# Product Development and Value-Added with Market to E-Commercial Production of Aroma Salt Samut Songkhram Thailand

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## **Abstract**

This research aimed to 1) develop aromatic salt products to achieve greater acceptance, and 2) promote e-commerce marketing. The sample group consisted of 392 tourists, data was gathered using the questionnaire and was analyzed using mean and standard deviation. The findings revealed that most of the sample group were female (59.86%), aged over 60 (36.73%), with under a bachelor's degree (58.42%), engaged in private sector or freelance work (29.34%), and a monthly income of less than 15,000 baht (50.26%). The analysis of aromatic salt product development consisted of packaging design, product quality, and product durability. The findings revealed that the overall average score was at the highest level ( $\bar{x} = 4.54$ , S.D.= 0.774), and the overall average score of e-commerce marketing was at the highest level ( $\bar{x} = 4.65$ , S.D. = 0.728), which enhance the value-added of aromatic salt products, acceptance, and contribute through e-commerce platforms.

**Keywords:** Product Development, Value-Added, E-Commerce, Aroma Salt, Samut Songkhram

## 1. Introduction

Samut Songkhram Province, Thailand, a water-based tourist destination like Venice of Italy, and people called Mae Klong as "Venice of Thailand" featuring several floating markets such as Bang Noi Floating Market, a notable destination located at the Bang Noi Canal connected to the Mae Klong River. This eco-tourism destination offers a variety of goods, consisting of fresh vegetables, fruits (Samut Songkhram Province, 2023), and souvenirs such as Klong Khon shrimp paste, mackerel, traditional desserts, coconut sugar, bananas, and much more. The tourists can also observe the local lifestyle and identity of Samut Songkhram (Tourism Authority of Thailand, 2023). Since 2011, Suan Sunandha Rajabhat University has collaborated with the community to restore and conserve the area by promoting it as a tourist destination with more shops, homes being renovated and beautifully decorated, and making it an ideal new destination in Samut Songkhram Province. Few restaurants are operating in Bang Noi Floating Market by the size of the Bang Noi community in Kradangnga Subdistrict, Bang Khonthi

District, Samut Songkhram Province, they offer local foods such as traditional mackerel fried rice and Teochew-style roti, as a historic market aged over 100 which preserves an ancient way of life; being foam-free, iconic sign is made of dark wooden planks with golden letters, written in three languages, and is attached to authentic riverside homes.

The College of Allied Health Sciences, Suan Sunandha Rajabhat University, Samut Songkhram Campus, is located in Bang Kaew Subdistrict, Mueang District, Samut Songkhram Province, a primary area for salt farming. Due to the economic and climate changes affecting the salt farmers, products related to salt have been developed and also support tourism. The surveys with local enterprises revealed a lack of knowledge in marketing and the use of information technology to reduce costs and increase revenue. Nowadays, e-commerce has become increasingly vital, particularly under the Thailand 4.0 policy (Suvit Maesincee, 2017) affecting enterprises and consumers. Large enterprises have adopted online sales systems extensively, alongside social media platforms that support e-commerce through monthly promotions and sales-boosting campaigns. Therefore, it is essential to enhance small enterprises or community enterprises to keep pace with larger enterprises. Otherwise, consigning products to online storefronts often incurs significant service fees.

In 2019, the GSB Yuwaphat Rak Thin Project collaborated with Suan Sunandha Rajabhat University to support the Bang Noi Canal Floating Market Lovers Community Enterprise Group. This initiative focused on promoting and enhancing the potential of low-income individuals to create sustainable supplementary occupations and sell their products effectively. The collaboration between Suan Sunandha Rajabhat University and GSB has been a significant success.

#### 1.1 Research Objective

- 1) develop aromatic salt products to achieve greater acceptance
- 2) promote e-commerce marketing.

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# 2. Research Methodology

#### 2.1 Study Design

This research is a Research and Development (R&D) using the process of product development and promoting e-commerce marketing.

#### 2.2 Population and Sample

The population of this research was 19,987 tourists visiting Bang Noi Floating Market.

The sample group of this research was 392tourists using the table by Krejcie and Morgan Robert V.( Krejcie and Earyle W .Morgan, 1970: 608-609) to estimate the population proportion, assuming a proportion of 0.5, a margin of error of 5%, and a confidence level of 95%, including using simple random sampling by drawing lots.

#### 2.3 Research Instrument

The researcher categorized the research instrument into two types :a product evaluation form and a questionnaire for promoting e-commerce marketing.

The reliability of the questionnaire was assessed by conducting a try-out with a group of 30 participants who shared similar characteristics with the sample group. The data were analyzed to calculate the reliability of the questionnaire using the Coefficient Alpha, and the result showed an overall reliability score of 0.843.

#### 2.4 Data Gathering

In this research, data was gathered as follows:

#### 1. Pre-Experimental Stage

- 1.1 The researcher proposed a permission letter from the College of Allied Sciences, Suan Sunandha Rajabhat University, Samut Songkhram Campus, to the manager of the Bang Noi Floating Market Learning, Research, and Academic Service Center, for data gathering from the sample group.
- 1.2 The researcher explained the product development process, preliminary data, and existing problems to the local enterprises before conducting the research.

#### 2. Experimental Stage

2.1 The researcher developed aroma salt products following the research process and evaluated the results using assessment forms with the sample group. Then 392 returned forms were checked for completeness, and selected according to the specified proportion of the entire sample group.

#### 3. Post-Experimental Stage

The assessment forms were checked for accuracy and completeness before being analyzed.

#### 2.5 Data Analysis

The statistics for data analysis consist of; general data analysis using frequency and percentage, and lifestyle data analysis using mean and standard deviation at a 0.05 level of significance.

#### 3. Result and Conclusion

This research gathered data from a sample group of 392 tourists. The researcher analyzed and presented the demographic characteristics of the sample group using frequency and percentage. These characteristics included gender, age, education level, occupation, monthly income, marital status, and healthcare methods as follows;

#### Part 1:General information

#### Gender

This research involved a total sample group of 392 tourists, consisting of 234 females (59.8%) and 158 males (39.26%)

#### Age

The age of the sample group can be categorized into six age groups; aged over 60, 144 tourists (36.73%); aged 51–60, 85 tourists (21.68%); aged 31–40, 67 tourists (17.09%); aged 21–30, 49 tourists (12.50%); aged 41–50, 33 tourists (8.42%); and aged under 20, 14 tourists (3.57%).

#### **Education level**

The educational level of the sample group can be categorized into three levels; below a bachelor's degree, 229tourists (58.42%); a bachelor's degree, 125tourists (31.89%); above a bachelor's degree, 38tourists (9.69%).

## Occupation

The occupation of the sample group can be categorized; private sector or freelance work, 115 tourists (29.34%); merchant, 71 tourists (18.11%); student, 54 tourists (13.78%); government officer, 44 tourists (11.22%); private sector employees, 40 tourists (10.20%); and business owners, 38 tourists (9.69%).

#### Monthly income

The monthly income of the sample group can be categorized; less than 15,000 baht per month, 197 tourists (50.26%); 15,001 - 25,000 baht per month, 157 tourists (40.05%); 25,001 - 35,000 baht per month, 25 tourists (6.38%); and more than 35,001 baht per month, 13tourists (3.32%).

## Part 2 : Opinion Toward Product Development

The researcher analyzed and presented the opinion toward product development of aromatic salt using mean, and standard deviation by the Best Criteria (Best, 1981)

Table 1: Opinion toward product development of aromatic salt

Opinion toward product development	$\bar{\mathbf{x}}$	S.D.	Result
1. Packaging Design			
1. 1Attractive and suitable for containing the product	4.53	0.850	Highest
1. 2Provides appropriate product information and details	4.49	0.694	High
1. 3Features innovative packaging design that meets customer needs	4.58	0.710	Highest
1. 4Modern product design	4.37	0.750	High
1. 5Packaging design is convenient and user-friendly	4.39	0.738	High
Total Packaging Design	4.47	0.748	High

Opinion toward product development	$\bar{\mathbf{x}}$	S.D.	Result
2. Product Quality			
2. 1Has a long shelf life	4.41	0.770	High
2. 2Indicates the manufacturing and expiration dates	4.53	0.894	Highest
2. 3Reflects the unique identity of the local community	4.39	0.765	High
2. 4Free from contaminants	4.75	0.840	Highest
Total Product Quality	4.52	0.817	Highest
3. Product Durability			
3. 1Maintains its original condition	4.58	0.790	Highest
3. 2Retains its scent	4.64	0.854	Highest
3. 3Protects against moisture and air	4.49	0.640	High
3. 4Resists deformation or shape changes	4.85	0.736	Highest
Total Product Durability	4.64	0.755	Highest
Overall	4.54	0.774	Highest

Source: (jirawat, 2024)

From Table 1: Opinion toward product development of aromatic salt revealed that the overall average score was at the highest level ( $\bar{x} = 4.54$ , S.D.= 0.774). When it was analyzed each aspect, it revealed product durability was at the highest level ( $\bar{x} = 4.64$ , S.D.= 0.755), product quality ( $\bar{x} = 4.52$ , S.D.= 0.817), and packaging design was at a high level ( $\bar{x} = 4.47$ , S.D.= 0.748).

## Part 3: Opinion Toward E-Commerce Marketing

The researcher analyzed and presented the opinion toward e-commerce marketing using mean, and standard deviation by the Best Criteria (Best, 1981)

Table 2: Opinion toward e-commerce marketing

Opinion toward e-commerce marketing	$\bar{\mathbf{x}}$	S.D.	Result
Opinion toward e-commerce marketing	X	з.р.	Kesuit
1. E-commerce Marketing			
1. 1Increases revenue from sales through e-commerce	4.63	0.640	Highest
1. 2Attracts new customer groups	4.65	0.745	Highest
1. 3Improves customer accessibility	4.78	0.726	Highest
1. 4Facilitates convenient product recommendations	4.73	0.722	Highest
1. 5Ensures fast and convenient payment options	4.67	0.756	Highest
Total E-commerce Marketing	4.69	0.718	Highest
2. Social Media Marketing			
2. 1Expands marketing networks	4.74	0.730	Highest

Opinion toward e-commerce marketing	$\bar{\mathbf{x}}$	S.D.	Result
2. 2Provides quick access to target customers	4.58	0.699	Highest
2. 3 Allows convenient updates on new products for existing customers	4.51	0.685	Highest
2. 4Enhances credibility in product distribution	4.53	0.750	Highest
2. 5Simplifies the ordering and selling process for products	4.68	0.825	Highest
Total Social Media Marketing	4.61	0.738	Highest
Overall	4.65	0.728	Highest

Source: (jirawat, 2024)

From Table 2: Opinion toward e-commerce marketing revealed that the overall average score was at the highest level ( $\bar{x} = 4.65$ , S.D.= 0.728). When it was analyzed each aspect, it revealed e-commerce marketing was at the highest level ( $\bar{x} = 4.69$ , S.D.= 0.718), and social media marketing was at the highest level ( $\bar{x} = 4.61$ , S.D.= 0.738).

The findings revealed that most of the sample group were working-age individuals, aged over 60, and engaged in private sector or freelance work. The research focused on two aspects of consumer behavior, product development and e-commerce marketing as follows;

In terms of product development, three aspects consisted of 1) packaging design, 2) product quality, and 3) product durability. When it was analyzed each aspect; it revealed most of them decided to purchase aromatic salt based on product durability as it resists deformation or shape changes; product quality as its lack of additives; and packaging design as its suitable and meets customer needs, which affects the purchasing decision, as customers valued the product's longevity and worthwhile investment.

In terms of marketing, the marketing mix revealed that packaging affected the purchasing decision due to its convenience to carry, brand and product recognition, enhancing market opportunities by making it as souvenir and expanding distribution channels.

The researchers had an idea to develop aromatic salt products, as the original product lacked proper packaging, branding, and durability suitable for practical use. Most customers purchased the product for home use rather than as a souvenir. Then, the researchers proposed to develop the product to meet customer needs, expand distribution channels, and target a broader customer base.

The research of developing products and value-added through e-commerce marketing of aromatic salt revealed that packaging development focused on creating designs suitable for practical use, recognizable branding, reasonable pricing, expanding the distribution channels, and customer accessibility to attract more customers and gain acceptance to sell in general retail stores as a management mechanism supporting packaging design, financial planning for calculating product costs, and appropriate profit planning. This aligns with research by Sathapath Kilaso et al (2023), which revealed that a well-defined work duration and operational control plan were implemented. Regarding leadership in organizations, the importance of leadership was rated as average. The organization provided training to enhance employees' skills, knowledge, and job abilities, with clearly defined roles and responsibilities. Additionally,

the development of online sales channels was highlighted to expand distribution channels and customer accessibility; aligns with research by Wipawee Kritsanaputi (2013), Community Enterprise Group Management :Learning from The Silk and Cotton Weaving Professional Groups in Khon Kaen Province which revealed that the weaving profession group managed various aspects, including group administration, production planning management, production management, product development management, marketing management, and public relations management; aligns with research by Pisit Watchararattanavalee et al (2024), which revealed that this enhancement is particularly evident in facilitating detailed product examination and selection before making a purchase, financial management and accounting management are implemented to ensure the efficient operation of group administration. These efforts also contribute to creating a unique identity for the products, enhancing their distinctiveness, and fostering sustainable economic growth within each local community; aligns with research by Keeratirakha (2019), which revealed that the exchange of experiences, collaborative thinking, and knowledge transfer among weaving communities have significantly contributed to product development and the creation of new products on a broader scale will expand markets, maintain market share, and increase sales of the products; and aligns with the consumer behavior theory on factors affecting purchasing decisions, as discussed by Sudaporn Kunthalbutr (2009), stated that consumers are influenced by factors and purchasing decision process by their needs, seeking information, and evaluating alternatives based on aspects such as brand, price, design, after-sales service, and unit price. Subsequently, the decision to purchase is made considering factors like brand, store, quantity, timing, and payment method.

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