

Competitive Model of Orchid Exporters in Thailand

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Abstract - This research aims to: 1) Study a causal factor that influences the competitive ability of orchid exporters in Thailand, 2) To examine the Goodness of fit between the development of the Competitive Model of Orchid Exporters in Thailand and the empirical data, 3) To study the size of factors of direct influences, indirect influences, and the total influences that affect the competitiveness of Orchid Exporters in Thailand, and 4) To bring forth the Competitive Model of Orchid Exporters in Thailand from this research to use as a guide to increase the competitiveness of the study group which are the Sample Size who is suitable as a representative or 80 Orchid Exporters in Thailand, and 352 farms who export orchid.. The researchers use Multi-Stage-Sampling method to collect data through surveys and received the surveys back (Response Rate) in the ratio of 89.58 percents. The data then is analyzed by Structural Equation Modeling: SEM technique.

The result shows that Logistic management has the most influence on the competitive capability. The second lesser influential factors are the Marketing and Environment. According to the analyst of the model, it shows that the model has a balancing correspondence with the empirical data in which the 5 indexes of the Goodness of Fit Index pass the criteria with p-value = 0.119, Chi-Square/df equals to 1.276, GFI=0.977, AGFI=0.958, and RMSEA=0.027. Therefore, it could be

concluded that the Model of Structural Equation Model goes in accordance with the empirical data and that the Environment and the Marketing have a positive effect to the Logistic while these three factors can directly influence the competitiveness of orchid exporting business which the hypothesis of this research has indicated.

Keywords - Competitiveness, Orchid Exporters

I. INTRODUCTION

Nowaday is an era of globalization that technology is considered essential and being developed in several ways. Due to these reasons, International trade has grown expeditiously and together with a free-trade policy of many countries, the competitiveness of the international trade becomes very intense. Various related organizations, both public and private, strive to find an advantage on this competitive business to increase their export figure [1-2].

In order to develop and promote orchid industry in Thailand, there are many major problems in exporting orchids that require attention which will lead to a long lasting assurance of the capability to compete in the international market. The National committee of orchid, Ministry of Agriculture and Cooperatives, presented a development strategy under the name of "Strategy of competing Thai orchid in international market 2011-2016". The strategy aimed to increase the export amount of orchids to 10,000 M.THB per year and lead Thailand to become

the central producer of tropical orchids in the world, then to use orchids as a mean to attract tourists by focusing on 3 main points which are to increase the effectiveness of the a production, to increase the market capability, and to have a solid management system.

Later the Ministry of Agriculture and Cooperatives presented a plan to develop the potential to compete to the current Thai Government. With the cabinet resolution agreed to the core purpose of the plan to promote the growing of orchid in Thailand, focusing on quality of growing orchid for export which are: 1) Controlling the quality of the exported orchids to fit the criteria of destination countries and 2) Controlling the quality of the orchids by controlling a quality of the farm (GAP), an assorting and packing factory, and the orchids before the export [3].

Then in the time that gasoline price is increasing, the importers have to adapt by adjusting the transportation plans by keep the cost down. In the meantime, they also have to keep strict control of the products' quality to impressed the customer without decreasing the price down otherwise the market price will be too low and it will have a wide negative effect on the market [4]. As per the explanation above, time is the most essential and the main problem that would affect the product the most because orchids have a very short shelf life. To increase a potential in the competition, the exporters, therefore, have to focus on the Logistic Management to deliver the products to consumers as soon as possible with the best quality. For that reason, the factor of Logistic which is a part of Logistic Management Supply Chain is a business that relates to activity of moving products and data from the beginning of the production line to the finally the consumption [5]. This goes in accordance with the idea that internal management in the organization which will be able satisfy customers must have an excellent coordination in order to create an advantage in the competition, for example: sending the correct product swiftly and with a reliable and accurate with Day, [7] discovery. According to the working process, [6]

which agrees previously explained background and importance, it can be seen that there are many methods to create advantageous opportunity, be it business strategy, quality control, technology etc. Moreover, there are other methods that scholars are interested in such as factors inside the organization, factors outside the organization, Marketing and Logistic. This study is consistent with a concept and the theory of National Competitive Advantage [8] which is used in analyzing ability to compete in exporting products and as a perception to indicate a criteria to examine Thailand's levels of ability to compete in exporting orchid. This interests the researcher to study the Competitive Model of Orchid Exporters in Thailand in order to use the result to create an advantage in competition of Thai exporters. Thus it could also be applied as a model to implement advertising, adjusting, modifying, and supporting the orchid exporters. Furthermore, the data could be adopted to determine criteria for exporting orchid internationally.

II. OBJECTIVES

The research of the Competitive Model of Orchid Exporters in Thailand has 4 main objectives, which are:

1. Study a causal factor that influences the competitive ability of orchid exporters in Thailand.
2. To examine the Goodness of fit between the development of the Competitive Model of Orchid Exporters in Thailand and the empirical data.
3. To study the size of factors of direct influences, indirect influences, and the total influences that affect the competitiveness of Orchid Exporters in Thailand.
4. To bring forth the Competitive Model of Orchid Exporters in Thailand from this research to use as a guide to increase the competitiveness of Thai orchid exporters.

III. METHODOLOGY

A. Collecting Data

Primary Data is collected by surveys from 432 samples (Sample survey reach) which the researcher considered as an appropriate Sample Size to represent the orchid Exporters in Thailand. Then, secondary Data is a collection of information that comes from books, textbooks, publications, journals, and related research information.

B. Study Tools

Tools that have been used in collecting data this time are surveys that the researchers created according to the concept of this study where the questions cover all the purposes.

C. Tools Management

This study is conducted by Survey Research method.

D. Data Analysis

Survey Research will provide a primary data which comes from an analysis of the returned surveys. The analysis is conducted by statistical package program. The statistic then is divided into 2 types: descriptive statistics and inferential statistics. The researchers have tested a hypothesis of relationship between factors that affects the advantage in the competition by statistic, Multivariate Regression Analysis and Path Analysis in order to create a model of competitive ability of orchid exporters in Thailand by defining values of Regression coefficient.

At the same time, the information from an open-ended question for suggestions to increase competitive capability of orchid exporters in Thailand can be presented in terms of Descriptive information as an explanation of general nature of other collected data.

IV. THE RESULT

A. Objective Results

The result of the first objective can be concluded that out of the 3 factors, Environment, Marketing, and Logistic, the variable of Logistic is the most influential

factor while Marketing and Environment come as second and third respectively. After analyzing the model, the result of the second objective can be concluded that the model is conformed to the empirical data.

The result of the 3rd objective finds that the Environment has a positive effect to the Logistic, and the Competitiveness. Then the Marketing has a positive effect to the Logistic and the Competitiveness. And the Logistic has a positive effect to the Competitiveness at Statistically significant level of 0.001, which agrees with the hypothesis of this research.

The result of the 4th objective can be concluded that the Competitive Model of Orchid Exporters in Thailand from this research can be used as a guideline in increasing the capability to compete in orchid exporting business. After interviews with the businessmen, President of Thai Orchid Exporters Association, and also experts in orchid exports (Academically): Associate professor Direk Thongaram, Dean of the faculty of Technology and Innovation, Bangkokthonburi University, and Associate professor Dr. Surachai Chakrirat, head of Agricultural Technology Department, all suggest that in order to put this model into use, educating orchid farmers and exporters is a must. So they could use it as a guideline to correctly increase their capability. While for the private organization, after interviewing 2 of the businessmen: Ms. Prapai Netprapai and Mr. Rattakorn Imjai, both suggest that in order to use this model successfully, the businessmen should gather to strengthen themselves. On the other hand, an interview with government representative, Mr. Jate Meeyanyiam: president of orchid export association, suggests that businessmen should also adapt the government policy of Marketing 4.0 model into practice as well. In conclusion, the result of the aforementioned analysis also shows the importance of Logistic is the number one while the Marketing and Environment comes second and third. And when interviewing with businessmen, President of Thai Orchid Exporters Association, and also experts in orchid exports

(Academically), all recommend the ideas that by putting forth the Competitive Model of Orchid Exporters in Thailand into practice, Logistic should be held as the priority.

B. Results of Examining

Path Analysis Hypothesis Path Analysis is a statistic that will be used to explain the Causal relationship of variables by showing a structural model. This model demonstrates the influences of each factor and after that examine the diagram, according to the respective hypothesis, whether they are suitable or not. If the diagram or the model is suitable, then the form of influences will be studied and defined later. In this research, the researchers have used Statistical program, AMOS (Analysis of Moment Structures), as a tool to create the hypothesis model in order to prove an acceptance or refusal of this model while working along with the data from SPSS program.

Hypothesis 1: The Environment has a positive effect to the Logistic.

The result of the study (H1) of Competitive Model of Orchid Exporters in Thailand agrees with the hypothesis that the Environment factor has a positive influence on the factors of the Logistic equals to 0.368 and has an importance on statistical level of 0.001. Therefore, it could be said that this assessment supports the hypothesis 1. In other words, The Environment has a positive influence on the Logistic. Thus, if the Environment situation increases by 1.00, the Logistic will also increase by 0.368 as per table I.

Hypothesis 2: The Environment has a positive influence on the Competition.

The result of this hypothesis (H2) of Competitive Model of Orchid Exporters in Thailand agrees with H2 that the Environment has a positive influence on the Competition equals to 0.210 and has an importance level of 0.001. This shows that when the situation around the Environment becomes better by 1.00, the ability to compete will also increase by 0.210 as per table I.

Hypothesis 3: The Marketing has a positive influence on the Logistic.

The result of this hypothesis (H3) of Competitive Model of Orchid Exporters in Thailand agrees with H3 that the Marketing has a direct positive influence on the Logistic equals to 0.269 and has an importance level of 0.01. This means that when the effort is put on the Marketing to increase the situation for 1 digit, the management in Logistic will also increase by 0.269 digits as per table I.

Hypothesis 4: The Marketing has a positive influence on the Competition.

The result of this hypothesis (H4) of Competitive Model of Orchid Exporters in Thailand agrees with H2 that the Marketing has a positive influence on the Competition equals to 0.216 and has an importance level of 0.001. Moreover, it also has both direct and indirect influence on the competition equals to 0.415 and 0.199 respectively at the importance level of 0.001. This shows that when the business is focusing more on the Marketing, it will also increase the ability to compete as per table I.

The result of this hypothesis (H5) of Competitive Model of Orchid Exporters in Thailand agrees with H5 that the Logistic has a positive influence on Competition equals to 0.739 and has an importance level of 0.001. This demonstrates that when the logistic is improved, the ability to compete will also increase as per table I.

According to the result after examining the Goodness of Fits of Competitive Model of Orchid Exporters in Thailand, it is discovered that there is a Goodness of fit between the development of the Competitive Model of Orchid Exporters in Thailand and the empirical data by determining from a statistical value which is used to test the Goodness of Fit between the Model and the Empirical data. The values are Chi-Square = 59.782, Degree of freedom (df)=48, Probability p-value = 0.118 which Chi-Square value does not equal to zero with no

significance. This means the Linear Structural Equation Model of Factors fits with the development of the Competitiveness of orchid exporters in Thailand conforms with the empirical data. It also agrees with the analysis result of the Goodness of Fit Index (GFI) at 0.974, Adjusted Goodness of Fit Index at 0.958 by having approaching value closes to 1 and Root mean square residual (RMR) = 0.035, and Root mean square error of approximation (RMSEA) remains at 0.025 which is very close to 0.

When considering the direct and indirect influence, the Environment has a direct influence on the Logistic and the Competition of exporting orchid. So the positive elements weight at 0.368 and 0.210 respectively and have an affirmative relationship. This demonstrates that if the business has a proper adjustment and development on the environment, the Logistic and the competitiveness will also advance. Then if considering the Logistic, it could be found that it has a direct influence on the competitiveness with 0.739 positive element value. This implies that if the business has an excellent management on the Logistic, the competitiveness will also rise.

From the result of developing Competitive Model of Orchid Exporters in Thailand, it is discovered that Logistic is a factor that affects the competitiveness the most. Second is the Marketing. And third is the Environment as shown on fig. 1.

Competitive Model of Orchid Exporters in Thailand agrees with the empirical data (Hypothesis 6). According to the analysis of the model, it shows that the model has a balancing correspondence with the empirical data in which the 5 indexes of the Goodness of fit Index pass the criteria with $p\text{-value} = 0.119$ Chi-Square/df equals to 1.276, GFI=0.977, AGFI=0.958, RMSEA=0.027. Therefore, it could be concluded that the Model of Structural Equation Model agrees with the empirical data.

V. DISCUSSION

Results of the study show that the competitiveness of the orchid exporters depends on several factors which are: 1) Environment, 2) Marketing, and 3) Logistic.

The research result agrees with Siguaw, Simpson, & Baker who found that coordination and information sharing between suppliers affect the commitment of the suppliers and relationship between external agencies in delivering a qualified products to customers [9]. This also supports with the idea of the ability of Logistic means integration in organization [10]. In other words, it is a working process where internal cooperation is required. This kind of process will lead to achieving efficiency in the organization. When products or services are delivered outside to the customers, this will make them returned. Furthermore, Naver & Slater also discovered that in order to be at an advantage point in competition, internal management between each duty and flawless coordination would create a better qualification to satisfy customer [6].

For example: punctual delivery, reliable, accurate, and correct process. This agrees with a theory of [7] as well as [11] who said that bringing marketing into practice for designing business and proposing a mixture of best service to customers will bring out advantages in competition and high profits. The same goes for [12] who indicated that marketing is an idea that is aiming for customers as the main target by focusing on pleasing the customers. This is because marketing will motivate the business to conduct a research about the customers and the competitor. It will also increase the efficiency in management. Moreover, the businesses that focus on marketing will have knowledge of customers' needs and expectation. Then it will lead to competency in communication and cooperation between the business and the customers. Also, marketing causes businesses to have good result because the executives and employees have a clear knowledge of the customers as well as the strength of the competitors [13].

Due to this reason, the business will be able to properly satisfy the customers' demand and lead to being at an advantage point in competition.

Results of the research implies that Logistic has the highest influence on the competition according to [14] who said that presently there are logistic activities that cause Form Utility such as Breaking Bulk, Product Flavoring like Mixing, Blending, Additive, adjusting the products to compliment the logistic: Shipment, Floor-Ready Merchandise, for example: dividing merchandises into small pieces, labeling and hanging. These kinds of activities happen at the warehouse or distribution centers and help increase value of the products. And making customers satisfied is a value of the company. By offering a high class service, the value of the service will also increase as well as what [15] pointed out that Logistic management will offer a better value in total. Not only that, but also creating an advantages in competition. However, the important difference between moving products management that could be considered Logistic is having a proper interaction between each process and a system with rules and scientific planning because orchid is an agricultural product that is quite fragile. Furthermore, different types of orchid has a different problem about insects, diseases, the reproduction of each breed of orchid, incorrect harvest method by the workers, damage from transportation to the packing factory, and also decay from inappropriate temperature. Nevertheless, transporting orchid must be done by air which has a limited space and from the farms to consumers, the orchids must be under the temperature control to keep the freshness and reduce chances of decay which will lead to loss [16]. Logistic service providers are not just a forwarder's representative, but also a service provider who provides conveniences in custom, Liners, Airways, and a representative in dealing with each organization for the exporters [17] Because the providers are working as part of the organization, it is important to choose them carefully. Choosing the providers is complicated and relates to qualitative and quantitative data. The Criterias

may differ depend on the business model of each organization and company.

VI. SUGGESTIONS

In order for the orchid exporting to have an excellent result, it is the management's duty to place importance on essential tools to level up the business. The management should focus on 3 factors: Environment, Marketing, and Logistic because these three can influence the ability to compete both directly and indirectly. Also they will bring advantages in the competition and good performance. This is because orchid exporting is being supported by the government and is a famous export good in Thailand (strength), so it has a very strong foundation and is beneficial to maintain a long lasting business.

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

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