy for innovation capability development
CSE 1	Silver Jewelry from Bali 	Founder and Designer (CSE 1.1)	9 years	A jewelry brand that attempts to preserve Bali traditional silver craftsmanship into modern jewelry design
		Head of R&D (CSE 1.2)	9 years	Winner of DBS Foundation Social Enterprise Grant Award 2017 and 2018
CSE 2		Founder and Designer (CSE 2.1)	8 years	A jewelry brand inspired by long earlobes Dayak East Kalimantan Jewelry Culture
		Head of R&D (CSE 2.2)	8 years	Winner of Indonesian Fashion Craft 2018
CSE 3	Wicker craft from NTT 	Founder and Designer (CSE 2.1)	7 years	Redefine palmyra wicker crafts of East Nusa Tenggara Island into modern home accessories for the domestic and international markets.
		Head of R&D (CSE 2.2)	7 years	Winner of DBS Foundation Social Enterprise Grant Award 2018 Indonesian Good Design Award 2020
CSE 4	Fashion accessories made from loom NTT 	Founder and Designer (CSE 3.1)	5 years	Redefine the heritage of rural East Tenggara Island loom weaver into contemporary fashion accessories
		Head of R&D (CSE 3.2)	5 years	Winner of Good Design Indonesia 2021 Award for Best Design
CSE 5		Founder and designer (CSE 4.2)	9 years	Re-define bamboo crafts in Tasikmalaya, West Java, Indonesia, as modern home accessories.
		Head of R&D (CSE 4.2)	8 years	Winner of Good Design Indonesia 2020 Award for Best Design

The interview guide includes eight key-theme-centered questions: The process how to incorporate cultural features into CSEs' product development. Prior to interview, we have collected CSEs' product that incorporate cultures, and we dig deeper asking about the development process.

1. Tell me about your company's history, including when and how it was founded.
2. I observe that you incorporate culture into your products, can you share me how is the process, and the people who are involved?
3. Why do you take culture as your differentiation strategy?
4. Do you take the form, shape, color, texture, decoration of cultural artifact as inspiration? If yes, please elaborate through example?
5. Do you take the functional aspect, craftsmanship of cultural artifact as inspiration? If yes, please elaborate through example?

6. Do you take the meaning, story, values of culture as inspiration? If yes, please elaborate through example?
7. How do you identify these cultural inspirations? (From where and who)
8. How do you translate all these cultural inspirations into product innovation? How each aspect of culture inspires you?
9. How do you cultivate the design skills to incorporate culture into product development?
10. How do you combine the cultural feature with your aesthetic preference, and modern consumer needs?

The data is examined using cross-case analysis, an approach that looks for common themes, similarities, and differences among cases (Miles et al., 2014). Cross-case analysis is designed to enhance validity, transferability, and theoretical elaboration (Mills et al., 2012). We analyzed the data from the five cases in three steps (see figure 1). With our interview, observation, and documental data, we used open coding in the first step to understand the CPD process that yield product innovation. Informant-centered codes based on common statements gave rise to first-order concepts. We moved on to the next step when cycling between data and existing theory yielded no significant new insights, implying that we had reached a saturation point for first-order codes. The second step involved looking for relationships between and within the initial codes, which resulted in the development of second order themes (axial coding). While remaining true to the underlying data, these themes became more abstract and general. Finally, the themes were aggregated into three key findings that explain how CPD become key strategy in innovation capability development: First, material culture is the majority inspiration for new product development in creative social enterprises. Second, behavioral and reflective culture create compelling storytelling. Third, the knowledge of spiritual culture instills sense of respect on the designers by knowing the inner level CSEs understand what can and cannot be done to develop the local artifact. Forth theme is cultural Product Design as framework for idea management system.

4. Result

The result of our exploratory study highlights the following four themes that explains cultural product design as key strategy for innovation capability development. The data structure is elaborated on figure 1.

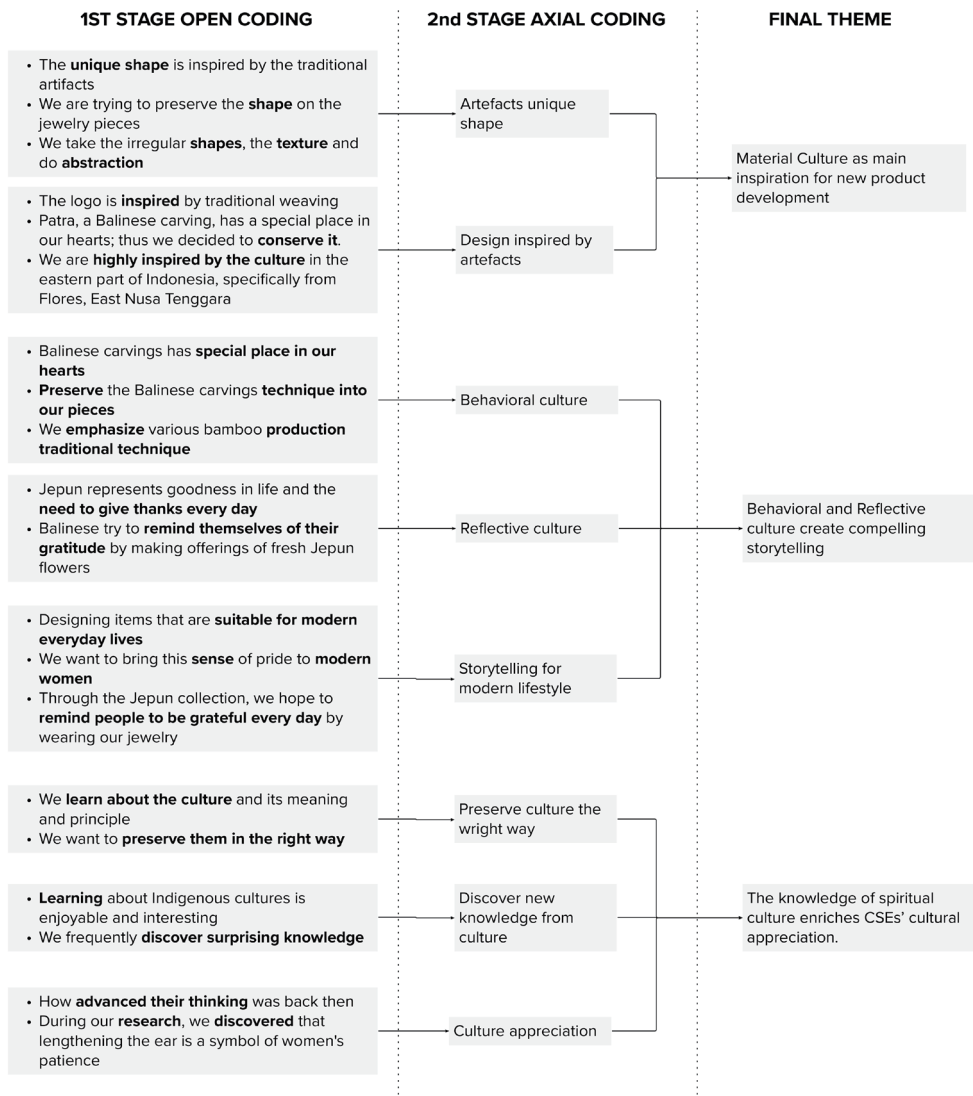


Figure 1 Data Structure

4. 1. Material Culture as main inspiration for new product development

The first theme that emerges from the data is that CSEs draw design inspiration from physical or material culture. They adopt the physical culture's form, shape, color, pattern, decoration, and details. The finding is consistent with Lin (2007) design study case, in which the outer level enriches designers' imagination to bring attractiveness, beauty, and creativity. Another study that supports our findings is (Huang et al., 2011), which claims that the outer level of cultural artifacts touch the inner feelings of consumers' hearts and entice them to buy the product for reasons other than practicality. The similarities among four CSEs: use outer level cultural feature as main inspiration for new product development.

Two of the CSEs founders explained that:

*“..The **unique shape is inspired by the traditional boats** commonly used by the women weavers of East of Nusa Tenggara” (CSE 3.2)*

*“..Our new logo, **inspired from the Kepitang hexagonal weaving**” (CSE 3.1)*

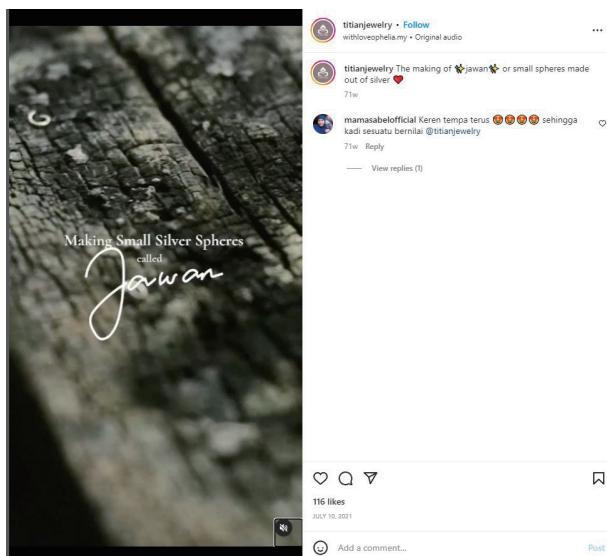
The designers of the CSE described that:

*“.. After we’ve spent some time blending in with Balinese people, we started to realize how Bu Wayan, our artisan’s wife religiously prepares offerings every morning. She often includes Jepun flowers in the offerings. Jepun, the identity flower of Bali, we are trying to **preserve this in the shape of our Jepun Jewelry Collection pieces**” (CSE 1.2).*

*“.. We take the irregular shapes, the texture of the women earlobes and **do abstraction**” (CSE 2.2)*

4. 2. Behavioral and Reflective culture create compelling storytelling

The data also show that CSEs use information about the making process and the meaning of local artifacts as part of a content marketing strategy, which is a type of marketing focused on developing, publishing, and distributing information for a targeted audience online (Qadir, 2010). Through the middle and inner level CSEs create a strong and compelling storytelling to their customer. The finding gives news perspective, and yet relevant to Hou (2020) who claims that behavioral level deepens customer experience. and the inner level provide emotional memory, which provides people with deep and unforgettable feelings towards familiar characters, things, and environments from the past. This perspective is also supported by Luo (2021) who asserts that consumers’ memory and feeling are developed through their understanding of cultural values. The similarities among four CSEs: use middle and inner level cultural feature to create compelling storytelling.



CSE 1 communicate the making process through social media (Behavioral culture)

This is the **Kemerekkrara** pattern. The word Kerekkrara comes from the word "kemaren", which means "black ant" and "rara", which means "road." The pattern is meant to look like a line of black ants walking to symbolize cooperation and unity.



CSE 3 explain the meaning of NTT Weaving through its Blog (Reflective Culture)



CSE 5 creates bamboo weaving workshop to raise public's appreciation (Reflective Culture)

Figure 2 Behavioral and Reflective culture communicated through social media

4. 3. The knowledge of spiritual culture enriches CSEs' cultural appreciation.

The third finding from the interview data is that CSEs emphasize the importance of understanding cultural values, meaning, philosophy, and belief systems before developing the cultural artifacts. The knowledge helped to ground them and nurture their sense of cultural appreciation and appropriation. The finding is supported by Walker (2021) who states that values shapes how human perceive the world and a major influence on how we stand on several issues on equity, social welfare and environmental care. Furthermore, Lee (2019) asserts that designers must be careful not to distort cultural meaning through incorrect reinterpretation.

One of the CSEs founders claimed that:

*“We are highly inspired by the culture in the eastern part of Indonesia, specifically from Flores, East Nusa Tenggara. When we encounter the culture, we **learn about them its meaning and principle**, so we know what is allowed and not allowed to be used, **we want to preserve them in the right way**” (CSE 3.1).*

The designers of the CSE explained that:

*“Learning about Indigenous cultures is enjoyable and interesting, and we frequently **discover surprising knowledge and how advanced their thinking** was back then. For example, Blego weaving pattern symbolize the NTT scenery back then, so it’s like painting but by weaving” (CSE 3.2).*

“During our research, we discovered that lengthening the ear is a symbol of women's patience. “The longer the ears of Dayak women, the more beautiful they will feel, but we don't create jewelry to make modern women's ears grow longer; rather, we make jewelry to help them feel attractive by adopting how Dayak women wear traditional jewelry” (CSE 2.2)

4.4. Cultural Product Design as framework for idea management system

The fourth finding is that all CSE use CPD as a system to generate, develop, and implement culturally derived ideas. Although they are aware of it, but every CSE has used the outer, middle, and inner levels as inspiration for new product development and content marketing. CSEs have a unique product that is communicated through strong and compelling storytelling because they use CPD as idea management system. As suggested by Herrmann et al. (2020) the importance of tool development on idea management to approach innovation different ways. As a result, we propose CPD as an idea management system that encourages CSEs to generate meaningful ideas with a high degree of novelty. CPD as an idea management system will foster innovation capability, ensuring CSEs' competitive advantage in the global market.

Three of the CSEs founders supported our proposition:
















*“We don’t know there is a name for our design process, but yes **we agree with your claim** that the Cultural Product Design as framework for idea management system and this nurture our ability to innovate” (CSE 4.1).*

*“We **believe that by exploring local culture as our main inspiration** both for product development and our marketing strategy, this will **bring benefit for us in the long run**” (CSE 3.1).*

*“As Indonesians, we are proud to bring our indigenous culture to the global market. They astound us, and by **implementing various levels of cultural product design, we gain many inputs** that inspire us to create better design solutions” (CSE 2.1).*

One of the CSEs willing to share their CPD process in detail, which we structure into six stages of idea management. The CSEs draw inspiration from East Borneo's Dayak culture because the founder is from Central Borneo and sees Dayak culture, particularly the long-ear tradition, as nearly extinct. The founder sees this as an opportunity to launch a creative social enterprise.

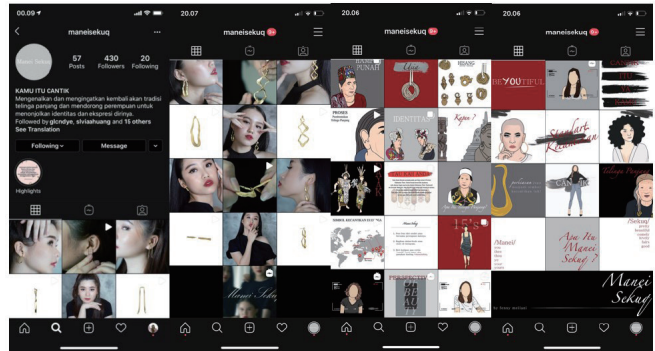
Table 2 CPD on six phase of idea management

1. Idea Preparation	2. Idea Generation	3. Idea Improvement	4. Idea Selection	5. Idea Implementation	6. Idea deployment
<p>CSE identifies the visceral design elements of Dayak Jewellery which are the form, shapes, texture, proportion of the Dayak's women long ear and their jewelry.</p>   	<p>CSE generates ideas from the shape of a Dayak woman's ear.</p>   	<p>Each ideas from each elements are improved and reviewed.</p> 	<p>The best design that is inspired by the shapes of a Dayak women's ear is chosen based on cultural relevance and CSEs manufacturability in gold casting.</p> 	<p>The first jewelry is inspired by the Dayak women's earlobe shapes (visceral design elements of Dayak's culture).</p>  	<p>The design inspiration is communicated through packaging and social media</p>
<p>CSE identifies the behavioral design elements the process Dayak's women lengthening ear</p>	<p>CSE generates ideas by the way Dayak women lengthening their ears and the way Dayak women wear their earrings (Behavioral design elements)</p>  			<p>The second jewellery is inspired by how Dayak Women wear their jewellery.</p>  	

CSE identifies the reflective design elements: the longer the ears of Dayak women, the more beautiful they will feel Sense of pride having long earlobes

CSE generates ideas from the symbolic meaning of long ear in Dayak's Culture (reflective design elements) The brand name is Manesei kuq: it is taken from Dayak language means you are beautiful. The brand vision is to embrace different kind of beauty

The reflective design elements, the history of Dayak's long ear and its meaning, are communicated through instagram feed.



The table shows how CSE develops a comprehensive perspective of the cultural layer and translates each layer into new product development concepts. By approaching each culture layer differently, including visceral design aspects, behavioral design components, and reflective design elements, CSE can develop its innovative capability, creating diverse innovative products while avoiding literal cultural translation.

4. 5. The Proposed Framework Cultural Product Design as Idea Management System for Innovation Capability Development

Based on the findings. Figure 3 depicts the proposed framework for cultural product design as an idea management system for the development of innovation capability. The researcher analyzed the data based on the research questions and research objectives while using the theoretical framework as a guideline. The study is based on a deductive approach that uses the theoretical framework to help organize and direct the data analysis. The model is different from existing literature and yet still relevant to them.

The proposed framework work in six stages

Idea preparation

On this stage designers do research by collecting all the cultural data that need to be investigated starting from the outer level observing the visceral design elements, the middle level gathering behavioural design elements and inner level capturing meaningful stories that can be relevant with contemporary society. Designers can use both primary and secondary research method. The outcome of this stage is setting a design brief and mood boards that embodied the three cultural levels.

Idea generation

After all the data is collected and the brief has been set. Designers starts generating ideas from taking design elements from the mood boards. In here designers' knowledge, imagination, skills, and their experience interacting with all three cultural layers come to play. Aside from cultural input, there is a constant need for market and technological know-how input in order to generate successful ideas. Designers create idea sketches in texts and drawings.

Idea improvement

All ideas are saved in a system to be reviewed by the entrepreneurs, designers, marketing, and production team who comment on them and make suggestions for changes and improvements. In some cases, if the culture artefacts are unique, designers need to discuss with cultural experts to see if the idea is developed appropriately and still respects the culture.

Idea selection

After the ideas are improved. Designers create mock ups. The best one is selected based on user desirability, technology feasibility, business viability and cultural appropriateness. Some ideas can be kept for future development because they are not appropriate with the current condition, but these ideas might be useful in the future.

Idea implementation

The next stage is prototyping. To carry out the implementation process successfully, clear responsibilities and teamwork are required. Furthermore, on this stage storytelling strategy to communicate the cultural product design to target market are formulated. The aim is to create a strong brand identity through craftsmanship quality and compelling storytelling that deepens the customer experience.

Idea deployment

The product is finally communicated to the target market through storytelling in the final stage. It is about conditioning and educating potential customers about the product by narrating the crafts production process and the significance of cultural inspiration. At this stage, entrepreneurs and designers must exercise extreme caution in selecting the right cultural story that resonates with the target market, so that the meaning is imprinted in their minds even before they see the product.

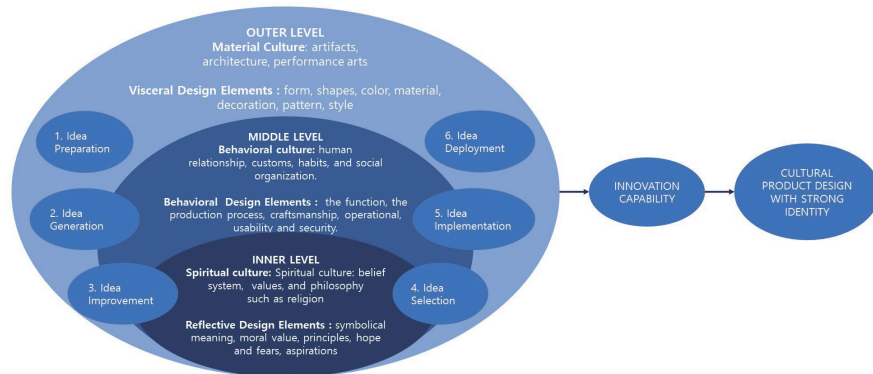


Figure 3 Cultural Product Design as a Key Strategy for Innovation Capability Development Framework

5. Conclusion

Our exploratory study emphasizes a more in-depth understanding of the context how creative social enterprises use cultural product design as idea management system to develop innovation capability. The research was successful in answering the research question:

How does a cultural product design approach foster innovation capability development? By proposing a framework CPD as idea management system. Our research contributes to an expanding body of knowledge on innovation management for cultural sustainability.

With the CPD framework, old traditions and modern lifestyles can be linked. Through a mindful innovation strategy, they connect the past with the present and the future. The end result is a diverse range of new objects, a synthesis of old and new, in a new shape, new technique, new function, and new context, as well as a proposal for a more mindful and sustainable manufacturing method (Luo, 2021). We recommend entrepreneurs should cultivate the CPD framework in order to continuously develop and mature their innovation capability.

Nonetheless, the proposed framework has several advantages. It can inspire young entrepreneurs to seek business opportunities through the development of new products based on their own local culture. The six steps of CPD can help young entrepreneurs investigate multiple layers of culture and transform them into knowledge and ideas for new products with strong product character. The visceral design elements of cultural artifacts contribute to the strong product visual character, and the behavioral and reflective design elements can be used as inspiration for marketing content that touches consumers' emotions through storytelling.

Based on our findings, we recommend that CSEs use behavioral and reflective design elements not only as a marketing strategy, but also as inspiration for new product development. In a competitive market, CSEs must be innovative in transforming local craftsmanship and social tradition into innovative design. It is now obvious that creativity drives business success today, and brands that want to stay on top, promote innovation, and stand out in a highly competitive market require creativity to accelerate them forward.

Regarding the limitations of the paper, the study only manages to study one determinant factors of IC which is idea management. Further research can investigate other factors of innovation capability development such as knowledge management, organizational learning, organizational culture, leadership, collaboration, creativity, and innovation strategy, and how these factors affect CPD as idea management system. The proposed framework is also important for other researchers who want to conduct additional research. The proposed framework can serve as a guideline and reference for researchers looking into how CPD can be used to create a less tangible outcome such as spatial design or service design. Because research in these areas is still in its early stages.

The study concludes that to transform local culture into modern product design, a comprehensive and holistic view of physical culture, behavioral culture, and spiritual culture is required. Because each cultural layer can provide unique design inspiration for new product development and effective marketing strategy through storytelling. CSEs accumulate their innovation capability by taking a holistic view of the cultural layer, and with the comprehensive views of their innovations, they create a strong identity in the global market.

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