

# Back to the Future: A Revelation of Conventional Platform Preference of Digital Creative Ecosystem Entities in Bandung



Santi Novani, Cici Cintyawati, and Lidia Mayangsari

**Abstract** This chapter explores the application of service science to enhance the development of digital creative industry in Bandung, Indonesia. The digital creative industry is one of the creative industry sectors that will grow rapidly in the near future. Our objectives are to analyze the current practices of value co-creation (i.e., collaboration) in the digital creative industry with the theoretical frameworks of service science and to contribute to the value orchestration platform development strategy of the case ecosystem. We applied exploratory research as a methodology. At the first stage, we identify the critical issues of the digital creative industrial cluster. Based on the findings, we developed a value co-creation process model. Secondly, we developed a value orchestration model by evaluating the stakeholder's value co-creation strategies. The results show that stakeholders in the digital creative industry in Bandung prefer a physical platform like a focus group discussion (FGD) over digital platforms. Face-to-face discussion is perceived to result in better business decisions. This finding is in line with the principle of “musyawarah mufakat,” which has become a defining cultural characteristic of Indonesian society.

**Keywords** Service ecosystem innovation · Value orchestration platform · Digital creative industry

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## Introduction

A digital creative industry that relies on technology, creativity, and intellectual property as a major asset has developed quite rapidly in recent years (AIMIA 2005; Sneha 2016; Leung and Bentley 2017). The digital creative industry has a different sub-sector including computers and online games, digital music, visual effects and animation, and software development, as well as e-health, e-tourism, e-commerce, and e-learning software (Proctor-Thomson 2013; AIMIA 2005; Leung and Bentley 2017).

Today, the growth rate of the creative industry in Indonesia is high; however, according to the data compiled by the Indonesian Central Statistics Agency about the Creative Economy (EKRAF), the contribution of the creative economy to the Indonesian GDP is quite low, just around 7% per year (Hermansyah 2016). This presents an opportunity and challenge for the digital creative industry to greatly expand in the near future. In Indonesia, the digital creative industry is predicted to continue to grow, along with the rapid growth in digital technology (Das et al. 2016). Digital technology is expected to have a positive impact on the economic development in Indonesia. The digital technology sector is projected to increase the annual economic income by generating almost USD 150 billion in 2025 (Das et al. 2016). This presents a great challenge and opportunity for developing countries like Indonesia to increase the development of the digital creative industry to generate economic benefits in the long run.

However, to enhance the development of digital creative industry in Indonesia, all stakeholders involved need to collaborate to create a healthy ecosystem. Collaboration has become an important issue today because it is perceived to contribute to innovativeness (Todeva and Knoke 2005). In a collaborative framework, each stakeholder must be able to work together (collaborate) in creating shared value (value co-creation). This concept is very similar to the concept of *gotong-royong* in Indonesia. *Gotong-royong* is a unique characteristic of Indonesia, which continues to be implemented until now. In this concept, people will collaborate to help each other in doing their work. The essence of this concept is collaboration.

In response to the collaboration goal in the ecosystem, it is important to create a platform as a media of communication and coordination among stakeholders. Research by Kijima et al. (2013) on the service ecosystem shows that in the service ecosystem, key players play a role in the platform that orchestrates and facilitates value co-creation by customers and providers. The platform is a strategy pursued by key players as a tool to invite stakeholders to participate in its platform. Afterward, the curation stage gives new meaning to products, information, or a service defined as the result of a collecting, selecting, analyzing, editing, and reexamining process. The platform is then used to facilitate the value co-creation process involving customers, providers, information, and technology based on the new meaning. The final destination of performing a value orchestration strategy is value co-creation that results from empowering customers and providers in a spiral process. Kijima, Rintamki, and Mitronen developed a theory that values an orchestration platform.



**Fig. 1** Two layers of service systems

Figure 1 shows customers and providers encouraged to interact with each other and to co-create values often but without using information and communication technology (ICT).

A value orchestration strategy is a method used by an organization to create a healthy ecosystem with platform offered as key factor to succeed. There are three strategies proposed to orchestrate the platform, i.e., involvement, curation, and empowerment strategy. This paper analyzes a value orchestration platform developed in the digital creative industry. We will discuss the current practices of value co-creation (collaboration) in the digital creative industry using the framework of the service science and strategies used in creating a healthy ecosystem by using value orchestration strategies.

## Theoretical Background

To gain a deeper understanding of this research area, we reviewed literature related to the concept of service science and service ecosystem innovation. Then, to analyze the results of this research, service science was used as the major framework for this research.

### *Value Co-creation in Service Ecosystem*

The service ecosystem is defined as a relatively self-contained, self-adjusting system of resource-integrating actors, shared institutional logics, and mutual value creation through service exchange (Lusch and Vargo 2014). It is combined with what is thought of as the external environment as part of resources that are integrated into the entire value co-creation process and the role of networks as mediators of value co-creation because they enable access to resources (Akaka et al. 2012).

The service-dominant logic challenges the traditional value creation logic as it suggests that value comes from firms to consumers and is co-created by both consumers and firms. Firms are considered contributors that assist consumers in achieving an objective, resolving an issue, or fulfilling demand (Bettencourt et al. 2014). On the other hand, the foundational concept of value co-creation is that consumers will play an active role in cooperating with firms to create value through different stages (Prahalad and Ramaswamy 2004). Value co-creation is envisioned as an exchange of resources where the actors involved will need to interact with each other to enable the exchange of resources, allowing values to be mutually created (Gronroos 2008). The form of exchanged resources can be figurative or concrete. Essentially, this theory suggests that actors fulfill their needs through a resource exchange in which actors obtain their demanded resources from others using social interactions between the parties.

Kijima et al. (2013) reported that there are four phases of value co-creation process: co-experience, co-definition, co-elevation, and co-development. In the co-experience process, actors may need to share a model to co-define a reciprocal understanding regarding the problem that is to be defined. Through the interaction of actors, the capabilities and expectations of others may be identified so that they share and co-define a similar model (Galbrun and Kijima 2009). Co-elevation is a spiral-up process of consumer expectations and the capabilities of providers. Greater value and quality flow from high consumer expectations. Finally, co-development emphasizes the co-innovation originating from collaboration among entities (Novani et al. 2015).

### *Value Orchestration Platform Strategy*

In this study, we will focus on examining the concept of a value orchestration platform. A value platform orchestration is a method used to involve all stakeholders in the ecosystem (Perks et al. 2017). This platform can be a media of interactions (Kijima et al. 2013) to facilitate the collaboration process between providers and customers (Novani et al. 2014). Meanwhile, the role of orchestration is perceived to create and manage the networks in the ecosystem (Perks et al. 2017).

To co-create value among stakeholders, in this case, “customers” and “providers” often require greater effort to help them understand each other so that the platform can be more effective. It is important to create mutual understanding among stakeholders in the ecosystem. Therefore, to develop a value orchestration platform, there are three strategies proposed by Kijima et al. (2013), which are involvement, curation, and empowerment strategies (Novani et al. 2015).

#### 1. Involvement Strategy

Involvement is an initial strategy used to attract and involve people to the platform. To reach the objective of this strategy, we can use a cycle process called sympathize, identify, participate, and share and spread (SIPS). This process is used to generate interest among stakeholders to join the platform (Kijima et al. 2013). People will be connected by using a platform, whether it is a real platform (face-to-face discussion or events) or virtual platform like using ICT (social media, website, etc.). It needs to earn “sympathy” from each stakeholder so that they can join the platform and become interested in collaborating with other stakeholders.

## 2. Curation Strategy

The curation strategy is the next stage used after the stakeholders get involved in the platform. This strategy relates to the way of analyzing the current problems in the digital creative industry and taking steps to overcome them.

## 3. Empowerment Strategy

In this strategy, we will focus on how to make the platform empower the stakeholders so that they can be motivated to interact and collaborate with each other. Each stakeholder is empowered by increasing their aspiration (from the customer side) and capability level (from the provider side).

# Method

This study approached the co-creation platform preferences qualitatively while focusing on understanding the nature of research rather than the quantity of observed characteristics. Social reality is a human creation. Thus, this study interprets and contextualizes meanings that emerge from people’s beliefs and practices. A qualitative multi-case study serves as the methodological framework where it creates a holistic view, bounded system, and elaborative case, through in-depth data collection of several related data sources (Creswell 2012). The knowledge from data collected provides a better understanding of the collaboration platform preference. As taught by Yin (2014), a case study in general is useful for examining contemporary cases without manipulation of behaviors or variables.

In this study, the phenomenon examined is a collaborative platform preference of digital creative ecosystem entities in the cities of Bandung and Cimahi. There are two cases involved: Institute for Innovation and Entrepreneurship Development ITB (LPIK ITB) and Cimahi Techno Park (CTP). This study focused on three sub-sectors of the digital creative industry (animation, video, and application and game development) to gain a better understanding of the use of the platform in enhancing the digital creative industry in Bandung and Cimahi. This study used semi-structured interviews, where it relies on a general interview protocol as a guide. Then the interviewers may address other aspects and give opportunities to the participants to say things that lie outside of the interview guidelines, and the interviewer could probe deeper into an area of interest (Carpenter and Lertpratchya 2016, p. 452). This

paradigm is more appropriate to be used to reach the objective of this study. A “deep and experiential understanding,” “thick descriptions,” and “multiple realities” can be obtained from a qualitative case study approach (Grybovich 2012).

## *Case Selection*

Bandung and Cimahi are two neighboring cities in West Java Province in Indonesia. These cities are known as a hub where innovation, creativity, and entrepreneurship flourish. The government has many programs to improve the quality of life of citizens and to foster economic development in these cities, whose future identities include a reputation for digital creativity. The cities are rich business incubators, but this study limits its scope to two digital creative incubators: the Institute for Innovation and Entrepreneurship Development (LPIK ITB) and Cimahi Techno Park (CTP). These three incubators were selected because they are focused on the incubation program for the digital creative start-ups. This study assumes that by focusing on these two case studies, a deeper understanding of the real condition of the digital creative industry can be achieved.

### 1. *The Institute for Innovation and Entrepreneurship Development ITB (LPIK ITB), Bandung*

LPIK ITB is an incubator set up by ITB to help techno-based start-ups resolve problems faced in Indonesia by developing business innovation. LPIK was selected because in this incubator, there are many digital start-ups, especially start-ups that create software and animation. Also, LPIK is one of the incubators in Bandung that aims to enhance the development of innovation in the business ecosystem.

### 2. *Cimahi Techno Park (CTP)*

CTP is a particular area constructed by the local government to develop technology-based economy industries. CTP was inaugurated in March 2017 and aims to support the development of innovative technology-based businesses. The techno park is an example of the concept of a technology-based area development, which combines a science and technology center to support creative economy development. CTP was selected because it aims to help digital start-ups, especially the start-ups in the field of animation and telematics.

### 3. *The Institute for Innovation and Entrepreneurship Development ITB (LPIK ITB), Bandung*

Institute for Innovation and Entrepreneurship Development ITB (LPIK ITB) is an incubator set up by ITB to help techno-based start-ups resolve problems faced in Indonesia by developing business innovation. LPIK was selected because in this incubator, there are many digital start-ups, especially start-ups that create software and animation. Also, LPIK is one of the incubators in Bandung that aims to enhance the development of innovation in the business ecosystem.

#### 4. *Cimahi Techno Park (CTP)*

Cimahi Techno Park is a unique site constructed by Cimahi's government to develop technology-based economy industries. CTP was inaugurated in March 2017. CTP aims to support the development of the innovative technology-based business. The techno park building reflects the concept of a technology-based area, by combining a science and technology center to support creative economy development. CTP was selected because it aims to help digital start-ups, especially the start-ups in the field of animation and telematics.

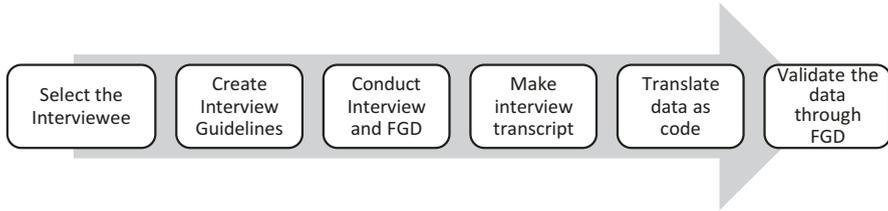
### ***Data Collection***

Since this study aims to analyze the situation and condition of the digital creative ecosystem, where only limited research has been conducted, this research is carried out as exploratory research with a qualitative approach. Following the guidelines of doing exploratory research, we did a search for and review of appropriate literature, conducting in-depth interviews and focus group discussions. Since the stakeholders in the digital creative industry are digital start-ups, government, academia/university, incubators, associations, large enterprises or financial institutions, and customers, we only focused on choosing key people from academia, government, association, digital start-ups, and incubators as our interviewees. We did not choose all possible stakeholders because these five stakeholders were considered acceptable to provide sufficient information to develop a strong model and platform.

In selecting the interviewees, a judgmental sampling strategy was used. This strategy allowed us to choose the samples based on our judgment. In this case, we choose interviewees based on their potential contribution to the digital creative ecosystem but still relevant to fulfill the research objectives of this study.

Ten interviewees were chosen for this research. They included two individuals from government (Bandung and Cimahi), two individuals from incubators (CTP and LPIK), two individuals from academia (lecturers in ITB), two members from a community/association (CCA), and two start-ups that develop animation and software and also participate in an incubation program in LPIK and CTP. These interviewees play key roles in their organization, so their opinion was considered potentially important contributions in developing digital creative industry in Bandung and Cimahi.

The interview process averaged between 30 min and 1 h. The interviewees were asked questions about their role in developing the digital creative industry, problems or issues faced by the digital creative industry in Cimahi and Bandung, and their opinion of how to solve these issues or problems, especially related to the platform needed to enhance the coordination and collaboration of one stakeholder with other stakeholders. The interview process was conducted in Bahasa Indonesia to help them better understand the purpose of the interview and to avoid miscommunication so they can give clear opinions to the interviewer. The interview was conducted



**Fig. 2** Data collection process

using a one-to-one interview to gather different points of view and information from each informant. In addition, before we started the interview, we also asked for permission from each interviewee/informant to record the interview process. This recording was used to help us coded all of important information from the interviewees.

After conducting the interview, we then made transcripts of the interviews, which were then coded to make it easier to analyze the data collected. The data were collected from the stakeholders, which was then analyzed to draw conclusions and make recommendations. From the preliminary studies, one particular issue was selected to be the target of a more focused research question, which was to study the business ecosystem of digital creative industry, especially the existence of a value orchestration platform to increase the health of digital creative ecosystem. From the data collected, we could create a platform model that is more suitable to be used in the digital creative ecosystem.

In addition to the interview, we also conducted a focus group discussion to gather more points of view about the problems and to gather more insight about the solution needed to enhance the development of the digital creative industry in Bandung and Cimahi. This focus group discussion (FGD) was conducted twice. The first FGD on 12 September 2017 was conducted to gather information about the issues faced, and the second FGD on 7 November 2017 was to validate the solution proposed by the researchers. The data collected from the FGD also was also gathered in a transcript and coded.

The figure above explains the stages used to collect the data for this research (Fig. 2).

## ***Data Analysis***

The aims of this study were (1) to analyze the current practices of value co-creation (collaboration) in the digital creative industry using the framework of service science, (2) to contribute to the value orchestration platform development strategy of digital creative industry to be adapted by the stakeholders involved in the ecosystem, and (3) to contribute to the literature on this topic. These objectives drove the focus of this study to enhance the development of the digital creative industry in Indonesia, especially in Bandung.

To reach the aforementioned objectives, there are three stages used to analyze the data of this study. The first stage is case analysis to collect deep information about the application of value co-creation (collaboration) application in the digital creative industry. We also identified and described the digital creative ecosystem and interaction model among stakeholders in the ecosystem. Also, we identified the role of each stakeholder in the ecosystem to understand their potential and involvement in creating a healthy ecosystem. A semi-structured interview was conducted to gain more insight or opinion from each stakeholder about the current condition of the digital creative industry. A triangulation process through focus group discussion was conducted to validate the information obtained from each stakeholder.

In the second stage, a cross-case analysis was conducted (Yin 2014 quoted in Perks et al. 2017). In this stage, a focus group discussion was conducted to identify and analyze the most appropriate platform to be used by the stakeholders in the ecosystem. Then, we focused on the identification of the strategy used in developing a value orchestration platform in the digital creative industry.

In the second stage, we could uncover new strategies to be used in creating a healthy digital creative ecosystem. The last stage then was conducted to validate these strategies by getting feedback from the stakeholders. Each stakeholder gave their opinion about these new strategies whether these strategies were appropriate for them or not. So, the solution derived from this study can be applied to enhance the development of the digital creative industry in Indonesia, especially in Bandung.

## Findings

### *Digital Creative Ecosystem*

A digital creative ecosystem is a place where all of stakeholders are involved in enhancing the digital creative industry development. Based on the interview results, at least seven stakeholders are involved in the digital creative ecosystem, which include digital start-ups, university, government, association/community, customer, industry, and incubator. From the interview results, we tried to outline the ecosystem of digital creative industry in Bandung, as shown in the figure below (Fig. 3).

#### 1. University

The university plays a role as a major researcher that helps start-ups develop their idea or product and facilitate some business education for the start-ups. Also, the university can help start-ups by providing talent needed by start-ups.

#### 2. Government

The government has a role as facilitator and policymaker for the digital creative industry in Indonesia. For example, Indonesia's government created an agency called the Creative Economy Agency (BEKRAF) to assist the president in formulating, assigning, coordinating, and synchronizing policies in the creative economy in Indonesia. The major role of the government in the ecosystem



to give business knowledge to the start-ups. The incubators also can give some funds to the selected start-ups so that they can use these funds to develop their business.

#### 4. Association/Community

Associations have a role as a meeting place for people who concerned about the development of the digital creative industries in Indonesia. An association can be a good media for sharing information and ideas or conducting some events in the digital creative industry.

We have conducted many events aim to attract people. We usually conduct an annual event like the Bandung International Digital Arts Festival to exhibit many digital art collections around the world. (ACC008)

He said that their role as a creative association is through facilitating and conducting some events so that many stakeholders will gather in one place to discuss the issues faced today. In addition, these events also become a platform for digital start-ups in showing or even marketing their products to consumers.

#### 5. Big Company and Financial Institution

The role of a big company and financial institution is to help the digital start-up by providing funds to develop and enhance their business. A big company also can be a partner of start-ups in developing their products.

#### 6. Digital Start-Ups

Digital start-ups are small companies that focus on producing digital technology-based products or services. The role of digital start-ups in the ecosystem is as a company that makes innovative and creative digital products or services.

In this research, the digital start-ups become the major focus of the ecosystem because based on the interview results, the most important thing is to create a healthy ecosystem by increasing the quantity and quality of digital start-ups.

...to make a healthy digital creative ecosystem, it is important to start by enhancing the quality, not only the number of digital start-ups. (ASS027)

It believed that focusing on increasing the quality and quantity of digital start-ups is more than focusing on how to make more customers. This is because, if there is no innovation from start-ups due to the low quality of start-ups, then the number of start-ups will decrease significantly, and the ecosystem will be unbalanced. He thought attracting customers could be the next step to take after start-up businesses are well-developed. This is because the consumer of the digital start-ups is not only a personal customer but also an organizational customer (the government, the universities, or the investors). Also, from the S-D logic perspective, the customer is perceived as a value co-creator, where providers can collaborate with the customer to co-create value. But, in this case, although a customer appears as a stakeholder in the digital creative ecosystem, we found that they still have no role in the current ecosystem. The customer is assumed to be the value consumer only; thus, customers do not seem to have any participation in the ecosystem.

Based on the depth interview results, each stakeholder has different potential and involvement, which is high, medium, or low. The table below explains the potential and involvement of each stakeholder in the digital creative ecosystem in Bandung (Table 1).

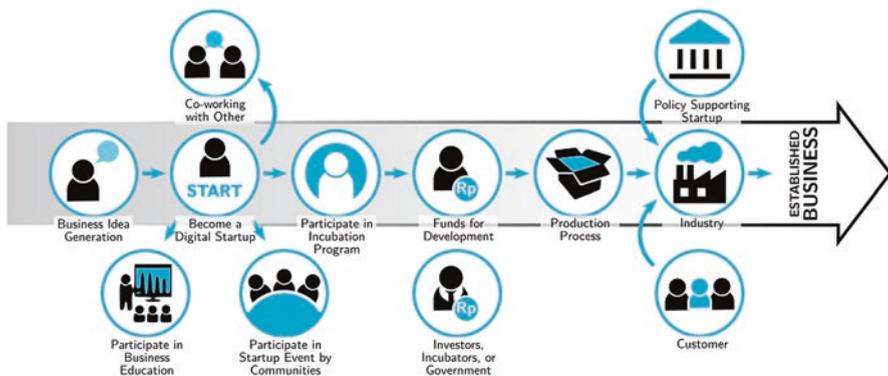
The table below shows that in the digital creative ecosystem, there is a full set of roles, but many parties believe that the involvement of each stakeholder is not optimum. It should further be questioned, whether there is any reason that makes the involvement of each stakeholder not optimum and whether it is caused by the low coordination or different expectations among stakeholders.

### Interaction Process Among Stakeholders

In addition to identifying the digital creative ecosystem model, we then tried to determine and analyze the interactions that occur between the parties involved in the ecosystem. This interaction process can help the stakeholders in understanding the role of each other in the ecosystem. In-depth interviews and observations were conducted to draw that interaction. We tried to explain the interaction happening in the ecosystem through the interaction model below (Fig. 4).

**Table 1** Categorization of stakeholders' role in the ecosystem

Type of stakeholder	Characteristic	
	Potential	Involvement
Digital start-ups	High	High
University/academia	Medium	Medium
Incubator/accelerator	High	High
Association/community	Medium	Medium
Government	High	Medium



**Fig. 4** Interaction model among stakeholders in the digital ecosystem

Since each stakeholder has a different role in the ecosystem, collaboration and innovation in the service ecosystem are necessary to create a healthy ecosystem. But unfortunately, the results of the explorative study show that the collaboration among stakeholders in the digital creative industry is still uncommon. This can be caused by a lack of communication and coordination among stakeholders. Therefore, the role of the platform in the digital creative industry is very critical.

...in fact, there has been collaboration among stakeholders in the ecosystem. However, the collaboration is still very low, whereas the collaboration is necessary to help us in achieving our goals. (ACD007)

Based on the interview results above, collaboration among stakeholders has been happening but remains weak. Furthermore, they also consider the fact that stakeholders have limited resources and capabilities, so they need to integrate and collaborate with others to innovate and deliver better products or services through an orchestrator or independently.

We can create our product by ourselves. We don't need to collaborate with other parties. (DSP012)

But, there are some stakeholders who believe they can achieve their goals without having to collaborate with other stakeholders. This means that the mutual understanding between them is still undeveloped. This can be the result of a lack of communication and interaction among them. The collaboration issue then became a major issue to be solved in this research.

### ***Value Orchestration Platform***

After conducting ten interviewees (from academia, government, incubator, digital start-ups, and association), almost all stakeholders believed that they needed a platform to help them better communicate and coordinate with each other in developing a digital creative industry. The platform is viewed as an effective media in co-creating the value among stakeholders by involving stakeholders, information, and technology in one place.

Platforms can be an effective media for improving coordination and communication among stakeholders. We believe that the platform is necessary to make it easier for us to interact and collaborate with each other so that there is no misunderstanding in the fulfillment of our roles..... (ASS056)

They assumed that a platform is needed to make it easier to communicate with each other. This could be the reason why a platform is important in enhancing collaboration among the stakeholders in the ecosystem. If effective communication and coordination can be achieved through a platform, then this can facilitate the process of value co-creation within the ecosystem.

Before analyzing a platform, we will focus on some issues faced by the stakeholders in the digital creative industry derived from a qualitative approach. These

issues include difficulties in getting funding, a lack of trust among the stakeholders, and lack of human resources (talent and expertise) to develop innovation.

There are several issues faced by us as the digital start-ups like lack of funds, lack of talent.... (DSP034)

We do not collaborate with other parties because there is no guarantee they can be trusted to help us in developing our business. (DSP050)

One issue faced by the digital start-ups is a lack of funding; this means that they have challenges in collecting funds to develop their business. This issue can be solved by collaborating with the incubators, large enterprises, or financial institutions to obtain funding to run the business. Another issue is a lack of talent and expertise. Some digital start-ups have trouble finding appropriate human resources and trained staff to run their business. This is because they need to hire people with necessary capabilities and capacities like people with skills in developing creative digital products. This problem can be solved by collaborating with universities that can provide appropriate talent needed by the start-up. Next, a lack of trust becomes an issue faced by most of the stakeholders. This issue caused by trust among the stakeholders is still limited. Many of them believed that other parties could not be trusted because each was focused on achieving their goals. This can be caused by a lack of communication and interaction among them. These collaboration issues can be a good reason as to why a platform is important in solving these problems.

In realizing the value co-creation process, there is a strategy used to increase collaboration among stakeholders called a value orchestration platform. A value orchestration platform encourages stakeholders to interact with each other to create new values using ICT. In the value orchestration platform model, we will not only focus on the strategy to increase the number of digital start-ups but also the quality of start-ups, so the left side of this platform is digital start-ups itself. Below is a model of the two-sided platform to develop the digital creative industry in Bandung (Fig. 5).

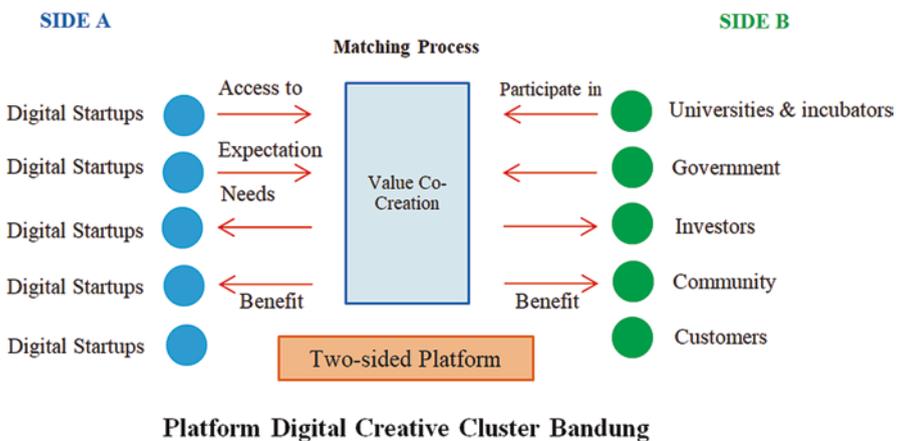


Fig. 5 Model of two-sided platform in the digital creative industry

**Table 2** Stakeholder implementation in value orchestration strategy

Stakeholders	Involvement	Curation	Empowerment
University/ academia	Introduce the vision of “increasing the quality and quantity of digital start-ups”	Willingness to conduct research with digital start-ups	Initiate collaboration with others
	Establishing the real platform: FGD and seminars to introduce the vision of “increasing the quality and quantity of digital start-ups”	Willingness to facilitate a talent development program with digital start-ups	Platform is embedded
		Establishing education program on how to make digital products (animation, software, etc.)	Commit to its role
		Intention to collaborate with SMEs in making digital products	Co-production is embedded
Community	Establishing platform: Baros International Animation Festival (BIAF), <i>Bandung International Digital Arts Festival</i> (BIDAF), IXPO, etc.	Community informing and advertising new trend in the digital creative industry	Orchestrate stakeholders in harmony
Government	Introduced to the vision of “increasing the quality and quantity of digital start-ups”	Initiate 1,000 Digital Startups National Movement program	Regulator function (produce regulation, monitor, and evaluate)
	Approach for media to announce the platform	Convincing stakeholders that digital creative market is national and overseas customer	Shared institution is embedded
	Road show to region to inform the platform	Encouraging stakeholders that digital creative products are one of the multinational products	–
Incubators/ accelerator	Introduced to the vision of “increasing the quality and quantity of digital start-ups”	Facilitating incubation programs (funding and start-up development)	Commit to its role
		Intention to join the platform	Resource/skill sharing

A value orchestration strategy is a strategy used to create a healthy ecosystem by using a platform as the key factors to succeed. The strategy begins with an involvement strategy. An involvement strategy aims to invite stakeholders on board to join the platform. The next strategy is the curation strategy and then the empowerment strategy.

After conducting some in-depth interviews, the process of digital creative stakeholders in a value orchestration strategy is described in Table 2.

## 1. Involvement Strategy

In increasing the spirit of co-creation, it is necessary to have direct involvement from each stakeholder involved in the digital creative ecosystem. Communication is the first step used to increase the understanding of each stakeholder. This process is the first step to create co-experience. If the co-experience is created, then it is expected that concerned stakeholders can understand each other's wishes, expectations, or capabilities so that no one party feels disadvantaged (co-definition).

The concept of value co-creation among stakeholders can be created if each stakeholder can benefit from this co-creation process. For example, the digital start-ups increase their expectations of the facility received, and the government improves the facility provided.

Therefore, each stakeholder needs to know and communicate the benefits they want to attain when they are involved in the digital creative ecosystem. For example, a major issue in the digital creative industry is increasing the quantity and quality of digital start-ups. A university can act as a platform provider and then introduce the vision to other stakeholders. Here each stakeholder needs to know the desire of other stakeholders to create a healthy digital creative ecosystem. Therefore, the platform becomes a media of interaction among stakeholders.

The platform can facilitate communication and coordination among stakeholders (especially between government, digital start-ups, incubator, university, and association). The platform is used to realize the involvement strategy, where the government involves the digital start-ups, incubator, university, and incubators in making some policies for the digital creative industrial cluster. The platform can be either physical or virtual. Physical platforms can be a seminar, focus group discussion (FGD), and other activities or even a place that can facilitate interaction among stakeholders.

Based on the results of exploratory research, the stakeholders in the digital creative industry prefer a physical platform (face-to-face platform) to a virtual platform (social media).

A Face-to-face platform is considered more effective to be applied in the digital creative industry than face-to-screen because in face-to-face communication, an agreement will be easier to reach... (ASS078)

A virtual platform will be difficult to use by the government because not all government staff are interested in using virtual platform like a website or other social media to discuss something. (GVN015)

Almost all stakeholders prefer a face-to-face platform (real platform). This is because, with face-to-face communication, they will be more able to express their needs and expectation. Through activities like seminars, forums, or focus group discussion (FGD), the government can interact with the digital start-ups and other stakeholders to directly hear their opinions and aspirations. Such forums are perceived to be more effective because they can facilitate stakeholders in reaching an agreement.

We can easily discuss the problems faced by the digital creative industry in the forum like this (focus group discussion). (GVN009)

This is in line with a principle held firmly by the Indonesian people, in which decision-making usually is made based on the principle of deliberation or referred to as the principle of *musyawarah mufakat*. To make this process more effective, feedback from each stakeholder is important. Feedback can be used to increase the service of each stakeholder in the ecosystem. For example, while conducting a focus group discussion, many digital start-ups complained about the difficulty of the licensing processes in establishing a limited company (PT). This can be good insight to help the government simplify the licensing process.

Besides using FGD or other forums, there have been some events conducted to involve the digital start-ups and other stakeholders in the digital creative industry. There have been some events conducted by the community before, like the Baros International Animation Festival (BIAF), Bandung International Digital Arts Festival (BIDAF), IXPO (Informatics Explosion), and other events. These events can be a platform to increase the public interest toward the digital creative industry. The government, incubators, universities, or communities can be a facilitator to create some digital creative events that can attract people to get involved in the digital creative industrial cluster.

The involvement strategy is part of the sympathize, identify, participate, and share and spread (SIPS) cycles aimed at fostering public interest in participating in the platform (Dentsu 2011). The platform is used to make people curious and concerned so that people have an interest to know more about the issues faced by the digital creative industrial cluster. This aims to increase the level of public participation in the developing digital creative industry. If people are willing to participate, they tend to spread information to others so that more people will be involved. This can create a spirit of value co-creation among stakeholders. The figure below explains the process used to reach the co-experience and co-definition process (Fig. 6).

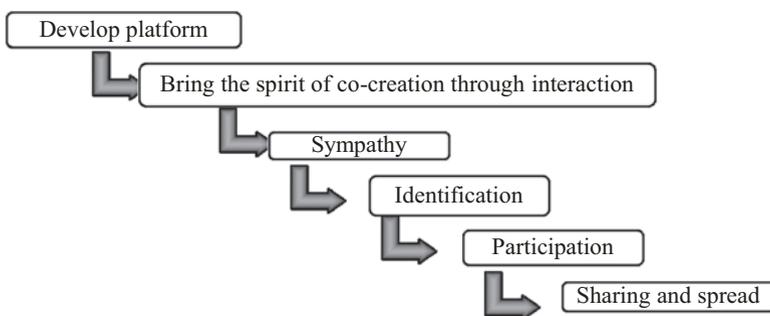


Fig. 6 Process of co-experience and co-definition (Dentsu 2011)

## 2. Curation Strategy

Curation strategy relates to a way of analyzing the current condition of the digital creative industry and taking steps to overcome it. This strategy is used to reach co-elevation and co-development. This strategy is related to proactive steps that need to be taken by the government in overcoming problems in the industry. For example, to increase the number and quality of digital start-ups, the government created the 1,000 Digital Startups National Movement.

BEKRAF has created a program called the 1,000-Digital Startups National Movement. This program aims to give business knowledge to the digital start-ups so they can manage and develop their business. (INC024)

She said that currently, the curation strategy developed by the government is to create the 1000 Digital Startups National Movement. This program aims to increase the number of digital creative start-ups in Indonesia. By creating this program, the government expects that the number of digital creative start-ups will increase to enhance the development of a digital creative ecosystem in Indonesia.

Next, the university or academia has initiated joint research or co-production with digital start-ups and then helps them by providing high-capability talent for the start-ups. Incubators create an incubation program and initiate having others join the platform. The community has informed and advertised a new trend in the digital creative industry. Next, other parties became aware of the platform and intended to join and, further, were inviting others to adhere to the platform.

The involvement and the alertness of each stakeholder in overcoming the existing problems faced by the digital creative industry will make people more interested in participating (be motivated) and can invite others to participate in the ecosystem. Each stakeholder needs to have consistency in realizing every plan that was made so that it can increase the trust among stakeholders. In achieving the plan, each stakeholder needs to consider the benefit and impact of the action taken so that each stakeholder can gain some benefit from this co-creation process. Below are the co-elevation steps in co-creation (Fig. 7).

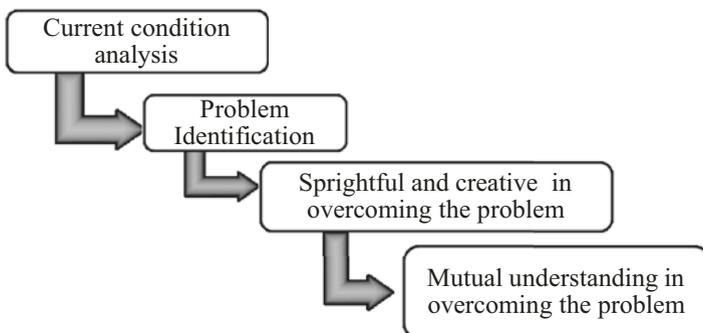


Fig. 7 The process of co-elevation

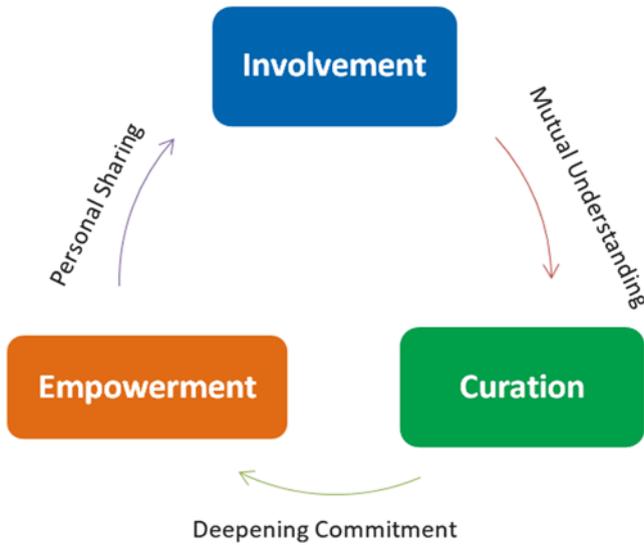


Fig. 8 Cyclic process of value orchestration strategy

### 3. Empowerment Strategy

In the empowerment strategy, each stakeholder uses the platform effectively to increase interactions among each other. Based on the interview and observation results, the empowerment strategy has not yet happened in the digital creative ecosystem. It can be concluded that value orchestration strategies in the digital creative ecosystem through FGD and event platforms have only achieved the involvement and curation stage. This can be due to the lack of effectiveness of FGD and other events aiming to increase the quality and quantity of the digital creative industry.

Learning from the digital creative ecosystem by using the lens of the service industry, we conclude that the process of the value orchestration strategy in the digital creative ecosystem should not stop at the empowerment stage. It should be a cyclic process as proposed in Fig. 8. Also, it is found that there is another stage needed before stepping into the involvement, curation, and empowerment stage. The figure above explains the cycle process needed to create a healthy digital creative ecosystem.

Before the involvement stage, the initiation stage is needed to help people open their minds about the platform. This initiation stage is referred to as personal sharing. The stakeholders are expected to share their personal desire and expectation to make them more interested in joining the platform. The involvement stage is then initiated by inviting the stakeholders to join the platform. In the involvement stage, the stakeholders are expected to have mutual understanding so they can continue the curation stage. Mutual understanding is needed to make the stakeholders choose a good solution by still considering the other stakeholders’ needs. Next, in the curation stage, the orchestrator will propose a new meaning of products, services, or

information (service) to stakeholders to produce better products, services, or information for the entire ecosystem. High commitment to fulfill their role in the ecosystem will be a sign that an ecosystem is ready for the next stage – empowerment. If each stakeholder has high commitment to be a part of the ecosystem, then they will consider their role and responsibility as a part of the ecosystem so the empowerment stage can be achieved. After achieving the empowerment stage, the next issues may appear so the process would be back to the involvement stage when the vision of the platform is achieved. The process does not stop at the end of empowerment process; instead, a new platform will be introduced to stakeholders as a new involvement stage strategy. In the digital creative ecosystem, the current vision of the platform is to increase the quantity and quality of start-ups. When the ecosystem has achieved the platform's objectives, a new platform should be created to keep the ecosystem healthy.

## Discussion and Theoretical Contribution

Value co-creation can be created if each stakeholder is motivated to work together. The motivation can be generated from the interaction and communication in the platform, like motivation to get new knowledge, to interact with other stakeholders, and to create a partnership, or motivation because they feel involved (feel like they are an important part) in developing the digital creative industry, and others. The platform can serve as a media to effective communication and coordination so co-creation can be achieved.

The process of value co-creation in the digital creative industry is quite similar to other creative industries. But, since in this research we only focus on a start-up's development, the customer here is the digital start-ups themselves. Then, the provider may be the government, universities, incubators, or communities that help digital start-ups in developing their business.

Strategies used by the stakeholders in the value co-creation process are unique because almost all stakeholders prefer more to use a physical platform (FGD, forum, discussion, and events). This is because they believe it provides more effective communication if they have face-to-face interaction with the other stakeholders. This concept is consistent with the principle of *musyawarah mufakat*. This principle is still firmly held by most Indonesians in making decisions or solving problems. A face-to-face platform is perceived as the more effective platform to be used in the digital creative industry.

## Limitations and Further Research

One limitation of this research is that it was conducted with a limited number of participants from Bandung. For future research, the scope of the research could be broader, for example, using an Indonesian case study as a whole. In addition, future research could be more specific or, for example, focusing on animation, software development, or the game sub-sector so that the exploration could be deeper using one or two specific sub-sectors of the digital creative industry.

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