

Culture as an Engine for Start-up Networks in a Cultural and Creative Product-based Small Service

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Abstract--This research aims to explore the role of culture as a driver for starting up a cultural and creative product-based small service, particularly in discussing the embroidery shoe business in Taiwan. The antecedent studies have heavily explored the driver of innovation in different product-based business. However, the exploration about using culture as a driver for innovation and start-up network building remains undeveloped, and there is still little examination on the development pattern of culture and creative start-up and what role the culture really plays at early stage. As a result, this study conducts a qualitative approach using participant observational studies and self-immersion approach through a single case study of embroidery shoe business. The findings reveal that the role of culture in start-up process will follow three phases including "culture as content", "culture to be preserved", and "culture to be regenerated". Meanwhile, instead of business partners in a network, there are also cultural partners in the start-up networks of cultural and creative business, thereby creating a cultural network for cultural events, workshop, exhibition, educational activity, and sales channel. Finally, the results also show that the role of incubator in the start-up network should more emphasize the service at demand side for cultural preservation and regeneration, instead of the conventional incubation service at supply side.

I. INTRODUCTION

This research aims to explore the role of culture as a driver for starting up a cultural and creative product-based small service, particularly in discussing the embroidery shoe business in Taiwan. The antecedent studies have heavily explored the driver of innovation in different product-based business. However, the cultural and creative product-based service, such as traditional craft, is facing the stress of sustainability, and struggling in search of a new engine of innovation, especially in new start-ups. Some literature reveals that through the culture inspiration designers could revoke consumers inner thought to rethink about their life experience. The most important way for this cultural and creative product-based service is the operational process of collaboration between designers, craft artisans and the manufacturing industry. However, the exploration about using culture as a driver for innovation and start-up network building remains undeveloped, and there is still little examination on the development pattern of culture and creative start-up and what role the culture really plays at early stage.

In light with this research gap, the research question to be addressed is that how the culture plays as an engine for start-up networks in a cultural and creative product-based small

service. As a result, to understand the process using culture as an engine for innovation, this study conducts a qualitative approach using participant observational studies and self-immersion approach through a single case study of embroidery shoe business. The grounded theory coding is also applied to analyze the collected qualitative data, including the process of open coding, axial coding, and selective coding. This research result could lead to a new model of cultural and creative product-based start-ups and see the possibilities of preservation and regeneration of craft culture.

This paper is organized as follows. In Section II, the concept of entrepreneurial process in literature is reviewed, and the role of start-up network is also introduced in Section III. These literature reviews reveal that the characteristic of cultural and creative business were not fully discussed in current entrepreneurship studies yet, and there is also little exploration about the role of culture in cultural and creative start-up networks. Then, the development of cultural and creative start-up is presented in Section IV. The examination of entrepreneurship on cultural and creative business in literature still remains undeveloped. As a result, the research method and analytical framework adopted in this research are introduced in Section V. The results of our case study using qualitative analysis are discussed in four stages in Section VI. The discussion to explore the role of culture as engine for start-up network is summarized in Section VII. Finally the conclusions are presented in Section VIII.

II. ENTREPRENEURIAL PROCESS

To review the development of entrepreneurship and the evolving role of start-up networks, there has been a tremendous wave of interest in the dynamic view of entrepreneurial process. Some studies indicated that entrepreneurial phenomenon can be categorized in three perspectives. The first dimension is the basic classification, "industrial people or technology R & D people who start a business", which refers to the company people were working in belong to the same industry with their entrepreneurship. Second dimension is "correlation in industries" which means the entrepreneur before was working in the related industry. The last perspective is "industry life cycle stages". Industry in different stages provides various opportunities [9].

In addition, venture creation is essentially risk taking process under bounded rationality, opportunism, uncertainty and environmental complexity. Many researchers have different aspects on categories entrepreneurial process. For instance, Ruhnka and Yang [26] argued that development

process of a creative entrepreneur can be segmented into five periods, including seed stage, start-up stage, the second period, the third stage and exit stage. In seed stage, there was usually no development at this stage beyond idea or concepts. Sometimes, there is no a detailed business plan been completed. There is usually no significant investment in this stage as well. Next, in start-up stage, the business concept has generally progressed to the point of having a formal business plan together with some analysis of market for the proposed product or service. In second period, products are readily produced and prepared to enter markets, usually, after a firm established for one to two years. In third stage, the venture identified characteristics appeared in increasing diversity. Finally, in exit stage, companies are expected to complete its development.

Moreover, four general phases proposed by Blanchflower and Oswald [7] are also used. This category claims that in any life cycle model regularities occur in organizational development, and these regularities can be segmented into discrete stages. There are four general phases appear to all organization, including start-up or entrepreneur stage, growth or expansion stage, domain protection, and stability stage. More recently, a trilogy in start-up stage for creative enterprises is also provided to explore the entrepreneurial process of creative talents [37]. This trilogy includes engagement, development, and delivery stage. In engagement stage, it is the time taking to plan who your prospective clients are and to persuade them to buy products or services from you. Secondly, in development stage, it is the time taking to develop your product or service for your customers. At last, in delivery stage, it is the time taking to get your product or service to your customer.

Another strand to study the entrepreneurial process is the focus on entrepreneurial incentive, such as entrepreneurship education or the characteristic of entrepreneurs. In general, entrepreneurship activities create new businesses which provide job opportunities and intensify competition. Entrepreneurship has a close relationship with economic growth [1]. Furthermore, entrepreneurship is the main factor that supports innovation [27]. Noticing the importance of entrepreneurship activities, entrepreneurship education was applied at school. Significantly, the rapid growth of entrepreneurship education has not been limited to science, engineering, and business programs but cuts across all academic fields and appears at the undergraduate and graduate levels of postsecondary education [23]. Entrepreneurship education indeed influences students' choices on their careers. Usually, fresh graduate is faced with two alternatives- either as self-employed or employed in an organization [31].

III. ROLE OF START-UP NETWORK

Before entering into the discussion of start-up network, we need to look on the two key factors in the entrepreneur

process- scale of the venture and the legitimacy of it [17]. The small scale of a start-up business leads to consequence of resource limitation [5]. On the other hand, the low legitimacy happened while starting up a business because those stakeholders do not found value in your star-up business initially. Entrepreneurs should conquer the problems of legitimacy in order to persuade stakeholders to believe them and furthermore share their unique information and resource [29]. Constructing of entrepreneur network will be the strategy for entrepreneurs to gathering resources [3]. In other words, venturing entrepreneurs develop social capital, namely social relationship and trust as mean to access reliable business information in order to overcome information asymmetry. The initial connection in the entrepreneur network has positive impacts on the development of a start-up business [11]. In addition, Amit and Zott [4] proposed three important factors in the entrepreneur process, involving content, governance and structure. This is a network based entrepreneurial research discussing on networks evolution in entrepreneurial development process.

A number of studies also explored the development of start-up network and how it is formulated and created. Researchers indicated that the characteristics and the features of a business network determined entrepreneur success. Social capital plays a critical role in the development of entrepreneur network [28]. Social capital facilitates access to broader sources of information and improves information's quality, relevance, and timeliness [2]. Besides, social ties allow the individual to reach outside his or her immediate contacts to secure a wider range of information [10]. This is considered constructing a network for an individual or a group. In addition, a network process proposed by Larson and Starr [19] also explain the most complete piece of theorizing about network processes in the entrepreneurial context. The first network development stage, essential connection, due to the need of access to resources, entrepreneur tends to construct relationship to exchange resources. These networks connected with entrepreneur social capital based on social and emotion reasons. Then, second stage, networking diversity, means the experience from the first stage feed backing to the entrepreneur. It is considered a process of constructing trust, learning from errors which form abundant exchange and communication. Finally, the last stage of network development, multiple-layering network, evolves from the last stage. The difference between the last two stages is that the due to the economic motivation the entrepreneurial activities and services used to exchange resources. Another phenomenon happened in this stage is that the network relationship gradually connected closely which is better happened to the relations with suppliers. Moreover, the connection in this network development stage is important and critical to the venture. After successfully experience these three stages of network development, the initial personal connection through social interaction will be turned into a strong network [22].

To be elaborated, Hite and Hesterly [16] also indicate that in the emerging phase, start-up relies on primary personal network which evolves from an identity-based network considered as strongest ties because those ties will usually provide resources. Later in the initial growth of development process, entrepreneurs will expand their network to include weak ties. In the early growth phase, it is necessary to develop a more diverse network that is rich in weak ties, to gain information on new business leads. However, other researchers did not have the same point of view. Greve and Salaff [15] argue that the mix of strong and weak ties develops in a different way. A network that is rich in weak ties in the emergence phase enhances the search for new information concerning the development of an entrepreneur’s business plan. Reviewing from literatures, both strong and weak ties are useful and contribute to the emergence and growth of firms, although they are beneficial in different ways and at different stages of a company’s development [13]. Increasing frequency of interactions, such personal ties may develop into a stronger-tie relationship [25]. From the perspective of the strength of tie, Granovetter [14] defined the strength of ties as the intensity and diversities of relationships. The difference between strong and weak ties is based on four criteria: the frequency of contact, the emotional intensity of relationship, the degree of intimacy and reciprocal commitments between actors involved. The relations will promote the development of trust, the transfer of fine-grained information and tacit knowledge, and joint problem solving in development of entrepreneurship [30].

IV. CULTURAL AND CREATIVE START-UP

As an emergent and undefined industry sector, there is still little examination of cultural and creative industry on its start-up research issues. Until very recently, new discussions have been made in the comparison of different cultural and creative sectors, especially in their development and business operation.

According to the report of UNESCO May 2012: Culture: a driver and an enabler of sustainable development 1 we can have highly expectation that culture can be a powerful driver for development, with community-wide social, economic and environmental impacts. This statement is proved by statistics, indicators and data on the cultural sector in the past decade. Some statistics indicate that cultural and creative industries represent one of the most rapidly expanding sectors in the global economy with a growth rate of 17.6 % in the Middle East, 13.9 % in Africa, 11.9 % in South America, 9.7 % in Asia, 6.9 % in Oceania, and 4.3 % in North and Central America². Though the exporting market of the cultural and creative industry, European countries still have the advantage of culture export. However, regarding from the proportion of export sales between developed countries and developing countries, ratio of the two had nearly pull by year by 1996 from 2.4 to 1 and 1.44 to 1 in 2005. This indicates that the

developing countries had prominent outcomes on cultural and creative industry.

To be elaborated, taking Taiwan as a case, viewing from the international developing situation what Taiwan encounters is the competition of “content”, the creativity, knowledge, construction of value and standard...etc., which are the core elements of national competitiveness. In order to enhance the industry competitiveness and national soft power, Taiwan government promoted the “culture creative industry development program” in “Challenge2008: National development plan” since2002. This program aims to promote the public creativity and it has a great influence on the development of economic transition and public life style. Moreover, in 2010, Taiwanese government also established the development law of CCI to stimulate the development of CCI based on the diverse culture and creative content of social environment. The establishment of the development law indirectly also helps emerging markets of CCI (Taiwan CCI Development Report, 2011, Taiwan Ministry of Culture). Table 1 lists the category of CCI in Taiwan, herein CCI formed by four main areas which include 15+1 industries.

TABLE 1 CATEGORY OF CULTURAL AND CREATIVE INDUSTRY IN TAIWAN

Areas	Industries (15+1)
Art & Literature	Visual art
	Music and performing art
	Culture heritage
	Craft industry
Media	Movie industry
	Radio and Television industry
	Publish industry
	Advertising industry
	Pop music industry
Design	Product design
	Visual design
	Design brand fashion industry
	Archetecture design indstry
	Creative living industry
Digital content	Digital design
Other	Others

By literature, more information was given on the craft industry while examining the development of cultural and creative start-ups in this CCI category. Comparing to other culture and creative industries, the craft industry is more developed. In 2008 UNCTAD (United Nations Conference on Trade and Development) economic report indicated that craft industry is the one led by developing countries in international culture and creative industry market. Within 10 years, during 1996~2005, the export of craft industry in developing countries increased nearly two times. In Taiwan, recently, the cooperation of craft industry with design, fashion and technology has shown the great potential of diverse development. Local craft is a reflection of the relationship between humans and their environment within their historical, cultural, and social contexts.

Some studies also raise the issues regarding the craft-related start-ups from the perspective of design management and innovation. Some design researches claim that customer behaviors have shift from products that compete on price and availability to products that compete through their uniqueness, design value and aesthetic appeal. This shift may contribute to the change of the product system which now is more focusing on small batches of high quality products that target niche markets (Creative and Culture Skills, 2009). Therefore, the market opportunities for the craft industries are emerging based on this trend that people tend to search for uniqueness to identify them. The material and textile qualities of crafts are being popular in the modern markets [18]. The trend of co-creation approach also depicts the new pattern of craft-related start-ups. For example, Pannozzo [35] argued that design innovation rely on reusing existing knowledge or re combining existing knowledge in new and innovative ways. As a result, specific techniques and craft styles may be passed generationally within families or a close knit community. Additionally, Chuenrudeemol, Boonlaor, and Kongkanan [29] also propose two models in regaining local crafts peoples' knowledge to develop new products. These two models are the master/apprentice model and the co-creation model. Design practitioners attempting to develop local crafts should directly engage themselves in a local context by interacting and co-creating with the artisan community. Co-creation by artisans and designers employs collective creativity as an approach to the development of local craft.

V. RESEARCH DESIGN

This section will elaborate the research design in this paper, to answer the research question regarding the role of culture for start-up networks in a cultural and creative product-based small service. The research method in this study for qualitative analysis will be firstly introduced, including case study method, participant observational studies, and self-immersed approach. Secondly, the selected case, "hsiu", an embroidery shoe shop in Taiwan, will also be explained as follows. Finally, a matrix of start-up network as an analytical framework will be presented based on the results of mentioned literature reviews.

A. Research Method

This research adopts a single case study to explore the context of research question and aims to answer this how-question using qualitative approach, such as participant observational and self-immersed approaches. Three research methods, encompassing case study, participant observational study, and self-immersed approach will be reviewed in this section as follows.

1. Case Study Method:

Yin [32][33] has depicted there are different research strategies of case study depending on their ways of collecting and analyzing empirical evidence. These different strategies

can be divided into exploratory, descriptive and explanatory case studies according to several conditions, consisting of the type of research question posed, the extent of control an investigator has over actual behavioral events, and the degree of focus on contemporary as opposed to historical events. Meanwhile, Yin [34] also argued the type of case study design includes single-case designs and multiple-case design. The single-case design is an appropriate design under circumstances when it represents the critical case in testing a well-formulated theory or where the case represents an extreme or unique case. In contrast, the evidence from multiple-case design is often considered more compelling, and the overall study is therefore regarded as being more robust. In addition, some studies also reveal, for the design of case study method, five components need to be considered encompassing, a study's questions, its proposition, its unit of analysis, the logic linking the data to the propositions, and the criteria for interpreting the findings [20] [34].

The issue about collecting case studies from the evidence data is also important. Yin [34] suggests evidence for case studies may come from six sources: documents, archival records, interviews, direct observation, participant-observation, and physical artifacts. The use of these six sources calls for slightly different skills and methodological procedures. Some overriding principles regarding the reliability and validity of data and the quality of research are also critical to any data collection effort in doing case studies. These include the use of: multiple sources of evidence, a case study database, and a chain of evidence meaning an explicit links between the questions asked, the data collected, and the conclusion drawn.

Finally, to explore the data from case study evidence, data analysis consisting of examining, tabulating, or otherwise recombining the evidence, to address the initial propositions of a study is also worthy noting. Some literatures reveal that four dominant analytic techniques should be used including pattern matching, explanation building, time series analysis, and program logic model [12][34][6]. Each is applicable whether a study involves a single-case or a multiple-case design, and every case study should consider these techniques.

2. Participant Observational Studies:

Whereas interviews and questionnaires elicit response from the subjects, it is possible to gather data without asking questions of respondents. People can be observed in their nature work environment or in the lab setting, and their activities and behaviors. There are two types of observation roles- nonparticipant-observer and participant observer. For this research, the participant observer is conducted. The researcher enters the organization or the research setting, becoming part of the work team. This research method assists researcher to study the dynamic process.

However, information observed from the researcher's point of view is likely to be prone to observer bias. The specific advantages and disadvantages to gathering data through observation are listed below [36]. Three major

advantages of observational studies include: (i) The information obtained through observation of events as they occur normally which is generally more reliable; (ii) It is relatively easy to observe certain groups of individuals; and (iii) It is easier to note the effects of environmental influences on specific outcomes. On the other hand, several disadvantages of observational studies also involve: (i) It is necessary for the observer to be physically present; (ii) It is slow, tedious and expensive to collect data; (iii) Because of long periods for which subjects are observed, observer fatigue is easily set in, which may bias the record data; and (iv) Observers have to be trained in what and how to observe, and ways to avoid observer bias. As a result, to minimize the observer bias in a research, observer should be trained in how observe and what to record. Good observational studies also establish inter-observer reliability.

3. Self-immersion Approach:

This research also adopts self-immersion approach for heuristic analysis. This heuristic research is a method that was developed by Moustakas [24] which describes how personal experience is used as a valid research method. Discovery is at the heart of heuristic research. Polanyi maintains that all research begins with collecting clues that are interesting, but are not immediately obvious for themselves, a good problem, something puzzling and promising, is half of discovery. One must be able to see a problem and sense a direction towards a solution where others see none, and eventually arrive at a solution. Discovery is creative and requires originality [24].

B. Selection of Case

To study the research question concerning the role of culture as an engine for start-up networks in cultural and creative industry, this research select a empirical case in cultural and creative product-based small service as a single case study. A new start-up in Taiwan, “hsiu”, as an embroidery shoe shop, is selected in research target for analyzing. Founded in 2013 by three 22-year-old girls full of passion and aspiration for Taiwanese artifact industry, “hsiu” was devoted to the tradition of making embroidered shoes, which integrate hand-made stitching and traditional embroidering into the aesthetics of the local lifestyle. All of this adds up to retro fashion and elegance to women’s feet with their shoes.

The product and service strategy of this new start-up is to apply new design of shoes shape and new design of embroidered pattern to traditional embroidered shoes. Producing creative handmade embroidered shoes suit for today’s fashion trend. Their advantages in human resource is the talents with great cultural enthusiasm not only continuous making these comfortable embroidered shoes but also emphasizing on design of modern aesthetic with cultural meaning. In addition, the professional technique is the R&D capabilities to enhance the comfort of shoes and R&D on new embroidery materials. At last, their brand vision will continues to expand its operations worldwide to become a prominent designer label. Adopting aesthetics from Taiwanese culture and perfecting various embroidery techniques, the aim of this business will be to convey Taiwan cultural elements with oriental symbolism and modern elements, and creating groundbreaking, timeless styles.

C. Analytical Framework

This section will summarize the results from literature reviews on start-up network, and construct an analytical framework to explore the building process regarding how a new start-up can develop its own external network with the original support of internal network. Three elements of network [4] and three development phases of network building [19] will be used to construct an evaluated matrix shown as Table 2. The three main elements of network are content, governance and structure. By literature definition, the “content” represents the needed internal resource; the “governance” represents the exchanged resource like stuff, information or resource; and the “structure” represents the external connection [4]. In addition, three development phases of network building, especially in entrepreneurship networking, used in this research encompasses essential connection phase, networking diversity phase, and multiple-layer network phase, revealing an evolving process of start-ups to create their own sustainable network.

This study also design an analytical process in case study based on the proposed research question. Figure 1 show this structure and four-step questions will be explored in hsiu’s case using participant observational studies and self-immersion approach.

TABLE 2 THE MATRIX DESIGNED FOR START-UP NETWORKS

	Content	Governance	Structure
Essential connection			
Networking diversity			
Multiple-layering network			

Three stages of entrepreneurial networking activity (Larson and Starr, 1993)

Three elements of network development (Amit and Zott, 2001)

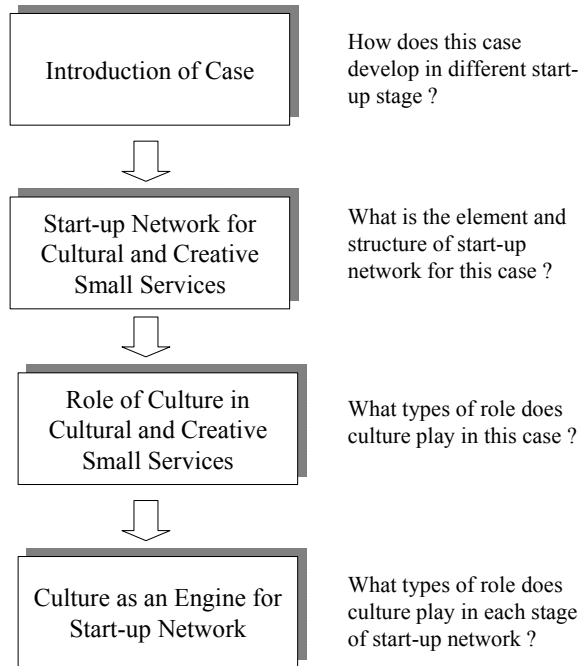


Figure 1 Analytical structure in case study

VI. RESEARCH RESULT

This section will show the research result. The findings will be introduced as follows based on the structure in Figure 1.

A. Introduction of Case

This section will present the result from case study. The development process of the case “hsiu”, especially in its start-up network will be described as follows, divided into three stages of entrepreneurial process.

1. Engagement Stage

The start-up idea of “hsiu” was planted in September 2012 on the campus. Through this class, the entrepreneur invested a long existing embroidered shoes store in Tainan. In the process, the entrepreneur realized that the beauty of craft and was eager to make people to reemphasize this meaningful thing. At the same time, “hsiu” was incubated by the incubator CCIDRC at National Cheng Kung University. Just before the end of incubation registration, the business luckily noticed the information and decided to take a chance. Finally, “hsiu” was chosen to be one of the incubated firms. The establishment of CCIDRC is that the original incubator in NCKU focusing on assisting the technology-based firms to do the technology transfer; however, it found out that there were another type of firms which were not based on technology and since they were creation-based firms, it is difficult to do any technology transfer. Therefore, under serious consideration, NCKU decided to establish CCIDRC to assist this kind of firms.

After contract with CCIRDC, CCIRDC becomes the main pusher of “hsiu”. Because of the first exhibition “2013 good to work” held by CCIRDC, hsiu only spend two months finishing the first version of creative embroidered shoes. In these two months, hsiu had intensive discussion on exhibiting the brand core value, design of brand image and developing the products. Rethinking of the process, hsiu realized that the social network plays a vital role in the star-up stage. With a stable social network, hsiu got important resources such as information of shoes producer. More detailed network relationship will be elaborated in next chapter. For hsiu, the exhibition of “2013 good to work” becomes the milestone of hsiu, triggering the following entrepreneurship activities.

The main services that the CCIRDC provided are workshop, consulting, lecture, and exhibition which are considered as sharing resource to all the incubatees. The incubating approach is to do grouping to the all of related cultural and creative incubatees. Four groups were set and each group will have one to two mentors in local creative industry who have fruitful experience cultivating in CCI.

2. Development Stage

In the second stage, there are two ways to think of hsiu’s design. Firstly, new patterns transferred from traditional ones with cultural meaning. Secondly, new patterns were inspired from daily life. The design concepts highlight the meaning of culture. Culture is constantly redefined with time and human beings. To preserve the culture is not only to remain the originality but to evaluate with the cultural value. In addition, in design process, there are over an hundred complicated steps to produce a pair of embroidered shoes, from the design of shoe last to sampling the shoes. “hsiu” can simplify these complicated processes to seven major steps to easy understand the production process.

This stage is also the phase about “to meet with the public”. There are six exhibitions that hsiu attended in this development stage. For instance, hsiu attend the “2013 Good to Work” exhibition from June to July in 2013, this was their first exhibition. What made the exhibition different is that it shows the working scenario behind our products. In this exhibition, hsiu turned the start-up idea into reality. Moreover, from August to September, hsiu was invited to attend the event in Anping tree house. Because of the topic of this event- creative cultural clustering of Anping, the design of the second series embroidered shoes are based on that. After the last exhibition, hsiu decided to change the manufacturer because of some technical reasons. Therefore, hsiu searched for the new one through the entrepreneur’s social networks.

In addition, due to the incubation, hsiu gets the opportunity to cooperate with Zhen Xing Shoes Store. Through the incubation networks hsiu did not have to pay extra effort to find the external partners. Incubation center CCIRDC will be the platform for incubated firms to find their external partner to create more value for their brand.

3. Delivery Stage

For a start-up business, the facing challenges are the connection to market channel. Due to incubation network, which assist hsiu to step in related channel such as culture-based department stores. Firstly, due to the impact of social media, the “Shin Kong Mitsukosh” department store invites hsiu to sell its embroidered shoes as their opening activities. It is because managing strategy of the newly-opened department store is focusing on cultural creative industry, which is a great opportunity for hsiu to show the embroidered shoes to the public. Secondly, due to the mentors in CCIRDC incubator, hsiu gets the opportunity to sell shoes in Hayashi department store. The two mentors who are the key person in the development of Tainan city, also participate in several projects. They are also willing to share even cluster potential incubated firms to join in some programs. On the other hands, these incubated firms can pay less effort to get information at the same time increasing the accessibility to success.

Based on the above case study result, the evolving role of start-up network of “hsiu” can be schematized in Figure 2 dividing into three phase, including engagement, development, and delivery stages.

B. Start-up Network for Cultural and Creative Small Services

For a cultural and creative product-based small service, the element and functional role of start-up network is critical. Based on the findings from our case study using the participant observational study and self-immersion approach, the start-up network of “hsiu” in different stage can be explored and summarized into the proposed analytical framework. Table 3 shows the functional roles of start-up network, including its content, governance, and structure in each network stage. From the case study results of “hsiu”, the findings also reveals that how a start-up network for cultural

and creative small services can be formulated and what elements this network should possess.

C. Role of Culture in Cultural and Creative Small Services

To explore the role of culture in cultural and creative product-based small services, the characteristics of cultural and creative business can be analyzed from the views of their cultural partners. Based on the development process of “hsiu”, this case study reveals that the culture of embroidery skills will play three different roles in the development process. Figure 3 shows these three phases in hsiu’s start-up process, including “culture as content”, “culture to be preserved”, and “culture to be regenerated”. In meanwhile, these three roles of culture also reflect to three corresponding phases of hsiu to develop product, service, and product service system (PSS). In their model, the product service system represents an operational model as a pattern of sales channel, e-commerce platform, event, or exhibition.

D. Culture as an Engine for Start-up Network

To explore the role of culture in hsiu’s start-up network, the results reveal that the cultural element needs to be used as product content in the early stage, even before the entrepreneurial process. Secondly, while the start-up network is created, cultural preservation and regeneration will play different roles in different network stage. Based on the findings from our case study using the participant observational study and self-immersion approach, the functional role of cultural preservation and regeneration in hsiu’s start-up network can be explored and summarized into the proposed analytical framework. Table 4 shows the results, including its role by network content, governance, and structure in each stage. The item in the table without under line represents the role of cultural preservation, and another item with under line means the role of cultural regeneration.

TABLE 3 START-UP NETWORK FOR CULTURAL AND CREATIVE SERVICES

	Content	Governance	Structure
Essential connection	• Identify the internal resource	• Collect the <u>necessary resource</u> in internal network	• Connect necessary partners in internal network
Networking diversity	• Develop the product/service by internal resource	• Share the necessary resource with partners in internal network	• Build a supply and marketing network for new product/service
Multiple-layering network	• Develop the product/service portfolio by external resource	• Deliver the necessary resource to partners in external network	• Formulate a strategic alliance in external network

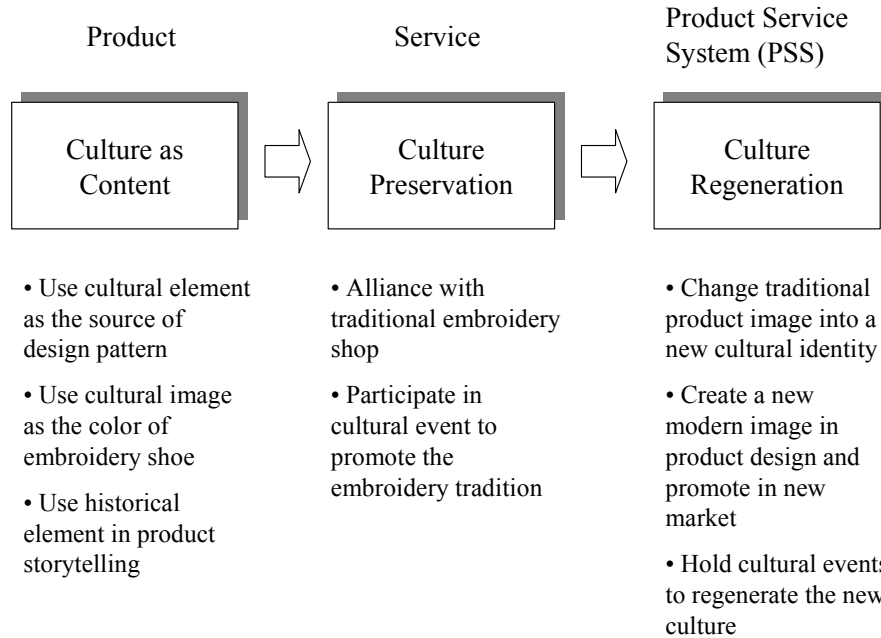


Figure 3 Role of culture in cultural and creative services

TABLE 4 ROLE OF CULTURE IN START-UP NETWORK FOR CULTURAL AND CREATIVE SERVICES

	Content	Governance	Structure
Essential connection	<ul style="list-style-type: none"> • Identify the cultural capital • Identify the possible cultural interaction 	<ul style="list-style-type: none"> • Collect the cultural resource in the network • Collect other necessary resource in the network 	<ul style="list-style-type: none"> • Connect necessary cultural partners • Connect other necessary partners
Networking diversity	<ul style="list-style-type: none"> • Develop the product/service for promoting culture • Promote the product/service to new segment 	<ul style="list-style-type: none"> • Share the cultural resource with partners in the network • Participate in the cultural event for cultural interaction 	<ul style="list-style-type: none"> • Build a supply network for new product/service • Build a marketing network for new product/service
Multiple-layering network	<ul style="list-style-type: none"> • Develop the product/service portfolio for promoting culture • Promote the product/service to multiple segment 	<ul style="list-style-type: none"> • Deliver the cultural resource in the network • Hold the cultural event for cultural interaction 	<ul style="list-style-type: none"> • Formulate a strategic alliance for new product/service • Build a education system for promoting culture

VII. DISCUSSIONS

To explore the role of culture for cultural and creative product-based service, several research findings can be elaborated from the case study results in Table 4. Firstly, for most of new start-up, their start-up networks are often formulated by their business partners in a supply chain, thereby creating a production or service delivery process. However, for cultural and creative start-ups, there are also cultural partners in their innovation system and start-up networks instead of conventional business partners. These cultural partners will create a specific cultural network in this

start-up network for cultural events, workshop, exhibition, educational activity, and sales channel.

Secondly, the role of culture in start-up network for cultural preservation and regeneration need to be developed in a sequence. The measure about cultural preservation should be taken firstly to sustain the value of traditional craft and test the market, then, the strategies for cultural regeneration can be further followed to create new product image and market segmentation by integrating related cultural partner and sector. This process will possibly create a new cultural identity as a new engine for start-up network and sustainable business model.

In addition, for cultural and creative product-based small services, the purpose of developing cultural regeneration should be marketing. From the view of start-up network creation, conventional business partners in a network cannot connect to new sales channel. The new cultural identity from cultural regeneration will possibly pour new element into marketing, and link to new cultural partner as sales channels to expand the scope of start-up networks. Taking the case study in this research as example, traditional channel such as shoe shops or fashion store cannot help “hsiu” create new market, and only the new cultural partner based on cultural regeneration, such as cultural events, workshop, and culture-based department store, assist them expand the new cultural identity in a start-up network.

Finally, the role of incubator in a start-up network for cultural and creative business can also be examined. In hsiu’s case, the incubator CCIRDC is a center focusing on cultural and creative incubatees, and the proposed services mostly focus on the creation of cultural platform and network building, instead of conventional business services offered by other incubators. This finding reveals that the role of culture in cultural and creative start-up network will redefine the role of incubator for culture based business. The incubation service and network should emphasize the service at demand side for cultural preservation and regeneration, instead of the conventional incubation service at supply side.

VIII. CONCLUSIONS

This research aims to explore the role of culture as a driver for starting up a cultural and creative product-based small service, particularly in discussing the embroidery shoe business in Taiwan. The case study findings reveal that the role of culture in start-up process will follow three phases including “culture as content”, “culture to be preserved”, and “culture to be regenerated”. Meanwhile, instead of business partners in a network, there are also cultural partners in the start-up networks of cultural and creative business, thereby creating a specific cultural network for cultural events, workshop, exhibition, educational activity, and sales channel. In operational, cultural preservation should be developed firstly to sustain the value of traditional craft, and then the strategies for cultural regeneration can be further conducted to create new product image and market by integrating related cultural partner and sector. This new cultural identity from cultural regeneration will also pour new elements into marketing, and link to new cultural partner as sales channels to expand the scope of start-up networks. Finally, for the role of incubator in the start-up network, the findings also reveal that the incubation service should more emphasize the service at demand side for cultural preservation and regeneration, instead of the conventional incubation service at supply side.

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