

Dynamic organizational capability and firm success: an empirical investigation of cosmetic businesses in Thailand

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Keywords

Dynamic organizational capability, Customer Response, Business effectiveness, Organizational productivity, Environmental learning, Technological competency.

Abstract

Dynamic organizational capability used as a perspective for reflecting competitive advantage leads to firm success, included as one of the key components that influence organizational outcomes. The objectives of the study are to investigate the relationships among dynamic organizational capability and its antecedents, consequences and firm success; and also to explore the moderating effects of top management support. The results were surveyed from 122 cosmetic businesses in Thailand. They provided some interesting points of dynamic organizational capability and how dynamic organizational capability enhances high firm performance. The hypothesized relationships among variables were examined by using ordinary least square (OLS) regression analysis. The results found that the relationships were significant with its consequences and antecedents, but the moderating effects were not significant with dynamic organizational capability. Moreover, the discussion to propose theoretical and managerial contributions, conclusions and suggestions for future research are included.

1. Introduction

Nowadays, business operates in a dynamic environment; firms face increased competition such as the development organizational capability and the ability to enhance superior firm performance. However, the concept of organizational capabilities indicated perspective of organizational change as a continuous and open-ended process of organizational development (Schienstock, 2009). While, organizational capability provides a competitive advantage and leads to firm success, Lee and Wilhelm (2010) argue that competitive advantage provides compose of price, quality, transport and innovation advantage etc. (Porter,1985). According to the resource-based view (RBV) of the firm, the fundamental factors of a firm performance are firm-specific capabilities and assets, as well as dividing mechanisms (Rumelt, 1984; Wernerfelt, 1984; Teece, Pisano and Shuen1997). One important factor in providing firm success was dynamic organizational capability. In the cosmetic business dynamic capability is necessary to enhance organizational capability for creating superior firm performance, customer response, business and to involve organizational creativity. However, dynamic organizational capability is one of the most significant abilities when performing and repeating a productive task which relates either directly or indirectly to a firms capacity for creating value through affecting the transformation of input into output (Grant, 1996). While, Chang, Chang, Chi, Chen, and Deng (2012) highlight organizational capabilities as openness capability, autonomy capability, integration capability, and experimentation capability to investigate the relationship between organizational capability and innovation. They integrated four capabilities to perform superior firm performance. However, for perspective of organizational capability found that they are interesting for empirical investigating businesses in Thailand. In addition, the researchers have never seen any empirical research investigating dynamic organizational capability into Thailand cosmetic businesses.

The cosmetic market in Thailand has a large market value. In 2010, the overall size of Thailand's cosmetic market value was approximately US\$ 1.134 million (34 billion Baht) (Kasikorn Research Center, 2009). Global Trade Atlas (2012) reports that for 2000 to 2012, the import and export rate of cosmetic products in Thailand had been growing continuously for several reasons

such as the decrease of tariffs on export cosmetic products. Therefore, cosmetic businesses in Thailand were an interesting group to investigate dynamic organizational capability and outcome for customer response, business effectiveness and organizational productivity, including competitive advantage and firm success as well. Thus, these lead to an interesting investigation of the relationship between antecedent, mediator, moderator and consequence of dynamic organizational capability.

The main research questions for this study are as follows:

(1) How does dynamic organizational capability have an influence on customer response, business effectiveness organizational productivity, competitive advantage and firm success? (2) How does the customer respond, business effectiveness, organizational productivity influence on competitive advantage? (3) How does competitive advantage influence firm success? (4) How do environmental learning and technological competency influence dynamic organizational capability?

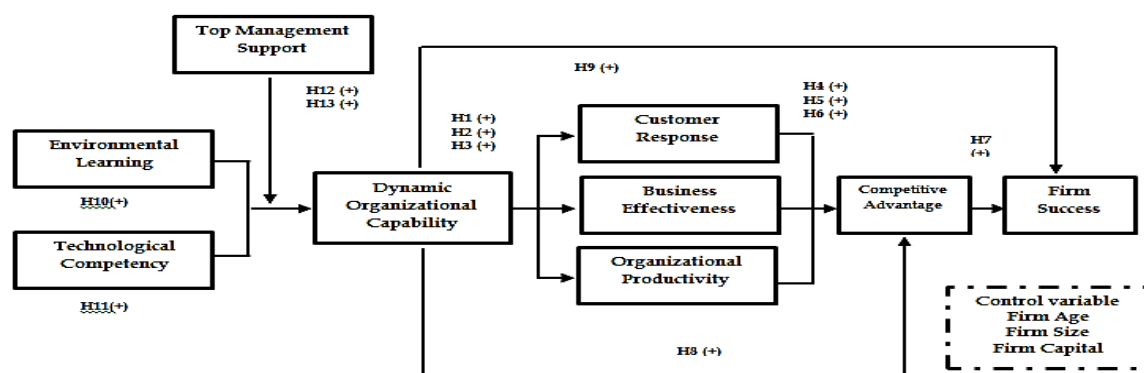
(5) How do environmental learning and technological competency influence dynamic organizational capability via the moderating effect of top management support? With the answers this research provided we propose to examine the relationship between dynamic organizational capability and firm success through its effect on four mediators, customer response, business effectiveness, organizational productivity, and competitive advantage. Furthermore, examination of the relationship between antecedents of environmental learning, technological competency and the four dimensions of dynamic organizational capability, while including the moderating effect of top management support.

Important points of this research are organized as follows: The first part represents the theoretical foundation and relevant literature reviews on the subject and specifically considers the relationships between the antecedents and consequences of dynamic organizational capability. Their linkages to hypotheses development are presented in the second part. The second part researches methodology, including sample selection, data collection procedure, measurement of variables, instrumental verification, the statistics and equations to test the hypotheses. The third covers results and discussions within empirical investigation. The last provides theoretical and managerial implications, limitations, suggestions for future research and conclusions.

2. Literature reviews and hypotheses development

The conceptual model is proposed as shown in Figure 1, demonstrating the relationships among dynamic organizational capability, customer response, business effectiveness, organizational productivity, competitive advantage, firm success, and the antecedents of dynamic organizational capability as environmental learning and technological competency. Furthermore, this study investigates top management support as a moderator in the context of cosmetic businesses in Thailand.

All hypotheses, in this study, are proposed to be positive.



**Figure1: Relationship model of Dynamic organizational capability and Firm success:
An empirical investigates of cosmetic businesses in Thailand.**

2.1 Dynamic Organizational Capability

Teece, Pisano, Shuen (1997) propose dynamic capability as “how firm to integrate, build and reconfigure their internal and external firm specific companies into new competencies that match their turbulent environment” (P.516). Many researchers define closely Teece et al. (1997), such as Helfat et al. (2007) defined dynamic capabilities as “the capacity of an organization to purposefully create, extend, and modify its resource base. While, Teece (2007) proposed how firm use dynamic capabilities to create and sustain a competitive advantage over other firms by responding to and creating environment change. Thus, when considered Teece (2007) and Helfat et al. (2007) dynamic capabilities as ability of a firm to create, extend, and modify their resource base, which lead to a competitive advantage over other firms. However, organizational capabilities defines a firm’s ability to perform and repeat a productive task which relates either directly or indirectly to a firm capacity for creating value through affecting the transformation of input into output. Recently, many studies examined several of these capabilities such as O’Connor and Ayers (2005) who proposed a three-stage model of radical innovation capability: from discovery capability, through incubation capability to acceleration capability. Cheng et al. (2012) followed dimensions from O’Connor and Ayers (2005) and investigated the relationship between organizational capability (openness capability, integration capability, autonomy capability and experimentation capability) and radical innovation performance in Taiwan manufacturing firms. The results found that the four dimensions created a positive relationship between organizational capability and radical innovation performance.

Organizational capability from Cheng et al. (2012) described four abilities; that will lead to superior performance. Firstly, openness capability, this refers to the ability to harvest ideas and competencies from a broad of source (Cheng et al., 2012). Thus, successful organization capability emerges from capability to openness from external and internal sources. Phene, Fladmoe-Lindquist and Marsh (2006) proposed that the type of external source of knowledge influenced possibilities to creation. Accordingly, absorptive capacity is an element of capability (Cohen and Laventhal, 1990) defined absorptive capacity as ability to recognize the value of new external information and assimilate their knowledge leading to apply them to a commercial end. Therefore, openness capability enhances the ability of a firm to harvest ideas and competencies from other sources and exploit them leading to the creation of new practices, products and services which provides superior firm performance. Second, Integration capability refers to ability to combine R&D alignment and integration between in-house R&D and external sources such as a corporate R&D center (Kanter et al. 1991; Chang et al. 2012). However, O’Conner and Ayer (2005) studied products and services emerging from innovation activity and discovered they should be tightly couple and perceived as co-produced (Kanter et al., 1991), or an integrated system. While, Kelly (2009) argued that strategic integration refers to connectedness programs between existing businesses. Therefore, integration capability to enhance the ability of a firm to combine capability from internal sources, such as in-house R&D and external sources such as a corporate R&D center involves other sources for exploitation to create a new practice, product and service which provides superior firm performance. Thirdly, the role of freedom or autonomy in the capability approach is very much in dispute. However, research of autonomy addresses results of positive relationships with innovation or facilitates to innovation involving easy work. Chang et al. (2012) defined autonomy as a capability that refers to the ability to encourage and tolerate risk, ambiguous and unsuccessful ideas leading to superior firm. Cabrales et al. (2008) highlighted that team diversity and development of risk taking attitudes within teams is positively associated with innovation. Therefore, autonomy or freedom capability facilitates performance leading to superior firm performance. Finally, Experimentation capability refers to the ability to learn and to probe (Lynn et.al, 1996; Phillips et al., 2006; Kelly, 2009) and experiment with their ideas, R&D, manufacturing /marketing tools, new disciplines and facilitate innovation (Chang et al., 2012). However, many studies argue that experimentation capability as a key cultural element is important to encourage organizational innovation. From their

perspective, an experimentation capability separates two perspectives as probing (ability to experiment product in market) and learning (ability to learn about technology). Lynn et al. (1996) found that probing and learning are elements for the introduction of innovation (new product and service).

However, the four abilities used to enhance and create superior performance lead to interest in dynamic organizational capability from O'conner and Ayer, (2005), Cheng et al., (2012) for investigating capabilities in organizations. Pehrsson's study (2011) found that firms focus on customer responsiveness and financial performance which reflect positively on the firm's growth market. While, Robbin (2001) found that business effectiveness as a degree of organizational attainments for short-term and long-term goals, they reflect strategic constituencies, self-interest of evaluation and life stage of organization. In addition, (Newlin, 2009) argued that organizational productivity is an indicator of operation in an organization, while productivity is a standard measure to assess organizational performance. However, they are emerging from an organizational ability to create customer response, business effectiveness and organizational productivity. Therefore, the dynamic organizational capabilities above, lead us to the relevance of the following hypothesis:

Hypothesis 1: Dynamic organizational capability will have positive influence on customer response.

Hypothesis 2: Dynamic organizational capability will have positive influence on business effectiveness.

Hypothesis 3: Dynamic organizational capability will have positive influence on organizational productivity.

Consequences of Dynamic Organizational Capability

2.2 Customer Response

Customer response refers to the ability to respond to the needs and wants of customers, involving response to satisfaction. However, customer response is necessary for cosmetic context and others, thus dynamic capability organization leads to the ability to respond to the needs and wants of customers. Many researchers define customer response as results from firm competency in response to customer demand/ need and delivery superior value to customers involving focus on customer satisfaction, they focus on identifying, analyzing, understanding and answering their needs (Jaworski and Kohli, 1993; Narver and Slater, 1990). While, Jayachandran et al. (2004) defined customer response as an ability to quickly and effectively respond to customer needs and wants. According to Neill et al. (2007) studies found that customer orientation capability may have the ability to develop a customer-focused business model that considers customer satisfaction to be the core purpose of business. However, Pehrsson's study (2011) found that a firm's focus on customer's responsiveness and its financial performance will positively reinforced the firm operation in the growth market. Thus in this study organizational capability to encourage customer response will have a high competitive advantage, thus customer response will positively direct consequences as follows:

Hypothesis 4: Ability to customer response will have a positive influence on competitive advantage.

2.3 Business Effectiveness

Business effectiveness is an area fundamental to optimizing business operational efficiency, including change and adjustment that produce tangible gains whether increasing revenue by process optimizing (e.g. customer service, billing, contract management or control and decreasing cost saving). However, Robbin (2001) defined business effectiveness as a degree of organizational attainments from short-term and long-term goals, they reflect strategic constituencies, self-interest of evaluation and life stage of an organization. In this study business effectiveness as an indicator for dynamic organizational capability to enhance the effectiveness perspective involved high performance from alliance and the ability to create and improve their activity leading to employee

capability as well. Thus, businesses will have a competitive advantage. Thus, the aforementioned relationships are hypothesized as below.

Hypothesis 5: Business effectiveness will have a positive influence on competitive advantage.

2.4 Organizational Productivity

Organizational productivity is an indicator of operation in an organization, while productivity is a standard measure to assess organizational performance (Newlin, 2009). However, organizational productivity has many ways to assess, often assesses from output, sales, profitability, work quality and process complete (Culnan and Bair, 1983; Pritchard, 1992). While, Newlin (2009) argued that productivity as an indicator absenteeism and how productivity assesses base on what is important to the organization (Kyoung-Ok, Wilson, Mayung Sun, 2004; Newlin, 2009). In this study organizational productivity refers to indicator operational from dynamic organizational capability output, sales, profitability, work quality and process complete involve innovation from new ideas. Therefore, organizational productivity will have a positive direct competitive advantage. Thus, the aforementioned relationships are hypothesized as below.

Hypothesis 6: Organizational productivity will have a positive influence on competitive advantage.

2.5 Competitive Advantage

Competitive advantage refers to the ability to gain, through attributes and resources, a performance level higher than others in the industry or market place (Christensen and Fahey, 1984; Chaharbaghi and Lynch, 1999). However, competitive advantage has consequences for strategic success, dynamic organizational capability to provide firms that have superior performance as well as firm success refers to an assessment of the firm's performance, is successful in several aspects including customer satisfaction (Pongpeachan and Ussahawanitchakit, 2011), when firms can respond to needs and wants, return on investment when firms have revenue in period time over investment, product quality when firms have a standard and their standard matches with customer needs and wants, thus, firm success including sale volume, market share and profitability as well (Robin, 1992; Carter and Carter 2009).

In this study dynamic organizational capability will enhance competitive advantage and lead to firm success as well. Thus, the aforementioned relationships are hypothesized as below.

Hypothesis 7: Competitive advantage will have a positive influence on firm success.

Hypothesis 8: Dynamic organizational capability will have a positive influence on competitive advantage.

Hypothesis 9: Dynamic organizational capability will have a positive influence on firm success.

Antecedent of Dynamic Organizational Capability

2.6 Environmental Learning

Environmental learning is atmospheres or mood from competition environment, thus environmental learning similarity is sensing or monitoring their opportunity (Teece, 2007) and learning from their competitor, needs and wants from customer, foreign trend in cosmetic industry. However, knowledge from environmental learning is closely absorptive capacity concept, Cohen and Laventhal (1990) argue that absorptive capacity is a process to absorptive their external knowledge from outside and exploitation their knowledge adapted to inside. Thus, environmental learning refers to ability to capture or monitor their competition environment and absorbs their knowledge from outside leading to assimilate and apply to create new product, knowledge and practice.

In this study environmental learning is a vital function of organizational capability, knowledge from inside and outside is a knowledge source for creating and reconfiguring their resources to become more capable in an organization. Therefore, environmental learning is ability to enhance dynamic organizational capability as well. Thus, the aforementioned relationships are hypothesized as below.

Hypothesis 10: Environmental learning will have a positive influence on dynamic organizational capability.

2.7 Technology Competency

Technology will be necessary to facilitate their organizational activity. However, the technology competency or technology infrastructure refers to a device and element of a firm's technology base or physical infrastructure (Mark and Su, 2010; Link and Tasse, 1993), for instance, centralized and desktop computing, data warehouse, wide-area network, the help desk support system and applications/ development/ maintenance systems (Leong and Jarmoszko, 2010). They help to organize and direct for the collectively supplied, specific, industry-relevant capabilities that are intended for several applications for general users in the firm (Justman and Teubal, 1995; Laranja, 2009). Infra-technologies are transformed from technology infrastructure by expanding technology-market oriented approaches. It includes R&D, production and market development processes (Intarapanich and Ussahawanitchakit, 2011). In this study technology competency will be positive to increase dynamic organizational capability. Thus, the aforementioned relationships are hypothesized as below.

Hypothesis 11: Technological competency will have a positive influence on dynamic organizational capability.

2.8 Moderating Effect of Top Management Support

Top management support is the role of managers to participate, facilitate or make speedy strategic decision. Many researchers' agree with the role of top management support to provide organizational success, because quick response strategic decisions facilitate early adoption of successful new products, new technologies, or improved business models, which the yield from facilitation leads to competitive advantage and a firm success. (Baum, 2000; Jones, Lanctot, Teegen, 2000). In this study the role of top management support has a moderating effect between environmental learning and technological competency that leads to dynamic organizational capability. Thus, top management support will react positively to environmental learnings that are higher and in the same way to provide high technology competency, they will be positive with four dimensions of dynamic organizational capability (openness capability, integration capability, autonomy capability and experimentation capability). Thus, the aforementioned relationships are hypothesized as below.

Hypothesis 12: Top management support will positively moderate the relationship between environmental learning and dynamic organizational capability.

3. Research Methods

3.1 Sample Selection and Data Collection Procedure

This research selected cosmetic businesses in Thailand as a subject. Cosmetic businesses are interesting for analyzing the result of this research for two reasons. Firstly, the cosmetic market in Thailand has a large market value. In 2010, the overall size of Thailand's cosmetic market value was approximately US\$ 1.134 billion (34 billion Baht) (Kasikorn Research Center, 2009). Global Trade Atlas (2012) reports that from 2000 to 2012, the rate of import and export of cosmetic products in Thailand had been continuously growing for several reasons such as the decrease of tariffs on export cosmetic products. Second, cosmetic businesses in Thailand are faced with intensive competition, which stems from the changing of the external environment, including the appreciation of the Thai baht, advances in technology, and Thailand's membership in the ASEAN Free Trade Area (Pansuppawatt and Ussahawanitchakit, 2011). Therefore, cosmetic businesses in Thailand are an interesting subject for how to organization and cope with a dynamic environment and potential for cosmetic business.

The subject of this research is from the database of The Department of Business Development, Thailand (www.dbd.go.th, last accessed 25 March 2015). The trustworthy government website provides service information and a database of businesses in Thailand. The website revealed there were 655 cosmetic businesses in Thailand (after filtering unrelated). A survey using a mailed questionnaire was sent to either the general manager or chief executive officer of each business. 685 questionnaires were mailed to which we received 130 responses. Of the 130 returned questionnaires we were able to use 122 in our analysis. The response rate was approximately 17.81%. However, Menon et al. (1999) argue that response rate of returned questionnaires collected from top managers generally is between 15-20%, a range that is acceptable for data analysis.

This paper tests non-response bias following the recommendation of Armstrong and Overton (1977) to ensure that the final sample represents the population of the research. All 122 received questionnaires were divided into early and late groups that firm's characteristics between two groups are compared by test. The results show that there are no statistically significant differences between the two groups. It can be concluded that non-response bias is not a significant problem.

3.2 Measurement

This paper consists of eight constructs, and one of these is an independent variable which includes three dimensions. Each construct was rated on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). An exception was demographic and control variables. The measurements of dependent, independent, consequence, and moderating are discussed as follows:

Independent Variables

Dynamic organizational capability is a core construct of this research that has four dimensions as described by Cheng et al. (2012) and O'Conner and Ayer (2005). All 18 item-scales are adapted from Chang et al. (2012).

Consequence Variables

Customer response refers to the results from a firm's competency in response to customer demand/need and delivers superior value to customer. Involves a focus on customers by identifying, analyzing, understanding, and answering their needs (Jayachandran et al. 2004). (5 items)

Business effectiveness refers to the degree to which an organization attains its short-term and long-term goals, the selection of which reflects strategic constituencies, the self-interest of the evaluator and the life-stage of the organization (Robbins, 2001). (4 items).

Organizational productivity refers to terms of output, sales, profitability, work quality and processes completed on schedule (Culnan and Bair, 1983; Pritchard, 1990). (3 items).

Competitive advantage refers to the ability gained through attributes and resources to perform at a higher level than others in the same industry or market (Chacarbaghi and Lynch, 1999). (5 items).

Firm success refers to the assessment of a firm's performance and is concerned with several aspects including customer satisfaction, returns on investment, product quality, sale volume, market share and profitability (Pongpearchan and Ussahawanitchakit, 2011). (5 items).

Antecedent Variables

Environmental learning refers to the ability to capture or monitor their competition environment and absorb their knowledge from the outside leading to the assimilation and creation of new products, knowledge and practices (Cohen and Lavinthal, 1990; Tecce, 2007). (5 items).

Technology competency refers to the devices and elements of a firm's technology base or physical infrastructure (Mark and Su, 2010; Link and Tassej, 1993). They help to organize and guide the collective supply and specific, industry-relevant capabilities that are intended for several applications in general users in firm (Justman and Teubal, 1995; Laranja, 2009). (4 items).

Moderator variable

Top management support defines as the role of managers that facilitate and participate to make speedy strategic decisions because fast strategic decisions facilitate early adoption of successful new products, new technologies, or improved business models that yield competitive advantage and firm success as well. (Baum, 2000; Jones, Lanctot, Teegen, 2000 and Zhang, 2007). (5 items)

3.3 Methods

Table 1 presents the measurement of scale reliability that was estimated by using Cronbach's alpha coefficient that would be greater than 0.60 (Malhotra, 2004), factor loadings tested each construct to be statistically significant and greater than the 0.40 cut-off. The results found that factor loadings were between 0.656 -0.925, Cronbach's alpha coefficients are between 0.803- 0.926 which is the acceptable criterion (Nunnally and Bernstein, 1994). However, table 1 demonstrates construct validity by investigating the relationships of the large number of items and determining whether they can be reduced to a small set of factors. While, factor analyses were implemented separately on each set of items representing a particular scale. Therefore, the results found that reliability and validity in this study are appropriate for further analysis. The results of testing reliability and validity are presented in Table 1 below as:

| Items | Factor Loadings | Cronbach Alpha |
|-----------------------------------------|-----------------|----------------|
| Dynamic organizational Capability (DOC) | 0.716-0.881 | 0.920 |
| Customer response (CR) | 0.665-0.831 | 0.832 |
| Business effectiveness (BE) | 0.820-0.917 | 0.866 |
| Organizational productivity (OP) | 0.832-0.899 | 0.803 |
| Competitive advantage (CA) | 0.656-0.823 | 0.846 |
| Firm success (FSC) | 0.696-0.963 | 0.930 |
| Environmental learning (EL) | 0.799-0.910 | 0.904 |
| Technology competency (TC) | 0.837-0.915 | 0.903 |
| Top management support (TM) | 0.824-0.925 | 0.926 |

Table 1: Results of measure validation

Statistics test

The regression analysis is selected to test and examine all hypotheses because dependent variables and independent variables were not characterized as both nominal data and categorical data. For more understanding of the hypothesized relationships in this study, the following equations of relationships aforementioned are illustrated as below:

$$\text{Equation 1: } CR = \beta_{01} + \beta_1 DOC + \beta_2 FA + \beta_3 FS + \beta_4 FC + \varepsilon_1$$

$$\text{Equation 2: } BE = \beta_{02} + \beta_5 DOC + \beta_6 FA + \beta_7 FS + \beta_8 FC + \varepsilon_2$$

$$\text{Equation 3: } OP = \beta_{03} + \beta_9 DOC + \beta_{10} FA + \beta_{11} FS + \beta_{12} FC + \varepsilon_3$$

$$\text{Equation 4: } CA = \beta_{04} + \beta_{13} DOC + \beta_{14} FA + \beta_{15} FS + \beta_{16} FC + \varepsilon_4$$

$$\text{Equation 5: } FSC = \beta_{05} + \beta_{17} DOC + \beta_{18} FA + \beta_{19} FS + \beta_{20} FC + \varepsilon_5$$

$$\text{Equation 6: } CA = \beta_{06} + \beta_{21} CR + \beta_{22} FA + \beta_{23} FS + \beta_{24} FC + \varepsilon_6$$

$$\text{Equation 7: } CA = \beta_{07} + \beta_{25} BE + \beta_{26} FA + \beta_{27} FS + \beta_{28} FC + \varepsilon_7$$

$$\text{Equation 8: } CA = \beta_{08} + \beta_{29} OP + \beta_{30} FA + \beta_{31} FS + \beta_{32} FC + \varepsilon_8$$

$$\text{Equation 9: } FSC = \beta_{09} + \beta_{33} CA + \beta_{34} FA + \beta_{35} FS + \beta_{36} FC + \varepsilon_9$$

$$\text{Equation 10: } DOC = \beta_{10} + \beta_{45} EL + \beta_{46} TC + \beta_{47} FA + \beta_{48} FS + \beta_{48} FC + \varepsilon_{10}$$

$$\text{Equation 11: } DOC = \beta_{11} + \beta_{49} EL + \beta_{50} TC + \beta_{51} TM + \beta_{52} (EL * TM) + \beta_{53} (TC * TM) + \beta_{54} FA + \beta_{55} FS + \beta_{56} FC + \varepsilon_{11}$$

4. Results and Discussion

| | DOC | CR | BE | OP | CA | FSC | EL | TC | TM | FS | FC | FA |
|------|---------|---------|---------|---------|---------|---------|---------|---------|-------|---------|---------|-----|
| Mean | 3.876 | 3.746 | 3.607 | 3.762 | 3.844 | 3.828 | 4.156 | 4.000 | 4.033 | n/a | n/a | n/a |
| S.D | .899 | .877 | .819 | .945 | .853 | .840 | .739 | .813 | .738 | n/a | n/a | n/a |
| DOC | 1 | | | | | | | | | | | |
| CR | .530** | 1 | | | | | | | | | | |
| BE | .669*** | .655*** | 1 | | | | | | | | | |
| OP | .732*** | .567*** | .818*** | 1 | | | | | | | | |
| CA | .585*** | .615*** | .705*** | .743*** | 1 | | | | | | | |
| FSC | .566*** | .572*** | .658*** | .681*** | .881*** | 1 | | | | | | |
| EL | .590*** | .469*** | .668*** | .641*** | .682*** | .705*** | 1 | | | | | |
| TM | .591*** | .456*** | .559*** | .628*** | .585*** | .565*** | .818*** | 1 | | | | |
| TC | .551*** | .440*** | .541*** | .653*** | .673*** | .596*** | .790*** | .838*** | 1 | | | |
| FS | -.142 | .083 | -.004 | .044 | .140 | .117 | -.029 | -.059 | -.032 | 1 | | |
| FC | .037 | .127 | .134 | .020 | .075 | .145 | .131 | .087 | .068 | .359*** | 1 | |
| FA | -.068 | -.069 | .045 | -.049 | .088 | .140 | -.002 | -.060 | .041 | .439*** | .357*** | 1 |

p<0.05, *p<0.01

Table 2: Descriptive statistics and correlation matrix

| IV | Dependent Variables | | | | | | | | | | | |
|--------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------------|--------------------|--|
| | Model1 | Model2 | Model3 | Model4 | Model5 | Model6 | Model7 | Model8 | Model9 | Model10 | Model11 | |
| | CR | BE | OP | CA | FSC | CA | CA | CA | FSC | DOC | DOC | |
| DOC | 0.544*** (0.077) | 0.675*** (0.069) | 0.759*** (0.062) | 0.622** (0.073) | 0.593*** (0.074) | | | | | | | |
| CR | | | | | | 0.628*** (0.073) | | | | | | |
| BE | | | | | | | 0.717*** (0.065) | | | | | |
| OP | | | | | | | | 0.745*** (0.061) | | | | |
| CA | | | | | | | | | 0.879*** (0.043) | | | |
| EL | | | | | | | | | | 0.328** (0.126) | 0.272** (0.136) | |
| TC | | | | | | | | | | 0.315** (0.126) | 0.253 (0.155) | |
| TM | | | | | | | | | | | 0.125 (0.146) | |
| EL x TM | | | | | | | | | | | 0.175 (0.141) | |
| TC x TM | | | | | | | | | | | -0.124 (0.137) | |
| FA | 0.387** (0.176) | 0.091 (0.157) | 0.401*** (0.141) | 0.447*** (0.166) | 0.286* (0.170) | 0.110 (0.165) | 0.336** (0.147) | 0.129 (0.139) | -0.122 (0.098) | -0.235 (0.166) | -0.262 (0.169) | |
| FS | 0.303 (0.281) | 0.258 (0.251) | -0.190 (0.226) | -0.155 (0.266) | 0.113 (0.272) | -0.243 (0.267) | -0.289 (0.238) | 0.008 (0.223) | 0.265* (0.157) | 0.031 (0.269) | 0.097 (0.277) | |
| FC | -0.335* (0.195) | 0.097 (0.174) | -0.146 (0.156) | 0.109 (0.185) | 0.236 (0.188) | 0.298 (0.186) | 0.029 (0.164) | 0.213 (0.156) | 0.137 (0.110) | -0.001 (0.186) | 0.023 (0.193) | |
| Adjust R ² | 0.303 | 0.445 | 0.552 | 0.376 | 0.351 | 0.380 | 0.507 | 0.557 | 0.780 | 0.371 | 0.366 | |

*p<0.1, **p<0.05, *** p<0.01, a Beta coefficients with standard errors in parenthesis.

Table 3: Results of OLS regression analysis

Table 2 demonstrates the descriptive statistics and correlation matrix for all variables. Result of correlation concern of multicollinearity among the relationship between independent and dependent variables (X and Y variables), dependent and dependent, of which some variables have a correlation over 0.7, but correlation should be over 0.90 (Hair et al, 2010). As a result, it was found that higher correlation is 0.881 and the lower is 0.440, which demonstrates multicollinearity when correlation between X and Y are more than 0.90 (Hair et al. 2010). When consideration on VIF (Variance Inflation Factors (VIF's) found that the range of VIFs is from 1.022 to 4.922, which was below the cut-off value of 10 as recommended by Hair et al., (2006). Therefore, it can be concluded

that the multicollinearity varies and may affect the weights of the explanatory variables in the model which is not a serious problem.

Table 3 demonstrates the results of ordinary least square (OLS) regression analysis of relationship dynamic organizational capability (DOC) and consequence as customer response (CR), business effectiveness (BE), and operational productivity (OP), competitive advantage (CA) and firm success (FSC) are also involved. Model 9 presents antecedents of dynamic organizational capability as environmental learning (EL) and technological competency (TC). Model 10 presents the moderating effects among antecedent and dynamic organizational capability as the effect from top management support (TM). However, the results found that hypotheses 1-3 (model 1-3) and the relationships between dynamic organizational capabilities and consequence are significant as customer responses ($\beta_1= 0.544$, $p<0.01$), business effectiveness ($\beta_5= 0.675$, $p<0.01$), operational productivity ($\beta_9= 0.675$, $p<0.01$). Thus, hypotheses 1, 2 and 3 are supported. In addition, the results found that hypothesis 4-6 (model 6-8) and the relationships between customer response, business effectiveness, operational productivity and competitive advantage are significant, the results found that ($\beta_{21}= 0.628$, $p<0.01$), ($\beta_{25}= 0.717$, $p<0.01$), ($\beta_{29}= 0.745$, $p<0.01$) respectively. Thus, hypotheses 4, 5 and 6 are supported.

Furthermore, in model 4, 5 and 9; the relationships between competitive advantage and firm success ($\beta_{33}= 0.879$, $p<0.01$), then when considering the relationship between dynamic organizational capabilities and competitive advantage ($\beta_{13}= 0.622$, $p<0.01$) and firm success ($\beta_{17}= 0.593$, $p<0.01$) are significant. Thus hypotheses 7, 8 and 9 are supported.

Model 10 presents the relationships between antecedence as environmental learning and technological competency, it shows that they are significant with dynamic organizational capability including moderating effect from top management support. The results found that environmental learning ($\beta_{45}= 0.328$, $p<0.01$) technological competency ($\beta_{46}= 0.315$, $p<0.01$) are significant with dynamic organizational capabilities. Thus, hypotheses 10 and 11 are supported.

Moreover, the moderating effects (model 11) of top management support among relationship between environmental learning and technological competency have an influence on dynamic organizational capabilities. The results provide that interaction between environmental learning and top management support, technological competency, and top management support are not significant on dynamic organizational capability. Thus, hypotheses 12 and 13 are not supported.

5. Contributions and Direction for Future Research

5.1 Theoretical Contribution

This study aims to gain more interest in the relationship among dynamic organizational capability and consequences as customer response, business effectiveness, and operational productivity when involving competitive advantage and firm success in cosmetic business in Thailand. However, antecedent is vital to dynamic organizational capability, in this study the interesting environmental learning and technological competency, including moderating effect on top management support. The research provides a unique theoretical contribution expanding on organizational capabilities literature and incorporate strategic management. In addition, the perspective from theories including dynamic capability (Teece, 2007), resource-based view Barney, 1991) and contingency theory. They describe phenomenon of dynamic organizational capability in a cosmetic context. Finally, it can be a starting point to examine the conceptualization of dynamic organizational capability in a different context and period time including different countries, which they give up evidently are different.

5.2 Managerial Contribution

This study is mainly concerned with general managers and chief executive officers (CEO's), the objective was to identify key success factors for how to use dynamic organization capability that can lead to firm success as well.

First, dynamic organizational capability is the ability to perform their full capability in an organization to create superior performance. This study found that it can create customer response, business effectiveness and organizational productivity. In addition, dynamic organizational capability leads to competitive advantage and firm success. Thus, the results found that dynamic organizational capability from Chang et al. (2012) in cosmetic businesses to create high firm performance. However, from the results CEO's should be taking an interest in in-house capability where they can create ability to perform superior performance.

Second, when considerations of antecedent environmental learning and technological competency have a relationship with dynamic organizational capability, they are important for enhancing capability for created superior performance. In particular, CEO's should be focused on environmental learning in organizations, including extra learning within, with technology as a vital function to enhance learning and facilitate in improved working.

Finally, when considering the moderating effects of top management support, it was found that moderating effect is not influenced with environmental learning and technological competency. However, top management support should be changing the role in this cosmetic context from supportive to stimulative or aggressive strategy for their capability to create superior performance and defensive strategy.

5.3 Limitations and Future Research

This study has some limitations of investigation as follows; the research uses questionnaire only, data collection process has opinion detail from question order, thus no other aspect from data collections such as aspect from top management support and employees for dynamic organizational capability. Future research or further data should use an interview technique (in-depth interview) or a mixed method for more information and understanding about dynamic organizational capability in cosmetic businesses in Thailand.

6. Conclusion

This study aims to gain more interest in the relationships among dynamic organizational capability and consequences as customer response, business effectiveness, and operational productivity when involving competitive advantage and firm success in cosmetic businesses in Thailand. However, antecedents were vital to dynamic organizational capability, in this study the relationship of the interesting environmental learning and technological competency including with moderating effect on top management support are significant. The results found that the organizational dynamic capability influenced on their consequences was significant, from antecedent it was found that that environmental learning and technological competency have an influence on organizational dynamic capability as well. In addition, moderating effects from top management support found that there is no influence between antecedents (environmental learning and technological competency) and dynamic organizational capability. Furthermore, this study suggests that future research should use a mixed method by combining an interview technique (in-depth interview) for more understanding in dynamic organizational capability in cosmetic businesses in Thailand.

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