Entrepreneurial Innovation Capability and Firm Success: An Empirical Investigation of Gem and Jewelry Businesses in Thailand

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Abstract

Entrepreneurial innovation capability enables organizations to have the ability to develop and improve new methods and processes, as well as contribute to the development or creation of products and services of businesses and stay ahead of the competitors. This study aimed to examine the effect of entrepreneurial innovation capability on firm success in gem and jewelry businesses in Thailand. The size of sample group was 127 firms. The questionnaires were used as a tool for collecting data. The statistics for this research was Multiple Regression. The result showed that entrepreneurial innovation capability in terms of firm innovativeness awareness and business risk-taking had influence on sustainable competitive advantage which in turn affecting firm success. This research developed the concepts of innovation capability and provided useful information that gem and jewelry business can take into account in order to enhance sustainable growth.

Keywords: Entrepreneurial Innovation Capability, Sustainable Competitive Advantage, Firm Success, Gem and Jewelry Businesses

1. Introduction

Businesses face increasingly in a dynamic competitive environment, fast changing in customer needs, as well as products and business models that have a short life cycle. This is the driving force for enterprises to develop and maintain a competitive advantage (Ho et al., 2015). Therefore, businesses that seek new opportunities in the market tend to be more entrepreneurial and innovative for increase growth, market share as well as create different competitiveness and a sustainable position in the market (Shirokova et al., 2016). Particularly, entrepreneurial firms will make a difference in the ability to innovate, to initiate change, quickly respond, be flexible, and be agile for change. For this reason, the organizational ability to innovation is an important because innovation is a key concept in social businesses that contributed to the discovery of survival of a major recession (Kim & Huarng, 2011). Moreover, innovation has a close relationship

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and a role center of entrepreneurship (Hebert & Link, 2006), relevant to introducing something new to the production activities (Dibrell et al., 2011) and finding new methods or approaches for the operation. Therefore, the innovation in entrepreneurship encourages the organizations to achieve the balance in the economy. Moreover, it contributes the value creation to the firms. Thus, many firms gain competitive advantage and maintain sustainable growth through entrepreneurial innovation capability (Weerawardena et al., 2006).

From the above-mentioned, entrepreneurial innovation is crucial for business functions and operations (Baron & Tang, 2011). The issues related to entrepreneurial innovation therefore are very challenging for the board to point out the strategies by taking both internal and external environmental change into account. For this research, it is interesting to investigate entrepreneurial innovation capability which is explained new ways, methods, practices, and decision-making form to firm management for increase adaptation and competiveness. On the other words, entrepreneurial innovation capability is explained accordingly with dynamic capabilities including integrate, create and modify capabilities of businesses under an uncertainty environment. Therefore, this research aimed to study the relationship between entrepreneurial innovation capability and firm success for gem and jewelry business in Thailand. This research would be useful for developing entrepreneurial innovation concepts which firms can use in order to enhance sustainable competitive advantage and firm success.

2. Literature review and hypotheses development

For an entrepreneurial firm, innovation plays as a crucial role because it creates practices that lead to new products with high quality, fast marketing, adding value to customers at a lower cost than its competitors, as well as providing a different process (Lawson & Samson, 2001). Also, an emphasis on management capabilities through the linking of non-imitate resources (Teece & Pisano, 1994) results in a sustainable competitive advantage and achievement of businesses.

An entrepreneurial innovation capability, as a concept, is mainly focused on adapting and developing a strategic position such as new solutions and risk-taking which focus on innovation. These are very possible in gathering and bringing new business opportunities to take advantage of a company and result in better performance achievement (Covin & Lumpkin, 2011). Therefore, dynamic capability can be applied to describe the relationship of entrepreneurial innovation capability which divided into five dimensions. The conceptual model was presented in Figure 1 as below:

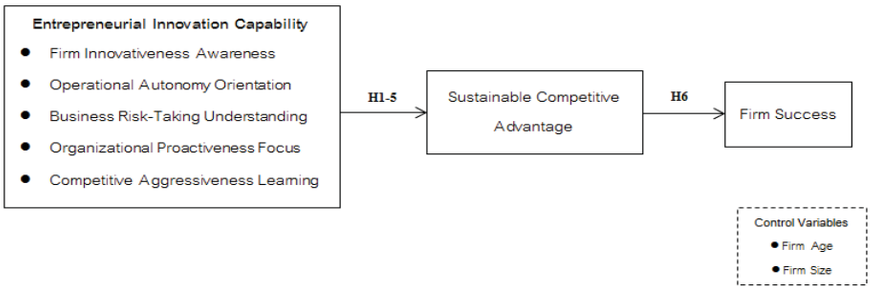

Figure 1: Conceptual model of entrepreneurial innovation capability and firm success

2.1 Entrepreneurial innovation capability

Entrepreneurial innovation capability is the combination of entrepreneurship and innovation and mainly focused on adapting and developing new ways. As a result, business develops new business opportunities for increase performance achievement. For small and medium enterprises, the track to entrepreneurship is to make their activities more efficient, to be superior in the capture of the needs of customers, and to be faster to the market than competitors. In this way, businesses can able to create a competitive advantage and superior performance (Covin et al., 2006).

On the basis of the relevant literature review, the difference between entrepreneurial orientation and entrepreneurship was developed by Lumpkin and Dess (1996). Entrepreneurial orientation is offered as the key in the process of answering questions about how to operate business, that is, important methods, practices, and decision-making styles. Meanwhile, entrepreneurship focuses on the content of the decision by tracking the operations concerning the scope of the company, introduces product-market relationship and deploys resources. Both new-entry and existing companies have expanded their business in order to generate more revenue, access better technological progress, and wealth creation. Moreover, the suggestion of Miller (1983) states that corporate entrepreneurship must support in product-market innovation, operational risks, entering to the market before rivals and to counter the competitors which had these features, activities or processes of the company. The concept of entrepreneurship reflecting organizational processes and forms of decision-making of organizations leads to competitive advantage and firm success. Therefore, this research gives important about new ways, methods, practices, and decision-making forms to firm's management in order for the deal with situations that may occur, help process development and increase potential in operation exceed competitors. As a result, businesses can building or maintain competitive advantage and finally accomplishment.

From the above discussion, entrepreneurial innovation capability refers to the ability of an organization to contribute to the development and improvement of the organization and to its own success. This organizational ability is to develop and refine a new way to support practices, processes, and the decision-making activities involved in the operation, in order to contribute to the opportunity to enter new

markets and modify the operation under the remaining dynamic environment. Entrepreneurial innovation capability in this research consists of five dimensions as follow.

2.1.1 Firm innovativeness awareness

Due to the fast changing in technology, businesses are facing a dynamic market in particular a short product life cycles. The organizations have to establish the search for new ways involving business practices (Ganter & Hecker, 2014) as well as the introduction of new products before the competitors. Besides, in high competitive environment the company could gain sustainable competitive advantage by focusing on innovation (Shoham & Fieganbaum, 2002). Therefore, business that has focus on development new approach cause a superior competitiveness over the competitors and allow businesses succeed.

In this research, firm innovativeness awareness refers to the organization's ability important to encourage the cause of development of new operations as well as products and services. It would facilitate the efficiency and effectiveness of the organization (Lumpkin & Dess, 1996).

Organizational innovativeness awareness can help entrepreneurs make decisions and implement results as to a product or process that differs from competitors, providing outstanding and superior competition. The previous research of Droge et al. (2008) found that the strategy orientation issue where organization innovativeness brought about the success of new products. Furthermore, new improving or creating through innovation is also an opportunity to respond to the expectations of customers as well. These help the business maintain competitiveness and continuously long-term performance. Thus, this research proposes the hypothesis that follows as:

Hypothesis 1: Firm innovativeness awareness has a positive effect on sustainable competitive advantage.

2.1.2 Operational autonomy orientation

In dynamic environment, companies tend to operate independently. This associates with how the company should be managed and what is the important key to make it succeed (Zehir & Ozsahin, 2008). The firm can achieve its goals by focusing on creating value for customers, innovation, and flexibility (Prastacos et al., 2002). Moreover, autonomy is a process that needs to take advantage of the existing strengths of the company, to identify opportunities beyond the current capabilities of the organization, and to develop support for new or improved business practices (Kanter et al., 1990).

For this study, operational autonomy orientation refers to an emphasis on the ability and intended operation that independently lead to developing the operating ability by one's organization, impacting decisions under the condition that it maintains the company's strengths, the opportunity for superior capability, and the effectiveness of the firms (Lumpkin & Dess, 1996; Shan et al., 2016).

The operational autonomy orientation is related to the open communication, acceptance of access to information, policies of empowerment, and authority to think and act without intervention (Hughes & Morgan, 2007). When organizations create a work environment that is highly autonomous, it leads to new approaches in the implementation of creating a new product or service, customer response, and the process

of corporate management. In previous research supports the organizational view that, when independence encourages innovation, the launching of entrepreneurial ventures increases the competitiveness and effectiveness of the company (Brock, 2003; Burgelman, 2001). These will be an opportunity to support creativity of the work which will lead to the development of new approaches superior competitors. Thus, this proposes the hypothesis as follows:

Hypothesis 2: Operational autonomy orientation has a positive effect on sustainable competitive advantage.

2.1.3 Business risk-taking understanding

Risk-taking organization seems to response well in high competitive environment. Especially, rapidly change environment and short product life cycle; companies need to find new opportunities due to increased uncertainties of profit from existing operations. Moreover, an entrepreneurial company is required to understand the risks involved and must be able to manage those risks (Liu et al., 2002). Because these things show that the risk tolerance is linked to bold intention and activities that can improve the businesses returns (Wang et al., 2015).

In this research, business risk-taking understanding refers to the organization's ability in the perception of the situation that occurs under uncertainty and can manage the uncertain situation's control by the ability or skills of the organization itself (Liu et al., 2002; Lumpkin & Dess, 1996).

Small and medium-sized businesses have a high risk tolerance to create opportunities that benefit the results of innovation. Moreover, it provide benefits to their clients as well as cost advantage over competitors by offering a product or service at a lower cost in the market (Hoonsopon & Ruenrom, 2012; Zhou et al., 2005). These correspond with the previous research of Hoonsopon and Ruenrom (2012). It indicated that high risk tolerance will have a positive impact on the competitive advantages in small and medium-sized enterprises. It can help business pursue beyond competitiveness and continuously maintain competitive advantage. Thus, business risk-taking understanding proposes hypothesis as follows:

Hypothesis 3: Business risk-taking understanding has a positive effect on sustainable competitive advantage.

2.1.4 Organizational proactiveness focus

Proactiveness is associated with initiative in an attempt to cause a reaction in the environment which would lead to benefits for the businesses. This is because the forward-looking is a search for opportunities and utilization of the resources that can be a source of innovation, competitive advantage, and first-mover benefits in the market (Eggers et al., 2013).

In this research, organizational proactiveness focus refers to the organization's ability focuses on a look ahead to a goal in the future, adaptive capability, and the expectations and practices on future demand by the discovery of new opportunities that may be associated with a current operation which helps a firm to success (Lumpkin & Dess, 1996; Rauch et al., 2009).

In order to gain competitive advantage in the market and stay ahead of the competitors the companies have to be proactive. It shows when a company is forward-looking, focusing on the changes over time and then bringing it actively to determine practices and management action. Responding to those changes allows companies to take the advantage before competitors in terms of product development, improved management practices, and responding to customer demand as well. Thus, proactiveness of business results in superior performance and sustainable competitive advantage correspond with the previous research of Gima et al. (2005). Thus, this research proposes hypothesis about organizational proactiveness focus as follows:

Hypothesis 4: Organizational proactiveness focus has a positive effect on sustainable competitive advantage.

2.1.5 Competitive Aggressiveness Learning

Companies need to adapt to competitive environments based on their ability for innovation and risk-taking. Indeed, there is a requirement for participation and aggressive positioning of offering new products or services that will often lead to a strong performance (Ireland et al., 2003). Responding to restrictions as well as is adapting to the challenges of competitors (Lumpkin & Dess, 2001; Shan et al., 2016) are called features of competition aggressiveness. A company is more likely to use aggressive competition when it acquires a niche and searches for ways to prevent the barrier from a new entrant (Lumpkin & Dess, 2001), which will make organizations able to exceeding effective competitors in terms of product, management process, and customer response.

In this research, competitive aggressiveness learning means the organization's ability to support the commitment to overcome the competition and also the effort to make in the market position over the competitors in order to achieve a goal and firm success (Lumpkin & Dess, 2001).

The previous research showed business that has responding to high competitive aggressiveness is not only a result of cutting costs, expanding markets abroad, or existing product development with new functions or increased service, but creating products or processes that cause differentiation and is superior over competitors, leading to competitive advantage (Benitez et al., 2015; Green et al., 2012). When organizations have learned aggressive competition, it will enable them to adapt, react, and prevent the actions of competitors. These results within the firm take in new ways to bring long-term performance, which is called sustainable competitive advantage. Thus, this research proposes the hypothesis as follows:

Hypothesis 5: Competitive aggressiveness learning has a positive effect on sustainable competitive advantage.

2.2 The consequences of entrepreneurial innovation capability

In this research, the consequences of entrepreneurial innovation capability comprise sustainable competitive advantage and firm success. The details below follow a presentation on the literature review in each construct and proposed hypotheses for testing.

2.2.1 Sustainable competitive advantage

The competitiveness of the company reflects both short and long-term performance as well as demonstrating the relationships within the industry and with competitors. The sustainable competitive advantage of a company occurs as being superior to the financial and market advantage (Weerawardena & O'Cass, 2004) that competitors cannot imitate. In short, the competitive advantages can be achieved from a potential superior and are different from competitors in product, service, and administration. Significantly, a competitive advantage can be considered as an advantage, condition, or position to facilitate the operations being more efficient and of higher quality in the management of products and services for the organization (Huang et al., 2016).

For this research, the sustainable competitive advantage refers to the organizations that have performance in the introduction of new products and operation methods superior to competitors, that show capability and differentiates from competitors (Weerawardena & O'Cass, 2004). When an organization takes a sustainable competitive advantage, it operates under a competitive environment as well as responds to organizations and customers, and reacts to competitors. This enables an organization to survive and contribute to the success of the business; and therefore, this research proposes the hypothesis as follow:

Hypothesis 6: Sustainable competitive advantage has a positive effect on firm success.

2.2.2 Firm success

An organization has superior performance, markets, and competitors who cannot imitate; after that, the organization meets its achievement. In the operation of a business, especially for small and medium-sized enterprises, business success is an indication of the potential and capabilities beyond its competitors, as well as showing that it can survive under conditions of intense competition. Moreover, scholars can utilize both financial and non-financial measurements to gauge the success of an organization (Haber & Reichel, 2005; Lewis, 2008; Reijonen, 2008). Therefore, for this research, firm success refers to the potential of a business toward achieving company goals, creating customer acceptance, and building a reputation, while continuing to survive in the industry through the short and long-term.

3. Methodology

3.1 Sample selection and data collection procedure

Gem and jewelry businesses were selected as the population. The list of 626 gem and jewelry businesses in Thailand was obtained from the Department of International Trade Promotion, Ministry of Commerce (www.ditp.go.th, accessed in November 2015). These businesses have complex, various customers and competitors. In particular, the dynamic competitive environment has resulted in businesses

facing competitive challenges and the need to rapid response. Moreover, the operating characteristics are expanded its operations in the domestic market and abroad as well as the development of new in terms of products, services and operational methods for increase competitiveness and superior competitors. Thus, gem and jewelry businesses have appropriate population sample for the data collection.

Questionnaires were used as a tool for collecting data. All questionnaires were distributed in June of 2016 and follow-up letters were sent to the firms after four weeks later if they had not yet replied. The key informants were the managing directors or managing partners who made a decision on long-term plans with respect to the overall direction of the organization. In the end, there were 127 questionnaires returned in response. The effective response rate was approximately 22.04 percent which greater than 20 percent, and considered acceptable, was recommended by Aaker et al. (2001). Therefore, the sample size of this research is sufficient for conducting multiple regression analysis.

3.2 Test of non-response bias

This research showed a non-response bias which the result of the t-test presents no significant difference between the two groups of respondents, and it implies that the returned questionnaires had non-response bias problem (Lewis et al., 2013; Rogelberg & Stanton, 2007). Thus, it is assumed that a non-response bias had not impact on this research. There were not significant differences statistically between early and late respondent. Thus, this research had non-response bias problem according to Armstrong and Overton (1977).

3.3 Variable measurements

The development procedures measure concerns the multiple items development for measuring each construct in the conceptual model. Using multiple items provides a wider range of content of the conceptual definition and improvement of reliability (Neuman, 2006). The measuring of each construct in the conceptual model is so that all variables have been developed from the definition and review of the literature for the measure and are received from the survey. These variables are measured by a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strong agree) as follows:

Firm success was measured through the sales growth and performance, growth of the company, market share, reputation, and the relationships with customers and stakeholders. This construct is adapted from Pongpearchan and Ussahawanitchakit (2011).

Five dimensions of entrepreneurial innovation capability were developed from the work of Lumpkin and Dess (1996) as follows:

Firm innovativeness awareness was measured through the business that has operational innovation, research associated with operations, and the presentation and performance measurement based on new concepts and methods.

Operational autonomy orientation was measured through the independent operation that allows the operational planning for success, the awareness of duties and responsibilities of owner, and openness in the use of knowledge in operations.

Business risk-taking understanding was measured by understanding uncertain situations that may arise, confrontation, and response to decisions in uncertain situations.).

Organizational proactiveness focus was measured by the operation focus on goals in the future, the analysis, forecasts of competitive situations as well as customer demands and the competitive potential of competitors in the future.

Competitive aggressiveness learning was measured through monitoring the competition situation, preparing data for the competition, supporting the application of modern technologies, and developing new methods for operating.

Sustainable competitive advantage was measured by the outstanding differential of products, innovation and methods in operation beyond competitors, when better technological operations are compared with competitors. This construct is developed as a new scale from the definition and literature.

The control variables in this research were firm age and firm size. Firm age was measured by the number of the years that a company had performance from the year of the firm's establishment to the year of current study (Leiblein et al., 2002). In this research, firm age was represented by a dummy variable which had assigned a 0 to all firms that have experience of operations of 15 years or less, and a 1 to all firms that had experience of operations more than 15 years. Furthermore, firm size influences the capacity of a firm to operate a business in order to achieve performance (Kang et al., 2010; Ussahawanitchakit, 2005). In this research, firm size was measured by the number of full-time employees. It was represented by a dummy variable (0 = total employees less than 50, and 1 = total employees that are equal to or more than 50).

3.4 Validity and reliability

This research employs two experts who verified the questionnaires, making possible critiques and improvements, and choosing the best possible scale of measure corresponding with the conceptual definition according to recommend of Nunnally and Bernstein (1994). Furthermore, the first set of 30 questionnaires that returned is pre-tested to ensure the validity and reliability of each measurement in the questionnaire.

Table 1: Results of measure validation of each dimension of entrepreneurial Innovation capability, sustainable competitive advantage and firm success

Constructs	Factor Loadings	Alpha Coefficient
Firm Innovativeness Awareness (FIA)	.690 - .910	.822
Operational Autonomy Orientation (OAO)	.784 - .892	.814
Business Risk-Taking Understanding (BRU)	.742 - .924	.855
Organizational Proactiveness Focus (OPF)	.768 - .861	.835
Competitive Aggressiveness Learning (CAL)	.792 - .917	.861
Sustainable Competitive Advantage (SCA)	.914 - .937	.943
Firm Success (FSU)	.704 - .889	.878

The construct validity of the data finds that each item of all variables is loaded on a single factor. The range of factor loadings is between 0.690 and 0.937 that are greater than the 0.4 cut-offs, and are statistically significant (Nunnally & Bernstein, 1994). Meanwhile, reliability value, Cronbach's alpha coefficients have value between 0.814 and 0.943, which exceeds the acceptable cut-off score. Accordingly, Cronbach's alpha should be greater than 0.70 to ensure the internal consistency (Hair et al., 2010; Nunnally & Bernstein, 1994) as showed in Table 1.

3.5 Statistical techniques

This research used the ordinary least squares (OLS) analysis to test the hypothesis. Because of all the variables are not the nominal and categorical data, the method is appropriate for testing. The equation models were used for statistical analysis can expressed as follows:

Equation 1: $SCA = \alpha_1 + \beta_{01}FIA + \beta_{02}OAO + \beta_{03}BRU + \beta_{04}OPF + \beta_{05}CAL + \beta_{06}FA + \beta_{07}FS + \varepsilon_1$

Equation 2: $FSU = \alpha_2 + \beta_{08}SCA + \beta_{09}FA + \beta_{10}FS + \varepsilon_2$

4. Results and discussion

In Table 2, the relationships among variables, the correlations among all variables in the conceptual model are in the range of 0.297 at $p < 0.01$ to 0.814 with $p < 0.01$. Besides, the variance inflation factors (VIF) in equation models 1 to 2 indicate the maximum value as 3.464, which are shown in Table 3. The result showed that independent variables are not correlated with each other because the VIF value was lower than 10 according to that recommended by Hair et al. (2010). Hence, multicollinearity is not a problem in this research.

Table 2: Descriptive statistics and correlation matrix of all variables

Variables	FIA	OAO	BRU	OPF	CAL	SCA	FSU
Mean	3.99	4.14	4.03	3.97	3.89	3.68	3.61
S.D.	.60	.52	.60	.64	.66	.78	.59
FIA	1						
OAO	.513***	1					
BRU	.497***	.692***	1				
OPF	.508***	.597***	.642***	1			
CAL	.527***	.626***	.653***	.814***	1		
SCA	.429***	.496***	.513***	.405***	.445***	1	
FSU	.503***	.395***	.354***	.491***	.327***	.297***	1
FA	-.005	-.010	.100	.002	.047	.001	-.024
FS	.282***	-.132	.008	.189***	.177***	.083	.170

***Correlation is significant at the 0.01 level (2-tailed).

For the multiple regression analysis in Table 3, the results demonstrates that the first dimension, firm innovativeness awareness was significantly and positively related to sustainable competitive advantage (β_{01} = 0.213, p<0.05). The entrepreneurial is necessary to the existence of sustain competitive advantage (Wiklund & Shepherd, 2003). Because innovativeness reflects that is the business's proclivity towards supporting new ideas, experiment and creativity for the development and new creation (Shirokova et al., 2016). This was consistent with dynamic capability that pay attention on management capabilities allows the company to new market opportunities, maintain competitiveness and continuously competitive advantage (Teece, 2007). This confirmed that innovativeness encourages sustainable competitive advantage. **Thus, hypothesis 1 is supported.**

Table 3: Results of regression analysis for the hypotheses testing

Independent Variables	Dependent Variables	
	SCA	FSU
Firm innovativeness awareness (FIA): H1	.213**	
	(.091)	
Operational autonomy orientation (OAO): H2	.083	
	(.114)	
Business risk-taking understanding (BRU): H3	.237**	
	(.111)	
Organizational proactiveness focus (OPF): H4	.064	
	(.133)	
Competitive aggressiveness learning (CAL): H5	.068	
	(.133)	
Sustainable Competitive Advantage (SCA): H6		.364***
		(.088)
Firm age (FA)	-.144	.004
	(.166)	(.191)
Firm size (FS)	-.508***	.487**
	(.169)	(.186)
Adjusted R^2	.353	.117
Maximum VIF	3.464	1..095

*** p < 0.01, ** p <0.05, * p < 0.10 Beta coefficients with standard errors in parenthesis

Secondly, operational autonomy orientation had not significantly impact on sustainable competitive advantage (β_{02} = 0.083, p>0.10) which was inconsistent with expectation. Businesses have independent

operations causing encourage innovation, enter new market, and increase competitiveness and effectiveness (Brock, 2003; Burgelman, 2001). These lead competitive advantage to the companies. However, businesses that have over participated in the decision may be suffering financially (Covin et al., 2006). Meanwhile, the over autonomy has possibility to lack understanding that can be used to bring with the necessary activities. As a result, the finding the answer, the knowledge development, and maintain competitive advantage is going to be difficult. This is consistent with research of Hughes and Morgan (2007) found that operational autonomy had not impact on business's performance. **Thus, hypothesis 2 is not supported.**

Thirdly, business risk-taking understanding had positively significant influence on sustainable competitive advantage (β_{03} = 0.237, p<0.05). This result was consisted with expectation that companies have a highly accepted risk that would create an opportunity to benefit outcomes in innovation. Furthermore, it also can help to meet the customer and cause cost advantage over competitors from the offering of a product or service at a low cost in the market according the previous research of Hoonsopon and Ruenrom (2012) and Zhou et al. (2005). Indeed, small and medium-sized enterprises especially gem and jewelry businesses have the characteristic that can analyze and predict competitive situations, as well as lead to a better understanding and are able to manage those uncertainties from useful information to adapt it to suit the company. The results pointed out that the business risk-taking had a positive impact on a sustainable competitive advantage for the firm. **Thus, hypothesis 3 is supported.**

Fourthly, the finding indicates that organizational proactiveness focus had not significant influence on sustainable competitive advantage (β_{04} = 0.064, p>0.10) inconsistent with expectation that organizational proactiveness is actually essential for competing in today. Meanwhile, the previous research of Runyan et al. (2008) found the period operation of business only less than 11 years that affects to performance. This was in line with the operating characteristics of gem and jewelry businesses that have the period almost more than 15 years. In addition, the almost businesses had the production and distribution aboard, so that they should pay attention more on the regulation, rules both local and foreign as well as face many competitors. Hence, it had a possibility for the limitation to create sustainable competitive advantage. **Thus, hypothesis 4 is not supported.**

Finally, competitive aggressiveness learning had not significant with sustainable competitive advantage (β_{05} = 0.068, p>0.10). The result had inconsistent with expectation because gem and jewelry businesses in this research faced intense competition in the global market particularly price competition and faced with increase cost from the import some materials. As a result, business showed decline profit which in line to the study of Lumpkin and Dess (2001) who indicated that competitive aggressiveness was negatively related to sales growth and poorly related to profitability and return on sales. It was possible that for businesses, it was difficult to maintain competitive advantage. **Thus, hypothesis 5 is not supported.**

Importantly, sustainable competitive advantage demonstrated significantly and positively impact on firm success (β_{06} = 0.364, p < 0.01) consistent with expectation that a sustainable competitive advantage will

contribute to the company success due to the survival and success in the operation of the current business environment. Firms need to focus on new product development such as continuously identify the needs of customers for new product development (Melissa, 2005), product quality improvement (Staley & Warfield, 2007), and speed up the process for doing business (Swink et al., 2006). This would contribute the creating potential and differences among superior competitors and ongoing outstanding performance. It is essential for business to sustain competitive advantage in order to be success. **Thus, hypothesis 6 is supported.**

For control variables, firm age showed no significant effect on sustainable competitive advantage and firm success. However, firm size had a positively significant influence on firm success and negatively significant with sustainable competitive advantage.

5. Contributions

This research was conducted with gem and jewelry businesses in Thailand which was driven under the intensity of the competitive environment. The adaptation and development of operational methods of these businesses were noteworthy for current operations. This research provides the explanations and expanding of entrepreneurship and innovation perspective. Furthermore, it facilitates the explanation phenomenon under dynamic competitive circumstances which would contribute to academic further study.

For managerial contribution, entrepreneurial innovation capability supports operations by continuously improving, developing harmonizing with the internal and external environment leads to competitive advantage and finally has success. Therefore, executive should focus on entrepreneurial innovation capability as how the business should be foresees a priority, especially business risk-taking understanding and firm innovativeness awareness. The business has firstly concentrate on risk-taking that help understanding and able cope to uncertainty situations result in able to develop new ways in operation. Furthermore, the executive should be aware and to support the development of new approaches for the operation that is consistent with currently competitive environment which allow businesses to flexible operational effectiveness and competitiveness beyond competitor. These lead to maintain competitive advantage and succeed eventually.

6. Conclusions

This research interested in entrepreneurial innovation capability that comprises five dimensions effect on sustainable competitive advantage and finally result in firm success. The sample was 127 gem and jewelry businesses in Thailand and conducted hypothesis testing by Regression analysis. The results found that firm innovativeness awareness and business risk-taking understanding cause sustainable competitive advantage. Moreover, sustainable competitive advantage results in business achievement.

Although this research had contribution, some limitations occur should provide. There were only 127 respondents as the sample size for collection data which is considered a small sample for the measure of

seven variables. This may be result in the statistical tests about the analytical power are possibly weakened. Although a response was more than 20%, a larger sample size would facilitate further results. For the suggestion in future research, the research should re-examine the research hypotheses that are not statistically significant. Moreover, further research should re-confirm testing these variables again with another population in order to confirm the result.

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