An Exploratory Study of Entrepreneurship in Taiwan’s Small & Medium Enterprises – Case Studies of Six Manufacturing Companies

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Abstract: Entrepreneurship with organization setting has been conceptualized in a variety of ways. Studies in this area remain broad and appear relatively fragmented. From previous literature reviews, we found that little attention has been paid toward the entrepreneurial management model with the starting-up phases of Small & Medium Enterprises (SMEs) in Taiwan. In view of this, the purpose of this study is to fill this gap in the literature by proposing a research framework that integrates both entrepreneurship literature and Small & Medium Enterprises (SMEs) literature. To address this problem, a new research method based on integrating cases study and in-depth interviews methods are also proposed. According to the results, the individual factor was the central part among the four contributing factors (reproduction, imitation, valorization, and venture). With respect to the six dimensions of entrepreneurship (strategic orientation, commitment to opportunity, commitment to resources, control over resources, management frame, and compensation philosophy), the enterprises interviewed in this research all set forth their perspectives. As for the four kinds of entrepreneurial status, there were four entrepreneurial imitation companies and two entrepreneurial venture companies in this research. To conclude, several propositions were proposed, and the results released that the individual factor was the crucial part among the four contributing factors. Research also examined the main dimensions of entrepreneurship for analyzing the theoretical basis.

Keywords: Entrepreneurship, Entrepreneur, SMEs, Entrepreneurial Management Model, Entrepreneurial Types

1. Introduction

The Small and Medium Enterprises (SMEs, hereafter) are the foundation stones of economic development in Taiwan. They not only expanded the Taiwan economy, participated and witnessed the economic miracle in the past, but also formed the main part of overall enterprise structure in Taiwan through creating a great deal of employments, and thus made a stable and prosperous social life. After Taiwan was accepted to join the WTO in early 2002, the SMEs face more threats and opportunities such like the boundless market and globalization trend formed by economic liberalization and industrial internationalization, which alters the original production-sale mode and management styles. Many large enterprises in Taiwan are composed by SMEs, and most of them were growing up and becoming robust after going through obstacles in the way. For example, the leading manufacturing company, Foxconn Technology Group was mold and die manufacturer at first, and many companies from the 10 biggest international brands published by the Ministry of Economic Affairs (2012) such like ASUS, ACER, MAXXIS and GIANT were also grown up from small or medium enterprises, and now they are the models and mirrors for the SMEs. The trend of globalization accelerates the transition of industrial environment and intensifies the competition. For SMEs with limited resources, only if they bring their driving business philosophy, indomitable spirits, highly adaptive and reaction ability, and self-innovative characteristics to management can they create the next climax business and continue play a crucial role of stabilizing Economy in Taiwan under the unfavorable environment after joining in WTO.

According to the White Paper statistical data collected by Small and Medium Enterprise Administration, Ministry of Economic Affairs (SMEA) in 2011, the total number of SMEs in Taiwan has been more than 1.1 million which accounts for 97.72% of the overall enterprises, with 7.36 million employment which accounts for 77.89% of total employment. Whereas in OECD member countries, the SMEs accounts for 95%, bringing forth 50% of total value-added and creating 60% to 90% of new jobs, which showed the SMEs also play a crucial role in industrialized countries, or even serve as the key suppliers of components for large enterprises in the industrial supply chain. However, the SMEs in our nation are commonly lacking of resources (human resources, technology, management, capital, influence and personal connections ...etc.), and thus have a lower capacity of taking environmental shocks under globalized competition than large companies. Therefore, there are more than ten thousands of SMEs going out of business every year (SMEA, 2011), and only 50% of the enterprises have a lifetime more than 5 years. As a result, SMEA publishes White Paper on SMEs in each year, to guide and assist SMEs in strengthening structure and enhancing international competitive competency. In view of this, the SMEs are essential in our nation, and they demand immediate attention on upgrading the competitive competency. Tracing back to recent decades, the SMEs performed excellently in Taiwan economy, and the leading entrepreneurs and
their venture creation could be said as the backbone of our economic development that support of the economic growth. It was the indomitably entrepreneurial spirit establishing the rock-steady foundation of economy in our nation.

If the enterprises can bring out their innovation motives and entrepreneurship, then they can strengthen production capacity, enhance the competitive competency in the industry, and at the same time upgrade the core competency within the company. Entrepreneurship is the main factor determining economic growth. It includes creativity and innovation, besides, the entrepreneurship is learnable. In Taiwan, SMEs appeared everywhere. Among all the management characteristics, the "Entrepreneurship" is always discussed with great relish, many scholars (Chittipeddi & Wallett, 1991; Drucker, 2007) also considered it could make influences on organizational performance, culture, and even the overall competitiveness of the country. However, Shane (2000) once mentioned, the field of entrepreneurship was lacking of clear structure and fine line, and mostly used in the aspect of strategy management. Thus, this research attempts to clarify its structure and bound. "Venture Creation" is the most challenging path among all the careers, and the entrepreneur planning is abounding with most variables. As the entrepreneurial economy is forming gradually at home and abroad, there must be further people would like to join in the entrepreneurial field, to actualize their ambitions and dreams. In the rapid transitive era of knowledge-based economy, the management strategies of success are no longer the same. Professional managers have to learn from the entrepreneurs. And more innovations and "entrepreneurship" should be led into the internal organization environment and management styles, even the mature enterprises had to innovate continuously in order to survive in the market. Since the definition and contributing factors are not consistent among the industry, government and academy, this research would focus on the SMEs, the core of enterprises in Taiwan, and further clarify the definition of entrepreneurship and discuss the contributing factors, entrepreneurial types and procedures of motives of entrepreneurs according to the research background above. The SMEs in Taiwan accounts for 98% of the enterprises, and they are the representatives of the entrepreneurs. The success of SMEs also creates the world-famous Taiwan economic miracle. Thus this research would define the entrepreneurship and understand its content first, then further obtain the contributing factors of entrepreneurship for SMEs based on the theories of four entrepreneurial statuses by (Bruyat & Julien, 2001) and six dimensions of entrepreneurship by (Stevenson & Jarillo, 1990).

**Research Design:** SMEs accounted for a great proportion in total enterprises in Taiwan, therefore the influence of the entrepreneurs were not ignorable. The appropriate thinking frame in this research was developed in this part, and further defined the variables according to such thinking frame. This research integrated the literatures above, referred to the entrepreneurial management mode set forth by (Gartner, 1985), it mainly included four dimensions of individual, organization, environment and new venture process, to comprehend the content of entrepreneurial activities and grasp the key elements of entrepreneurial management. In addition to discussing the definition of entrepreneurship, this research further analyzed the models used in this research according to the definition, and four entrepreneurial types were derived: entrepreneurial reproduction, entrepreneurial imitation, entrepreneurial valorization and entrepreneurial venture. And the factors from six dimensions composed entrepreneurship: strategic orientation, commitment to opportunity, commitment to resources, control over resources, management frame and compensation philosophy. Moreover, the two models above formed the theoretical basis for practically reviewing entrepreneurship. This core of this research was the thinking frame made by the contributing factors and content of entrepreneurship of SMEs in Taiwan. As for the recommendations for future researches, they could probe into the condition and influences of implementation of entrepreneurship.

**Research Subject:** A SME shall refer to an enterprise that has completed company registration or business registration in accordance which the requirements of the Law, and which conforms to the following criteria: In the manufacturing, construction, mining and quarrying industries, a paid-in capital of NT$80 million (US$2.42 million) or less; In the agriculture, forestry and fisheries, water, electricity and gas, commercial, transportation, warehousing and communications, finance, insurance and real estate, industrial and commercial services or social and personal services industries, sales revenue of NT$100 million (US$3.03 million) or less, or with less than 50 regular employees in the last year. According to the paid-in capital and sales revenue in 2011, the proportion of SMEs was 97.7% (White paper for SMEs, 2012). This research adopted convenience sampling to conduct in-depth interview. The subjects were CEOs from six companies, and this research gained their concepts from their free conversations about the enterprise starting-up by the semi-structured questionnaires. Moreover, according to interview minutes, video or voice recording, this research further analyzed the emotional responses, gesture or body language of the CEOs, to conclude and arrange the data gained.

2. Interview Results

According to the interview results above, among four contributing factors in the entrepreneurship, the individual factor accounts for the most part since each entrepreneur have a strong ambition in figuring out what they want to do in the future base on a solid faith, and the most vital is to put all the things into practice by practical actions. In the six dimensions of entrepreneurship mentioned by (Stevenson & Jarillo, 1990), this interview discovered that, from the aspects of strategic orientation, commitment to
opportunity, commitment to resources, control over resources, management frame and compensation philosophy, the six entrepreneurs all set forth their own viewpoint. Lastly, according to the four entrepreneurial statuses introduced by (Gartner, 1985), there were four entrepreneurial imitation companies and two entrepreneurial venture companies. The two entrepreneurial venture CEOs made a great breakthrough on individual changes and creation of social new value. Their personalities were backed up from previous working experiences, and they also cumulated some capital. They were also clear about their entrepreneurial objectives. They stuck to their faith and created venture at the right industrial environment. With respect to the entrepreneurial imitation CEOs, since the SMEs were lacking of resources in Taiwan, imitation could reduce a good deal of risk from venture creation. The interview results were arranged as following table1.

Figure 1: Research Framework

| Environment | Organization | Process | Entrepreneurship |
|-------------|--------------|---------|-----------------|
| Environment | Organization | Process | Entrepreneurship |
| Environment | Organization | Process | Entrepreneurship |
| Environment | Organization | Process | Entrepreneurship |

- Contributing factors
- Definition of entrepreneurship
- Research Structure
- Future/research
Table 1: Interview Results

| Company Dimension | Individual | Organization | Environment | New venture process | Strategic orientation | Commitment opportunity | Commitment resources | Control over Resources | Management frame | Compensation philosophy | Entrepreneurial imitation | Entrepreneurial venture |
|-------------------|------------|--------------|-------------|--------------------|----------------------|-----------------------|----------------------|------------------------|-----------------|------------------------|------------------------|------------------------|
| Yu Kuang Co.      | 0          | 0            | 0           | 0                  | 0                    | 0                     | 0                    | 0                      | 0               | 0                      | 0                      | 0                      |
| Hsin Construction Co. | 0          | 0            | 0           | 0                  | 0                    | 0                     | 0                    | 0                      | 0               | 0                      | 0                      | 0                      |
| NanSongson Industrial Arts Co. | 0          | 0            | 0           | 0                  | 0                    | 0                     | 0                    | 0                      | 0               | 0                      | 0                      | 0                      |
| Lu Yuh Fu Luong Sean and Stephen Co. | 0          | 0            | 0           | 0                  | 0                    | 0                     | 0                    | 0                      | 0               | 0                      | 0                      | 0                      |

3. Methodology

According to the context of entrepreneurial management mode introduced by (Gartner, 1985), it included four dimensions of individual, organization, environment and new venture process. In terms of interview results, the six subjects selected in this research all considered the contributing factor of entrepreneur were mainly individual. For the entrepreneur must have strong ambition and explicit faith on what they want to do in the future or establish what kind of companies, then they could conquer the difficulties and obstacles with confidence. For example, the founder of Sean and Stephen Corporation had thought thoroughly about his venture creation in the future, and even had the well-planned blue print in order to move toward his goal. While the founder of Hsin Nan Construction Co. considered the individual factor was the most relevant in the starting-up phase, but the enterprise would certainly alter by the influence of environment and organization after reaching certain scale.

Proposition 1: The contributing factor of entrepreneur was “mainly individual.”

Koberg, Uhlenbruck & Sarason (1996) suggested that for company at the starting-up phase of venture creation, if the organization preferred formalized and centralized management would assist in gathering up resources. Since the organizational structure was simpler at the starting-up phase, the entrepreneur had more power on resources allocation. According to the interview result, in the starting-up phase, there were fewer people in the company, and therefore the resources and power fell on the founder. As the founder of the Lu Yuh Industrial Co. said the company hired professional manager in assistance to company affairs in recent years. The founder of the Songson Industrial Arts Co Ltd suggested, the power only fell on him in the starting-up phase.

Proposition 2: The organization adopted centralization management at the starting-up phase.

According to the interview result, great amount of capital were necessary in the starting-up phase. Family and friends could support them financially in running their business. As the founder of the Hsin Nan Construction Co. said, the stockholders support him with capital at the starting-up phase, while the founder of the Lu Yuh Industrial Co. also mentioned that his brother ever supported him with capital in the starting-up phase. The encouragement of family and friends also played a crucial role during the entrepreneur process. Both the founder of Lu Yuh Industrial Co. and Songson Industrial Arts Co Ltd considered they were encouraged and cared mentally by their wives a lot.

Proposition 3: During the venture process, family and friends could offer assistance with mental supports and capital investment.

According to the interview result, after discovering the opportunities, the entrepreneur would evaluate the environment and self-drawbacks, and further find ways out to seize the opportunity for venture creation. As the founder of Yu Kuang, he established the first company selling mechanical pencil lead refill, while the founder of Hsin Nan Construction Co. grasp the opportunity to become one of the construction companies in the booming industry. With respect to the founder of Songson Industrial Arts Co Ltd, he manufactured the teapot made by stainless steel, which is the first in the market.

Proposition 4: The entrepreneur could discover the opportunities, and seize them for developing their venture creation.

Innovation brought the everlasting competitive competency. According to the interview results, the
entrepreneurs pursue innovation aggressively to maintain perpetual operation. As the founder of Fu Luong Hi-Tech Co. Said, a simple product would fall out of use very soon, and he would become ever more aggressive on new product R&D after seeing a product dying out. The founder of the Sean and Stephen Corporation suggested that the company had acquired more than 20 patents, and really made all efforts on innovation and R&D.

Proposition 5: The entrepreneur pursued innovation aggressively to maintain perpetual operation.

According to the interview result, the entrepreneurs would take advantage of many fashions to pursue further education, such like going back to school, joining a study group, attending a speech or lecture and reading books. The founders of the Yu Kuang, Hsin Nan Construction Co., Songson Industrial Arts Co Ltd and Sean and Stephen Corporation all went back to school for further education. While the founder of the Fu Luong Hi-Tech Co. also acquired knowledge through reading famous books such like "Good to Great" and "Execution", and he also aggressively participated in the industrial fellowship in Tainun.

Proposition 6: The entrepreneurs all considered further education was necessary.

Owing to limitation of resources and great uncertainty, the SMEs typically adopted entrepreneurial imitation in starting-up phase of venture creation. As the founder of Yu Kuang suggested that the R&D expenditure was limited in the starting-up phase, so they modified others' sample to create a new product, it had less risk, but had to avoid the intellectual property right issue arise from total replication. The founder of Hsin Nan Construction Co. also conducted entrepreneurial imitation. At that time, the construction companies already existed but with fewer competitors. The company was founded according to other's experience with little innovation. As for Songson Industrial Arts Co Ltd & the Sean and Stephen Corporation, since they created a new product, they were more like entrepreneurial venture. However, regardless of entrepreneurial imitation or venture, the entrepreneur not only had to learn more to make supplement to their own weakness, but also continuously upgrade the product quality or enhance the production procedure, to elevate the performance of the enterprise.

Proposition 7: At the starting-up phase, most entrepreneurs entered the market in way of entrepreneurial imitation.

4. Research Contributions and Limitations

This research mainly discussed the contributing factors and content of entrepreneurship, conducted in-depth interview of qualitative research through interviewing six entrepreneurs and analyzed the fruitful results gained from interview. The contribution of this research was to conclude the common contributing factors from distinct entrepreneurial history, and understand the influence of each contributing factor on entrepreneurship. According to the results, the critical contributing factors of entrepreneurship including the personal faith of entrepreneur, personal relationship, the spirit of pursuing further education and centralized organizational structure during the starting-up phase. As for the self-skill and knowledge of the entrepreneur would not influence the entrepreneurial strategies adopted afterwards, however the spirit of pursuing further education was highly praised by each entrepreneur. This research took down the venture procedure of entrepreneur in Taiwan. From the economic take-off in the past to the Asia financial crisis in 1998, the essential condition that made the enterprise in Taiwan stand erect was the effect of entrepreneurship. This research transformed the venture creation of six entrepreneurs in manufacturing industry into written words and formed a theoretical basis of practical reviews by six dimensions and four statuses of entrepreneurship, to provide others with comprehensible contributing factors and content of entrepreneurship in Taiwan manufacturing industry.

Research Restriction: In the sampling part, this paper adopted the in-depth interview as data collecting method, however, this methodology cost a lot of time, manpower and expenses, and therefore the number of sample was limited. The research subjects in the case study were the entrepreneurs from SMEs in manufacturing industry. Since the samples selected were all successful cases, it would be incomplete in collecting data of difficulties and unfavorable conditions in venture creation. Since the interview process was conducted under semi-structured questionnaires, and further arranged, analyzed and concluded by the researcher, the interview results was in form of written words. However, the description in written words might influence the objectiveness of result and cause errors due to the personal experience and subjective recognition and judgement of the researcher. Part of the research theme did not conduct further discovery in interview, so the data remains insufficient and was not supportive substantially. During the interview, the researcher attempted to avoid setting forth leading questions, however the interviewee sometimes might wander from the subject, so the researcher had to guide them, and thus lead to part of anticipated answers.

5. Recommendations

Take entrepreneur in other industry for research subjects: The subjects in this research are entrepreneur in manufacturing industry that belongs to traditional industry. The researchers in the future can focus on entrepreneurs in the Internet or electronics industry to do research. The electronics industry is the most booming industry and the lifeblood of Taiwan economy, the venture creation process is also worthwhile to do research in the future.
Re-verification by other methodologies: Owing to limitation of time, this research could not conduct verification on the result, thus the researchers in the future could rely on triangulation to refine the research. So-called triangulation should include four elements: Firstly: Interaction through the researcher-subject corroboration to cross-verify the data meaning between researcher and subject. This kind of cross-verification might occur in the data collecting process or interpretation after complete collecting the raw material to produce accurate reports, which is used in this research. Second: The other data resources. Researcher should collect related data from other information sources as reference. However the data collected in this research is mainly the interviewing minutes, and failed to add in the relevant reports of interviewee to supplement objective comments. Third, other methodologies such like long-term observation and focus groups. So-called long-term observation was to collect relevant data via observing the growing history of the company, and to modify the researcher's subjective viewpoint after analysis and comparison. While the focus groups method is to gather up the entrepreneurs in each company to discuss on this theme, and thus gained more information from their freely conversations. Fourth, check whether the results convergence with other researchers, which means to compare the results with other researchers using exactly the same raw material. As for the third and the fourth methods mentioned above, this research did not adopt owing to limited time and manpower. Only six entrepreneurs were interviewed in this research, thus the researchers in the future are recommended to take advantage of the third and fourth methods to gain more abundant information with enlarged sample number, and further verify whether consistence exist among propositions in this research.

Reference

Bruyat, C. & Julien, P. A. (2001). Defining the field of research in entrepreneurship. Journal of Business Venturing, 16(2), 165–180.
Chittipeddi, K. & Wallett, T. A. (1991). Entrepreneurship and competitive strategy for the 1990's. Journal of Small Business Management, 29(1), 94–98.
Drucker, P. F. (2007). Innovation and entrepreneurship: Practice and principles. New York, NY: Routledge.
Gartner, W. B. (1985). A conceptual framework for describing the phenomenon of new venture creation. Academy of Management Review, 10(4), 696–706.
Koberg, C. S., Uhlenbruck, N. & Sarason, Y. (1996). Facilitators of organizational innovation: The role of life-cycle stage. Journal of Business Venturing, 11(2), 133–149.
Stevenson, H. H. & Jarillo, J. C. (1990). A paradigm of entrepreneurship: entrepreneurial management. Strategic Management Journal, 11(5), 17–27.
White Paper on Small and Medium Enterprises in Taiwan, 2012.