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The Success Model Of The New Product Development In The Thai Food Industry

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ABSTRACT

The development of new products is very important for business survival, as developed products have a shorter period of time. There is high competition in the market, along with consumers accessing data quickly via communication technology. Consumers are constantly changing their behavior. The objectives of this research were to: 1) study the level of factors affecting the success of new product development in the Thai food industry; 2) study the factors influencing the success of new product development in the Thai food industry; and 3) study the success model of new product development in the Thai food industry. This research employed a mixed research methodology, combing quantitative and qualitative methods. In quantitative research methods, stratified random sampling was employed in this study. The sample consisted of at least 360 of ready-meal business operators in Bangkok. The sample size was determined based on the criterion of 20 times of the observed variables. A structural equation model was used to analyze the data after the questionnaires were distributed. For the qualitative research method, semi-structured interviews were conducted with 17 key informants, including experts, executives, entrepreneurs, and customers. The results of the research showed that: 1) the success of new product development in the Thai food industry was rated at high importance level; 2) the factors influencing the success of new product development in the Thai food industry were, respectively, the product cycle, marketing strategy, leadership ability, and competitiveness; and 3) the success model for new product development in the Thai food industry was to plan in advance in terms of product development with unique features, focus on creativity and new usefulness, constantly survey marketing, and construct a network of public and private cooperation. The findings of the research are useful to entrepreneurs in the food industry. The Ministry of Industry can use the finding to formulate new product development policies and strategies to meet the needs of consumers.

Keyword: Success / New Product / Food Industry.

INTRODUCTION

Thailand's Food Industry It is one of the industries that has a significant impact on the country's economy. It is also a fundamental industry to add products such as agriculture. Fisheries, livestock and other fields. Thailand's food industry has progressed, exporting to more than 200 countries, with an average annual average of more than 800 billion Baht (Office of Industrial Economics, 2020). In addition, the food industry has contributed to other production activities that are supportive industries, including packaging such as canning, and leading to higher employment and national income (Chonthis Darawong, 2015) Food products are at the heart of the business. The company can only succeed if it has a product. Good quality in line with consumer demand Coupled with being available in the right place or market. Distributed with promotion and reasonable

price. Good products should be unique and fully qualified as announced or advertised to consumers. In addition, products that are on the market are faced with changes in various aspects that occur, especially the demands of the market that are constantly changing. Products that can meet the needs of today's consumers may no longer be in demand by consumers in the near future. As a result, the company faces risks in the time market. Therefore, companies always focus on developing products that are new and in line with the needs of consumers. Because the company will benefit from the new product type, the company will benefit from the new product type. This is becoming much more in demand than existing products on the market (Goetsch, D. L., & Davis, S. B., 2014).

The development of new products is not the case. Entrepreneurs who want to grow sustainably must be constantly evolving. The process of developing new products is an ongoing process that must be developed over time, so that the product can best meet the needs of consumers and be able to compete in the market. New products are fiercely competitive and increasing every year. The second priority of business operators from the customer group is the products in the organization, which must always be developed. A new product may be a product that is a change of format, or it is just a change in the original product, or it offers an existing product in a new market. The business must have a clear objective of presenting new products, what they want, or whether they want to be technological leaders, as well as potentially gaining new ideas from middlemen. Brainstorming the ideas of heads of departments in the business. And most of the ideas that are obtained are derived from the problem. Feedback feedback on consumer products Found in the consumption of that product at this stage, the business should get an idea. Many ideas from different sources to be moderated select only suitable for the business of designing products, products or services (Department of Industrial Promotion, 2016).

Reasons why new products are unpopular include insufficient market analysis. Without good enough market research, the product has no advantages or errors, the cost of developing production and marketing is too high, lack of good internal and external communication, lack of good marketing planning, the product has a relatively short life cycle, there are a growing number of competitors and lack of cooperation from marketing intermediaries. The development of new products is of great importance to business survival, as developed products have shorter life spans and are constantly replaced by new types of products. In addition, most manufacturing companies are in market situations where consumers can quickly access data. With digital communication technology and consumption habits are constantly changing. This results in business failures of new products that occur. As a result of the problem. The researchers were interested in studying "The Success Model of The New Product Development in The Thai Food Industry".

PURPOSE OF RESEARCH

1. To study the level of factors affecting the success of new product development in the Thai food industry.
2. To study the relationship of causal factors, leadership abilities, marketing strategies, product cycles, competitiveness and the success of new product development in the Thai food industry.
3. To offer a successful model of new product development in the Thai food industry.

RESEARCH METHODOLOGY

This is a combination of quantitative and qualitative research.

Quantitative research, the sample is ready-made food operators. Consisting of executives, employees, staff, staff located in Bangkok area. Sampling using stratified random sampling of 360 people.

A tool is a 5-level estimation query. 90 questions. Check the quality of the tool by determining the IOC value, finding that the entire IOC value is .97. And the whole sentimental value is .967, analyze the data. By using descriptive statistics and analyzing structural equation models.

Qualitative Research The key informant groups are 1) food industry vocational experts on the development of new products 2) Executive level or government representatives 3) Entrepreneurs or people associated with the food industry involved in the development of new products. The criteria are set as knowledgeable persons with at least 5 years of

experience in both the public and private sectors, 17 people. The tool is a semi-structured interview form, 6 open-ended questions, the IOC value of the question is between 0.80-1.00, analyze the data by analyzing the content.

SUMMARY OF FINDINGS

Research on The Success Model of The New Product Development in The Thai Food Industry summarizes the findings, according to the research objectives as follows:

The objective of research no. 1 is to study the level of factors that affect the success of new product development in the Thai food industry.

Table 1 Priority of Factors

Latent Variable Totals (TOT)	Amount	Mean	St. Dev.	Priority	Order
Leadership Abilities	360	3.50	0.63	High	1
Marketing Strategies	360	3.30	0.69	Medium	5
Product Lifecycle	360	3.48	0.53	High	2
Competitiveness	360	3.45	0.60	High	3
The Success of New Product Development	360	3.35	0.57	Medium	4

Comparative analysis and sequence of all passive variables

From Table 1 can be sorted, Leadership Abilities averaged 3.51 as the first. Second only to Product Lifecycle has the same average of 3.48. Third place is Competitiveness with an average of 3.45. The fourth is the success of New Product Development with an average of 3.35. And fourth, Marketing Strategies has an average of 3.30.

The objective of research number 2 is to study the relationship of causal factors Leadership Abilities Marketing Strategies, Product Lifecycle, Competitiveness and The Success of New Product Development in the Thai food industry.

Show correlations and influences from joint data analysis to determine the harmonious consistency of models with empirical data after the final adjustment of the model has an effect on Figure 1.

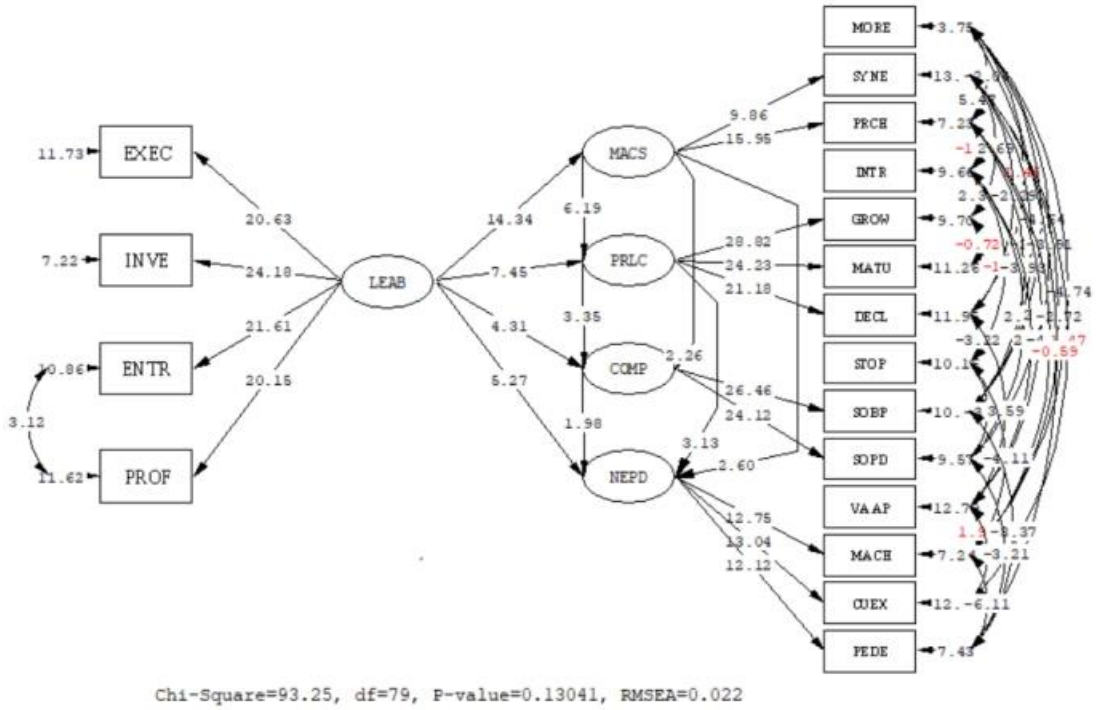

Figure 1 Models and empirical data

Results of hypothesis test according to Table 2.

Table 2 Analysis of aggregate, direct and indirect relationships of alternative models

Dependent variables	Relationships	Independent variables				
		LEAB	MACS	PRLC	COMP	NEPD
MACS	DE	0.74**	N/A	N/A	N/A	N/A
	IE	N/A	N/A	N/A	N/A	N/A
	TE	0.74**	N/A	N/A	N/A	N/A
PRLC	DE	0.51**	0.50**	N/A	N/A	N/A
	IE	0.37**	N/A	N/A	N/A	N/A
	TE	0.88**	0.50**	N/A	N/A	N/A
COMP	DE	0.30**	0.25*	0.47**	N/A	N/A
	IE	0.60**	0.24**	N/A	N/A	N/A
	TE	0.90**	0.49**	0.47**	N/A	N/A
NEPD	DE	0.75**	0.66**	0.82**	0.39*	N/A
	IE	0.11	0.22*	0.17*	N/A	N/A
	TE	0.86**	0.88**	0.99**	0.39*	N/A
Chi-Square= 93.25, df=79, p-value = 0.130, GFI=0.97, AGFI=0.94, RMR=0.007, RMSEA=0.022, CFI=1.00, CN=420.58						

Note * Means statistical significance at 0.05 ([t] >1.96)
** Means statistical significance at 0.01 ([t] >2.56)

From Table 2, the relationship path can be described as leadership abilities (LEAB) as directly related to The Success of New Product Development (NEPD) as much as 0.75. Secondly, it has a direct effect on Marketing Strategies (MACS), Product Lifecycle (PRLC) and Competitiveness (COMP) were 0.74, 0.51 and 0.30, respectively. And it indirectly affects Competitiveness (COMP) and Product Lifecycle (PRLC) of 0.60 and 0.37, respectively. But it does not indirectly affect The Success of New Product Development (NEPD) of 0.11.

Marketing Strategies (MACS) have as much direct correlation with The Success of New Product Development (NEPD) as 0.66. Secondly, the direct result of Product Lifecycle (PRLC) and Competitiveness (COMP) is 0.50 and 0.25, respectively. And indirectly affects computerization (COMP) of 0.15 and The Success of New Product Development (NEPD) is 0.24 and 0.22, respectively.

Product Lifecycle (PRLC) has the most direct association with The Success of New Product Development (NEPD) as 0.82. Secondly, it directly affects computerization (COMP) of 0.47 and indirectly affects The Success of New Product Development (NEPD) of 0.17. Competitiveness (COMP) was found to have a direct relationship with The Success of New Product Development (NEPD) of 0.39.

Overall image analysis showed that the harmonious index values were more consistent with empirical data. It meets the benchmarks that represent the consistency of the model and the empirical data with the standard is very good.

Table 3 Hypothesis Test Results

Research Hypothesis	**Path Coefficient**	**t Statistics**	**Result**
Hypothesis 1: Leadership Abilities, Marketing Strategies, Product Lifecycle and Competitiveness affect The Success of New Product Development			
1.1 Leadership Abilities directly affect The Success of New Product Development (LEAB --> NEPD)	0.75**	5.27	support
1.2 Marketing Strategies directly affect The Success of	0.66**	2.60	support

New Product Development (MACS --> NEPD)			
1.3 Product Lifecycle directly affects The Success of New Product Development (PRLC --> NEPD)	0.82**	3.13	support
1.4 Competitiveness directly affects The Success of New Product Development (COMP --> NEPD)	0.39*	1.98	support
Hypothesis 2: Leadership Abilities Marketing Strategies and Product Lifecycle affect Competitiveness			
2.1 Leadership Abilities directly affect Competitiveness (LEAB --> COMP)	0.30**	4.31	support
2.2 Marketing Strategies directly affect Competitiveness (MACS --> COMP)	0.25*	2.26	support
2.3 Product Lifecycle directly affects Competitiveness (PRLC --> COMP)	0.47**	3.35	support
Hypothesis 3: Leadership Abilities and Marketing Strategies affect Product Life Cycle			
3.1 Leadership Abilities directly affect Product Life Cycle (LEAB --> PRLC)	0.51**	7.45	support
3.2 Marketing Strategies directly affect Product Life Cycle (MACS --> PRLC)	0.50**	6.19	support
Hypothesis 4: Leadership Abilities affect Marketing Strategies			
4.1 Leadership Abilities directly affect Product Life Cycle (LEAB --> MACS)	0.74**	14.34	support

Note ** Means, p value ≤0.01
* Means, p value ≤0.05

From Table 3, the hypothesis test results can be summarized as follows:

Hypothesis 1: Leadership Abilities, Marketing Strategies, Product Lifecycle and Competitiveness affect The Success of New Product Development, finding that Leadership Abilities directly affects The Success of New Product Development. The path coefficient is 0.75, the t statistics are 5.27, which supports the statistically significant hypothesis at the level of 0.01. This can be interpreted as the variables studied correlated in the same direction, that is, as Leadership Abilities increased, resulting in more The Success of New Product Development.

Marketing Strategies directly affects The Success of New Product Development. The path coefficient is 0.66, the t statistics are 2.60. Which supports a statistically significant hypothesis at 0.01. This can be interpreted as the variables studied correlated in the same direction, that is, as Marketing Strategies increases, resulting in more The Success of New Product Development.

Product Lifecycle directly affects The Success of New Product Development. The path coefficient is 0.82, the t statistics are 3.13. Which supports a statistically significant hypothesis at 0.01. This can be interpreted as the variables studied correlated in the same direction, that is, as Product Lifecycle increases, resulting in more The Success of New Product Development.

Competitiveness directly affects The Success of New Product Development. The path coefficient is 0.39, the t statistics are 1.98. Which supports the statistically significant hypothesis at 0.05. This can be interpreted as the variables studied correlated in the same direction, that is, when Competitiveness More and more, resulting in more The Success of New Product Development.

Hypothesis 2: Leadership Abilities Marketing Strategies and Product Lifecycle affect Competitiveness. Based on hypothesis tests, Leadership Abilities directly affect Competitiveness. The path coefficient is 0.30, the t statistics are 4.31. Which supports a statistically significant hypothesis at 0.01. This can be interpreted as the variables studied correlated in the same direction, that is, as more Leadership Abilities increase, resulting in greater Competitiveness.

Marketing Strategies directly affects Competitiveness. The path coefficient is 0.25, the t statistics are 2.26. Which supports the statistically significant hypothesis at 0.05. This

can be interpreted as the variables studied correlated in the same direction, that is, as marketing strategies increase, resulting in more Competitiveness.

Product Lifecycle directly affects Competitiveness. The path coefficient is 0.47, the t statistics are 3.35. Which supports a statistically significant hypothesis at 0.01. This can be interpreted as the variables studied correlated in the same direction, that is, as Product Lifecycle increases, resulting in more Competitiveness.

Hypothesis 3: Leadership Abilities and Marketing Strategies affect Product Life Cycle. Based on hypothesis tests, Leadership Abilities directly affect Product Life Cycle. The path coefficient is 0.51, the t statistics are 7.45. Which supports a statistically significant hypothesis at 0.01. This can be interpreted as the variables studied correlated in the same direction, that is, as more Leadership Abilities increase, resulting in more Product Lifecycle.

Marketing Strategies directly affects Product Life Cycle. The path coefficient is 0.50, the t statistics are 6.19. Which supports a statistically significant hypothesis at 0.01. This can be interpreted as the variables studied correlated in the same direction, that is, as more marketing strategies result in more Product Lifecycle.

Hypothesis 4: Leadership Abilities affect Marketing Strategies. Based on hypothesis tests, Leadership Abilities directly affect Marketing Strategies. The path coefficient is 0.74, the t statistics are 14.34. Which supports a statistically significant hypothesis at 0.01. This can be interpreted as the variables studied correlated in the same direction, that is, as more Leadership Abilities increase, resulting in more Marketing Strategies.

The purpose of research 3 proposes The Success Model of The New Product Development in The Thai Food Industry found that the mixed method of The Success Model of The New Product Development in The Thai Food Industry is a chart image, including: Product cycle, Leadership Abilities, Marketing Strategies and Competitiveness as shown in Figure 2

Figure 2 The Success Model of The New Product Development in The Thai Food Industry

DISCUSSION

1. The level of elemental factors of Leadership Abilities has an average score on all sides. The administrative aspect has the highest average score, and the professional side has the least average score.

The Marketing Strategies element has an average score of 1-sided and intermediate 2-sided. The market-oriented aspect has the highest average score, and the product characteristics have the least average score.

The Product Lifecycle factor element has an average score value of all aspects. By recommended stages It has the highest average score and the full growth side with the least average score.

Competitiveness elements have an average score value on all sides. The strength of the business process has the highest average score, and the strength of product development has the least average score.

The Success of New Product Development element has a high average score of 1 -sided and medium 3-sided. In terms of increasing marketing channels, the average

score value is the most, and adding value to the product has the least average score.

2. The effects of leadership abilities, marketing strategies, product cycles and competitiveness affect The Success of New Product Development in the Thai food industry, Influence sizes are 0.75, 0.66, 0.82, and 0.39, respectively. Explain that Leadership Abilities affects The Success of New Product Development in the Thai food industry because of its leaders with special administrative abilities, vision, communication skills, Ability to trust others, ability to make others see themselves as capable, energetic and focused on achieving action. Express emotions appropriately and generously to others, preferring to take risks, create new strategies to achieve goals, advertise yourself, and minimize internal conflicts. In line with Cunningham, Carolyn & Hayes (2020) say that the intellectual and competent attributes are the presence of cognitive intelligence, Knowledgeable, rational, visionary, timely decision-making by leadership attributes is so necessary because it is necessary to perform the duties by thinking, making decisions. In the administrative workload is always there.

Marketing Strategies affects The Success of New Product Development in the Thai food industry. Because the use of product differentiation strategies is to find competitive advantages by differentiating the product. This is an attempt to create their own products or services in a unique way to maximize the value of customers. In line with Asad, Chethiyar, & Ali (2020) focuses on marketing, learning by acquiring customer and competitors' data as well as publishing, sharing information within the business. This gives businesses the ability to differentiate themselves from their competitors in the long run and lead to a competitive advantage.

Product Cycle affects The Success of New Product Development in the Thai food industry. Since a product, product or service will last at disposal time, sales of products, products or services will change according to the season of each range or at each stage of Product Lifecycle, goods or services, product profits will increase and decrease with the Product Lifecycle marketing process. In line with Bikas, Stavropoulos, & Chryssolouris (2016) said that product improvements in both format and quality, price improvements by setting prices differently based on quality or product models, using thorough distribution channels, improving all kinds of market promotion, increasing user numbers and usage rates, depressing strategies, reducing the number of models or models of unprofitable products, reducing distribution channels and reducing market promotion to reduce costs, preferring discounting to increase sales.

Competitiveness affects The Success of New Product Development in the Thai food industry. Because of the competitiveness of food industry entrepreneurs who seek to innovate and enhance their abilities. In line with Eikelenboom & de Jong (2019), mentioned, competitiveness is associated with performance. When an organization can make more profits than its competitors, it means that the organization has a competitive advantage, or if any organization has an advantage, That organization will perform well. In line with Barney (2012), possession of valuable resources is rare, plagiarized and non-substitutional, will have a competitive advantage. And in line with Rodríguez-Serrano & Martín-Armario (2019), core talent leads to sustain competitiveness.

SUGGESTION

Academic Feedback

This finding confirms a finding that is consistent with the concept. The theories and related research work reviewed by the researchers by the knowledge obtained can be taken as a basis. Determine the success model of new product development in the Thai food industry. Industrial entrepreneurs can be used as a guide to enhancing the competency of leaders. Marketing Strategies Product life cycle and competitiveness.

Recommendations in the next research

1. Study of satisfaction, trailing the success model of new product development in the Thai food industry.
2. Study the legal measures of the development of new products of the Thai food industry to increase management efficiency.
3. Study the approach to promoting supply chain management of new products of the food industry.

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