

The Effect of Using Artificial Intelligence in Determining Marketing Strategies for Industries in Thailand

Catthaleeya Rerkpichai¹,

Pisit Chumnanna²,

and Wanchai Machutrakull³

¹Siam Technology College, Thailand

²Bansomdejchaopaya Rajabhat University, Thailand

³Protphitayaphayat School,

The Secondary Educational Service Area Office 2,
Office of Basic Education Commission Bangkok, Thailand

¹catthaleeyar@siamtechno.ac.th

²pisit_tcc_mk@hotmail.com

³wanchai_ma2502@hotmail.com

Abstract - This study aimed at identifying The effect of using artificial intelligence in determining marketing strategies for industries in Thailand the Population consisted of (65) marketing managers of the companies incorporated in the study. The study revealed the existence effect of using artificial intelligence in determining marketing strategies (cost leadership, differentiation, focus, alliance, diversification and direct marketing).

Results: 1) There is an effect of using artificial intelligence in cost leadership strategy as these applications obliges the company to reduce the cost of its products with keeping an acceptable level of quality, 2) There is an effect of using artificial intelligence in differentiation strategy as these applications stimulant the company to attend providing the highest quality of its products in the market, 3) There is an effect of using artificial intelligence in focus strategy as these applications stimulant the stimulant the company to choose the marketing activities that boost its position in the market, 4) These is an effect of using artificial intelligence in alliance strategy as these applications stimulant the company to join alliances with suppliers and Agent to generate more efficient marketing activities,

5) There is an The effect of using artificial intelligence in diversification strategy as these applications help the company to offer different and multiple products with several trademarks, and 6) There is an effect of using artificial intelligence in direct marketing strategy as these applications increase the company`s dependence on the available data basis about the customers.

Keywords - Artificial Intelligence, Marketing Strategies, Industrial Companies

I. INTRODUCTION

AI is a technology playing an important role in the way humans living a life and businesses in various industries as well as organizations. During the transition to “Digital Transformation”, Artificial Intelligence (AI) has been used more widely in ASEAN while Thailand has been ranked the second high number of organizations adopting AI technology. In Thailand 17.1% of organizations replied that they have adopted AI technology in some forms. It is considered that this technology is making a further step in Thailand. Public organizations, health concern sector and retail business sectors are the first group that adopts AI in their businesses and industries in a form of Chatbot that helps sales and marketing work, customer relationship

management (CRM), big data collection and analysis to help create intelligent decision-making with more accuracy and precision. However, it has been found that Thailand has not adopted AI for marketing strategy planning. It is probably caused by cost factors or lack of confidence whether or not AI can actually help plan marketing strategy. That conducted a survey with 1,155 companies across the world and found only 29% of the companies planned to adopt AI in their manufacturing process in 2016 and there were only 98 companies that really adopted AI in their businesses, accounted for 8% of the whole companies in the survey (Source: Economic Intelligence Center; 2017).

Therefore, to enable industries to have confidence for investment in adopting AI technology for increasing strength in Industrial business and survival in a competitive world, the researcher is interested in studying The effect of using artificial intelligence in determining marketing strategies for Industries in Thailand.

II. OBJECTIVE

This study aims at identifying the effect of using artificial intelligence in determining marketing strategies from the perspective of marketing managers in the industrial companies.

III. CONCEPTUAL FRAMEWORK

In this study, the research follows the effect of using artificial intelligence in determining marketing strategies for industries in Thailand as research framework which includes 5 components and from this question emerged the following sub-questions (Source: Porter, 1980, pp. 38).

1) Leadership strategy means the effect of using artificial intelligence in determining cost leadership strategy?

2) Differentiation strategy means the effect of using artificial intelligence in determining cost differentiation strategy?

3) Focus strategy means the effect of using

artificial intelligence in determining cost focus strategy?

4) Alliance strategy means the effect of using artificial intelligence in determining cost alliance strategy?

5) Diversification strategy means the effect of using artificial intelligence in determining cost diversification strategy?

6) Direct marketing strategy means the effect of using artificial intelligence in determining cost direct marketing strategy?

IV. METHODOLOGY

A. Population

The population of study included all the industrial companies listed in the Stock Exchange of Thailand 84 companies (Source: The Stock Exchange of Thailand 2016).

B. Variables

The effect of using artificial intelligence in determining marketing strategies.

C. Research Tools

The questionnaires were distributed on the marketing managers of those companies using census method. 69 Questionnaires which rated (82.1%) were recollected and by sorting them out, four questionnaires were excluded due to information incompleteness whereby the sample rested on 65 managers of said companies which were analyzed realizing a percentage of (77.38%) of total population.

D. Data Analysis

The researchers used the statistical methods of (SPSS). The data of Means and Standard Deviations of Artificial Intelligence in determining marketing strategies for industrial in Thailand.

Shows Means and Standard Deviations of Artificial Intelligence Variable the Results shows total effective (Means = 3.805, SD. = .892).

TABLE I
THE MEANS AND STANDARD DEVIATIONS
OF ARTIFICIAL INTELLIGENCE VARIABLE

1.	Expression: Using modern developed technological software to develop-marketing strategies Means = 3.794, S.D = .865 Result = Effective
2.	Expression: Caring for new developed products to satisfy customers Means = 3.682, S.D = .911 Result = Effective
3.	Expression: Using modern technological and computer devices and equipment to develop marketing strategies Means = 3.977, S.D = .866 Result = Effective
4.	Expression: Training the workers in marketing management continuously to keep up with the technological developments of marketing strategies Means = 3.771, S.D = .843 Result = Effective
5.	Expression: Using developed software languages to develop marketing strategies Means = 3.925, S.D = .871 Result = Effective
6.	Expression: Depending on marketing experts to develop marketing strategies continuously Means = 3.717, S.D = .930 Result = Effective
7.	Expression: Depending on using intelligent programs to develop marketing strategies Means = 3.764, S.D = .955 Result = Effective

The table I, shows that the means of artificial intelligence variable ranged between (3.682-3.977), that states “caring for new developed products to satisfy customers”, and that states “using modern technological and computer devices and equipment to develop marketing strategies” was the highest among the answers, while expression was the least attended among the answers. In general, it is noticed that the responses of the sample were positive concerning artificial intelligence variable.

TABLE II
ALL MARKETING STRATEGIES HAVE EFFECT
FOR INDUSTRIES IN THAILAND

Expression:	
Cost leadership strategy	(8) increasing the company’s commitment to reducing the cost and keeping an acceptable level of quality Means = 3.771, S.D = .968 Result = Effective
	(9) using technology in all working stages which reduces the costs Means = 3.767, S.D = .976 Result = Effective
	(10) choosing the least costly raw materials that suit the required specifications Means = 3.761, S.D = .851 Result = Effective

Differentiation strategy	(11) Providing the best quality products to the market Means = 4.042, S.D = .821 Result = Effective
	(12) Understanding and meeting the needs and desire of the customers Means = 3.938, S.D = .799 Result = Effective
	(13) Allocating part of the profits for researches and studies to develop products Means = 3.549, S.D = .936 Result = Effective
Focus strategy	(14) Choosing marketing programs that can achieve competitive advantage Means = 3.725, S.D = .941 Result = Effective
	(15) Choosing the marketing activities that elevate its position in the market Means = 3.856, S.D = .781 Result = Effective
	(16) ensuring the needed marketing capabilities to serve a particular market Means = 3.837, S.D = .9041 Result = Effective
Alliance strategy	(17) Joining alliance with suppliers and agents to generate more efficient marketing activities. Means = 3.885, S.D = .863 Result = Effective
Diversification strategy	(18) Joining blocks with the companies that work in the sector to compete with foreign products Means = 3.363, S.D = 1.033 Result = Effective
	(19) Integrating with sales outlets to exceed the limitations of resources Means = 3.766, S.D = .880 Result = Effective
	(20) Offering different and multiple products with several trademarks Means = 3.948, S.D = .921 Result = Effective
	(21) Offering new products in the markets Periodically Means = 3.702, S.D = .769 Result = Effective
Direct marketing strategy	(22) Variation of sales outlets to sell products Means = 3.785, S.D = .821 Result = Effective
	(23) Depending on the available data basis of customers Means = 3.833, S.D = .936 Result = Effective
	(24) Keeping direct marketing communication with customers Means = 3.768, S.D = .945 Result = Effective
	(25) Modernizing information about products Means = 3.798, S.D = .780 Result = Effective

The information in the above Mentioned Table II, indicates the Following:

All marketing strategies have effect for industries in Thailand by:

1) The means of cost leadership strategy variable ranged between (3.761 - 3.771).

2) The means of differentiation variable range between (3.549 - 4.042).

3) The means of focus strategy variable ranged between (3.725 - 3.885).

4) The means of alliance strategy variable ranged between (3.363 - 3.948).

5) The means of diversification strategy and its development ranged between (3.7028 - 3.9481).

6) The means of direct marketing strategy variable ranged between (3.768 - 3.833).

V. RESULTS

1) There is an effect of using artificial intelligence in determining cost leadership strategy as these applications obliges the company to reduce the cost of its products with keeping an acceptable level of quality.

2) There is an effect of using artificial intelligence in determining differentiation strategy as these applications stimulant the company to attend providing the highest quality of its products in the market.

3) There is an effect of using artificial intelligence in determining focus strategy as these applications stimulant the company to choose the marketing activities that boost its position in the market.

4) There is an effect of using artificial intelligence in determining alliance strategy as these applications stimulant the company to join alliances with suppliers and agents to generate more efficient marketing activities.

5) There is an effect of using artificial intelligence in determining diversification strategy as these applications help the company to offer different and multiple products

with several trademarks.

6) There is an effect of using artificial intelligence in determining direct marketing strategy as these applications increase the company`s dependence on the customers.

VI. RECOMMENDATIONS

The researchers recommend the following:

1) A develop training to skills of workers. In management, marketing, technology development, keep up with due to programming, technology and qualified to handle.

2) The study of the process of the application of artificial intelligence, and development of marketing strategy in a way that promotes interest in producing new products and developments to meet customers.

REFERENCES

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

- [1] Annual Report of the Stock Exchange of Thailand. (2016). Accessed 23 May 2017.
- [2] Academic Articles Economic Intelligence Center. (2017). Accessed 23 May 2017.
- [3] Porter, M.E. (1980). "Competitive strategy: Techniques for analyzing industries and competitors". New York: Free Press.