# The Mediating Role of Dynamic Capabilities on Innovativeness and Export Performance of Small and Medium Enterprises in Thailand

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Abstract - The purpose of this paper is to observe the effects of Innovativeness on **Export Performance of Thai SMEs which** based on the literature review. It was possible to describe Direct and Indirect the Effects of Innovativeness (INNO) on Export Performance (EP) through Dynamic Capabilities (DC) as Mediating variable. Therefore, this leaded to the research questions as: 1) How does Innovativeness have causal relationship to **Export Performance of Thai SMEs? and 2)** How do and innovativeness have causal relationship to Export Performance of Thai SMEs through Dynamic Capabilities? **Quantitative Research was used in this** study whereas the population was SMEs engaged in export business and registered with the Ministry of Commerce. The research tool was the questionnaire collected by mail and Location, Which a total of 238 samples and the data analysis was descriptive and Structural Model Analysis. The results showed that there was no direct relationship between INNO and EP. On the other hand the results showed that there was the relationship between INNO and EP was indirect path fully mediated by DC.

*Keywords* - Innovativeness, Dynamic Capabilities, Export Performance

#### I. INTRODUCTION

The study of the performance of Small and Medium Enterprises in various cases showed the similar conclusion that the performance results are linked to the Innovativeness. One of the most important aspects of entrepreneurial activity is innovation [1]. Successful entrepreneurs in international business must not only discover valuable innovations but must also to bring the innovation to success [2]. This type of process is the goal of global business. Innovative work in innovation is something that is gaining in popularity today. Innovation organization is a recent stream of competition. Who achieved first. It will be in the forefront of success in the next age as which organizations do not care about innovation may be gradual. Therefore, all public and private organizations should pay attention to the importance of innovation organization. Then, the study of this issue is essential for Thai SMEs, to let the entrepreneurship under these circumstances, it is required to make use of the strategy the best option to find a way to create and develop the Thai SMEs to the sustainability. It should be a study that have a factor of Innovativeness which directly and indirectly affects the export performance through. Mediating was the Dynamic Capabilities, the results of performance to be able to use as a guide in the development of the country to have the opportunity to create the best sustainability to help the Country in Economics and Social.

#### II. LITERATURE

## A. Theories and Related Research on Relationship between Innovativeness and Export Performance

Sher and Yang [3] found that innovation potential is most relevant to performance when assessed by asset yield, strength and potential for human resources in research and development, which means innovation has been found that affects the company's performance. Companies with multi-step value creation have different potential for innovation. Guan and Ma [4] found that export growth was correlated with innovation potential. Learning side research and Development, Marketing, Enterprise Management, Human resources and strategy. In addition, being a business-efficient, process-innovation business can accelerate business operations more fluidly and successfully, as well.

# B. Theories and Related Research on Relationship Innovativeness and Dynamic Capabilities

Innovation is one dimension of Dynamic Capabilities and it is the ability to initiate experiments, research and development as well as the product and service, management in organization [5-6]. Based on the study of innovation of Dynamic Capabilities, innovation can be involved in the development of new organizations. New product development and distribution model of the product, new event development concepts and concept management. This is a great result for the company's operations [7-8]. Creativity and innovation is the dimensional response of trends that support new ideas and processes with new technologies [6, 9].

# C. Theories and Related Research on Relationship between Dynamic Capabilities and Export Performance

Dynamic Capabilities are the process of the organization and the strategy that managers change the value of their resources to the value of the strategy [10] with new strategic incentives. Dynamic Capabilities enhance the competitive advantage [11-12] and improve overall efficiency of the company [13-16].

Dynamic Capabilities in the relationship between enterprise resources and export performance are evidenced in the Dynamic Capabilities documentation that enables companies to create, develop and protect resources that help them achieve superior long-term performance [17]. Wu [18] confirmed the importance of Dynamic Capabilities in transforming resources into organizational performance. We expect this effect to occur in the international market.

To analyze the effects of latent variables on EP, the following hypotheses have been set forth:

**H<sub>1</sub>:** There is a positive relationship between INNO and EP.

**H<sub>2</sub>:** INNO positively affects DC.

**H<sub>3</sub>:** DC have positive impact on EP of Thai SMEs.

#### III. RESEARCH METHODOLOGY

#### A. Population and Sampling

The Scope of the population that is used in this research is the SMEs business to exporting of Thailand, according to the number of the SMEs business to exporting throughout the country at the end of the year 2016 (Registered with Department of International Trade Promotion, 2013-2016). The selection of small and medium enterprises who are exporter number was 454 units. However, when the questionnaire was returned, only 238 could be used for the research. The questionnaire will be identified by Unit of Analysis. The required sample size for this study based on calculation according to the rules of SEM [19] proposed a simplified guideline for the lowest ratio of "sample size" to "number of observed variable (p)" of 10-20: In this paper has 12 observed. Therefore, 238 samples were considered sufficient for statistical analysis.

#### B. Data Collection

The questionnaire was used in a variety of ways, such as how to make an appointment and send a questionnaire to the sample. The collecting of information is done though face-

to-face inquiry or send the questionnaire to the target audience by mail, with a reply envelope,

#### C. Latent Variables and Observed Variables

The latent variables for this study are based on literature review which comprises of: INNO which measured by Technological innovation, Product innovation and Process innovation; DC which measured by Structure, Strategy, System, Style, Skill, Staff and Shared Value, and EP which measured by Finance and Non-Finance.

#### D. Reliability and Validity

The validation of the measurement on content validity is evaluated by using Index of Item-Objective Congruence (IOC) method to evaluate content validity of the items used in the questionnaire. The IOC's overall assessment score is 0.94 and considered valid.

The test of the reliability of the variables used in the model by using Cronbach's alpha as mean to measure internal consistency. The variables used have the alpha values all higher than .8 (from .907 to .914). The data are found to be distributed within the Kurtosis value between -3 to +3, which is within normal distribution. The testing of multi-collinearity is an analysis for the non-relationship between variables. The tolerance must be more than 0.1 and the value of Variance Inflation Factor (VIF) must be lower than 10 [20]. The analyzed tolerance values ranged from .332-.488 and VIF values ranged from 1.653-3.011 indicated that there were no multi-collinearity among variables.

## E. Convergent Validity and Discriminant Validity

The convergent validity is measured with confirm factor Analysis, if the factor loading values are greater than 0.6 and the average variance extracted (AVE) are higher than 0.5, the model is considered converged. The loading factors ranges from 0.696 to 0.914 while the AVE values from the study ranges from 0.557 to 0.626.

The assessment of discriminant validity was done by comparing the AVE value with squared correlation between variables [21],

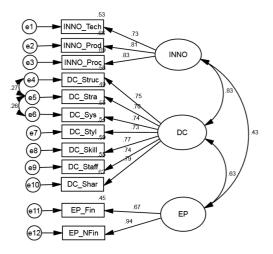
Fornell and Larcker [22] suggested that the values of squared root AVE should be higher than squared correlation values as to be valid. The result as shown on table I, indicates that the all the values have supported the discriminant validity. The AVE values from each latent variable were greater than the level of correlation involved.

TABLE I COMPARISON OF SQUARE ROOT AVE WITH CORRELATION BETWEEN CONSTRUCTS

	INNO	DC	EP
INNO	0.791		
DC	0.692	0.746	
EP	0.203	0.432	0.813

### F. Measurement of Model

Confirmatory Factor Analysis (CFA) to measure Latent Variable and confirm that each observation variable and Structural Equation Model Analysis (SEM) to analyze the structural relationships of innovativeness, Dynamic Capabilities, and Export Performance.



Chi-square = 92.170, Chi-square/df = 1.881, df = 49, GFI = .940, CFI = .972, RMSEA = .061, NFI = .943

Fig. 1 Factor Loading of Observation Variable in CFA (with Modification Indices)

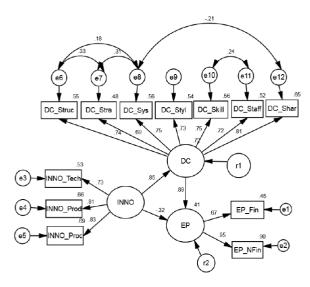
The CFA of Measurement model did meet the criteria of model fit as the indicator were favorable to the acceptable level, Which the result of model showed that the relative Chisquare ( $\chi^2$ /df) acceptable level at less than 3. In case of Group indexes set as GFI, CFI, and NFI at levels greater than or equal 0.90.

RMSEA did meet the criteria of lower than 0.08.

#### G. Analysis of Structural Equation Model

Structural Equation Model (SEM) has been constructed for the test of the proposed hypotheses. To determine the presence of standardized direct effect, the hypotheses has been developed that there was no direct relationship between INNO and EP (H<sub>1</sub>) ( $\beta$  = 0.846, p = 0.055), the indirect path that mediating by DC from INNO to EP (H<sub>2</sub>) was statistically significant with path coefficient  $\beta$ = 1.731 (p<0.001), This suggested that mediating by DC the relationship between INNO and EP was fully mediated by DC. The direct path that there was direct relationship between DC and EP (H<sub>3</sub>) as statistically significant with path coefficient  $\beta = 0.885$  (p<0.001). These indicated that DC was affected to EP.

The model exhibits reasonable predictive ability as it explains 72 percent of the variance in DC, and 41 percent of the variance in EP.



Chi-square = 65.624, Chi-square/df = 1.427, df = 46, GFI = .959, CFI = .987, RMSEA = .042, NFI = .960

**Fig. 2** Research Model Result: Analysis of Structural Equation Model (SEM)

#### IV. CONCLUSIONS AND DISCUSSIONS

The results in Model showed that and INNO which had not relationship between INNO with EP were statistical insignificant. However, these INNO variables indirectly

affect the export performance. INNO variable indirectly influences the EP through the DC. Furthermore, [23] suggested that the fully mediating effect occurs in the model if the indirect path is statistically significant and the direct path become insignificant, while the partially mediating effect occurs in the model if the indirect path is statistically significant and the direct path still be statistically significant. This suggested that the relationship between INNO and EP in Model was fully mediated by DC. The results showed that INNO had no direct relationship with EP. But to have the relationship had indirectly influenced the export performance through the DC which describe, these INNO variables have a role and influence increased if through DC which consists of Structure, Strategy, System, Style, Skill, Staff, and Shared Value which will make Export performance has increased.

#### V. MANAGERIAL IMPLICATIONS

The study reveals the relationship between innovativeness variable and export performance of small and medium enterprises operating in export, the results showed that the innovativeness variable can be achieved through the Dynamic Capabilities as mediating, resulting in higher export achievement. In addition, Innovativeness that can be used as Benchmarks to monitor and enhance the ability of a business between Innovativeness of small and medium enterprises that export. If there any organizations examining the factors of the Innovativeness variables, have found weaknesses, can bring the results of the survey to improve.

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# (Arranged in the order of citation in the same fashion as the case of Footnotes.)

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