

Developing Service Innovation Model for the Cultural Industry Park in Taiwan

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Abstract: The purpose of this research is to identify important constructs in service innovations, and understand the information and communication technology (ICT) roles of industrial services innovation management processes within cultural industry park. This study examines these phenomena not only from a technology viewpoint but also from a soft innovation perspective. Through the collection and integration of literature related to service innovation, the cultural production system and the service system, we propose a new service innovation model for cultural creative industry park. Case studies of the Cultural Creative Industry Park at NTUA (National Taiwan University of Arts) and the Gold Ecological Park in Taiwan illustrate our framework.

Key words: *Service innovation, ICTs, Case study, Innovation management, Cultural creative park*

1. Introduction

Culture has become an important source of economic growth and job creation, particularly within advanced urban economies [2, 3, 13, 21]. This has raised questions as to the objectification of culture for economic purposes, particularly as the policy discourse around creative industries shifts from a cultural to an innovational perspective [5]. Cultural parks aim to expose visitors to the experiences of the living historical stories of a people or landscape, so that they may feel immersed within a given culture. There is never a boundary between a cultural park and the surrounding local community. Many communities exist either within or very near cultural parks, and as a result, a cultural park requires unconventional management techniques, such as deeper and more frequent communication with local residents. Cultural parks represent the cultural atmosphere chronologically inherited within a regional space. This area of space is developed in the context of a cultural environment. It connects established settlements in the context of history and space to form the concept and direction of developing a cultural park, which serves the purpose of familiarizing residents with local history and the development of local culture. Domestic research concerning cultural parks in Taiwan is conducted mostly on the reutilization of vacant space, operational management, marketing activities, formation and transformation park zoning, industry selection and assessment, and the local culture industry. Few attentions are paid to the innovative services of culture parks [1].

The aim of this paper is to contribute to service innovation research with special attention to non-technological dimensions. We believe that this area—the “soft side” of service innovation—is largely neglected despite its enormous importance. The term “soft” is used to stress innovation that is specifically related to people and organizations, markets and relationships, knowledge and integration, and meanings and experiences [22]. These are established and emerging dimensions that our research indicates as crucial in building a sustainable

competitive advantage. To this end, we identify the dimensions of service innovations that are necessary for the further development of the cultural creative industry, especially a cultural creative industry park. Therefore, this study analyzes the progress of innovation activities in such a park and explores the value transformation and value repositioning from the service science point of view. In doing so, this paper proposes a new cultural industrial service innovation model that examines service innovation at the firm level within a Taiwanese cultural creative industry park. In addition to this conceptual framework, we also analyze the impact of information and communication technologies on service innovation activities.

2. Theoretical Background

2.1 Connotation of service innovation

The service innovation generally could be divided into product innovation, process innovation, transfer innovation, market innovation, technological innovation, organizational innovation, structural innovation, specialization innovation, and so on [6]. Among them, product innovation, process innovation and transfer innovation were based on the innovation of application technological, and they closely related with the development of technological innovation. However, more innovations were non-technical innovations, such as organizational innovation, structural innovation, and specialization innovation. This article holds that the connotation of innovative services are as follows: in the service process, enterprise apply new ideas and new technologies to reform and change existing services processes and products, improve the existing service quality and service efficiency, create new value for customers, and ultimately form the competitive advantage of service activities.

2.2 Cultural production system

Cultural production is the process by which cultural products (including goods, artifacts, visual and experiential objects, services, and art forms) are created, transformed, and diffused into the constitution of consumer culture [15, 17]. A central premise of the cultural production process is that culture itself is constructed and negotiated by cultural actors (producers, intermediaries, consumers) through an interplay of symbolic and sensory modes of experience and the concomitant meaning systems in which the cultural actors are engaged [27]. According to the models set forth by Joy [11, 12], Kozinets [14], McCracken [19], and Solomon [24], individuals and organizations involved in the production and diffusion of the arts and aesthetics contribute to the creation of symbolic meaning and the transfer of these meanings to cultural products.

Solomon [23] discusses a complementary conceptualization of the cultural production system. According to Solomon [23], the set of individuals and organizations that create and market a cultural product is a cultural production system. The cultural production and distribution process entails relationships among a complex network of organizations that both facilitate and regulate the innovation process [10]. A cultural industry system is comprised of all organizations engaged in the process of filtering new ideas as they flow from the creative subsystem to the managerial subsystem, communications subsystem, cultural gatekeepers, and lastly to consumers. The creative subsystem is responsible for generating new symbols or ideas. The managerial subsystem is responsible for selecting new ideas, making them tangible, mass producing these ideas, and then managing their distribution. The communications subsystem is responsible for giving meaning to the new ideas and providing

them with symbolic sets of attributes that are communicated to consumers. Finally, cultural gatekeepers are responsible for filtering the overflow of information and materials intended for consumers [20, 24, 25].

3. Model Development

3.1 Method

The purpose of this research is to identify important constructs in service innovations, and understand the information and communication technology (ICT) roles of industrial services innovation management processes in the cultural creative industry park. Therefore, this paper evaluates research on innovative service models ranging from the more traditional technology model to modern service innovation models and the more recent integration model [4]. Through the collection and integration of the literature related to service innovation, the cultural production system and the service system, we propose a new service innovation model for cultural creative industries. We use in-depth interviews and secondary data analysis to assess the impact of ICTs on a cultural creative industry park at the National Taiwan University of Arts (NTUA) and the Gold Ecological Park. Two of our interviewers are industry experts who have worked for the IT professional institutions for more than 15 years and cooperated with NTUA on IT projects. The other three interviewers are teachers of related departments in the College of Design at NTUA, or experienced staff in the Gold Ecological Park. Building on these conceptual and theoretical roots, it is possible to develop a proposed framework for characterizing a service innovation model in cultural creative industry park. To be useful, such a framework must be reasonably simple, logical, comprehensive, and operationally meaningful. In seeking generalization, the extant perspectives tend to oversimplify a firm's model. The challenge is to produce a framework that is applicable to firms in general but which serves the needs of the individual enterprise. Accordingly, the framework becomes a customizable tool that encourages the enterprise to focus on how value can be created by works of service innovation.

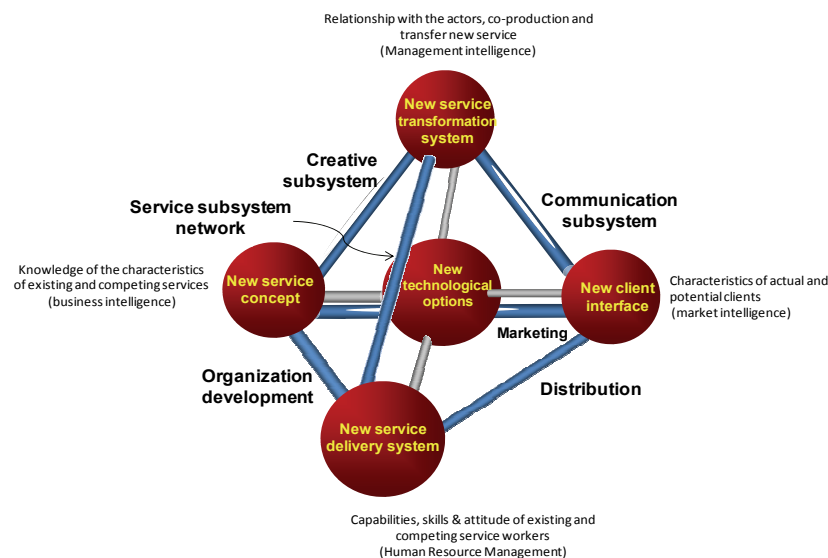


Figure.1 The five-dimension model of service innovation

3.2 Constructing a conceptual framework

The conceptual model of service innovation in cultural industries maps the following dimensions: new service concepts, new client interface, new service delivery system/organization, new services transformation system, and

technological options. The five dimensions relate, respectively, to the knowledge of the characteristics of existing and competing services (business intelligence); the characteristics of actual and potential clients (market intelligence); the relationship with actors, co-production and the transformation of new services (management intelligence); the firm's capabilities, skills & attitudes with existing and competing service workers (human resource management); and available and supporting technological options (technological intelligence). These five dimensions are further explored below and in Figure 1. The fifth area, “new service transformation systems,” is a combined process, and the linking of the other four constructs to improve organization development, creative sub-systems and communication sub-systems, so as to create better value for the customer.

4. Case Study and Analysis

4.1 Case Briefing

The Cultural Creative Industry Park was established by NTUA in the Fu-Jhou suburb of Banciao District in New Taipei City, only ten minutes walk from the main campus. There are four craft companies that are incorporated with the Innovation and Incubation Center of NTUA. Inside are additional ceramic and metal studios, with each studio providing hands-on workshops using different craft materials. The public can physically understand and experience fascinating crafts from ceramic, glass, metal and fabric. The goal of the cultural creative industry park is to combine artistic craftsmanship and economy with service design, and ultimately establish NTUA as a distinctive trademark of the park. To accomplish the goal, the “ABCDE Plan” was initiated by NTUA. The “ABCDE Plan” refers to one of the park's slogans, referenced in Figure 2: to turn “Art” into “Business,” we need “Creativity” and “Design” [16, 17, 18], which allows the creative products to be transformed into “E-business.” NTUA has established this link between art and business and combined creativity and design through three divisions: Our Museum, Our Studio and Our Factory. In particular, NTUA tries to use E-business (ICTs) to integrate design, culture, artistic craftsmanship, creativity, service innovation and customer preferences at the NTUA Cultural Creative Industry Park.

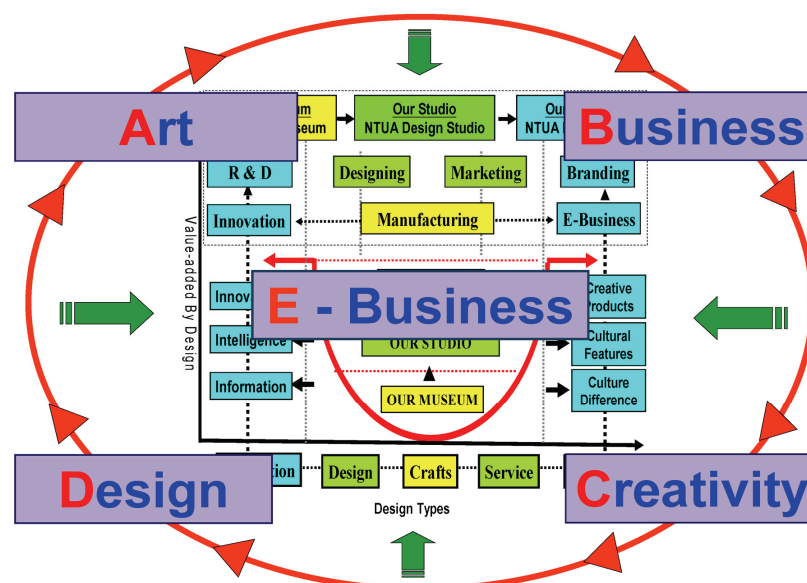


Figure.2 The concept of the E-business model

Moreover, the Gold Ecological Park is located in the “mountain town” Jinguashi, in Reuifang district, New Taipei City and has rich historical, cultural and natural resources. It is the first public museum in Taiwan which combines site preservation and the living environment with the museum operation. In contrast to most museums, which limit their activities and operation to some clear range, the Gold Ecological Park is a museum consisting of the living environment and existing stories. There is no boundary between the museum park and the local community. This unconventional type museum requires unconventional ways to manage, such as deeper and more frequent communication with the local inhabitants since the people are just living within or very close to the museum park. The Gold Ecological Park stresses the objects naturally existing in the environment. These are also the specialty of the museum park. From the service innovation perspective, it aims to provide the visitors with the experiences of the living stories of the people, the nature and the landscape, so that they may feel the aura and become refreshed both mentally and physically.

4.2 The Five-dimension Model Demonstration

We present the five dimensions that we believe are helpful in describing and analyzing service innovations in the following section. This model is not statistically tested, but should be interpreted as a tool to map and characterize various service innovations.

1. **New Service Concept: Our (Art) Museum.** To implement the ABCDE plan, NTUA established an art museum in 2007, known as “Our Museum,” for the purpose of linking professional teaching with the museum’s research, education, and display functions. At the same time the museum presents cultural and aesthetic content about art and artifacts to the public. For the Gold Ecological Park, different professionals proposed the ideas of site preservation and local development in the beginning. The cultural and natural heritage was thought to be better preserved as a “museum park”, instead of a “museum”. The concept of eco-museum then was discussed and considered as a planning inspiration. The name of an “ecological park” was generated afterward.
2. **New Client Interfaces: Our Factory.** Due to the challenging environment of cultural creative industries, NTUA is devoted to developing its regional and international networks by operating a cultural creative industry park, known as “Our Factory.” NTUA has established the link between “Art” and “Business.” With this client interface, all small crafts, metal and ceramic companies can be incorporated into the Innovation and Incubation Center of NTUA. Moreover, in order to establish the Gold Ecological Museum Park, the New Taipei City government coordinated the three parties (Taiwan Power Company, Taiwan Sugar Company, and the museum team) to release their properties as the base of this project and to achieve the cooperation. The museum staff visited influential local leaders for building up a friendly relationship and at the same time interviewed them for recording the local memories, and enquiring their suggestions and advices.
3. **New Service Delivery System/Organization: Our (Design) Studio.** Developing craftsmanship and creativity as well as competences related to the arts are of strategic importance to NTUA. Therefore, a design studio, known as “Our Studio,” was subsequently set up at the College of Design in NTUA with the purpose of providing innovative products. The college invests heavily in human resource management, including improving the capabilities and attitudes of both the students and craft workers. For the Gold Ecological Park, all the departments of city government supported this project together under the instruction of the magistrate. The official city-based meetings were also held regularly for solving the potential problems including the plan

of area transportation, the strategy of marketing, communication with companies, the responses from local inhabitants, problems of finance and so on.

4. New Services Transformation System: Cultural production system. Here, one example is the establishment of the NTUA Cultural Creative Industry Park with the cooperation of New Taipei City providing an innovative service through the Holiday Cultural Bus Tour. The Holiday Cultural Bus Tour is operated between NTUA main campus, the NTUA Cultural Creative Industry Park, and the Lin Family Mansion and Garden. The major purpose is to promote the cultural creative development of Banciao District, where the university is located. The tour journeys first to The Lin Family Mansion and Garden for experiencing cultural aesthetics. Then, based on the structure of Our Museum, Our Studio and Our Factory of NTUA, tour participants can appreciate the art of Our Museum, experience crafts in Our Studio, and purchase creative products from Our Factory. The purpose of this customer journey is to showcase the aesthetic experience by connecting design and culture so as to synthesize humanity, creativity, cultural production creativities, and technology. In this way, it achieves the aim of service design promotion in public [7, 8, 9]. As for the Gold Ecological Park, it is a museum consisting of the living environment and existing stories. So it is different from most other museums, which limit the activities and operations to some clear range. The image of the park comes from its spontaneous features of the nature environment and cultural landscape. The concept of ecology is included in the presentation of its CIS (Corporate Identity System) design. The characteristics of the Gold Ecological Park are illustrated in the ink impressionistic rendition of Mount Teapot. The revolving calligraphy letter “G” stands for: “Gold” and “Green”. In this way, the Gold Ecological Park is integrating humanity resources, and it is developing into a museum park that has life. Now it become natural field of environmental education, to promote ecological tourism as well as to investigate and research natural resources, to maintain and preserve ecological landscapes, to rebirth original plants, and to popularize natural education. It also intended to benefit the local development with cultural tourism.
5. New Technological Options: Integrate all constructs to E-business. Technology mainly plays a role as a facilitating or enabling factor in various innovations. Creativity and business are the elements for reaching an aesthetic economy, similar to the often-used concept of “Think Globally. Act Locally.” These elements process the “Digital Archive” of Our Museum through the cultural creativities of Our Studio, producing cultural products in Our Factory in order to establish local industry-making aesthetic and economical products. The use of ICT channels could also reach a new factory, create new experiences for consumers and provide a co-production platform for designers and consumers. The majority of firms in NTUA Cultural Creative Industry Park and the Environmental Educational Center of the Gold Ecological Park become more effective by using technology-related techniques such as online access to art and knowledge databases, downloadable and streamed multimedia content (audio, video, podcasts), virtual museums, QR-code attachment for products, company dedicated websites, wireless connectivity enabling live feeding of information and tools, and so on.

To demonstrate the proposed five-dimension model, an integral example is the “cultural creative fashion show” at the Cultural Creative Industry Park of NTUA. This specific event combines aesthetics, creativity, fashion, technology, design, and commercial networks. Government officials are invited, and students, teachers, art personnel, and the cultural creative community are also involved. Students perform as the catwalk models to show their creative products, which are designed by themselves in Our Studio and supervised by professors and co-

produced with Our Factory in the park. Moreover, students are able to communicate their inspiration and products to potential customers using this new style service. Through the creative stage and exhibition layout, the application of multimedia technology combined with creative products show that all participants can really feel involved in the aesthetics of art and life. Moreover, there are two big annual events, based on the two main developing directions of the Gold Ecological Park: The Gold Carnival, and the Festival of Silver Grass. The Gold Carnival is held in summer, and the main theme is goldsmith art. Festival of Silver Grass is held in autumn, and the subject is eco-tourism and eco-education. The museum sets out to promote gold art and metal craftsmanship, and to flourish creative industries in the local area. There were more than ten thousand people clustering in the museum park each day during the holidays. Two annual events were regularly held every year and recently the special exhibition with multimedia technology application is refreshed to attract more visitors. As a result, the idea of turning “Art” into “Business” is realized, while the process is combined with “Creativity,” “Design,” and “E-business” to transform the aesthetic values into commerce by service innovation [16, 17, 18].

4.3 The Roles of ICTs in Service Innovation

Although one of our foci is on non-technological innovation, we do not deny the importance of technology for innovation. It is important to understand the role technology plays in the different dimensions of service innovation. In our two cases, it plays the role of: 1) enhancing the effectiveness of a particular strategy, 2) virtually integrating and widening the boundaries of the physical environment, 3) a platform for information distribution, and 4) value co-creation within the service systems networks. Specifically, the new services transformation system echo stylistic innovation dealing with two types of changes in cultural industry parks: (1) aesthetics through changes in looks, shapes, and forms, and (2) changes in symbolic value expressed through new meaning and language of products [26].

5. Conclusions

The goal of the cultural industry park is to combine artistic craftsmanship and economy with service design, and ultimately establish NTUA as a distinctive trademark of the park. To accomplish the goal, the “ABCDE Plan” was initiated by NTUA. The “ABCDE Plan” refers to one of the park’s slogans, referenced in Figure 2: to turn “Art” into “Business,” we need “Creativity” and “Design” [16, 17, 18], which allows the creative products to be transformed into “E-business.” NTUA has established this link between art and business and combined creativity and design through three divisions: Our Museum, Our Studio and Our Factory. In particular, NTUA tries to use E-business (ICTs) to integrate design, culture, artistic craftsmanship, creativity, service innovation and customer preferences at the NTUA Cultural Creative Industry Park. This article allows the specificity of each construct to be emphasized, especially in terms of new services transformation systems and the role of technology. From our case studies, we found the convergence of cultural production systems and service science on the study of service systems to be particularly helpful in establishing a basis for systematic service innovation. The services transformation system dimension identifies the relationship with actors, value co-creation and transforms new service in enhancing management intelligence. We do not only see the generation of new service models but also perceive previous models increasing their efficiency and flexibility.

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