Building global dynamic capabilities through innovation: A case study of Taiwan's cultural organizations

Chun-Liang Chen*, Yi-Long Jaw1

Graduate Institute of International Business, National Taiwan University, Taipei, Taiwan, ROC

1. Introduction

In the era of the knowledge-based economy, the rapidly changing and uncertain business environment means that the biggest challenge facing enterprises is how to exploit the current market and gain a competitive advantage. A number of studies have found that innovation is the most important tool that enterprises use to maintain a competitive advantage (e.g., Kimberly and Evanisko, 1981; Damanpour and Evan, 1984; Badawy, 1993; Rabelo and Speller, 2005). The survival of enterprises in the modern era depends on how they improve their organizational innovation capabilities. Growth is a dynamic resource-based process with its origin and effect in the resources possessed by the firm. At the same time, sustainable development provides an opportunity to enhance competitiveness and growth, as it can become a source of inspiration for innovative efforts (Hall and Vredenburg, 2003; Hart and Milstein, 1999).

* Corresponding author at: 3Fl. No. 95, Sec. 2, Roosevelt Road, Taipei, Taiwan. Tel.: +886 2 23662327; fax: +886 2 23678540.
E-mail addresses: jun@moeasmea.gov.tw (C.-L. Chen), yljaw@management.ntu.edu.tw (Y.-L. Jaw).
1 Postal address: No. 1, Sec. 4, Roosevelt Road, Taipei, Taiwan. Tel.: +886 2 33662833; Fax: +886 2 33662833.

Cultural industries now form a distinct sector in which the creation, production, and marketing of goods and services are combined. Cultural industries include media organizations, film production companies, audiovisual sphere, the publishing, multimedia outlets, architecture, the performing arts, plastic arts, and cultural tourism (UNESCO, 2000). Cultural industries produce consumer goods that convey lifestyles and values with both an informative and entertainment function, and cultural services that cover intangible activities, such as the promotion of the performing arts, films, and values.

In recent years, China has emerged as a major player in the arena of international trade, exporting a very large number of cultural products. In 1996, cultural products occupied top spot in the hierarchy of exports to the US. Although there is virtual unanimity among economists that the gains stemming from globalization of business are enormous for the nations of the world, concern about its perceived negative effects on national cultural industries has also been widely expressed (Anderson et al., 2000; Dollar and Kraay, 2001; Sutherland, 2002; Wei and Wu, 2001). Even so, few researchers have focused on the impact of globalization on national specific cultural industries. With the increasing trend towards globalization, the modernization of specific cultural industries may help Taiwan maintain its national competitive advantages in the future.

Despite a growing number of reports on Taiwan’s cultural industries, many questions have yet to be fully addressed (Carola Cohen-Friedländer, 2007, for German Commission for UNESCO), for example: Are the industries capable of developing original and unique cultural products and creative services with sustainable effects? What are the challenges that cultural industries must face in terms of the media, IT, copyright, and technology development? Pitelis and Verbeke (2007) noted that international business scholars and managers need to focus on R&D investments and the systemic rejuvenation of technology-related firm specific advantages (FSAs), as well as on dynamic capabilities and the melding of internationally transferable FSAs which permeate beyond the location-bound. In recent years, discussions have concentrated on export and trade activities of all kinds of service activities. Little attention has been paid to knowledge intensive and technology intensive services, which have experienced one of the greatest increases in internationalization, and their contribution to the process of globalization (Miozzo and Miles, 2004). Therefore, it would be analytically interesting and useful to study the international operations of cultural corporations with creativities in Taiwan.

In this paper, we analyze the global dynamic capabilities, FSAs, and international expansion of cultural corporations from the viewpoint of sustainable development. We also explore how local cultural firms outside the core areas of cultural production gain access to new global networks of cultural production and consumption. Taiwanese research into the management of innovative multidisciplinary cultural production teams in cultural industries poses a number of interesting questions, three of which are addressed in this paper: (1) How can we identify organizational global dynamic capabilities in a local cultural production organization? (2) How do technology-based FSAs affect cultural businesses? (3) How can specific cultural organizations expand globally?

The balance of the paper is organized as follows. Section 2 provides a literature review. In Section 3, we present the research methodology. Section 4 describes the case company’s background, organizational innovations, technology-based FSAs and international activities. Section 5 discusses the elements of the global dynamic capabilities that underlay sustainable innovation. Finally, in Section 6, we present our conclusion and directions for future research.

2. Literature review

2.1. Cultural industries, content production, and continuous innovation

Cultural industries are characterized by high degrees of creativity in their production and distribution processes (Bank et al., 2000; DCMS, 1998, 2000). Although many cultural industries rely heavily on creativity and innovation as their core competencies, it is difficult to maintain that this reliance sets these industries apart from others. This paper is based on the concept that cultural industries are economic actors involved in the production of goods and services whose value is primarily or largely determined by their aesthetic, semiotic, sensory, or experiential content. In this paper, we follow the perspectives posited by Hesmondhalgh (2002) that the main dynamics in cultural...
industries are: the high levels of risk to be found in the cultural industries; high production costs and low reproduction costs; semi-public goods and the need to create scarcity; and various distinctive responses to these conditions, including offsetting misses against hits, concentration and integration, artificial scarcity, formatting and loose/tight control of production and circulation. Despite all the changes in the last 20 years, including the massive expansion of the cultural industries, and their increasing importance in social and economic life, cultural businesses still have to manage the above problems, which derive from the difficulties of managing creativity and information (Badawy, 2008).

Digitization has created a new market triggering the demand for electronic products and services and one of the most striking effects of such a process is that this has increased the demand for content (Davison and Hyland, 2006). Cultural content can be created from a range of different resources and cultural assets can feed such needs. Consequently, cultural production can be seen as a full partner of scientific research and technology development in forging a knowledge-based economy. De Laurentis and Carla (2006) illustrated how a more fundamental change of the cultural industries transformation relates to the dynamic of knowledge exploration and exploitation within the local and global digital value chain. He argued that the knowledge economy can be built by focusing on the value afforded by cultural assets in developing content for emerging media activities that link with digital convergence. Thus, instead of dealing with capital-intensive or knowledge-intensive organizations, managers must adapt to a new form of organization, namely a symbol-intensive organization, which is characterized by the need to manage the process of symbol creation and the continuous innovation associated with cultural production (Barney, 1986). Burns and Stalker (1971) described innovation as ‘the effort to create purposeful, focused change in an enterprise’ s economic or social potential’ . Burns and Stalker (1971) viewed the management of innovation as a product of the social processes taking place within organizations. The act of innovation is often considered in terms of the generation and commercialization of new ideas of economic or competitive value (Ahmed, 1998). According to Boer (2002), continuous innovation is the ongoing interaction between operations, incremental improvements, learning, and radical innovation aimed at effectively combining operational effectiveness and strategic flexibility, exploitation and exploration. In seeking to develop a culture of continuous innovation, an organization needs to focus on its capability to renew all or part of its managerial competencies and also create radically new competencies to achieve congruence with the changing business environment (Teece et al., 1997). Bessant and Boer (2002) argue that knowledge-based organizations need to engage in continuous innovation that is operationally effective in exploitation and strategically flexible in exploration. Yet, recent developments in society, markets, technology, and industry suggest that leading organizations need to find configurations of processes, procedures, people, technologies and organizational arrangements that allow them to be continuously innovative (Bessant and Boer, 2002; Damanpour and Wischnevsky, 2006; Priedhorsky and Hill, 2006).

2.2. RBV, dynamic capabilities, and global dynamic capabilities

One of the more promising theories to evolve in the strategic management field over recent years is the resource-based view (RBV) of a firm. Focusing on a firm-level analysis, RBV suggests that differences in firms’ performances are primarily the result of resource heterogeneity across firms (Wernerfelt, 1984). Firms that can accumulate resources and capabilities that are rare, valuable, non-substitutable, and imperfectly imitable will achieve an advantage over competitors (Barney, 1991). A distinction is normally made between resources and capabilities, in that “resources are stocks of available factors that are owned or controlled by the organization and capabilities are an organization’s capacity to deploy resources” (Amit and Schoemaker, 1993, p. 35). Resources tend to be tradable in markets and can be divided into tangible assets, such as financial and physical capital, and intangible assets, such as human and organizational capital (Barney, 1986). By contrast, capabilities reside in routines that are intrinsically intangible and embedded in the firm, and thus cannot be traded on factor markets (Kogut and Zander, 1992).

Drawing on the evolutionary theory of a firm, the dynamic capabilities approach to a firm emerged as an extension of RBV. Dynamic capabilities are defined as “the subset of competence/capabilities
which allow the firm to create new products and processes, and respond to changing market circumstances” (Teece et al., 1997, p. 510). The processes “specifically the processes to integrate, reconfigure, gain and release resources, use resources to match and even create market change” (Eisenhardt and Martin, 2000, p. 1107). Moreover, they are vital to gaining and sustaining a competitive advantage in industries where both technology and the market change (Verona and Ravasi, 2003). As such, they are considered as antecedent organizational and strategic routines that enable managers to acquire resources, which they then modify, integrate, and recombine to generate new value-creating strategies. Eisenhardt and Martin (2000), and Zahra and George (2002a, b) maintain that a firm’s routines or processes can form unique dynamic capabilities which allow the organization to make strategic changes that give it the flexibility to operate in dynamic markets. In summary, dynamic capabilities reflect an organization’s ability to derive new and innovative forms of competitive advantage based on distinctive managerial and organizational processes, the firm’s specific asset position, and the evolutionary path it follows (Ayuso et al., 2006). Lawson and Samson (2001) applied a dynamic capabilities approach to the investigation of innovation. Many authors highlight the differences between an organization’s well-established or ‘mainstream’ activities and its innovative or ‘new stream’ activities (Badawy, 1993; Kanter, 1989). Lawson and Samson proposed a model that operationalizes this global dynamic capability as seven elements: vision and strategy; harnessing the competence base; organizational intelligence; creativity and ideas management; organizational structure and systems; culture and climate; and management of technology. The concept of dynamic capabilities has proved useful in some other marketing areas. Previous studies have considered their use in the analysis of a firm’s international expansion (Luo, 2000; Griffith and Harvey, 2001; Grant, 1996), while Hart and Sharma (2004) analyzed the capabilities required to address the challenges of globalized and rapidly changing markets.

Global dynamic capabilities are difficult-to-imitate combinations of resources, including effective coordination of inter-organizational relationships, on a global basis that can give a firm a competitive advantage (Dyer and Singh, 1998; Teece et al., 1997). Such capabilities have two primary characteristics: (1) they develop systemic global coherence while recognizing the unique features of each country’s environment to facilitate customization of an individual country’s strategies and; (2) they adapt, integrate, and reconfigure internal and external assets to match opportunities in the global marketplace (Eisenhardt and Martin, 2000; Teece et al., 1997). Global dynamic capabilities are derived by a firm leveraging its internal and external asset. This strategy enhances its power in its global relationships, and enables it to coordinate inter-organizational activities and respond rapidly, in a flexible manner, to global competitors’ strategies (Eisenhardt and Martin, 2000; Teece et al., 1997). Internal and external assets provide the power base necessary to develop strategies that enable a firm to gain a global competitive advantage, thus providing an “action” dimension to the resource and market-based views of the firm (Eisenhardt and Martin, 2000; Srivastava et al., 1998). In this paper, the capabilities are seen as critical to actually linking managerial services with productive opportunities.

2.3. Firm-specific advantages and business performance improvement

Drawing on industrial organization theory, Hymer (1960) was the first to acknowledge implicitly the need for some proprietary advantages as a necessary condition for foreign activities. These advantages are based on the possession and use of certain intangible assets, such as patents, trademarks, and management skills, which enable a firm to reach high levels of technical or price efficiency (Caves, 1996). The intangible advantages of multinational enterprises (MNEs) are the mechanisms that foreign firms use to compensate for the lack of access to local resources, and for the additional costs associated with doing business abroad. They are geographically mobile and can be transferred within the MNE across national borders. Hymer explicitly acknowledged that these are areas in which foreign firms have advantages over local firms, and these advantages enable them to compete successfully in foreign countries.

In their brilliant integrative work, Buckley and Casson (2007) show that a theory for describing MNE growth should consider both (incremental) geographic diversification into new markets, following Penrosean logic, as well as product innovation. Johnston and Paladino (2007) discuss the
relationship between resources (especially knowledge), management of those resources and innovation in MNEs. They identify the determinants of a knowledge management system's usage, including groupware (e.g., intranets), knowledge repositories (e.g., IT-databases), and intellectual capital audits. The determinants of such usage, which is instrumental in mobilizing unused productive resources and therefore constitutes a transactional FSA, include the MNE's level of technology (in many cases the result of R&D), and the prevailing level of electronic communication.

Following Dutta and Manzoni (1999) framework of business performance improvement, we try to evaluate the specific contribution of a technological or market change in the marketplace. Adopting the perspective of business performance improvements, two types of change may contribute to the transformation of value chains (Malone and Crowston, 1994; Kim and Mauborgne, 1997). These are: (1) Business Opportunities: offering new products and services increases the penetration of the companies that participate in the market. When massive demand for a new product or service is generated, a number of companies try to offer similar products/services; thus, new co-operative efforts begin and serious changes are made. With continuing growth, businesses are challenged to find new markets, develop new products, and pursue new business opportunities in order to stimulate their firms to still more growth. (2) Technology Advances: production of innovative new technologies or replacement of older techniques with new ones, promises faster growth, efficient and effective accomplishment of business objectives, and motivates the development of new products and services.

A technological innovation is able to apply effective and sophisticated coordination mechanisms (Brynjolfsson and Hitt, 1995) and provide a wide spectrum of core competencies with the creation of flexible organizations (Tuma, 1998). In this paper, we consider that the only way to gain higher value is to invest in new technologies or identify a great business opportunity.

3. Research method

Given the early stage of empirical research into firms’ capabilities with regard to value creation, we used an exploratory case study research strategy that applied qualitative methods (Eisenhardt, 1989; Miles and Huberman, 1994; Ayuso et al., 2006; Ruokolainen and Mäkelä, 2007). The adoption of a qualitative methodology is consistent with the fact that dynamic capabilities are embedded in firms’ organizational routines and processes (Eisenhardt and Martin, 2000); thus, they are very difficult to identify through quantitative measures. In an attempt to fill the research gaps in the literature, we investigate two excellent and outstandingly innovative firms in Taiwan’s hand puppetry industry, namely the PiLi International Multimedia Corporation (PIMC) and the Taiyuan Puppet Theatre Company (TPTC).

The two companies were chosen for two reasons: (1) Both have been in operation profitably for more than a decade with sizable art creations and audience support. (2) Both are acknowledged by a number of national awards in creative performances. The considerable number of new, high-quality video programs and products introduced by the PIMC in the last decade clearly demonstrate its capacity for innovation, thus providing insights that help us better understand the organizational basis of dynamic capabilities. The TPTC’s shows have been performed in over 20 countries and are welcomed for audiences of all ages and cultural backgrounds. These features allow us to analyze the global dynamic capabilities that contribute to the companies’ capacity for sustainable innovation.

The data was collected between January and September 2007 in the form of reviews of companies’ public reports and in-depth semi-structured interviews with relevant managers. While the questions were left as open as possible, the interviewees were asked about how organizational innovation processes were organized, and how and why each company globalizes its business. Initially, we focused on the features of the value systems to investigate how they affected the process of value creation.

The analytic induction approach to data collection and analysis was used. Originally proposed by Znaniecki (1934), analytic induction has been refined into perhaps the best-developed logic for theory development and testing across multiple case studies (Gill and Johnson, 1991). Recent applications in the marketing domain include Wilson et al. (2002), Daniel and Wilson (2003) and Wilson and Daniel (2006). The method involves generating hypotheses or propositions from the first case study; using the hypotheses to inform the collection of data in the second case; comparing each hypothesis against...
the data collected in the second case; and, if necessary, reformulate or supplement the hypotheses to take account of the data from the first case. The analysis of the data collected took the form of a summary of the information in case write-ups, structured according to the components of global dynamic capabilities identified by Silvia, Miguel and Joan (2006), namely values, structures, and systems. The following section highlights the most important features of both cases with regard to company background, organizational innovations, technology-based firm specific advantages and international activities.

4. Case studies

4.1. Setting description

Taiwanese glove puppetry, or budaixi, is a traditional form of entertainment that has been popular in Taiwan for more than 200 years. According to legend, hand puppet shows originated with a disgruntled Ming Dynasty (1368–1644) scholar from Fujian Province. Taiwanese scholars estimate that Fujianese (Chinese) settlers brought glove puppetry to Taiwan in the early part of the 19th century (Wu, 2005, p. 50–58). Glove puppet theater is the newest branch of the 2000-year-old Chinese puppet theater tradition. Over the centuries, the art has developed into an elaborate form of theater with delicately carved puppets and stages, as well as an extensive repertoire and orchestral accompaniment. Despite their low social status in the past, many puppeteers could read and write and were often well-versed in the use of the classical Chinese written language.

Two famous exponents of this popular art form are Mr. Li Tian-lu and Mr. Huang Hai-dai. The Yi Wan Ran Hand Puppet Troupe, founded by the late Mr. Li, combines classical Chinese music, traditional Chinese Kungfu, and poetry. Mr. Huang Hai-dai’s troupe, Wu Jhou Yuan, was founded 70 years ago and has been the inspiration for a recent upsurge of interest in the traditional art form, with over 200 hand puppet troupes now performing all over Taiwan. The late Mr. Huang brought new ideas to Taiwanese hand puppetry, such as innovative puppet designs, special effects, and dynamic storylines. Three generations of the Huang family in Yun-lin County have transformed the puppet theater from a traditional art form into an international entertainment industry.

4.2. Case 1: PiLi international multimedia corporation (PiLi Puppet Theatre)

4.2.1. Company background

In Chinese, the name “PiLi” is onomatopoeia for the sound of thunder and is often used to mean shocking or amazing. Silvio (2007) noted the “digital video knights-errant hand-puppetry” serials produced by the PIMC are a popular culture genre unique to Taiwan. The production process blends a wide variety of media techniques that combine the traditional southern Chinese craft of hand-puppet theater, with the frenetic editing of Hong Kong action cinema and computer-generated animation. The narratives fall within the knights-errant genre, but with added elements from fantasy and science fiction stories. The PIMC employs more than 200 people, and makes an output value of around USD 40 million a year.

According to a company spokesman, more than a million people rent the videos every week. Since 2001, PiLi episodes have been released on DVD, usually in sets of two per week. The DVDs are distributed through over 1800 rental outlets throughout Taiwan (including chain stores, such as Blockbuster and Asia Art, and smaller family-owned stores) and reach an audience of at least one million people (PiLi International Multimedia Corporation, 2006). The PiLi Corporation has been celebrated as one of the great success stories in the “traditional culture creative industries”, an example of how a traditional art can be revitalized through new technology in such a way as to become marketable not only to a new generation of Taiwanese, but throughout the world.

4.2.2. Organizational innovations

Structurally, the company remains a family enterprise, like the businesses that provided the base for Taiwan’s “economic miracle” of the 1970s. In PIMC’s head office, there are six departments
(international marketing, domestic marketing, computer systems, products, programs, and administration) and two Internet marketing and international marketing branches. The company has three film studios located in Huwei, the family’s home town in rural Yunlin County. They produce two puppet dramas a week for the video market. Chirs Huang is the company’s CEO and the head of the script-writing group; Vincent Huang is the managing director and does the voice recordings; and Chris Huang’s wife, Liu Lihui, is the company’s marketing director.

There are seven major innovative elements in PiLi’s Puppet Theatre: dialogues, puppet-handling skills, scripts, character styles, photography, aesthetics, and music (music is divided into character music, scene music, and emotional music). In addition, there are two major differences (innovations) compared to traditional scripts: characters go beyond the binary position of good and evil; and the dialogues incorporate both classic Chinese literature language and street jargon. With craft and pure artistry, puppeteers manipulate these cultural innovative productions through a series of spectacular action set-pieces. PiLi specializes its work into separate departments for scriptwriting, design, music, recording, dubbing, set design, direction, photography, and props, all devoted to creating attractive “content”.

To attract viewers from the younger generation, the Huangs continue to create new and interesting concepts in their stories, including illusory time and space themes, action-packed Chinese kung-fu sequences, and new performing skills. In addition, the humorous dialogues have become classic lines and common social language in people’s daily lives. To strengthen the dramatic elements of the shows and ensure the art form is up-to-date, the Huans discarded the traditional Nan guan music (or Southern Tones) and replaced it with pop music and newly-created theme songs. In addition, Vincent Huang’s rich voice gives life to the characters such that each wooden puppet seems to have its own personality. PiLi’s screenwriting department was set up in 1997. The screenwriting team, many of them Chinese literature majors, create deep, multifaceted characters and write unique poems to accompany the characters when they come on screen. PiLi was the first establishment in Taiwan to collectively work on TV/film scripts to meet the demands of mass production.

4.2.3. Technology-based firm specific advantages

The company has been using computers for all editing and special effects animation since 1995, the same year the PiLi cable television station was established. In 2000, the PIMC produced a feature film called Legend of the Sacred Stone, which marked a turning point in the development of the PiLi style. The equipment purchased for the film, including cameras and new CGA and editing software, as well as many of the technicians hired for its production, were retained for use in the video serials. Most of the senior puppeteers and directors have been with the Huans since the 1970s, while many of the junior artists grew up in Huwei and frequently visited the studio as children. Puppeteer, video editing, costume and prop design, and script writing skills are passed on through an informal apprenticeship system. Mastering new technologies is also an internal process, outside of the formal education system. The video directors and postproduction crew learned to produce PiLi’s wide range of CGA effects by experimentation. The company now officially refers to their products as “digital knights errant puppetry”.

4.2.4. International activities

PiLi financed and produced the first puppet show movie “Legends of the Sacred Stone” in 2000, which was shown at the Cannes Film Festival and in several international markets in 2001. The rights were sold to China, South Korea, Japan and the United States. PIMC uses the Internet, on-line games, and its own website to communicate with young people. The company pays a great deal of attention to the suggestions of fans, who have established their own club. For example, the PiLi team turned Shi Yen-wen and Su Huan-chen, the two main characters, into objects of imitation. They have become hot topics among youngsters.

By updating the traditional art form, the Huans have been able to expand its fan base. The PiLi satellite television station now rebroadcasts at least two older serials in prime time every day. The PiLi serials are seen by their producers, fans, local scholars, the Taiwanese government, and the mass media as a form through which “traditional Taiwanese culture” absorbs global influences and remixes locality simultaneously.
4.3. Case 2: Taiyuan Puppet Theatre Company (Lin Liu-Hsin Puppet Theatre)

4.3.1. Company background

Dr. Paul C.F. Lin, founder of the Taiyuan Arts and Culture Foundation and a relentless promoter of Taiwanese culture, established the TTT (Toa-Thiu-Thia) Puppet Centre with its director, Dr. Robin Ruizendaal, in 2000. The hand puppet master Mr. Chen Xihuang (the son of the late Mr. Li Tian-lu) joined the company in 2001. From its very first days, the Centre has been at the very forefront of traditional puppet theater in Taiwan, organizing exhibitions at the Centre and simultaneously pushing the art to new vistas and new modes of performing. In November 2005, the TTT Puppet Centre moved to a permanent residence, named Lin Liu-Hsin Puppet Museum, generously donated by Mrs. Lin, the widow of late Mr. Lin Liu-Hsin.

The museum is dedicated to preserving and promoting traditional Asian puppet culture. In order to promote both traditional and modern puppet theaters, apart from the museum, two theater troupes were founded in 2004. On one hand, there is, the traditionally oriented Taiyuan Puppet Theatre Company (TPTC) that synthesizes northern Taiwanese traditional lyrics and refined modern stage techniques in order to preserve the more traditional part of puppetry. On the other hand, the new and creative Nadou Theatre Company emphasizes story-telling in a more modern context combining the visual imagination with modern stage acts including stylish drama and music performances. It is a puppetry educational center that provides a stage for puppetry from all over the Asia-Pacific region and promotes interaction between local and international puppet troupes.

Robin Ruizendaal, a well-known figure in Taiwan’s puppet theater community, wrote his PhD dissertation on the Chinese Marionette Theater. Since the museum was established over seven years ago, he has arranged tours for the museum’s troupe, which has traveled to Europe, Latin America, Hong Kong and Macao to perform pieces written and directed by Ruizendaal, whose fine eye for detail and restless avant-garde spirit have earned him a place among the leading lights of contemporary Asian puppet theater. Government agencies in Taiwan concerned with the preservation of traditional culture admire him for his hard work. His success has helped Taiwan’s puppet theater become more popular at home as it embarks with a new image on the larger global stage.

4.3.2. Organizational innovations

The TPTC strives to promote traditional Taiwanese puppetry. In contrast, the Nadou Theatre Company embraced a more innovative spirit by integrating Western aesthetic art forms into its work. Performances have a modernistic format, and may include human actors, stage workers, and modern music as well as puppets, to stress the inner meaning of the stories as well as the acoustic and visual symbolism. The two performing companies are integral parts of the museum. They add a dynamic “soft” and lively creativity to the static “hardware” of the exhibits of traditional artifacts so that visitors are treated to a stream of surprising delights.

In recent years, the TPTC have been on tours to Europe, Russia, Latin America, Cambodia, Hong Kong and Macao. This year, in cooperation with Taiyuan Publishing, the museum will publish a children’s book and audio CD on puppet theater. Thus, the TPTC are working at the educational level to sow the seeds of puppetry culture as well as broadening the international perspective of Taiwanese puppetry.

4.3.3. Specific advantages of technology-based firms

The Nadou theater company delivers first-class performances with actors, puppets and musicians. The amazingly diverse backgrounds of the performers, which vary from action theater, puppet theater to Taiwanese opera and classical western music, create the inspiring environment needed to create original plays, with original storylines and music. The company brings audiences a modern Asian theater that shines and fascinates because of its varied cultural background.

It presents universal themes that attract audiences from all over the world. For example, TPTC applied multimedia skills to perform a very big show in Macau in November 2004 as part of the 16th Macau Art Festival. The show named “The Pilgrimage” is about Macau and performed in both Cantonese and Portuguese by actors, puppeteers and musicians which gave a strong appeal to modern Macanese audience. TPTC also cooperated with professional artists and performed the ancient art

form of the Balinese shadow play, producing unique performances that stretched the bounds of the tradition. In one performance, the shadow puppets were positioned atop a banana log in between a large screen and a coconut oil flame so that their images cast shadows on to the screen.

4.3.4. International activities

In 2003, the TTT Puppet Centre entered a new phase of development by performing overseas for the first time. Since then, the company has performed in France, Hong Kong, Macao, Turkey, Russia, Italy, Vietnam, Korea, Holland, Nicaragua, El Salvador, Panama, Honduras, Costa Rica, Guatemala, Belize, United Kingdom, Cambodia, and Spain. Its performances extended from the world famous London Royal Festival Hall to a South American tropical forest, Cambodian temples, a 16th century European church and the Casa Mila in Barcelona.

Dr. Robin insists on hiring a professional musician to arrange original scores for each play, and when invited to perform overseas will have the soliloquies and dialogue translated and projected onto a screen so that audiences can understand what is on the play(s). He stresses that to promote Taiwanese puppet theater overseas, publicity and professionalism are extremely important. Some theater troupes in Taiwan put on high caliber performances, but they do not market and publicize themselves well. “Foreigners will come to see an unfamiliar type of stage performance once just out of curiosity, but what then? You have to put out attractively designed publicity that communicates something to grab people’s imagination, otherwise you’re not going to attract many back a second time.” said Dr. Robin. Professionalism includes such things as musical arrangements, lighting, use of the stage, and pacing. At temple fairs where puppet theater is often performed, the crowds are boisterous and the outdoor setting is spacious, so orchestras at these open air events play as loud as they can. However, when performing overseas, and especially in cozily appointed little theaters, the wailing suona alone are enough to blow the audience’s eardrums. For Taiwanese puppet theater to win fans overseas, it is necessary to size up the venue, adjust the music volume, make skillful use of lighting, shorten performances, and translate the soliloquies and dialogue.

5. Research results and discussion

According to RVB literature, organizational capabilities are embedded in a firm’s processes and are composed of routines, structures, systems, and the company culture. In this section, we discuss the elements of the global dynamic capabilities that underlay sustainable innovation. In our analysis of the two case studies, we looked for variables that could explain the phenomenon under study, i.e. how a firm’s capabilities are related to sustainable innovation. We observed that values and structures/systems are the most important categories. The global dynamic capabilities we inducted are the driving forces behind the creation of new cultural products that revitalize the company through sustainable innovation. Next, we will discuss both capabilities and provide examples found in the case studies.

5.1. Global dynamic capabilities of sustainable value creation

The first result of the in-depth case studies indicates that, to sustain continuous innovation, a firm must develop global dynamic capabilities that facilitate simultaneous value creation. Interviews with the management teams of PIMC and TPTC confirmed that puppet theater organizations rely on six organizational global dynamic capabilities: applying enabling technology creatively, seizing market opportunities, aligning routes to markets, utilizing absorptive capacity, enhancing organizational innovation, and staging cultural/aesthetic productions (see Table 1) (March, 1996; Lawson and Samson, 2001; Straub and Watson, 2001; Zahra and George, 2002b; Verona and Ravasi, 2003; Augier and Teece, 2007; Wilson and Daniel, 2006; Teece, 2006).

This finding is consistent with that of Augier and Teece (2007) who stressed the ability not just to sense changing market and technological opportunities, but also to seize them through effectuating “new combinations.” Under these organizational global dynamic capabilities combinations, there are nine organizational resources: advanced technology experience, strong fans community, market
Table 1
Global dynamic capabilities and organizational resources for value creation.

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<td>Applying enabling technologies creatively</td>
<td>- advanced technology experience</td>
<td>Integrative (management of technology)</td>
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<tr>
<td>Seizing market opportunities</td>
<td>- market orientation - entrepreneurial orientation</td>
<td>Innovative (vision and strategy)</td>
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<tr>
<td>Aligning routes to markets</td>
<td>- strong fans community - brand equity - partner relationships</td>
<td>Innovative (harnessing the competence base)</td>
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<td>Utilizing absorptive capacity</td>
<td>- employees with integrated market knowledge</td>
<td>Innovative (organizational intelligence)</td>
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<tr>
<td>Enhancing organizational innovation</td>
<td>- flexible project teams from formal organizational structure</td>
<td>Integrative (organizational structure &amp; systems/culture &amp; climate)</td>
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<td>Staging cultural/aesthetic productions</td>
<td>- specific indigenous cultural assets</td>
<td>Innovative (creativity and idea management)</td>
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5.1.1. Applying enabling technologies creatively

The increasingly complex technology which is used to create the creativity and special effects made the videos and films able to meet the competitive requirements introduced by the emergent digital technology and increasing competition. In addition to integrating technology into production work, in the sales arena PIMC is always looking for the latest media technology that it can use to promote glove puppetry. “Grandpa [Huang Hai-dai] spent 20 years establishing a reputation across the country, while dad [Huang Chun-hsiung] used television to make a name for himself overnight,” said Chris Huang. “Mastering the newest media is absolutely crucial.” PIMC with advanced technology experience has thoroughly mastered the application of media, as PIMC have developed from television to the cinema and to computers. As PIMC has moved from dominance in the video market to its satellite network and, finally, to an unlimited market through its Internet business, it has relied on cross-industry alliances to develop a number of related products. New media technologies have been crucial not only in developing the PiLi cultural production style but also spread overseas markets. “This digital knights errant kind of storytelling is unique to Taiwan and foreigners are interesting in this performing arts,” said Chris Huang, president of PIMC.

The TPTC adds a dynamic “soft” and lively creativity to the static “hardware” of the exhibits of traditional artifacts, so visitors are treated to a stream of surprising delights. Performances, which adopt a modernistic format and may include human actors, stage workers, light shadow effects, and modern music as well as puppets, stress the inner meaning of the stories as well as their acoustic and visual symbolism. Puppetry companies are characterized by a peculiar mixture of technological and non-technological innovations. On the one hand, they are strongly driven by technological innovations; on the other hand, they are also “laboratories and fields of experiment” of so-called non-technological innovation which we concluded in Table 2.

To sum up, even though value creation is a prerequisite for innovation, the dynamic process of continuous innovation is triggered by applying enabling technologies creatively (Badawy, 1993, chapter 3).

5.1.2. Seizing market opportunities

Although PiLi focused on glove puppet performances for many years, the company has always worked in the wider culture and business realms. Chris Huang argues that operators of a creative cultural enterprise “have to look at tradition from a popular perspective, and look at art from a business perspective” before they can achieve sustainability. “We are trying to focus on the business. It’s essential if our company is going to continue to survive. The business can ensure the survival of our puppet arts. You could say our family motto is ‘innovation is our tradition,’” said Chris Huang. “My grandfather and my father weren’t afraid to innovate. And today this industry is so competitive that innovation is a necessity. You need to stay ahead of the game to survive.”

To sum up, through keeping a finger on the pulse of the market and undertaking careful analysis of consumer psychology, the two case companies can make effective use of innovation to develop new customer target groups and make adjustments to seizing market opportunities in line with the changes taking place in society as a whole.

5.1.3. Aligning routes to markets

Silvio (2007) noted that the line between fan culture and the company itself is quite porous. The PIMC keeps close tabs on fans’ opinions by monitoring their own fans website and through attending large fan club events. Most of the workers at the PiLi satellite station and marketing department are puppet fans themselves. Fans engage in a wide range of activities, including amateur puppetry, drawing manga (cartoons), creating animated cartoons using programs such as FLASH, writing short stories, collecting and photographing puppets, making original music videos starring the puppets, and COSplay, in which fans dress as the puppet characters. TPTC is dedicated to working with elementary school children to sow the seeds of puppetry culture and broaden the international perspective of Taiwanese puppetry by cooperating with local and foreign puppetry promotional organizations.

The best marketing strategy must be adopted to attract younger people. For example, the PIMC team made Shi Yen-wen and Su Huan-chen, the two representatives of puppetry characters, become the object of imitation and the most talked about topic among youngsters. Thus, they have ensured that the traditional art form is always up-to-date and appreciated by its fans and audiences generally. The characters from PIMC programs are now being used in a wide range of industries, including the financial sector, telecommunications, the textile industry, manufacturing and the food industry. The characters are being used to promote a large range of products, including household goods, stationery, gifts, stamps, credit cards, phone cards, T-shirts, models, toys, on-line games, and snack foods. The TPTC will publish a mouse brochure and calendars of their famous “Wedding of the Mice” show for the coming, i.e. 2008, Chinese New Year.

Table 2
Firm specific advantages of PIMC & TPTC.

<table>
<thead>
<tr>
<th>Firm specific advantages</th>
<th>PIMC</th>
<th>TPTC</th>
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<tbody>
<tr>
<td>Technology-based</td>
<td>- the creative use of information content</td>
<td>- the creative use of information content</td>
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<tr>
<td></td>
<td>- producing video programs and films efficiently</td>
<td></td>
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<tr>
<td></td>
<td>- knowledge of visual communication techniques</td>
<td></td>
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<td></td>
<td>- access to distribution channels</td>
<td></td>
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<tr>
<td>Non-technology-based</td>
<td>- copyright and branding management</td>
<td>- expatriate manager and export promotion experience</td>
</tr>
<tr>
<td></td>
<td>- aggressive marketing</td>
<td>- strategic alliances with overseas organizations</td>
</tr>
<tr>
<td></td>
<td>- local culture aesthetic</td>
<td>- integrated market knowledge</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- local aesthetic</td>
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</tbody>
</table>

To sum up, even though value creation is a prerequisite for innovation, the dynamic process of continuous innovation is triggered by applying enabling technologies creatively (Badawy, 1993, chapter 3).

To sum up, in both case studies, different customer groups were served through different channels, defined to take into account both the relative value of different segments and their different needs.

5.1.4. Utilizing absorptive capacity

The PIMC possesses expertise in both traditional puppetry theater, television, and film production; this combination creates entry barriers that are very difficult for any would-be competitor to surmount. Past experience with cinema and television is an advantage for PIMC. To achieve perfection in puppetry performance, one needs an in-depth knowledge of Chinese culture, along with the necessary performance skills. New entrants will find these skills hard to acquire. The two case companies’ operation teams both own excellent and famous performing puppetry talents in Taiwan’s puppetry industry. Chris Huang founded PIMC, a multimillion-dollar firm that produces hand puppetry movies and TV series. His brother, Vincent Huang, voices all the characters, males, females and monsters alike. This talent has earned him the martial arts-like title “Eight Tone Genius.”

Meanwhile, in TPTC, Dr. Paul C.F. Lin operates the company with a non-profit management philosophy, and his ambition is to establish the world’s most comprehensive puppetry museum. A well-known figure in Taiwan’s puppet theater community, Dr. Robin Ruizendaal from the Netherlands, has earned himself a place among the leading lights of contemporary Asian puppet theater. Mr. Chen Xihuang, the puppet master of TPTC and founder of his own Hsin Wan Jan Hand Puppet Troupe, has taught and performed traditional Chinese puppetry for over fifty years.

To sum up, absorptive capacity allows organizations to make changes that afford them much-needed strategic flexibility in dynamic markets. Employees with integrated market knowledge contribute to defining the organizational capability that guides people’s behavior and affects value creation in the company.

5.1.5. Enhancing organizational innovation

The performance platforms of PiLi Puppet Shows include outdoor theater, indoor theater, TV, video, satellite TV, opera, and films. Founded as a commercial company in 1991, PIMC divides its work into departments for scriptwriting, design, music, recording, dubbing, set design, direction, photography, and props, all of which are devoted to creating attractive “content”. Our informants agreed that the new project-based organization has led to increased interaction across levels and professional groups so that it is easier to exchange ideas and integrate specialized skills. In TPTC, the two puppetry theater troupes perform overseas with different styles (Taiyuan on traditional while Nadou on modern context) both acquiring the government support. Moreover, a peculiar project-based structure promotes the combination of knowledge components dispersed within the organization by transforming specialized scientific and technical knowledge into new products. It is important to note that the relevance of these processes is confirmed by past research on product innovation.

To change a theater troupe management into a corporate management, two main management guidelines are: multiple business investments and finding new story ideas. The scriptwriting team, many of them Chinese literature majors, create deep, multifaceted characters and unique poems to accompany them on screen. Because of their special and elegant costumes, the main characters in PIMC programs have become puppet celebrities with their own fan clubs. Moreover, many famous enterprises have made donations to TPTC to support the traditional art form.

To sum up, a precise division of labor enhances production efficiency and increase production capacity, and the adoption of new flexible project team/management systems makes management more efficient.

5.1.6. Executing cultural/aesthetic productions

The two case companies have both inherited specific indigenous cultural assets. At a time when traditional puppetry performing arts are in decline, the PIMC of master glove puppeteers and national treasures Mr. Hai-tai’s grandsons Chris Huang, Vincent Huang are attracting a new generation of young fans to puppetry. In TPTC, master artist Mr. Chen Xihuang, the son of master glove puppeteers and another national treasure, Mr. Li Tien-lu, continues to craft puppet heads stroke by stroke, each with a unique expression. With skill and pure artistry, puppeteers manipulate these cultural creations

through a series of spectacular action set-pieces. There are two major innovations in the original scripts: characters go beyond the binary positions of good and evil; and the dialogues incorporate both classic Chinese literature and street jargon.

To sum up, PIMC cultural/aesthetic productions have become models for other companies in the cultural and creative industry. Business promotion is aggressive, the potential for future market growth is strong, and the scope of PiLi’s products and services is broad.

5.2. Technology-based FSAs Impact

We started by compiling a list of firm specific advantages for the two case companies in Taiwan’s puppetry industry. First, we identified the technologies and skills relevant to the cultural businesses, as well as the local aesthetic that would meet emerging customer needs related to entertainment and free-time activities. From Table 2, we separated the companies’ specific advantages into technology-based and non-technology-based types, both of which enhance the competitive advantages of the firms.

From our case studies, we find that technology-based FSAs affect two aspects of cultural businesses: the business organization and the business model. Business organization impacts include: emphasizing Internet-marketing, changing organizational working process with drama transcripts and database system; offering new value propositions to consumers in a cost-efficient way by video programs; and trying to reach consumers that the company does not currently target in its marketing and sales efforts, and who would consider its products and services valuable. Technology-based FSAs also allow traditional corporations to develop new business models to meet the demands of globalization. The effects of internationalization include: access to global audiences, reconciliation the conflicts between globalization and localization in content, competition between local telecommunication and cable providers who operate the media business, and learning internationalization strategies from advanced countries.

5.3. How cultural organizations expand globally

From our case studies, two alternative global expansion paths for increasing value exist (Fig. 1). The first path represented by the TPTC aims to achieve higher value through market pull approach, by exploring new markets and developing new products to pursue new business opportunities for growth. The path will end with the adoption or development of new technologies. The alternative path considers the technology push approach, i.e. the PIMC approach, applying new technologies or replacement of older techniques with new ones firstly to promise faster growth and then finding new markets. From PIMC case study, we can conclude that firms in cultural industries that are characterized by high-up front investments in technology, products, brands, and promotions, emphasize creativity and innovation and can apply enabling technologies to create high growth/
values and subsequently benefit from a global expansion. Meanwhile TPTC increases growth/values through expanding foreign markets. This means that the shift to the highest quadrant of value passes through the technology advances axis and later through the business opportunity axis. A prerequisite for this path is the existence of technologies and similar paradigms from other business activities.

In summary, cross-country cooperation and joint ventures with different media or companies have become the main strategies for expanding overseas markets, raising the international profile of the brand and the companies. From our case firm, i.e. PILC, we conclude that cultural companies can increase the value of their products or services through technology-based FSAs (technology push) and meeting the foreign market needs, then it could create high growth/values at a desired level. Conversely, cultural organizations can also create high growth/values through establishing foreign relationship (market pull), and then enhancing their technology usage to get a higher value. Our findings are consistent with those of Scott (1991) who stated that: “A higher level of value could be gained through a technology push and/or a market pull”.

6. Conclusion

This paper identifies six global dynamic capabilities and their resource-based nature as an important basis for continuous innovation. Each global dynamic capability actually leverages company resources, especially those regarding advanced technology experience, strong fans community, market orientation, entrepreneurial orientation, brand equity, employees with integrated market knowledge, flexible project teams from formal organizational structure, and specific indigenous cultural assets. These nine organizational resources therefore represent the building blocks of customer values, although it is the global dynamic capability that leverages them and leads to value creation. Our case study shows that technology-based FSAs help local cultural production corporations globalize their businesses. There are two global expansion paths that local cultural organizations can use to increase higher values.

The paper aims to investigate how innovation can improve the competitiveness of cultural industries firms by analyzing their ability to contribute towards sustainable development in an increasingly global economy. At the same time, the paper provides a good, interdisciplinary starting point for combining and integrating among these research fields, i.e. resource-based theory, innovation theory and international business (IB) theory. Researchers’ previous analysis focused mainly on international export and marketing aspects for service firms (see e.g. Samiee, 1999)—macro and mezzo analysis that take into consideration the impact of international service activities on innovation capacity and competitiveness of countries are neglected.

6.1. Managerial implications

This study might help businesses re-examine the way they integrate technology-based FSAs into their organizations, and the way they incorporate customers’ response to improve their performance. New partnerships have sprung up between enterprises active in separate industry sectors, such as the consumer electronics and information technology industries, infrastructure (telecommunications, cable and satellite) and service providers, information and entertainment content owners. The way firms are organized and do business has changed since computers appeared and made it possible to process information in digital form. We consider that this work is only an exploratory study of how and why cultural organizations innovate and globalize so successfully. From our research, the prosperous development of Taiwan’s puppetry industry implies the awakening of a local culture in the age of globalization. Managers must therefore concentrate on renewing and reproducing rather than protecting their resources of competitive advantage. We wish to open up the world to Taiwan’s modern puppetry industry and create a higher value of “Taiwan puppetry”.

6.2. Future research

Research comparing the innovation strategies of new and traditional companies would also yield useful knowledge. Moreover, when the traditional local culture industry are prompted to enter the
global market, balancing the global market's demands and local traditions should be managed carefully by recognizing the culture differences and suitability of the content and context of the story. It would also be worth investigating how MNEs derive firm-specific advantages from their country-specific advantages.

References


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