

# Organizational Creativity and Business Competitiveness: Empirical Evidence from the Thai Gem and Jewelry Industry

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## Abstract

The purpose of this study is to examine the relationship between the organizational creativity and business competitiveness of gem and jewelry businesses in Thailand. Data were collected from 146 managing directors or managing partners of firms in this sector in Thailand and subjected to multiple regression analysis to test the proposed hypotheses. The results show that organizational creativity has a significant positive effect on organizational productivity, organizational innovation and organizational excellence, which have a significant positive effect on business competitiveness. The results obtained in this study suggest that encouraging higher levels of creativity in organizations is beneficial to the firms in this industry as it not only leads to improvements in organizational productivity, organizational innovation and organizational excellence but also to an increase in business competitiveness. By providing a better understanding of how organizational creativity has the potential to significantly influence the nature of business competitiveness in the contest of the gem and jewelry industry in Thailand, this study is an important contribution to this sector.

**Keywords:** Organizational Creativity, Organizational Productivity, Organizational Innovation, Organizational Excellence, Business Competitiveness

## 1. Introduction

In today's extremely challenging business environment, firms are under intense global competitive pressure. One way for them to be successful in such an environment is to encourage organizational creativity, organizational productivity, organizational innovation and organizational excellence, which are among the main resources they can use to help them gain and maintain business competitiveness and enjoy sustainable success (Al-Dhaafri, Al-Swidi, & Yusoff, 2016; Ganter & Hecker, 2013; Ghosh, 2015; Torabi & El-Den, 2017). Since consumer behavior is now changing at unpredictable – and unprecedented – speed, organizational transformations are inevitable, even though they may put firms under high-pressure. To deal with such rapidly changing consumption patterns, it is necessary for companies to make changes in their organizational creativity in order to improve their productivity (Adcroft & Teckman, 2011), increase their innovation (Sutanto, 2017) attain excellence and bring about new products and services (Hashemy et al., 2016). In short, organizational creativity is critical to enhance the productivity, innovation, and excellence of a firm and generate long-term benefits (Adcroft & Teckman, 2011; Hashemy et al., 2016; Hu, Gu, & Chen, 2013). Increased levels of organizational creativity are most likely to promote business competitiveness (Ghosh, 2015). Apart from being one of the primary factors in the outcomes of a firm's innovative orientation, organizational creativity also helps firms generate and develop organizational innovation (Pratoom & Savatsomboon, 2012). Moreover, higher levels of organizational creativity can increase organizational excellence and are likely to result in higher business competitiveness (Adcroft & Teckman, 2011; Hutton & Eldridge, 2019; Kafetzopoulos, Gotzamani, & Gkana, 2015).

The relationships between organizational creativity and its four distinctive resources and capabilities (organizational innovation, organizational productivity, organizational excellence, and business competitiveness) are the focal point of this study. To develop the conceptual framework outlining the congruence between them and organizational creativity, the resource-advantage theory is used as theoretical support. According to this theory, firms can seek an advantage in resources over competitors by providing greater values and benefits to their customers via four resources: organizational creativity, productivity, innovation and excellence (Arnett & Madhavaram, 2012; Vasconcellos, Garrido, & Parente, 2019). Firms that exploit these resources more efficiently than their competitors can generate and maintain their competitive advantage (Hunt & Madhavaram, 2012).

One industry in Thailand that is facing more intense competition and needs to foster organizational creativity is the gem and jewelry industry, whose revenues and profits have been declining as gem and jewelry markets are becoming ever more competitive (Shortell & Irwin, 2017). Thai gem and jewelry businesses will thus be used in this study for empirical testing. Another reason for choosing this particular sector in Thailand, apart from declining profits, is that, as a creative industry, it has the adaptability and flexibility required to deal with challenges and obstacles and overcome them. The creativity and innovation inherent in most of the gem and jewelry businesses firms and their unique and distinctive designs differentiate them from competitors (Federation of Thai Industries, 2018). Another reason yet is that, according to Asia Development Bank (2019), Thailand is one of the world's leading gem and jewelry manufacturing centers. It is also regarded as one of the best gem sources (Kasikorn Research Center, 2018). All these characteristics, most notably the adaptability and responsiveness of firms, support the choice of Thai gem and jewelry businesses as the appropriate target sample for an assessment of organizational creativity.

Since there is little empirical research on determining the relationship between organizational creativity, innovation, organizational productivity, organizational excellence on the one hand and business competitiveness on the other, this study attempts to fill a gap in the context of organizational creativity and seeks to extend the application of the resource advantage theory to the Thai gem and jewelry industry. In short, focusing on a specific sector of activities, this study aims to gain a better understanding of how organizational creativity affects business competitiveness.

## **2. Literature Review and Hypothesis Development**

This section discusses the key operative concepts in this study and the hypotheses developed as a result.

### **- *Business Competitiveness (BUC)***

Business competitiveness is the outcomes of organizational capability of firms in managing and operating unique, superior, and different benefits in order to respond to customer needs and customer acceptance better than their competitors (LaVan, & Murphy, 2007; Lorenzo, Rubio, & Garcés, 2018). A firm's business competitiveness improves its operational efficiency (Khorram Niaki & Nonino, 2017). It is regarded as one of the main factors that provide competitive advantages and it plays a vital role in creating and retaining effective business advantages over competitors (Casadesus-Masanell & Ricart, 2010). To build and sustain business competitiveness in fast-growing industries, firms must provide distinct competitive advantages to customers that are greater than those of their competitors (Lorenzo et al., 2018). As the core driving force for achieving competitive advantages over competitors, business competitiveness gives priority to the consistent improvement and development of business operations (Jiang et al., 2016). The resource-advantage theory suggests that business

competitiveness is dependent upon the ability of an organization to produce creativity, innovation, productivity and excellence.

#### **- Organizational Creativity (ORC)**

Organizational creativity can be defined as the degree of firm competency in encouraging and developing employee creative thinking to propose a variety of goods or services that result in customer value creation (Amabile, 1997; Ghosh, 2015; Woodman, Sawyer, & Griffin, 1993). It is built through several firm attributes that can increase a firm's ability to hold a competitive advantage over its competitors. These attributes are valuable, rare and difficult to imitate resources because they collect intangible assets for coping with business environment changes (Ghosh, 2015). In an organizational context, creativity is realized as one of the crucial elements for the improvement of organizational innovation (Pratoom & Savatsomboon, 2012). Organizational creativity brings about crucial changes in organizational innovation as it tends to have a positive impact on organizational innovation in terms of the generation and development of more new products, processes and procedures (Hu et al., 2013; Chinchang, 2017). Moreover, apart from being most likely to support organizational productivity, enabling firms to effectively compete in fast-changing global markets (Adcroft & Teckman, 2011), organizational creativity also has a link with employees' competency to improve the efficiency of organizational innovation (Sutanto, 2017). Firms need organizational creativity to better advocate the generation of organizational excellence. This leads to business competitiveness in a changing global market (Hashemy et al., 2016). Thus, Hypothesis 1 is developed as follows:

*H1: Organizational creativity has a positive influence on (a) organizational innovation, (b) organizational productivity and (c) organizational excellence.*

#### **- Organizational Innovation (ORI)**

Organizational innovation refers to the degree of firm competency in generating, adopting and implementing new products, procedures and processes to respond quickly and effectively in a changing business environment (Anzola-Román, Bayona-Sáez, & García-Marco, 2018; Damanpour, 1991; Fadil, Singh, & Joseph, 2016). It is the advancement of customer value creation through new products, processes and procedures that confront with customer needs, expectations and satisfaction (Camisón & Villar-López, 2014). Organizational innovation is not bounded on new product development and process improvement but is born of a firm's ability to produce new business methods, structures and practices. As one of the most important attributes in supporting business competitiveness (Ganter & Hecker, 2013), organizational innovation is utilized for improving organizational productivity and encouraging future organizational excellence (Díaz-Chao, Sainz-González, & Torrent-Sellens, 2015; Jankal, 2014). According to Morris (2018), organizational innovation actually increases the accomplishment of organizational productivity. Moreover, Legenvre and Gualandris (2018) have shown that there is a positive relationship between organizational innovation and organizational excellence, which enables the achievement of business competitiveness and enhancement of organizational excellence in order to derive superior performance. Organizational innovation is likely to promote and facilitate organizational productivity, organizational excellence and business competitiveness. Therefore, Hypothesis 2 can be developed as follows:

*H2: Organizational innovation has a positive influence on (a) organizational productivity, (b) organizational excellence and (c) business competitiveness.*

#### **- Organizational Productivity (ORP)**

Organizational productivity can be defined as the degree of firm competency in assessing and improving operation efficiency to convert inputs into valuable outputs for internal and external customers (Dutton & Thomas, 1982; Pan, Pan, & Lim, 2015; Tan et al., 2015).

Business investment in organizational productivity has historically made a crucial contribution to business competitiveness (Torabi & El-Den, 2017). High levels of organizational productivity are important for increasing efficiency and effectiveness gains (Fu, Mohnen, & Zanello, 2018). Organizational productivity not only fuels the key determinants of business competitiveness but also improves the capacity of firms in a rapidly changing business environment by lowering the total manufacturing costs as well as expanding and enhancing access to emerging markets (Pan, Pan, & Lim, 2015). Tan et al. (2015) indicated that poor levels of organizational productivity account for low business competitiveness. Hutton & Eldridge (2019) have provided empirical evidence to support the relationship between organizational productivity and firms' business competitiveness. There is a significant and direct relationship between organizational productivity and business competitiveness (Díaz-Chao et al., 2015; Schnabel, 2010). According to Kafetzopoulos et al. (2015), organizational productivity can reduce manufacturing costs and promote the competitiveness of firms. Hence, Hypothesis 3 is developed as follows:

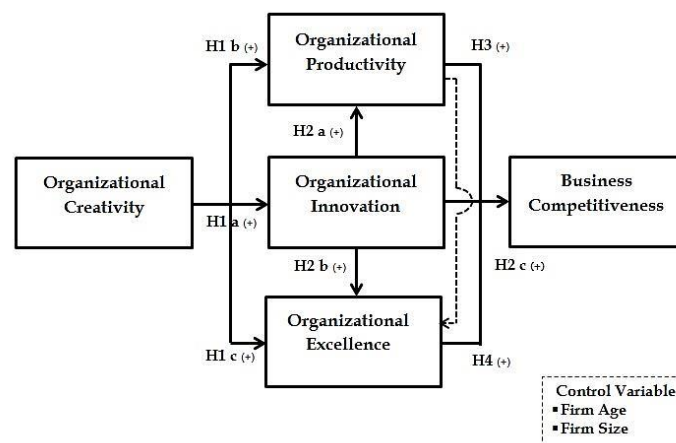
**H3:** *Organizational productivity has a positive influence on business competitiveness.*

**- Organizational Excellence (ORE)**

Organizational excellence refers to the degree of firm competency in seeking and delivering consistent, high-quality products and services to fulfill customer expectations and satisfaction (Antony & Bhattacharyya, 2010; Darling, 1999, O'Kane, 2003). It is the driving force that complements long-term business competitiveness over competitors (Esi, 2013). Today, business and global economic scenarios compel firms not only to react automatically to overcome important competitive challenges but also to build and maintain long-term business success by optimizing organizational excellence (Hashemy et al., 2016). Long-term business competitiveness in many firms requires suitable organizational excellence (Esi, 2013) in order to survive in rapidly changing customer demand (Al-Dhaafri et al., 2016). Organizational excellence can be achieved through the creation of long-term values to customers, employees and shareholders (Ringrose, 2013). There is evidence to support the linkages between organizational excellence and business competitiveness, with organizational excellence reckoned as the crucial driver sustaining and developing successful business competitiveness (Antony & Bhattacharyya, 2010). Moreover, prioritizing organizational excellence can help firms convey higher quality products or services than their competitors (Baraldi & Ratajczak-Mrozek, 2019). A number of previous studies stress the congruent relationship between organizational excellence and business competitiveness (Esi, 2013; Hashemy et al., 2016; Ringrose, 2013). Thus, Hypothesis 4 is developed as follows:

**H4:** *Organizational excellence has a positive influence on business competitiveness.*

Figure 1 illustrates the conceptual framework and relationships between these constructs.



**Figure 1:** Conceptual Framework (created by the author for this study)

### 3. Research Methodology

#### - *Sample Selection and Data Collection Procedure*

The samples in this research includes a total of 678 gem and jewelry firms in Thailand selected on the website of the Department of International Trade Promotion Ministry of Commerce in Thailand (DIPT; <https://www.ditp.go.th>). Surveys were directly sent to managing directors and managing partners involved in these firms. A total of 151 questionnaires were received but only 146 were usable for this study. The effective response rate is 22.81%. According to Aaker, Kumar, and Day (2001), an average mail survey response rate of 20% is considered acceptable and deemed sufficient. Non-response bias was tested for generalization (Armstrong & Overton, 1977). The recommendation is that the comparison between early and late respondents should not be significantly different between groups (Armstrong & Overton, 1977). The 146 usable questionnaires were divided into two equal groups: half the responses (73) fell into the early group of respondents (the first group) and the other half into the late group of respondents (the second group). The t-test comparison indicates that there are no statistically significant differences between the two groups.

#### - *Measurements*

Each construct in the models is measured using multi-item scales adopted from the literature review. A five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), was used to measure each variable. The measurements of the dependent, independent and control variables were conducted as follows:

- *Dependent variable* – Business competitiveness (the only dependent variable in this study) was measured by averaging four items adapted from LaVan and Murphy (2007). The scale measures whether the outcomes of organizational capability in the management of operations are (i) unique, (ii) superior, (iii) offer different benefits in order to respond to customer needs, and (iv) obtain better customer acceptance than competitors. A sample item reads as follows: “The firm’s readiness and potential to operate can continuously make a difference against other businesses in the same industry.”

- *Independent Variables* – The four independent variables include organizational creativity, organizational innovation, organizational productivity, and organizational excellence. The first one, organizational creativity, was measured by averaging four items adapted from Ghosh (2015). They assess the degree of firm competency in encouraging and developing employee creative thinking to propose a variety of goods or services that result in customer value creation. The sample item reads as follows: “The firm is confident that initiatives in developing concepts for the production of products or services and finding new operational methods will help it operate more efficiently.” To measure the second independent variable, organizational innovation, four items adapted from Anzola-Román et al. (2018) were averaged. The scale used measures the degree of firm competency in generating, adopting, and implementing new products, procedures, and processes as a quick and effective response to a changing business environment. The sample item reads as follows: “The firm is able to introduce new products and services that are up-to-date, meet the needs of customer, and enter the market more quickly and consistently than its competitors.”

The third variable, organizational productivity was measured by averaging four items adapted from Tan et al. (2015). The scale determines the degree of firm competency in assessing and improving operation efficiency to convert inputs into valuable outputs for internal and external customers. This was phrased in the sample item as follows: “The firm continuously improves the production processes and is able to rapidly produce high-quality products as everything exquisitely operates according to the production plan.” Finally, to

measure organizational excellence, another set of four items adapted from Antony and Bhattacharyya (2010) were averaged. More specifically, the scale measures the degree of firm competency in seeking and delivering consistent high-quality products and services to fulfill customer expectations and satisfaction. This translated into the following sample item: “The firm has established operational guidelines to achieve its goals that are more effective than those of other businesses in the same industry.” Previous studies also show that firm age and firm size have an influence on firm performance; it has been determined that larger and older firms are more likely to utilize their abilities to establish and maintain competitiveness than smaller and younger firms (Lau, Yiu, Yeung, & Lu, 2008; Park and Jang, 2009). Therefore, firm age and firm size were also used as control variables in this research.

**- Reliability and Validity**

The factor loadings ranged from 0.752 to 0.907, which were higher than the cut-off score of 0.4, thereby indicating acceptable construct validity (Nunnally & Bernstein, 1999). Moreover, the Cronbach’s alpha coefficients ranged from 0.786 to 0.906, which were greater than 0.70 thus indicating acceptable Cronbach’s alpha coefficient (Hair et al., 2010).

**Table 1: Results of Measure Validation**

Constructs	Factor Loading	Cronbach’s Alpha
Organizational Creativity (ORC)	0.882 - 0.907	0.906
Organizational Innovation (ORI)	0.830 - 0.906	0.896
Organizational Productivity (ORP)	0.786 - 0.874	0.836
Organizational Excellence (ORE)	0.752 - 0.806	0.786
Business Competitiveness (BUC)	0.856 - 0.894	0.893

**- Statistical Techniques**

Multiple regression analysis was used to test and examine all the hypotheses developed as part of the conceptual framework. This approach was appropriate since all the dependent, independent, and control variables in this study were categorical and interval data (Hair et al., 2010). The equation relationships of regression models appear as follows:

$$\text{Equation 1: } ORI = \alpha_1 + \beta_1 ORC + \varepsilon_1$$

$$\text{Equation 2: } ORP = \alpha_2 + \beta_2 ORC + \varepsilon_2$$

$$\text{Equation 3: } ORE = \alpha_3 + \beta_3 ORC + \varepsilon_3$$

$$\text{Equation 4: } ORP = \alpha_4 + \beta_4 ORI + \varepsilon_4$$

$$\text{Equation 5: } ORE = \alpha_5 + \beta_5 ORI + \varepsilon_5$$

$$\text{Equation 6: } BUC = \alpha_6 + \beta_6 ORI + \beta_7 ORP + \beta_8 ORE + \varepsilon_6$$

**4. Results and Discussion**

Table 2 presents the descriptive statistics and correlation matrix for all the variables studied. The results of the correlations ranged from 0.341-0.625, which was less than 0.80 (Hair et al., 2010). Thus, the correlation coefficients of all variables demonstrated the non-existence of a multicollinearity of the independent variables. As shown in Table 3, the maximum value of the variance inflation factors (VIF) was 1.810 (Equation 6), which was below the cut-off value of 10 (Hair et al., 2010). This means that the independent variables are not correlated with each other. Therefore, the value of the VIFs in this study indicates the non-existence of multicollinearity problems.

**Table 2:** Descriptive Statistics and Correlation Matrix

Variables	ORC	ORI	ORP	ORE	BUC
Mean	4.04	4.23	4.11	3.96	3.82
S.D.	.65	.66	.59	.57	.61
ORC	1				
ORI	.421**	1			
ORP	.549**	.438**	1		
ORE	.407**	.341**	.625**	1	
BUC	.478**	.433**	.576**	.576**	1

\*\*\* p<0.01, \*\* p<0.05

As shown in Table 3, the results of the regression analysis indicate that organizational creativity had a significant positive effect on organizational innovation (H1a:  $\beta_1 = 0.421$ ,  $p < 0.01$ ). Thus, H1a was supported; a result consistent with one previous study from Hu et al. (2013) in which it was determined that organizational creativity had a direct effect on organizational innovation since organizational creativity is critical to generate and develop organizational innovation in a fast-changing global business environment. Equation 1 adjusted R-square of 0.172 indicates the effects that additional factors (not in the model) have on organizational innovation. The remaining significant factors can only explain about 17.2% of the variation in organizational innovation (the dependent variable). Similarly, organizational creativity had a significant positive effect on organizational productivity (H1b:  $\beta_2 = 0.549$ ,  $p < 0.01$ ). Therefore, H1b was supported; a result consistent with an earlier study from Adcroft and Teckman (2011), which pointed out the importance of organizational creativity in generating and supporting employee creative skills in an organization. This can lead to an increase in organizational productivity as compared to competitors. Equation 2 has an adjusted R-square of 0.296, showing the effects that additional factors (not in the model) have on organizational productivity. The remaining significant factors only explain about 29.6% of the variation in organizational productivity. Organizational creativity also had a significant positive effect on organizational excellence (H1c:  $\beta_3 = 0.407$ ,  $p < 0.01$ ), indicating that H1c was supported. This is in keeping with a prior study from Hashemy et al. (2016) that shows organizational creativity to be an important requirement for organizational excellence and a factor of competitive advantages. Equation 3 has an adjusted R-square of 0.160. This shows the effects that additional factors (not in the model) have on organizational excellence. The remaining significant factors can only explain about 16.0% of the variation in organizational excellence.

**Table 3:** Results of Regression Analysis

Independent Variables	Dependent Variables					
	Equation 1	Equation 2	Equation 3	Equation 4	Equation 5	Equation 6
	ORI	ORP	ORE	ORP	ORE	BUC
	H1a	H1b	H1c	H2a	H2b	H2c, H3, H4
Organizational Creativity (ORC)	.421*** (.076)	.549*** (.070)	.407*** (.076)			
Organizational Innovation				.649***	.444***	.196**

(ORI)				(.060)	(.075)	(.070)
Organizational (ORP)						.282** (.085)
Organizational (ORE)						.334** (.081)
Adjusted R <sup>2</sup>	.172	.296	.160	.186	.110	.427
Maximum VIF	1.000	1.000	1.000	1.000	1.000	1.810

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

Secondly, as can be seen in Table 3, organizational innovation had a significant positive effect on organizational productivity (H2a:  $\beta_4 = 0.649$ ,  $p < 0.01$ ). Thus, H2a was supported. This result is in keeping with an earlier study from Morris (2018) in which it was found that organizational innovation increased organizational productivity. The adjusted R-square of 0.186 for Equation 4 indicates the effects that additional factors (not in the model) have on organizational productivity. The remaining significant factors can only explain about 18.6% of the variation in organizational productivity. Likewise, ORI had a significant positive effect on organizational excellence (H2b:  $\beta_5 = 0.444$ ,  $p < 0.01$ ). Hence, H2b was supported. This result is consistent with an earlier study from Legenvre and Gualandris (2018), which showed that organizational innovation was positively associated with organizational excellence and instrumental in enhancing high-profit growth. Equation 5 has an adjusted R-square of 0.110.

This highlights the effects that additional factors (not in the model) have on organizational excellence. The remaining significant factors can only explain about 11.0% of the variation in organizational excellence. Similarly, organizational innovation was found to have a significant positive effect on business competitiveness (H2c:  $\beta_6 = 0.196$ ,  $p < 0.01$ ). Therefore, H2c was supported. This is consistent with a previous study from Ganter and Hecker (2013), which determined that organizational innovation must be prioritized in the race to improve business competitiveness and the pace of innovation.

Thirdly, organizational productivity had a significant positive effect on business competitiveness (H3:  $\beta_7 = 0.282$ ,  $p < 0.01$ ). H3 was therefore supported; a result consistent with an earlier study from Kafetzopoulos et al. (2015), in which it was found that business competitiveness largely depends on organizational productivity, a driving force in the reduction of manufacturing cost and the gain of competitive advantages.

Finally, organizational excellence had a significant positive effect on business competitiveness (H4:  $\beta_8 = .334$ ,  $p < 0.01$ ), which means that H4 was supported. This finding is supported by a prior study from Baraldi and Ratajczak-Mrozek (2019), who concluded that, in today's fast-shifting industries, organizational excellence enables firms to maintain business competitiveness. Organizational excellence plays a foremost role in increasing and improving long-term business competitiveness as shown by the adjusted R-square of 0.427, which points to the effects that additional factors (not in the model) have on business competitiveness. The remaining significant factors can only explain about 42.7% of the variation in business competitiveness.

Organizational creativity can clearly be an important driving force in the Thai gem and jewelry sector and play a supportive role in its competitive success. The close relationships between organizational creativity, organizational innovation, organizational productivity, organizational excellence on the one hand and business competitiveness on the other show that the former can help these Thai firms in their quest for success in a highly competitive



business environment. It is therefore critical for executives in those companies to develop a strong understanding of organizational creativity and share the benefits these can bring to their firms in terms of enhanced competitiveness with their employees so as to get them on board and work as a team. Absent a strong level of cooperation, it is unlikely that the congruent relationships among organizational creativity, organizational innovation, organizational productivity, and organizational excellence be realized. This will help the firms respond successfully to the dynamic but uncertain business environment in the gem and jewelry sector.

Executives should also conduct a business impact analysis in order to determine the best way to respond to changes in the market prompted by competitor's competitive actions. Scanning the environment for future trends is critical to determine the overall strategic direction of their firms, exploit opportunities, and avert threats by using their organizational capabilities. In doing so, organizational creativity, organizational innovation, organizational productivity and organizational excellence may prove outcome determinative to increase productivity and reduce operating costs.

### **5. Conclusions and Suggestions for Future Research**

This research shows how organizational creativity can positively influence business competitiveness and, focusing on Thai gem and jewelry businesses and the highly competitive business environment in which they operate, provides empirical evidence of the relationships between organizational creativity and organizational innovation, organizational productivity, and organizational excellence. Data were collected from a sample of 146 managing directors and managing partners involved in the gem and jewelry sector in Thailand. They supported the validity and generalizability of the proposed hypotheses. The results indicate that organizational creativity and internal factors have the highest level of influence over business competitiveness. Therefore, it is imperative that firms integrate these factors to develop mechanisms to become more competitive.

Based on the findings from this empirical study, the following conclusions can be drawn. First, organizational creativity, which we defined earlier as the degree of firm competency in encouraging and developing employee creative thinking to propose a variety of goods or services that result in customer value creation, has a significantly positive impact on organizational innovation, organizational productivity, and organizational excellence. Both the qualitative and quantitative data indicate that organizational creativity can improve the abilities of the gem and jewelry firms to create organizational innovation, improve organizational productivity, and challenge existing organizational excellence.

Second, organizational innovation has a significantly positive impact on organizational productivity, organizational excellence, and business competitiveness. For all the firms operating in this hyper-competitive industry, achieving organizational innovation becomes a vital source of organizational productivity, organizational excellence, and business competitiveness. Even though creativity is inherent in the gem and jewelry industry, building a more innovative organization is a challenging task, one that takes time and requires commitment across all functions. Indeed, innovation is increasingly about teamwork and the creative combination of different disciplines and perspectives. Above all, it requires a shared vision, leadership and the will to innovate and shared sense of purpose. Perhaps of even greater significance here, a collaborative climate of mutual trust, needs to be established. This includes making everybody involved feel comfortable discussing ideas, offering suggestions and willing to consider multiple approaches.

Third, organizational productivity has a significantly positive impact on business competitiveness. All the data collected indicate that organizational productivity leads to a better

assessment of operational needs and an improvement of operational efficiency, with both of them increasing business competitiveness. As indicated in the interviews with managers, organizational productivity can enhance business competitiveness in various ways: reducing costs, adding efficiency in converting inputs into valuable outputs, improving product quality, and so on.

Finally, organizational excellence has a significantly positive impact on business competitiveness. The findings in this study indicate that organizational excellence has highly influenced the level of competitiveness of Thai gem and jewelry businesses by seeking and delivering consistently high-quality products and services in order to meet customer expectations and keep their level of satisfaction high. As can be easily gathered from the above, all the suggested adjustments require change. This is a high order though. Resistance to change is a common occurrence in many companies. The best path is thus for executives in these gem and jewelry firms to explain the benefits of the changes to be made to everyone. This is likely to get them on board.

#### - *Suggestions for Further Research*

Two directions can be suggested for future research. First, future studies should incorporate both quantitative and qualitative analyses in order to verify the findings in this research. A quantitative and qualitative analysis also can help to cross-check the convergence or divergence, both being necessary attributes for the congruence between quantitative and qualitative findings.

Second, for the generalizability of the results, similar research should be expanded using different samples to meaningfully interpret and investigate the congruence of relationships among organizational creativity, organizational innovation, organizational productivity, organizational excellence, and business competitiveness. Combined with this study, future research will surely provide valuable comparisons and insights and further enhance the understanding of organizational creativity.

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