

A Study on the Entrepreneurial Path of Design-led Startups in Taiwan

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Abstract

The phenomenon of design entrepreneurship has received attention in the field of design. The trend of design entrepreneurship emerges in Taiwan and becoming a new career option for designers. Entrepreneurial activities can promote economic growth through innovation and knowledge spillovers. Studies on designer entrepreneurship are warranted because it proposes the possibility of entrepreneurial innovation, contributing to industrial and economic development. A multiple case study was employed, and seven design-led startups were selected as case study subjects to explore and conclude how these firms integrate their own profession and acquire resources to construct the value chain so as to keep the company operational and profitable. According to the results, the value chain of design-led startups is identified. The findings are further discussed to provide a better understanding of the entrepreneurial path of design-led startups in Taiwan.

Keywords: design entrepreneurship, value chain, design-led startup

Introduction

Entrepreneurship that helps promote economic development is currently receiving increasing attention, and many countries consider encouraging entrepreneurship as an effective approach to promote economic and social development. Ridley (2010) indicates that entrepreneurship is a crucial thrust to stimulate economic growth and envisions that economic development will be led by small businesses in the future. The shift from a “management economy” to an “entrepreneurial economy” since the mid-1960s has influenced firm size and market rules. In an economic system that emphasizes knowledge and creativity, many small and medium-sized enterprises (SMEs) have been emerging with their creativity and knowledge (Audretsch & Thurik, 2001). The use of information and communication technology helps enterprises collaborate in nonhierarchical networks, enabling many startups to organize and engage in innovative activities on their own (den Ouden, 2012).

Design entrepreneurship involves creating businesses and new opportunities with the help of design processes. Any designer who runs a studio, office, or firm can be considered as entrepreneurial. In this study, design entrepreneurship is about producing and marketing the intellectual properties of a viable concept in terms of assuming risks, financing, and managing (Gunes, 2012). In the past, designers established design studios to provide clients with design services. They rarely established their own brands and put their design ideas into production, marketing, and sales. With an increase in the entrepreneurial trend, several designers not only provide design services but also start businesses to sell products they have developed. Tom Dixon, a London-based designer, exemplifies a design entrepreneur. In addition to product design, Tom Dixon is involved in production, distribution, and consumption systems. The expansion of designers in the areas of production and marketing suggests that a new role of a design entrepreneur is taking shape. Some design-led startups were formed and targeted the international market; these startups are termed as “design-intensive born globals” by Falay, Salimäki, Ainamo, and Gabrielsson (2007). According to a

study on six design startups in Finland, they report that these young and small startups were located in the international market, mainly because the domestic market was too small to grow those design startups. Regarding the marketing strategies, the cost of traditional advertising methods is excessively high for the startups. Hence, the design startups in Finland expose and market their products through participating in international trade shows. A similar entrepreneurial path can also be found in design startups in Taiwan. According to the Taiwan Cultural and Creative Industry Development Annual Report in 2013, an increasing number of designers start their own business. In Taiwan, design students were previously aware of only two career paths: design consultant or corporation designers. They seldom considered using their design skills to become entrepreneurs. However, currently, being a design entrepreneur has become one of the career options for design students.

Flexibility is an advantage of small businesses. Small businesses can rapidly adapt and respond to changes in the market. Countries with more small businesses and entrepreneurial activities have higher economic growth rates and lower unemployment rates (Thurik, Audretsch, Carree, & van Stel, 2008). In entrepreneurship-related studies, most researchers pay attention on to technology- or information-oriented startups, focusing on issues regarding management, economics, or entrepreneurship. However, less attention is paid on design entrepreneurship. The capability of combining concepts with manufacturing to develop new products and launching them into the market has become the entrepreneurial model of designers. Entrepreneurial activities can promote economic growth through innovation and knowledge spillovers. Studies on designer entrepreneurship are warranted because it proposes the possibility of entrepreneurial innovation, contributing to industrial and economic development

Literature review

Design Entrepreneurship

The phenomenon of design entrepreneurship has received attention in the field of design (Vienne, 2002; Heller & Talarico, 2008). Most industrial designers have fantasized about designing their own products and getting them into the market. However, being a design entrepreneur means that the designer should be involved in activities such as raising money, lining up manufacturing, and getting publicity. In the past, these entrepreneurial activities were difficult for designers. Nevertheless, some factors make it relatively easier for designers to transform a product concept into a viable business (Furbershaw & Herbst, 2013). Internet tools and resources create an environment that allows self-learning, immediate production, accelerated collaboration, and rapid networking. Crowdfunding platforms allow designers to access funding and develop a customer base. Product reviews from Internet media, such as web magazines or blogs, can gain publicity for a new product. We encounter a rapidly changing environment characterized in particular by new technologies and globalization. These changes also provide opportunities to designers to become entrepreneurs. Bianchini and Maffei (2012) indicate that the following four changes provide opportunities to designers to start their businesses. 1. Industry is changing: Manufacturing interdependence and outsourcing are the norms in the contemporary industry. The miniaturization and digitization of production technologies allow SMEs to overcome the local production capacity and geographical limitations, entering the global network. 2. Places of production are changing: Self-made production trends change the sites of production; the studio, workshop, and laboratory can be used as a production field. This allows designers to integrate product design, production, and distribution. 3. Product/service

is changing: More products contain a combination of hardware and software, leading to a complicated relationship between design and artifact production. The rapid product/service revolution is a new area for all manufactures; therefore, innovative entrepreneurs have the opportunity to win in the market. 4. The market is changing: The more mature the market, the more diversified the consumer demand. The change in the market provides startups an opportunity to develop products targeting on niche markets.

There are some commonalities between the entrepreneurial process and the design process, both of which attempt to propose new ideas and create better solutions (Zhou, 2008). Morello (2000) indicates that design is a future-oriented activity. Designers envision how people use and respond to new products or services. Similar to the new product development process, the entrepreneurial process must be close to the society and take all stakeholders into consideration. Creativity, the design profession, and empathy for the customer are the strengths for designers to become entrepreneurs. However, the development of the business process does not only propose the concept of a product but also complete a business model (Pavia, 1991). Entrepreneurs must take action to turn ideas into viable business ideas (Dimov, 2007). Design entrepreneurship reflects the possibilities of a designer's potential to innovate in the creative economy, transforming design concepts into business ideas (Cardozo, 1986). The expansion of these areas of expertise and the formation of new roles are challenges that designers must overcome to transform into entrepreneurs

Value Chain

The management of design-led businesses requires skills in both the entrepreneurial and design aspects of the business operation. From a designer to an entrepreneur, design entrepreneurs not only serve as creative producers but also have the ability to turn the product concept into commercially viable products or services. The series of activities that an organization performs to create value for its consumers is known as the value chain, as proposed by Porter (1985). The value chain represents the internal activities a firm engages in when transforming inputs into outputs, where initial creative ideas are combined with other inputs to be produced, enter marketing and distribution channels, and eventually reach the consumers. The value chain can be used as an analytical tool to analyze activities through which firms can generate value and a competitive advantage. Entrepreneurs should understand the value chain in industries and the roles and responsibilities of players at each stage of the value chain.

The application of the value chain is not only suitable for enterprises with a scale but also applicable to SMEs (McLarty, 2005). Landry (2000) applies the value chain to cultural industries and generally classifies the following five stages: beginning, production, circulation/distribution, delivery mechanism, and audience reception. The United Nations Conference on Trade and Development (UNCTAD) applies the value chain to creative industries as a series of processes, encompassing four different stages: (a) creation/conception, where the development of an idea or concept takes place; (b) production/reproduction, the stage at which an idea or a concept is developed further and then packaged; (c) marketing and distribution; and (d) consumption (UNCTAD, 2010). For design-led startups characterized as small or micro-sized businesses, they can carry out only one or more stages of the value chain. Thus, the design-led startups must integrate or collaborate with different skill groups to complete the chain.

Analyzing a business from the perspective of the value chain, researchers should focus on

what item has to be accomplished and how the resources should be used to accomplish such an item (O’Sullivan & Geringer, 1993). For design entrepreneurs, the concept of value chain provides them with a comprehensive perspective to understand how to integrate upstream and downstream and internal and external resources to add value to their products. As the environment and industry changes, the value chain also has different forms of links. Shane and Venkataraman (2000) argue that entrepreneurship is the examination “of how, by whom, and with what effects opportunities to create future goods and services are discovered, evaluated, and exploited.” Design entrepreneurs are an emerging phenomenon in Taiwan. The development of the entrepreneurial process varies from country to country because of different resources and market sizes. Value chain analysis can be used to understand how design entrepreneurs discover opportunities and capitalize on the available resources and advantages in Taiwan to start design businesses.

Research Method

This study adopted a case study method to execute the exploration. The case study method enables in-depth, multifaceted explorations of complex issues in real-life settings, enabling researchers to understand the development of the incident and related factors through exploring why and how the current situation is formed (Ragin & Becker, 1992). A multiple case study was employed, and seven design-led startups were selected as case study subjects to explore and conclude how these firms integrate their own profession and acquire resources to construct the value chain so as to keep the company operational and profitable. The selected case subjects and interviewers are listed in Table 1.

Table 1. The case subjects and interviewers

Case subjects	Interviewer	Main product lines	Year of founded
A	Founder	Home & living products, electronics	2008
B	Founder	Clock, lighting, accessories	2005
C	Founder	Writing instruments, jewelry, and timepieces	2008
D	Founder	Tea sets, lighting	2010
E	Co-founder	Writing instruments	2012
F	Co-founder	Tea & coffee sets	2010
G	Founder	Accessories, Headphone & speaker	2013

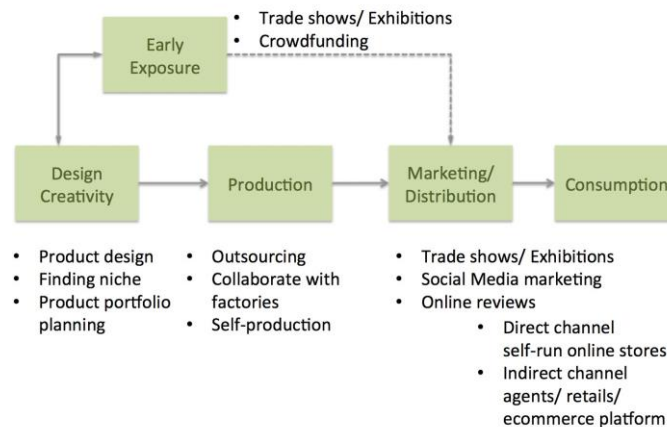
The data collection process involved collecting primary and secondary data. Primary data were collected through a questionnaire and an interview with the founders of the selected firms. The questionnaire and interview focused on four aspects of the value chain: 1. Design creativity, 2. production, 3. marketing/distribution, and 4. consumption. Secondary data were collected from different sources such as articles, records, books, reports, and Internet. All data were analyzed using framework analysis, starting from a framework of four higher-order codes that represent the four stages of the value chain while inductively searching for subcodes that reflect activities of each of these stages in the specific context of design-led startups in Taiwan.

Results and Discussion

According to the data analysis, the value chain of design-led startups is shown in Figure 1. In general, most of the design-led startups started with one short product line consisting of only few products. For design entrepreneurs, their skills and talents that enable them to conceive product ideas and prototype their products constitute the starting point of their businesses. These products will not proceed to the production stage directly until they

receive orders from buyers. Before moving on to the production stage, design entrepreneurs need to gain exposure for products in order to receive orders from buyers and confirm market opportunities. Thus, the value chain is not a linear process, as shown in Figure 1. The early exposure stage is necessary to facilitate the value chain of design startups. Design entrepreneurs should learn how to capitalize on resources and collaborate with others to complete the value chain from upstream innovation to downstream commercialization. As C3 respondents mentioned, *"A design entrepreneur must have integrated talents and should not just be a designer. Design entrepreneurs must have an integrated ability in which they should know how to integrate the available resources to work out a viable business."*

Figure 1. Value chain of design-led startups



Design creativity

Creativity is a vital factor in the discovery/creation of entrepreneurial opportunities. Conceiving a creative idea of a product does not guarantee success for a business. The key to the success of micro or small businesses is finding and choosing a niche market. All participants pointed out the importance of recognizing or creating a niche for a product. Focusing on a more specific and smaller area of the target market is often the better approach for a small business. Thus, design startups can demonstrate a clearer and precise image to clients, prospects, and referral sources. In this study, products developed by the design startups can be mostly classified into two categories: accessories and home & living. The accessory and home décor markets are mature and fragmented, comprising several submarkets. The fact that consumers pursue uniqueness in self-image and home environment gives opportunities for design entrepreneurs to create unique products to satisfy the market needs. One of the designers contribute to the market success is the design of product appearance especially in the situation when it becomes harder to compete on functionality and technology. In the mature market, design is recognized as a strategy to differentiate products from those of their competitors. According to this study, the design entrepreneurs make their products niches by focusing on one of two areas: esthetic or style and material.

Production

Design-led entrepreneurship does not mean self-production. In this study, only case C adopts self-production to produce their products made from concrete. Most of the design startups commission or collaborate with factories to produce their products. The manufacturing industries in Taiwan allow design entrepreneurs to access locally available manufacturers, facilitating the process of prototyping, making samples, and production. The

unique features of products pose challenges for designers to put the design concepts into production. They have to collaborate with manufacturers to develop feasible methods to produce their products at a reasonable cost. In this study, we identified three types of production that design entrepreneurs adopt to realize their concepts: mass production with craft practices, modern craft-making, and self-production.

Cases A, B, and G use mass production with craft practices to produce their products. For example, products made by case B (Figure 2) are actually produced through injection molding, a common mass production technique. To obtain delicate and handmade-like products, it requires ad hoc adjustments by humans to make a fine product. The flexible production enables design entrepreneurs to maintain the esthetics and uniqueness of their products. The modern craft-making process allows cases D, E, and F to create products with some materials such as bamboo, ceramics, brass, and paper (Figure 3). Unlike the traditional craft-making process, design entrepreneurs need to collaborate with craft factories to develop a feasible production process or introduce modern tools that can improve their manufacturing capacity and reduce costs. Thus, design entrepreneurs have to take production into consideration while developing new design concepts. With regard to self-production, case C uses concrete as the main material to create stationary items, jewelry, and timepieces (Figure 4). The use of three-dimensional printing technology and silicone modeling allows case C to produce products on their own.

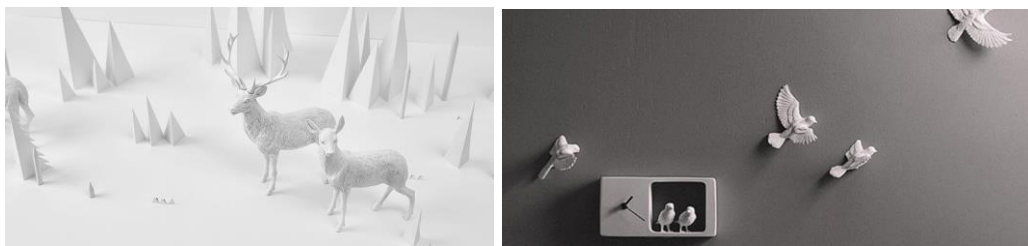


Figure 2. Products made by Case B



Figure 3. Products made by Cases D and E

Figure 4. Product made by Case C

Marketing/ Distribution

In the stage of marketing/distribution, attending exhibitions or trade shows is one of the propaganda strategies adopted by design entrepreneurs. Because of the small size of the domestic market in Taiwan, the design-led startups have to market their products in the international market. International trade shows or exhibitions provide them opportunities to sell and promote their products internationally and enter the international value chain (Browning & Adams, 1988; Measson & Campbell-Hunt, 2015). Despite having limited in their resources, the startups tried to look for resources from outside to participate in exhibitions, either to apply for government grants or to participate in joint exhibitions with their peers.

In addition to exhibitions and trade shows, the Internet provides startups an inexpensive means to expose products. Many startups primarily sell products through crowdfunding and online stores, reaching consumers directly and learning about their feedback. The founders noted that their firm would not exist without the Internet. Through the Internet, they can reach people scattered around the globe. Digitization and networking change the production and distribution method. An emerging global marketing structure is also changing the manner in which goods are sold. Online shops or platforms, such as Etsy and Pinkoi, enable design entrepreneurs to have more channels to sell products to consumers directly as well as build a network of interested consumers. In this study, many design entrepreneurs had run crowdfunding campaigns in Taiwan or in the United States. They considered crowdfunding as a means of obtaining funds and understanding market reactions and marketing methods. The impact of the Internet not only on marketing and sales channels but also on the acquisition of resources and capital, product development, and establishment of customer relations.

Conclusion

This study reveals the activities design entrepreneurs engage in to realize their businesses, based on value chain analysis. Currently, the market is ready for design entrepreneurs who work outside the mainstream manufacturing industry. They build their own niche and start businesses. Entrepreneurship is the driving force of economic development; it reorganizes resources to achieve a series of innovation and leads to economic growth. Design entrepreneurs integrate business opportunities into entrepreneurship to contribute to economic vitality and development, bringing new thinking patterns and creating value. The emergence of design entrepreneurs suggests that being an entrepreneur has become a career option for design students. From the viewpoint of design education, entrepreneurship education should be embedded in to the design curriculums to build design students ability to turn product ideas into business realities. In the past, design schools trained students to become professionals who provide design services, rather than becoming entrepreneurs themselves. Current design education should consider providing students entrepreneurial knowledge. By applying value chain analysis, this study explores how design entrepreneurs in Taiwan use their own profession and collaboration or access to resources to create market opportunities and summarizes their entrepreneurial activities. Future research should focus on design entrepreneurs with regard to brand management, marketing, distribution, and other practical experiences to help design practice and teaching curricula.

Acknowledgments

This material is based upon work supported by the Ministry of Science and Technology of the Republic of China under grant MOST 105-2410-H-011-013- and 104-2410-H-011-026-.

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