

# CORRELATION ANALYSIS OF THE MARKETING MIX FACTORS AFFECTING SHOPPING BEHAVIOR OF LOCAL FISHERY PRODUCTS

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## ABSTRACT

This research aims to 1) examine the marketing mix factors affecting shopping behavior of local fishery products, Ranong Province, and 2) explore the relationship among the marketing mix factors affecting shopping behavior of local fishery products, Ranong Province.

The population and the sample group were the consumers purchasing Ranong local fishery products. However, due to a large sample size and uncertain numbers of population, the sample group was then calculated by W.G. Cochran formula with the confidence level of 95% and discrepancy level of 5% from which the sample size was obtained at not less than 385 samplings. Consequently, the sample size for this research was determined to be 400 informants. The convenience sampling was applied for data collection through prepared questionnaires distributed to all 400 consumer informants.

The research result showed that there were 4 pairs of the marketing mix factors, affecting shopping behavior of Ranong local fishery products having low significant relationship at level of .01 and .05 and correlation coefficient (r) between 0.122 to 0.391. Considering the relationship of the marketing mix factor affecting shopping behavior of Ranong local fishery products on aspect basis, it was found that the distribution aspect of the marketing mix factor affecting shopping behavior of Ranong local fishery products showed the highest (r) value (rx3y = 0.391), followed by marketing promotion aspect (rx4y = -0.384) and pricing aspect (rx2y = -0.307), respectively whereas the lowest correlation coefficient was product aspect (rx1y = 0.122).

**Keyword:** Marketing Mix Factors, Shopping Behavior, Local Fishery Products

## INTRODUCTION

“The four factors” are the basic ones that human beings need to sustain lives and in case of lacking any one of them, it may affect their living. These factors consist of food, residence, clothing and medicine. Nevertheless, the captioned basic factors are required to firstly respond to physical needs and security; for example, food security, firm residence, etc. The local fisheries in Ranong Province are the occupation according to coastal topography lying along the Andaman Sea with local wisdom inherited for a long time from generation to generation. The captioned occupation has been carried out by using traditional tools invented by oneself and continuously developed to cope with disruption of technologies and environments leading

to a large number of processed seafood products. As per Ranong Province's vision set that "To be the leading health tourism destination of Asia" and due to its best-known uniqueness among over 90 % of Thai tourists, Ranong's souvenirs and processed seafood products have been then popularly purchased as valued souvenirs for consumption. This research therefore aims to examine the marketing mix factors affecting shopping behavior of local fishery products, Ranong Province in order to further apply the research findings for development of distribution channel to cope with consumer behavior that always changes to increase product sales and generate more income gain for local fishery entrepreneurs.

### **Objectives**

1. To examine the marketing mix factors affecting shopping behavior of local fishery products, Ranong Province.
2. To examine the relationship among the marketing mix factors affecting shopping behavior of local fishery products, Ranong Province.

### **Population/Sample Group**

The population consists of consumers purchasing Ranong local fishery products.

The sample group consists of consumers purchasing Ranong local fishery products. However, due to a large sample size and uncertain numbers of population, the sample group was then calculated by W.G. Cochran formula with the confidence level of 95% and discrepancy level of 5% from which the sample size was obtained at not less than 385 samplings. Consequently, the sample size for this research was determined to be 400 informants. The convenience sampling was applied for data collection through prepared questionnaires distributed to all 400 consumer informants.

## **RESEARCH RESULT**

### **General Information of the Informants**

Most informants were female or 60.50% whereas 39.50% were male. In view of age, most of them or 35.50 % were between 21-30 years old with educational level mainly with a bachelor's degree or equivalent to 62.00%. The main occupation or 30.50% was mostly government official/state enterprise employee, followed by 24.00% of private company employee. The average monthly income was mainly between 20,001-30,000 Baht or 27.00 %.

### **The Analysis Result of Relationship among the Marketing Mix Factors Affecting Shopping Behavior of Local Fishery Products, Ranong Province**

The relationship among the marketing mix factors affecting shopping behavior of local fishery products, Ranong Province was analyzed based on forecasting variables; product aspect (x1), pricing aspect (x2), distribution aspect (x3), marketing promotion aspect (x4) and shopping behavior of Ranong local fishery products (y), to find out Pearson's product moment correlation coefficient as shown in Table 1 below.

**Table 1** The Correlation Coefficient of Marketing Mix Factors Affecting Shopping Behavior of Local Fishery Products, Ranong Province

Marketing Mix Factors	x1	x2	x3	x4	y
Product Aspect (x1)	1				
Pricing Aspect (x2)	0.737**	1			
Distribution Aspect (x3)	0.787**	0.749**	1		
Marketing Promotion Aspect (x4)	0.522**	0.723**	0.655**	1	
Ranong Shopping Behavior of Local Fishery Product Aspect (y)	0.122*	-0.307**	0.391**	-0.384**	1

\*  $p < .05$ , \*\*  $p < .01$

According to the above table, it revealed that the marketing mix factors affecting shopping behavior of Ranong fishery products correlated at low level of 4 pairs with statistical significance level of .01 and .05 with correlation coefficient (r) between 0.122 and 0.391.

Considering the relationship on aspect basis, it was found that the marketing mix factor affecting shopping behavior of Ranong local fishery products was the distribution aspect showing the highest (r) value ( $r_{x3y} = 0.391$ ), followed by marketing promotion aspect ( $r_{x4y} = -0.384$ ) and pricing aspect ( $r_{x2y} = -0.307$ ), respectively whereas product aspect showed the lowest correlation coefficient ( $r_{x1y} = 0.122$ ).

**Multiple Linear Regression Analysis Result of the Marketing Mix Factors Affecting Shopping Behavior of Local Fishery Products, Ranong Province**

The multiple linear regression analysis on the marketing mix factors affecting shopping behavior of local fishery products, Ranong Province was made with the forecasting variables of the following aspects; product (x1), pricing (x2), distribution (x3), marketing promotion (x4) and shopping behavior of Ranong local fishery products (y), to find out the multiple regression by enter as presented in the analysis result of Table 2 - 4 below.

1. The testing results of basic assumption for statistical regression are as follows:

1.1 The measurement for independent and dependent variables was made on interval scale basis with 5 rating scales.

1.2 After testing the forecast error, it was found that the residual value = 0.268 with linear relationship of sig. = .000 as per below Table 2.

**Table 2** Variance of Error

Model	SS	df	MS	F	Sig.
Regression	7.220	4	1.805	6.724	0.000
Residual	106.027	395	0.268		
Total	113.246	399			

Testing the tolerance and variance inflation factor (VIF) values, the result showed no collinearity among each independent variable as details shown in Table 3.

**Table 3** Tolerance and Variance Inflation Factor (VIF) of Independent Variables on Aspect Basis

Variables	Tolerance	VIF
Product Aspect	0.362	2.766
Pricing Aspect	0.218	4.580
Distribution Aspect	0.218	4.592
Marketing Promotion Aspect	0.468	2.139

According to the above table, all independent variables showed the tolerance value of not less than 0.2 whereas the variance inflation factor of not less than 10. This represented that all independent variables had no multicollinearity or there was no collinearity among the independent variables.

### **The Analysis Result of the Marketing Mix Factors Affecting Shopping Behavior of Local Fishery Products, Ranong Province**

The multiple regression by Stepwise was applied, for analysis on marketing mix factors affecting shopping behavior of local fishery products, Ranong Province, by putting all variables into an equation as per Table 4.

**Table 4** The Multiple Linear Regression Equation of the Marketing Mix Factors Affecting Shopping Behavior of Local Fishery Products, Ranong Province

Variables	B	Std. b	Beta	t	Sig.
(Constant)	1.864	0.210		8.881	0.000**
Product Aspect (x1)	0.174	0.079	0.177	2.185	0.029*
Pricing Aspect (x2)	-0.192	0.085	-0.236	-2.264	0.024*
Distribution Aspect (x3)	0.232	0.088	0.274	2.625	0.009*
Marketing Promotion Aspect (x4)	0.157	0.060	0.185	2.603	0.010*

**R<sup>2</sup> = 0.364, R = 552, SEE = 0.218**

\* p < .05, \*\* p < .01

The marketing mix factors affecting shopping behavior of local fishery products, Ranong Province showed the multiple correlation coefficient (R) of 0.552, forecasting coefficient (R<sup>2</sup>) of 0.364. This showed that all forecasting variables jointly forecasted the shopping behavior of local fishery products, Ranong Province at 36.4 % with .01 statistical significance level.

When considering the regression coefficient of forecasting variables on aspect basis, it was found that the distribution aspect (x3) showed the highest value of 0.274, followed by pricing aspect (x2) of -0.236, marketing promotion aspect (x4) of 0.185 and product aspect (x1) of 0.177, respectively. This can forecast the shopping behavior of local fishery products, Ranong Province with statistical significance.

## CONCLUSION AND DISCUSSION

As the marketing mix factors affecting shopping behavior of local fishery products, Ranong Province showed the multiple correlation coefficient (R) of 0.552, forecasting coefficient (R<sup>2</sup>) of 0.364, this indicated that all forecasting variables jointly forecasted the shopping behavior of local fishery products, Ranong Province at 36.4 % with .01 statistical significance level. The research findings concurred with the study of Supattra Pranee, Kuncharee Kakhai, Sodsri Pulphon, Chichana Wongjunya (2022) on “Factors Affecting Marketing and Publicity of Processed Fishery Products in Ranong Province” and study of Sanpet Pianjud, Jatupat Samappito, Jintana Watcharapothikorn, Jarinee Makaew (2021) on “Community Economic Uplift Model through Integrated Development of Khao Mao Local Identity Products for Nang Rong District, Buri Ram Province” aiming to explore a new fairly marketing strategy for products, standardize products as well as developing community economic uplifting model through product development and economic change in Khao Mao Community in Nang Rong District, Buri Ram Province resulted from their agricultural adjustment for added value creation of tourism products in Buri Ram Province. This is also in line with the study of Supaporn Prommaroeng (2018) on “The Elevation Approach of OTOP’s Foods Which Produced in Mae Ban Rim Rong Community Enterprise of Makeujae Sub-district, Muang District, Lamphun Province” aiming to examine approaches to promote or upgrade OTOP products and investigate problems and obstacles in developing and upgrading OTOP products, the study of Poramet Saeng-on (2022) on “Factors Affecting Quality Development and Certification of Local Fishery Products in Ranong Province, Thailand” and the study of Suphatphong Ruthamnong (2019) on “Upgrading OTOP Products of Pho Anong Chili Paste by Using 4C’s Marketing Mix Theory (4C’s)” consisting of consumer wants and needs, cost of appreciation, convenience to buy and communication that connects.

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