

# The Innovative Entrepreneurs of Processed Agricultural Products (PAPs) Prototyping in Thailand

Article Info Volume 83 Page Number: 3045 - 3053 Publication Issue: March - April 2020

Article History Article Received: 24 July 2019 Revised: 12 September 2019 Accepted: 15 February 2020 Publication: 21 March 2020

#### I. INTRODUCTION

Currently, the world's economy is slowing down, certain countries are even in recession. In the light of a nation's strength, economics is of essential factors, thus the government encourages investment in varied kinds, especially the initiation of the free trade zone in ASEAN (Office of the National Economic and Social Development Board 2018)

Thailand is an agricultural country, most of its population are farmers, therefore agriculture isof importance for Thailand's economy. According to the National Statistics in 2014, Thailand had 12.3

Chaiyawitmuangmee

#### Abstract:

This research aims to (1) to the situation of processed agricultural products (PAPs) farmer groups in Thailand(2) to prototype innovative entrepreneurs of processed agricultural products (PAPs) in Thailand (3) to the prototyping with the 55 selected processed agricultural products (PAPs) farmer groups in Thailand(4) to evaluating and learning lessons from the innovative entrepreneurs of processed agricultural products (PAPs) in Thailand. this research integrated qualitative and quantitative research techniques. for qualitative by SWOT, content and In-depth interview focus group and reliable questionnaire, as an instrument to the quantitative research. the samples collected were 1,650. the data were analyzed by using descriptive statistics of percentage, mean and inferential statistics of confirmatory factor, path and structural equation modeling (SEM).

The research revealed that: (1) processed agricultural products (PAPs) farmer groups in Thailand be ready to be entrepreneur business and ready to develop potential (2) the constructed model innovative entrepreneurs of processed agricultural products (PAPs) in Thailand corresponded with the empirical evidence of all variables ( $\chi 2=67.26$ , df=51,  $\chi 2/df=1.31$ , P=0.12, RMSEA=0.01)(3)the apply model with the 55 selected processed agricultural products (PAPs) farmer groups in Thailand increased sales at high level, developed products have increased value, Increased production efficiency, reduce production cost per unit and the reduction of losses can result in more sustainable business growth. (4) processed agricultural products, reduce losses, create value-added, links from production, processing, management production integration, marketing, product development and packaging standards and linking production and marketing networks effectively

**Keywords:** Processed Agricultural Products, The Innovative Entrepreneurs, Model of Processed Agriculture.

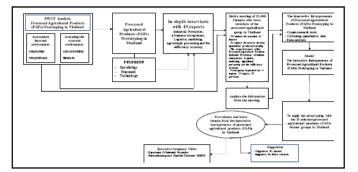
million farmers or 34% of Thai people's career. In the past years, agricultural produce prices are declining due to recessional global markets, thus causing the domestic purchasing power decline. Thai government has employed Thailand 4.0 stratagem to boost value-added agricultural produce and create entrepreneurs of agricultural produce so that Thai farmers can get out of poverty. In accordance with National Statistical Office 2013, 40% of Thai population is in the agricultural sector, yet they possess agricultural property only 114.6 million rai (35.7% of Thailand's land proportions) according to National Farmers Council, farmers are divided into



two groups: Group 1: the novice who has been doing the agricultural business not more than 3 years. Group 2: the veteran who has more than 3 Year experience in agricultural business. In any case, the novice and the veteran are still lack of business expertise, administration thus professional management supported by the government is essentially necessary. as described above, the researcher sees the importance of agricultural development the bv government and the measurement of driving the SME 4.0 stratagem by integrating every sector of the governmental units. BSRU and the researcher realize the cooperation of engaging in research work supported by the department of Industrial Development, Ministry of Industry, and National Farmers Council, from the aforementioned rationale, the researcher would like to research; the factors of Environment, the industrial promotion processed agricultural products, business network. innovative of processed business agricultural products. administration. competitiveness, to successful results processed agricultural products in Thailand, thus having undertaken this research.

## II. RESEARCH OBJECTIVES

- 1. To the situation of processed agricultural products (PAPs) farmer groups in Thailand
- To prototype innovative entrepreneurs of processed agricultural products (PAPs) in Thailand
- 3. To the prototyping with the 55 selected processed agricultural products (PAPs) farmer groups in Thailand
- 4. To evaluating and learning lessons from the innovative entrepreneurs of processed agricultural products (PAPs) in Thailand



#### CONCEPTUAL FRAMEWORK

- Fig.1. Process the innovative entrepreneurs of processed agricultural products (PAPs) prototyping in Thailand
- III. MODELTHE INNOVATIVE ENTREPRENEURS OF PROCESSED AGRICULRURAL PRODUCTS

(PAPS) PROTOTYPING IN THAILAND

environment	Innovative of Processed Agricultural Products	
The Industrial promotion processed agricultural products	Business Administration	Su cessifal Resulta Processed Agricultural Products in Thalland
Business not work	The Competitiveness	

Fig.2. The Innovative Entrepreneurs of Processed Agricultural Products (PAPs) Prototyping in Thailand

## IV. SCOPE OF THE RESEARCH

Scope on the content: The contents consisted of environment, the Industrial promotion processed agricultural products, business network, innovative of processed agricultural products, business administration, competitiveness, successful results processed agricultural products in Thailand

Scope on the population: population 600 groups the 55 selected processed agricultural products (PAPs) farmer groups in Thailand consisted of 1,650.

Scope on the timeline :From March 2018 - June 2019.



#### V. RESEARCH POPULATION AND SAMPLES

The population studied is the population that has been selected for the potential agro-processing industry. from the target group According to the 600 public groups, the sample group of 55 study groups, collecting 30 samples each, to obtain at least 30 samples per unit according to the concept of (Lindeman, Merenda & Gold 1980). the researcher therefore collected samples from all 55 locations, with equal each an amount of 30 sets each(Supachamas et al., 2009) In total, the samples collected were 1.650.

## VI. RESEARCH INSTRUMENT

This research is a qualitative and quantitative research. qualitative research is analysis printed documents Books, articles, newspapers, National seminar, research related research, SWOT, Focus group, and in-depth interviews. quantitative research is quantitative part used the questionnaire. pass validation for content validity by consulting with 3 experts, to determine the clarity of language, words and accuracy in the content the consistency of the question in the questionnaire with the (Index of item objective congruency - IOC) used in with the samples collected were 1,650. the research process and the creation of tools, questionnaires and in-depth interviews are as follows:

(1) Data collection using data is printed documents books, articles, newspapers, national seminar, research related research, SWOT, of to the management of processed agricultural products (PAPs) farmer groups in Thailand

(2) Making the structure of the interview form and interviewing 19 in-depth experts, summarizing important information from in-depth expert interviews for organizing important topics at the meeting of the farmers who are members of the processed agricultural group in Thailand organized a meeting of 55,000 farmers in processed agricultural products (PAPs) farmer groups in Thailand, to the potential of farmers, accounting, the production group, marketing, product development, packaging development, development of product standards and the connection of production and marketing networks, focus group, divided into 4 regions, 55 group, 32 provinces.

(3) designing the innovative entrepreneurs of processed agricultural products (PAPs) prototyping in Thailand to creating research tools By defining the issues and scope of the questions in accordance with the objectives and the benefits of research by making the structure of the questionnaire

(4)Check the content validity By bringing the questionnaire already created to experts Check the content validity The researcher used the (Index of item objective congruency - IOC) which the calculation index must be greater than 0.6 (Kalaya, 2009). that, the question is considered consistent. and put it to trial With a group of people who have similar characteristics to the sample group that wants to study 50 people and then find the reliability The results of finding the confidence of the whole questionnaire With a confidence value of (0.95)and to a complete questionnaire used in data collection for research 1650. to analysis statistics

(5) Create a model for the innovative entrepreneurs of processed agricultural products (PAPs) prototyping in Thailand and applying models to experiment with processed agricultural groups in Thailand. that has been selected by a group of with the 55 selected processed agricultural products (PAPs) farmer groups in Thailand

(6) evaluate and learn lessons from the innovative entrepreneurs of processed agricultural products (PAPs) in Thailand

## VII. DATA COLLECTION

The researcher conducted the data collection. qualitative by SWOT, content, In-depth interview were 19 people and focus group. quantitative



research the researcher therefore collected samples all 55 locations, each with an equal amount of 30 sets each in total, the samples collected were 1,650.

# VIII. STATISTICS EMPLOYED FOR THE DATA ANALYSIS

This research integrated qualitative and quantitative research techniques. SWOT andFocus group 4 Region 55 Group 32 Province, Description Statistics, Path, structural equation model--SEM toMode apply the prototyping with the 55 selected processed agricultural products (PAPs) farmer groups in Thailandand evaluate and learn lessons from the innovative entrepreneurs of processed agricultural products (PAPs) in Thailand. measurement the increased sales, Increased production efficiency, reduce production cost per unit, developed products have increased value, and reduce loss.

# IX. RESULTS OF THE RESEARCH

Part :1 the situation of processed agricultural products (PAPs) farmer groups in Thailand the results found that processed agricultural products (PAPs) farmer groups in Thailand there is a need to create competitiveness, management, accounting, the production group, marketing, product packaging development, product standards, the connection of production and marketing networks, by being able to develop potential in cost reduction increase productivity and quality of products for agricultural SMEs entrepreneurs to distribute products to the market appropriately and consistently.

Part :2 Results of the prototype innovative entrepreneurs of processed agricultural products (PAPs) in Thailand

Table-I:										
Show statistics, analyze relationships and influence between variables										

Result variable		Innovativ essed Agi Produc	ricultural	Busi	Business Administration		co	competitiven ess			Successful Results Processed Agricultural Products in Thailand		
Event variables	T E	E	DE	TE	E	DE	TE	E	DE	TE	E	DE	
Environment	0.51		0.51	0.80	0.20	0.60	0.68	0.13	0.55		0.17 0.29 0.24		
The Industrial promotion processed agricultural products	0.42	-	0.42	0.53	0.17	0.36	0.89	0.23	0.66		0.14 0.17 0.29		
Business network	0.49		0.49	0.88	0.20	0.68	0.80	0.44	0.36		0.17 0.33 0.16		
Innovative of Processed Agricultural Products				0.41		0.41		0.27		0.55	0.20	0.35	
Business Administration							0.66		0.66	0.78 0.63	0.29 0.14	0.49	
competitiveness												0.45	
R <sup>2</sup>	0.75 0.62				0.59			0.65					

\*P<0.05 TE = Total influence, IE = indirect, DE = Direct

From Table I, (1) the effect of variables between variables structural equation model found that Environment has direct effect on Innovative of Processed Agricultural Products (DE=0.51),

has direct effect on Business Administration (DE=0.60) indirect effect (IE=0.20) and total influence (TE=0.80)

has direct effect on competitiveness (DE=0.55) indirect effect (IE=0.13) and total influence (TE=0.68)

indirect effect on Successful Results Processed Agricultural Products in Thailand (through Innovative of Processed Agricultural Products IE =0.17), (through Business Administration IE =0.29) (through competitiveness IE =0.24)



(2) The Industrial promotion processed agricultural products has direct effect on Innovative of Processed Agricultural Products (DE=0.42),

has direct effect on Business Administration (DE=0.36) indirect effect (IE=0.17) and total influence (TE=0.53)

has direct effect on competitiveness (DE=0.66) indirect effect (IE=0.23) and total influence (TE=0.89)

indirect effect on Successful Results Processed Agricultural Products in Thailand (through Innovative of Processed Agricultural Products IE =0.14), (through Business Administration IE =0.17) (through competitiveness IE =0.29)

(3) Business network has direct effect on Innovative of Processed Agricultural Products (DE=0.49),

has direct effect on Business Administration (DE=0.68) indirect effect (IE=0.20) and total influence (TE=0.88)

has direct effect on competitiveness (DE=0.36) indirect effect (IE=0.44) and total influence (TE=0.80)

indirect effect on Successful Results Processed Agricultural Products in Thailand (through Innovative of Processed Agricultural Products IE =0.17), (through Business Administration IE =0.33) (through competitiveness IE =0.16)

(4) Innovative of Processed Agricultural Products has direct effect on Business Administration(DE=0.41), has direct effect on Successful Results Processed Agricultural Products in Thailand (DE=0.35)

indirect effect on competitiveness (through Business Administration IE=0.27)

indirect effect on Successful Results Processed Agricultural Products in Thailand (through Business Administration IE=0.20) and total influence (TE=0.55)

(5) Business Administration has direct effect on Successful Results Processed Agricultural Products in Thailand (DE=0.49) direct effect on competitiveness (DE=0.66)

indirect effect on Successful Results Processed Agricultural Products in Thailand (through competitiveness IE=0.29) and total influence (TE=0.74)

(6) competitiveness has direct effect on Successful Results Processed Agricultural Products in Thailand (DE=0.45)

- R-Squared (R<sup>2</sup>) of Innovative of Processed Agricultural Products (0.75)
- R-Squared (R<sup>2</sup>) of Business Administration (0.62)
- R-Squared (R<sup>2</sup>) of competitiveness (0.59)
- R-Squared (R<sup>2</sup>) of Successful Results Processed Agricultural Products in Thailand (0.65)

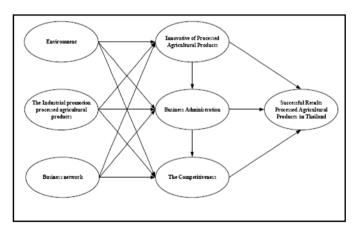


Fig. 3.Construct model displaying the effect values between variables(Chaiyawit, 2019)

From Figure 3Construct model displaying the effect values between variables the results of Environment has direct effect on Innovative of Processed Agricultural Products, Business Administration, competitiveness and indirect effect on Successful Results Processed Agricultural Products in Thailand (through Innovative of Processed Agricultural Products, Business Administration, competitiveness)



The Industrial promotion processed agricultural products has direct effect on Innovative of Processed Agricultural Products, Business Administration, competitiveness and indirect effect on Successful Results Processed Agricultural Products in Thailand (through Innovative of Processed Agricultural Products, Business Administration, competitiveness)

Business network has direct effect on Innovative of Processed Agricultural Products. **Business** Administration, competitiveness and indirect effect on Successful Results Processed Agricultural Products in Thailand (through Innovative of Processed Agricultural Products. **Business** Administration. competitiveness)

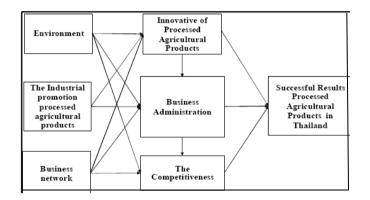


Fig.4.The model of The Innovative Entrepreneurs of Processed Agricultural Products (PAPs) Prototyping in Thailand (Chaiyawit, 2019)

Part :3 Results of the prototyping with the 55 selected processed agricultural products (PAPs) farmer groups in Thailand

Table-II. Results of the prototyping with the 55 selected processed agricultural products (PAPs) farmer groups in Thailand

to apply prototyping with the 55 selected	Increas ed sales	Increas ed production efficiency	Reduce production cost per unit	Developed products have increased value	Reduce loss
	percent	percent	percent	percent	percent
Young Farmer Group	55		75		
Beekeeping community Which movie house	40		15		
Manufacturer and development of banana processing Rahan	50		75	300	
Learning Center Group Ban Patthawi Community	28			60	10
Cassava growers in NongYai district	40			55	
Herbal-friendly enterprise, Ban Khia community	40	100			

Self-reliant community enterprises Ban Rong WuaDaeng	30		12	7	
Native rice conservation group	40	500			
Tha Kum Kum-Nern Sai Thurian Community Enterprise	37		33	250	
Tap ioca Group, Moo 10, Dong Chatchom	36			55	
Agricultural production group	30	50	50		
Napier Grass Growers	40		50		
La Bua Loi Agricultural Housewife	23			300	
Group Fruit Juice Processing Group	60			40	
Organic Happy Community Enterprise	20			40	
Learning Center for Plant and Herb			33	20	
Plantation	30		33	20	
Group of manufacturers and distributors of rice grain varieties	40				3
Pig farmers group Phra Thong Kham district	40			80	
Multi-purpose liquid production group	48			30	
Organic rice production and processing	50	100	50	150	
group Ban Dong Bang Community Enterprise					
Ban Bang Nu Community Enterprise	30	100	50	250	
Ban Bang Nu Community Enterprise Thung Yai Banana Processing Group	38		75	100	
Thung Yai Banana Processing Group Fairy Mushroom Cultivation Group, Ban	20	8	75	200	
Tha Chang	30	100	50		
Farmers group producing sea mouth shrimp paste	37		50	10	
Tamarind House Processing Group	9	<u>├</u>	50	10	1
Agricultural Product Processing Group,	5			**	15
Ban Lao Sub-district Complete banana growers in Phayao	42	↓ ↓		70	3
Province	42			70	3
PoramAsen Housewife Group	19			15	5
Tachee Latex Community Development Enterprise	40			312.5	
Boat farmer group	30	1 1		267	5
Thung Thai Wisdom Community	28	<u> </u>	20	207	10
Enterprise Organic Fruit Farmers Group, Li River		I I		200	
Basin	8			300	10
105 Community Enterprise, Organic Agriculture	52			100	
Ban Bang C hak Thai Food Processing	26	50	50		
Group Tourism enterprise by B an Sai Khao	39		25	60	
community				00	
Mulberry Network Community Enterprise, New Theory	35	800	2		
Ban Na Farmer Farmer Community	30	20		300	10
Enterprise					
Chao PlaSalid Adult Community Enterprise	20	30	10		5
Rice Seed Production Group	20	30	10	15	1
Rice Seed Promotion and Production	50		8.3	160	1
Center Mae Sin Farmers Group develops non-	39		10	600	-
toxic citrus production			10		
Mango Grower Enterprise, Chok Anan	35			100	5
Kadae Herbal Community Enterprise	29	25		300	5
Aiya rambutan drying group	90			3000	
KuanTomma Housewife Group	28			200	
Community Enterprise for Sustainable Agriculture Consumers	30			5	15
Pho Tak Rice Processing Community	40			300	
Enterprise Mudmee Silk Weaving Women	37		25	33	
Community Enterprise			23		<u> </u>
KutMak Fai Agriculture Cooperative Limited	40			333	7
Bhutan Mushroom Cultivation	48	400	75		
Community Learning Center Organic rice production community	30	30	10	5	+
enterprise Thung Charoen			10		
Farmers Community Enterprise	38	80		15	5
Hat Y ai Community Enterprise Group	29			100	15
Erie Organic Sile Production and Processing G to up	60			300	5

From Table II The result of the prototyping with the 55 selected processed agricultural products (PAPs) farmer groups in Thailand found were mostly Increased sales at high level by Aiya rambutan drying group developed the product processing process to produce the highest with mostly Increased sales at high level of 90 percent. The highest production efficiency is Mulberry Network Community Enterprise, New Theory Increased by 800 percent. Reduce production cost per unit for the groups that can reduce the maximum cost has 4 groups including Cassava group, Producer groups and the development of processed bananas, ThungYai Banana Processing Group and the Bhutanese Mushroom Culture Community Learning Center Increased by 75 percent. Developed products



have increased value is Aiya rambutan drying group Increased by 3,000 percent. The highest Reduce loss has 3 groups is Agricultural Product Processing Group, Ban Lao Sub-district Community Enterprise for Sustainable Agriculture Consumers and Hat Yai Community Enterprise Group Reduce loss by 15 percent.

Part:4 Results of evaluating and learning lessons from the innovative entrepreneurs of processed agricultural products (PAPs) in Thailand.

The farmers participating in the project and farmers in neighboring areas, they are can use machines to process agricultural products, extend the storage period for longer sales, developed products have increased value and reduce losses more, success of there is harmony in the group to jointly management effectively. self-development,

Many groups of farmers have developed into agricultural and processing business operators, to increase product value help push, the Thai economic foundation to grow steadily wealthy and sustainable to be able to transform the product to create more value, can use machines to process agricultural products, reduce losses and business network processed agricultural products that has links from production, business network processed agricultural products that has links from production, processing, management, production integration, marketing, product development packaging development product standard development and linking production and marketing networks With knowledge of science, technology, innovation and local wisdom, ready to create a variety of quality products and packaging that are beautiful, modern, in line with the needs of the market for both domestic and international, Importantly, the processed agricultural group that has developed the competitiveness of the agricultural processing group To be ready to be a processed agricultural entrepreneur with knowledge and able to conduct business effectively,

## X. DISCUSSION OF THE FINDINGS

The discussion of this research is divided into 4 parts as followings:

1. The results of the situation of processed agricultural products (PAPs) farmer groups in Thailand found that processed agricultural products (PAPs) farmer groups in Thailand are needs to be an entrepreneur, can develop potential. Increased sales. Increased production efficiency, Reduce production cost per unit, Developed products have increased value, Reduce loss. Ready to gain knowledge in management, accounting, the production group, marketing, product development, Packaging development, development of product standards and the connection of production and marketing networks which is in line with the concept and theory of (Kotler & Keller, 2014), which mentioned that The competitiveness management will make the business grow more efficiently. as well as correspond to the research of (Sathid, 2013) which found similarly.

2. the results of the prototype innovative entrepreneurs of processed agricultural products (PAPs) in Thailand found that Characteristics of processed agricultural groups in Thailand have both direct effects on needs to be an entrepreneur, direct effects on Management of Processed agricultural Products (PAPs) Prototyping in Thailand, and direct effects on the competitiveness of the Processed Agricultural Products and indirect effects on the successful results processed agricultural products in Thailand which is in line with the concept and theory of (Kotler & Keller, 2014) which is in line with the concept of quality of business wanted have knowledge in management and have the ability to compete to make the business successful, as well as correspond to the research of (Chaiyawit 2019) which found similarly.

The Industrial promotion processed agricultural products have both direct effects on needs to be an entrepreneur, direct effects on Management of Processed agricultural Products (PAPs) Prototyping in



Thailand, and direct effects on the competitiveness of the Processed Agricultural Products and indirect effects on the successful results processed agricultural products in Thailand which is in line with the concept and theory of (Jang & Feng, 2007) that said promotion processed agricultural will effectively affect the success of the business, as well as correspond to the research of (Eakuru and Mat, 2008) which found Businesses that are promoted will increase of business success.

The business network processed agricultural products have both direct effects on needs to be an entrepreneur, direct effects on Management of Processed agricultural Products (PAPs) Prototyping in Thailand, and direct effects on the competitiveness of the Processed Agricultural Products and indirect effects on the successful results processed agricultural products in Thailand which is in line with the concept and theory of (Kotler & Armstrong, 2009) that said the business has a system to create more networks that will result in more successful businesses, as well as correspond to the research of (Chaiyawit, 2019) which found the business has created a business network that will result in a more sustainable development potential for success.

The results of prototype innovative entrepreneurs of processed agricultural products (PAPs) in Thailand, the result of the research confirmed that the constructed model fit with the empirical data, P-value =0.12. Moreover, the value of  $\chi 2/df = 1.31$  further confirm the finding. The researcher also considers other critical statistical results; such as, RMSEA = 0.01, CFI = 0.99, TLI = 0.99. In conclusion, the constructed model fit with the statistical analysis of the empirical results. can use the model to experiment with agricultural processing groups in Thailand

3. The results of the prototyping with the 55 selected processed agricultural products (PAPs) farmer groups in Thailand which found were mostly increased sales at high level, increased production efficiency, reduce production cost per unit, developed products have

increased value, and reduce losses more which is in line with the concept and theory of (Kotler & Keller, Business with 2014)that said new product development, quality will make the business more productive, processed agricultural products (PAPs) farmer groups in Thailand Increasing production costs per unit and reduce losses, thus making the agricultural in Thailand successful processing group and sustainable, as well as correspond to the research of (Cemal&Elif, 2016) and (Chaiyawit et al., 2019) which found similarly.

4. The results of evaluating and learning lessons from the innovative entrepreneurs of processed agricultural products (PAPs) in Thailand, which found can use machines to process agricultural products, reduce losses and business network processed agricultural products that has links from production, processing, management, production integration, marketing, product development Packaging development Product standard development and linking production and marketing networks With knowledge of science, technology, innovation and local wisdom, ready to create a variety of quality products and packaging that are beautiful, modern, in line with the needs of the both domestic and market for international. Importantly, the processed agricultural group that has developed the competitiveness of the agricultural processing group

To be ready to be a processed agricultural entrepreneur with knowledge and able to conduct business effectively, which is in line with the concept and theory of (Kotler & Keller, 2014) that said as the business reduces losses, it will result in more profitable business, as well as correspond to the research of (Chaiyawit, 2016) which found business management and effectively linking production and marketing networks, resulting in successful business and the business has the potential to compete, resulting in sustainable business growth and the research of (Razaminet al., 2018) and (Chaiyawit, 2019) which found the new innovations and local wisdom for business development will have a positive effect.



# XI. REFERENCES

- Supachamas Angsuchot, Somtawin Vijittavanich, & Ratchanee Gulipinyopanuvat. (2009). Analytical Statistics for Social Science Research and Behavioral Sciences: Techniques for Using LISREL Program (3<sup>th</sup> ed.). (In Thai). Bangkok: Mission Media.
- [2] CemalZehir & Elif Narcıkara. (2016). E-Service Quality and E-Recovery Service Quality: Effects on Value Perceptions and Loyalty Intentions. Procedia - Social and Behavioral Sciences 229 (2016) 427 – 443.
- [3] Chaiyawit Muangmee. (2016). The Strategy Marketing of The Small Enterprises in Accordance to Sufficiency Economy Philosophy. Journal of Information Humanities & Social Sciences. 15 (1). 90-101.
- [4] Chaiyawit Muangmee. (2019).Thailand 4.0
  Floating Market Development Strategy for Sustainable Tourism. Journal of the Association of Researchers. 24 (2). May – August.
- [5] Chaiyawit Muangmee, Narumol Soonsawad, Preyanuch Kijrrrungroijarean, Ratchanak Panyasupat & Rattana Bunuam. (2019). Tourist destination loyalty model for Samut song khram Province. Journal of Humanities and Social Sciences Thonburi University. 13 (2). May – August.
- [6] Chusri Wongratana. (2007). Techniques for statistical use for research. Bangkok: Chulalongkorn University Book Center.
- [7] Eakuru, N. and Mat, N. K.N. (2008). The application of structural equation modeling (SEM) in determining the antecedents of customer loyalty in banks in south Thailand, (p.132).
- [8] Jang, S., & Feng, R. (2007). Temporal destination revisit intention: The effects of novelty seeking and satisfaction. Tourism management. 28(2), 580-590.
- [9] KalayaWanichbancha. (2009). Multivariate data analysis. Department of Statistics, Faculty

of Commerce and Accountancy, Chulalongkorn University.

- [10] Kotler, P. & Armstrong, G. (2009). Principles of Marketing. (13<sup>th</sup> ed). Upper Saddle River, New Jersey: Pearson.
- [11]Kotler, P., & Keller, K (2014). Marketing Management. Pearson Educational International.
- [12] Lindeman, R.H., Merenda, P.F. & Gold, R. Z.(1980). Introduction to bivariate and multivariate analyais. Glenview, IL: Scott, Foresman and company.
- [13] Office of the National Economic and Social Development Board. (2018). National Economic and Social Development Plan No. *12* (2017-2021).
- [14] Razamin Ramli, Shahidah Md Daud, Maznah Mat Kasim, and KalsomKayat. (2018). Success Index for Promoting Malaysian Homestay Programmes Based on Multi Criteria Analysis. Journal of Telecommunication, Electronic and Computer Engineering. Vol. 10 No. 1-10.
- [15] SathidMuangmee. (2013). The Sustainable Marketing Model of The Small Enterprises in Accordance to Sufficiency Economy Philosophy. Journal of the Association of Researchers.19 (1). 20-33
- [16] SithitTheerason. (2007). Research report writing techniques. Bangkok: Chulalongkorn University Publishing House.
- [17] SorachaiPhisanbut. (2007). Manual for conducting market research work. Bangkok: June Publishing.
- [18] Thitirat Mamak, ChatyapornRuenjai and KomKritPitierk. (2009). Small Business Management. Bangkok: SE-EDUCATION CO., LTD.
- [19] YuthaiChaiyawan. (2010). Principles of research statistics and the use of SPSS programs. Bangkok: Chulalongkorn University Publishing House.