Developing Guidelines to Add Value to Local Rice Products Based on New Consumer Behavior in the Pako Nyo Community Enterprise in Ban Pa Teng Ngam

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Abstract

Background and Aim: Local rice producers in Ban Pa Teng Ngam face challenges in increasing the market value of indigenous rice, despite its natural quality and health benefits. The Pako Nyo Community Enterprise was established to support the development and distribution of processed local rice products. However, changing consumer behavior and market demands have made it necessary to develop clear and practical guidelines to improve product value. This research aims to explore consumer behavior, examine marketing mix factors, and propose guidelines for adding value to local rice products based on new consumption patterns.

Materials and Methods: This research used an explanatory sequential design. The quantitative phase included a survey of 400 respondents using a questionnaire to collect data on consumer behavior and marketing mix factors. Descriptive statistics such as frequency, percentage, mean, and standard deviation were used to analyze the data. The qualitative phase involved focus group discussions with 6–8 key informants, including local leaders and experts in product development. Data were analyzed using theoretical coding and triangulation to ensure reliability and credibility.

Results: The findings show that most consumers were female, aged 16–60, with an income between 15,001–20,000 baht. They valued chemical-free, nutritious rice and preferred small packaging priced at 51–60 baht per kilogram. Online platforms like Facebook and Line were the main sources of product information and purchase. All four elements of the marketing mix, product, price, place, and promotion, significantly influenced consumer decisions. The Business Model Canvas was used to develop value-added strategies focusing on high product quality, digital marketing, and strong customer relationships.

Conclusion: This study provides a clear picture of consumer preferences and the influence of marketing factors on rice product purchases. It proposes a practical model to add value to local rice products by aligning them with new consumption patterns. The guidelines can help the Pako Nyo Community Enterprise improve product development, reach more consumers, and build a sustainable business in both local and online markets.

Keywords: Local rice products; Consumer behavior; Marketing mix; Business Model Canvas; Value-added strategy.

Introduction

Agriculture continues to play an important role in the national economy (Sutthichaimethee, Saraphirom & Junsiri, 2025). It not only generates income but also provides a livelihood for most respondents in the country. Over the past years, agricultural development has helped improve the income and living conditions of farmers (Meedaycha et.al., 2020). Even during times of crisis, such as the economic downturn or the COVID-19 pandemic, the agricultural sector experienced less negative impact compared to other sectors (Phiromakaradej, Sakkatat, & Palapanya, 2024). As a result, many farmers still aim to increase the quality and quantity of their produce to secure their livelihoods and support their communities.

Ban Pa Teng Ngam is a small village in Ping Khong Subdistrict, Chiang Dao District, Chiang Mai Province. The area is located about 100 kilometers from the city of Chiang Mai, at an elevation of 500 meters above sea level. Most of the local respondents are engaged in agriculture, including wet-rice farming and upland farming (Pothasin et.al., 2023). However, some farming practices in the area have caused biomass to accumulate, leading to problems like seasonal haze from burning. In response, local leaders have worked with organizations to solve this issue and to develop the area through circular economy ideas. One key initiative is to strengthen local community enterprises, especially those involved in rice processing using traditional rice varieties of the Pako Nyo ethnic group. Ban Pa Teng Ngam, as a community located in a rich upstream area, is recognized for its natural farming practices and environmental care, making it a suitable model for local development.

From the researchers' field survey, it was found that the respondents of Ban Pa Teng Ngam mainly grow rice as their economic crop, using safe and natural methods. They produce both paddy rice and upland rice that grows naturally without chemicals. Every year, the community produces about 200 tons of paddy rice. This rice is partly consumed by local households and partly stored in community rice banks. These rice banks allow villagers to store and borrow rice when needed, especially in times of disaster. Even though the rice is natural and delicious, it is often sold at a low price, only 10 baht per kilogram. This is because of high supply, low external demand, and issues like high moisture levels and grain breakage during milling. These problems reduce the market value of the rice, and the community faces difficulties in selling it at a fair price.

To address this issue, in 2019, the community began working on ways to increase the value of their traditional rice. They started to process rice into milled rice or brown rice, vacuum-pack it, design packaging, and build a local brand. In 2021, the Pako Nyo Community Enterprise was officially established. This group aimed to help with product distribution and to select high-value rice varieties. Three main varieties were chosen: Bue Por Lo, a soft and popular rice; Bue Nor Mu, an aromatic traditional variety; and Bue Bor, a yellow-brown rice known for its sticky texture and rich nutrients. Bue Bor rice is especially valuable because it contains health benefits, such as antioxidants and minerals that help prevent anemia and support heart and brain health.

In recent years, there have been changes in the way consumers choose and use rice products. Many respondents now prefer rice that is not only safe and healthy but also easy to cook, attractive in appearance, and packaged in a modern way. Consumers also look for rice with special features, such as high nutritional value or a connection to local identity. These changes in consumption patterns present both opportunities and challenges for local producers like the Pako Nyo community enterprise. If the enterprise can adjust its rice products to meet these new demands, it can increase sales and strengthen the community economy. Moreover, it was found that previous studies (Thawiphrom et.al, 2023; Kansiri et.al., 2024; Peerachaakkarachai, 2024) have primarily focused on large-scale agricultural businesses and have not taken into account the unique cultural and socio-economic context of the Pako Nyo Community Enterprise. Therefore, this research aims to provide context-specific guidelines tailored to the specific challenges and opportunities of the enterprise.

However, despite these efforts, the community enterprise still faces challenges in making its rice products popular in wider markets. They lack knowledge and clear guidelines on how to develop rice products that meet the needs and preferences of new consumer groups. Therefore, this research aims to develop practical and suitable guidelines for adding value to local rice products based on changing consumption patterns. The focus is to support the Pako Nyo community enterprise in Ban Pa Teng Ngam, so that they can improve their product development, respond to market demand, and build a sustainable and self-reliant economy within their community.

Objectives

1) to explore the consumer behavior in purchasing local processed rice products of the Pako Nyo Community Enterprise in Ban Pa Teng Ngam.

2) to investigate the marketing mix factors influencing the purchase of processed local rice products of the Pako Nyo Community Enterprise in Ban Pa Teng Ngam.

3) to develop guidelines for adding value to local rice products based on the new consumption patterns of the Pako Nyo Community Enterprise in Ban Pa Teng Ngam.

Literature review

To address the research objective, the researcher reviewed literature related to consumer behavior, the marketing mix, and the Business Model Canvas, as follows.

Consumer behavior

Consumer behavior refers to the process that individuals or groups go through when they select, buy, use, and dispose of goods or services (Reyes, 2020). It includes the actions and decisions of consumers before and after the purchase. These behaviors are influenced by personal preferences, cultural values, social factors, and economic conditions. Consumer behavior also involves how respondents react to products, prices, promotions, and distribution channels. Understanding consumer behavior is important because it helps businesses know what customers want and how they make buying decisions (Kamkankaew, Meesubthong, & Sawang, 2023). This understanding allows companies to design better products and develop marketing strategies that match customer needs.

Consumer behavior is not only about the final act of buying but also about the entire journey that leads to a purchase (Kamkankaew et.al., 2024). It starts from recognizing a need, searching for information, comparing alternatives, and making a choice (Stephens, 2016). After the purchase, consumers evaluate whether the product meets their expectations. Their satisfaction or dissatisfaction can influence future purchases and the opinions they share with others (Inthong et.al., 2022). Businesses that observe and analyze these behaviors can improve customer satisfaction, increase loyalty, and build stronger relationships with their target audience. By studying consumer behavior, companies can adapt to changes in the market and create more value for both the customer and the business. Consumer behavior toward rice products reflects how individuals make decisions based on taste preferences, cultural eating habits, and price sensitivity. Many consumers evaluate rice types, such as jasmine, glutinous, or organic, based on quality, origin, and health benefits before making a purchase. Understanding these behaviors allows rice producers and marketers to tailor their product offerings and promotional strategies to meet specific consumer expectations and build long-term brand loyalty.

Marketing mix

The marketing mix is a set of tools that businesses use to reach their target customers and meet their needs (Goi, 2009). It includes four main elements: product, price, place, and promotion. These elements help companies design and offer products or services that customers want (Kamkankaew et.al., 2025). The product refers to what the business sells, whether it is a good or a service. Price is the amount the customer must pay to get the product. Place means the channels or locations where the product is available for customers. Promotion includes the ways the business communicates with customers to inform and persuade them to buy the product. A good balance of these four elements helps the business satisfy customer needs and achieve its goals (Srikhamhaeng, Thanitbenjasith, & Kamkankaew, 2024)

The marketing mix is important because it gives a clear structure for planning and controlling marketing strategies (Pitri et.al., 2025). Each element affects the others, so businesses must manage them together. A high-quality product may need a higher price, but it also needs strong promotion to explain its value. The right place makes it easy for customers to buy the product, and the right promotion attracts attention and creates interest (Thongkammee & Ngamvichaikit, 2024). By adjusting the mix based on customer feedback and market changes, businesses can stay competitive. The marketing mix helps companies understand what customers want and how to deliver value in the best way. The marketing mix plays a key role in promoting rice products by ensuring the right balance of product quality, competitive pricing, accessible distribution, and effective communication. For example, premium organic rice can be positioned as a high-value product with health benefits, sold at a reasonable price through both local markets and online platforms to maximize reach. Promotional strategies such as storytelling about the rice's origin and the farmer community can help create emotional connections and drive consumer interest.

Business Model Canvas

The Business Model Canvas is a tool that helps businesses describe and understand how they create, deliver, and capture value (Osterwalder & Pigneur, 2010). It is made up of nine key parts that show the important activities and resources of a business. These parts include customer segments, value propositions, channels, customer relationships, revenue streams, key resources, key activities, key partnerships, and cost structure (Osterwalder, Nielsen & Pigneur, 2024). By using this tool, businesses can clearly see how their operations work and how each part connects to the others. This helps them plan better and make smart

decisions. The Business Model Canvas is often used when starting a new business or changing an existing one (Siagian & Marsono, 2025).

In marketing, the Business Model Canvas helps companies focus on what customers need and how to meet those needs (Razabillah et.al., 2023). The value proposition explains the benefits the business offers to solve customer problems. The customer segments identify who the target customers are, while the channels show how the company delivers products or services (Osterwalder, Nielsen & Pigneur, 2024). Customer relationships explain how the company interacts with its customers to keep them satisfied and loyal. Revenue streams show how the business earns money. By looking at these parts together, businesses can improve their marketing plans, reduce costs, and find new opportunities to grow (Brendel-Schauberger & Freiseisen, 2024). The Business Model Canvas helps rice product businesses map out how they deliver value to different customer segments by offering high-quality, organic, or specialty rice. By clearly defining elements like distribution channels, key activities in farming and packaging, and revenue streams from both retail and wholesale, producers can streamline operations and adapt to market needs effectively.
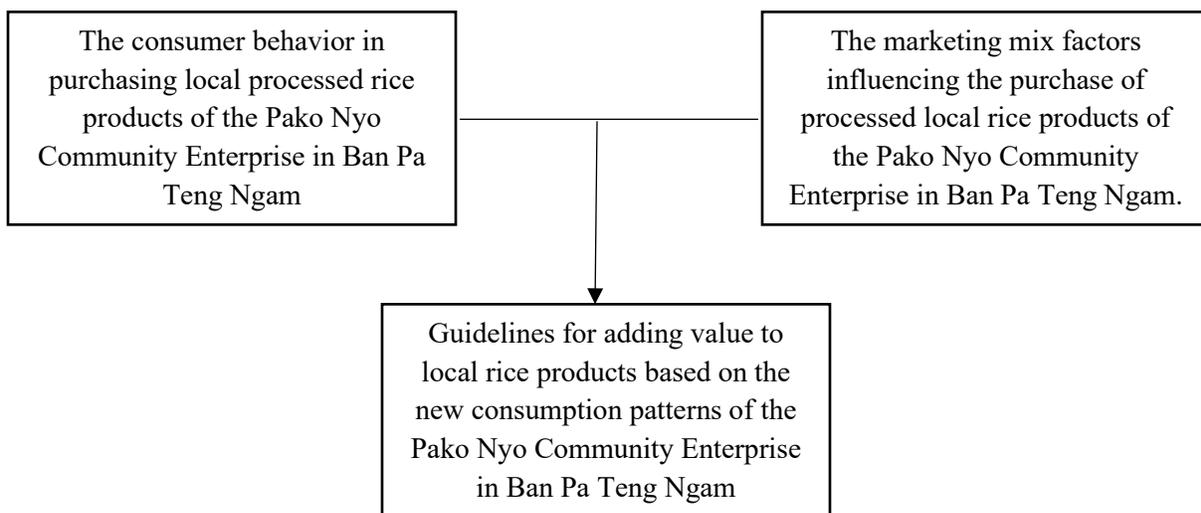
Conceptual Framework

The consumer behavior in purchasing local processed rice products of the Pako Nyo Community Enterprise in Ban Pa Teng Ngam	The marketing mix factors influencing the purchase of processed local rice products of the Pako Nyo Community Enterprise in Ban Pa Teng Ngam.

Guidelines for adding value to local rice products based on the new consumption patterns of the Pako Nyo Community Enterprise in Ban Pa Teng Ngam

Figure 1: Conceptual Framework

Methodology

Research Design

The research design of this study follows the explanatory sequential design. It starts with the quantitative phase to collect data about consumer behavior and marketing mix factors that affect the decision to buy local processed rice products from the Pako Nyo Community Enterprise in Ban Pa Teng Ngam. After the results from the quantitative phase are analyzed, the study continues with the qualitative phase. In this phase, the researcher uses focus group discussions to explore the data more deeply and to create useful guidelines for adding value to local rice products based on new consumption patterns. The key informants in the qualitative phase are community leaders, local members, university lecturers, and respondents who work in product design and development. This research design helps the researcher clearly understand how consumer behavior and marketing mix factors are related to product development. It also helps in creating guidelines that are suitable and useful for the community enterprise.

Quantitative Research Method

To address the first and second research objectives, namely, to explore consumer behavior in purchasing local processed rice products of the Pako Nyo Community Enterprise in Ban Pa Teng Ngam,

and to investigate the marketing mix factors influencing such purchases, the quantitative research method was applied. The details of this method are presented in the following section.

Population and Sampling

The population in this study includes consumers who buy processed local rice products made from indigenous rice varieties. Because the exact number of the population is unknown, the sample size was calculated using a formula for an unknown population proportion. The calculation was done with a 95% confidence level using Cochran's standard formula (1977). As a result, the sample size was set at 400 participants.

The sampling method in this research is purposive sampling. The researcher divided the sample into four age groups to ensure that different age ranges were represented: 100 children, 100 teenagers, 100 middle-aged adults, and 100 elderly respondents. Each group had an equal number of male and female participants. In addition, accidental sampling was used by selecting participants at local shops that sell indigenous rice products. These are places where consumers usually go to buy such products. This method allowed the researcher to collect data from actual consumers in real-life situations.

Research Tool

The research tool for data collection was a questionnaire. The questionnaire was developed from related theories to fit the research objectives. It had two parts. The first part asked about consumer behavior in buying local rice products based on new consumption patterns. It used check-list questions. The second part asked about the importance of marketing mix factors that affect buying decisions. This part followed the 4Ps model, which includes product, price, place, and promotion. It used a 5-point Likert scale to measure opinions.

The researcher tested the quality of the questionnaire by checking its content validity and reliability. The questionnaire was pre-tested with a small group to make sure it was clear and correct. Then, the reliability was measured using Cronbach's alpha coefficient. The result showed a reliability score of 0.785. Even though this is slightly lower than 0.80 (Agbo, 2010), the result still shows that the questionnaire is reliable and suitable for use in this study.

Data Analysis

The descriptive statistics used in this research were frequency and percentage to describe the demographic data. Mean and standard deviation were used to measure the factors affecting the marketing mix.

Qualitative Research Method

To address the third research objective, namely, to develop guidelines for adding value to local rice products based on the new consumption patterns of the Pako Nyo Community Enterprise in Ban Pa Teng Ngam, the qualitative research method was applied. The details of this method are presented in the following section.

The details of the qualitative research method section are as follows.

Key Informants

The key informants in this study are 6 to 8 respondents. They include community leaders, local members, university lecturers, and respondents who work in product design and development. These informants were chosen because they have experience and knowledge about developing local rice products. The main method for collecting data is the focus group discussion. This method helps the researcher collect opinions and suggestions from different views. It also helps to understand the needs and ideas of the community and other related respondents.

Research Tool

The researcher is also an important tool in this study. The researcher joins the activities, watches the behavior, and writes down important points during the focus group discussions. The researcher uses a mix of methods to collect data. The focus group is the main tool for helping to design and develop the rice product model. Other tools include observation notes, discussion records, and a reflection journal. These

tools help the researcher to check and compare the data from different sources. Before joining each activity, the researcher prepares a data record form. After each activity, the researcher uses this form to record and check the data and add anything that may be missing.

A voice recorder is used during the focus group sessions. The researcher asks for permission from the group before recording. This helps to check any information that was not written down during the discussion. The recorder helps to make sure the data is correct. A camera is also used to take pictures of the respondent, places, and activities during the focus group. These pictures are used in the research report and help to explain the research process.

Data Analysis

For this research, the theoretical coding method was used to categorize the data based on the theory from the quantitative phase and the concept of the Business Model Canvas. This was done to develop guidelines for adding value to local rice products based on the new consumption patterns of the Pako Nyo Community Enterprise in Ban Pa Teng Ngam. The data were then grouped by considering the consistency between the coded categories. After that, the core categories were identified through selective coding. The researcher created a mind map to show the connection and relationship between the data groups according to the related categories.

In addition, the researcher ensured the credibility of the data by applying triangulation methods. Source triangulation was used by comparing information from all interviews to check for consistency and data saturation. Method triangulation involved asking key informants to review and provide suggestions using both interviews and observations. Researcher triangulation was conducted by comparing notes and interview transcripts to support the coding process in data analysis. For transferability, the researcher reviewed relevant literature and clearly explained the data collection procedures.

Results

This section presents the research findings on three main topics. First, it shows the consumer behavior in purchasing local processed rice products from the Pako Nyo Community Enterprise in Ban Pa Teng Ngam. Second, it explains the marketing mix factors that influence the decision to buy these products. Lastly, it provides guidelines for adding value to local rice products based on the new consumption patterns observed in the community.

1. The result of Consumer behavior in purchasing local processed rice products of the Pako Nyo Community Enterprise in Ban Pa Teng Ngam.

For research objective 1, which is to explore consumer behavior in purchasing local processed rice products of the Pako Nyo Community Enterprise in Ban Pa Teng Ngam, the research results are as follows:

Most of the respondents were female, totaling 282 respondents, which is 70.50% of the sample. The rest were male, with 118 respondents or 29.50%.

For age, 100 respondents (25.00%) were 15 years old or younger. Another 100 respondents (25.00%) were between 16 and 40 years old. Also, 100 respondents (25.00%) were between 41 and 60 years old. A total of 34 respondents (15.74%) were older than 60.

In terms of monthly income, the largest group of respondents earned between 15,001 and 20,000 baht per month, totaling 158 respondents (39.50%). Next were those earning more than 40,001 baht, with 54 respondents (13.50%). A total of 42 respondents (10.50%) earned between 10,001 and 15,000 baht. Another 36 respondents (9.00%) earned between 35,001 and 40,000 baht. Respondents with an income between 20,001 and 25,000 baht were 35 respondents (8.75%), while 28 respondents (7.00%) earned between 30,001 and 35,000 baht. Another 27 respondents (6.75%) earned between 25,001 and 30,000 baht, and 20 respondents (5.00%) earned less than or equal to 10,000 baht per month.

The most common reason for buying indigenous rice was the desire to eat nutritious and high-quality rice. This reason was given by 163 respondents (40.75%). The second reason was the chemical-free and safe production process, with 117 respondents (29.25%). Other reasons included availability in department stores (64 respondent or 16.00%), price (58 respondent or 14.50%), trusted brands (54

respondent or 13.50%), convenience of nearby sales locations (48 respondent or 12.00%), attractive and easy-to-carry packaging (33 respondent or 8.25%), availability in safe agricultural stores (32 respondent or 8.00%), and marketing promotions (27 respondent or 6.75%).

Regarding the amount of rice preferred for purchase, most respondents (225 respondents or 56.25%) chose to buy 1–2 kilograms. Next were those who bought less than 1 kilogram (84 respondents or 21.00%), followed by 3–5 kilograms (57 respondents or 14.25%) and more than 5 kilograms (34 respondents or 8.50%).

For the preferred price per kilogram, most respondents selected 51–60 baht (163 respondents or 40.75%). Next were those preferring prices under 50 baht (98 respondents or 24.50%), followed by 61–70 baht (74 respondents or 18.50%), 71–80 baht (41 respondents or 10.25%), and more than 81 baht (24 respondents or 6.00%).

In terms of purchase locations, the most preferred option was online shopping (107 respondents or 26.75%). This was followed by retail stores (45 respondent or 11.25%), dedicated rice shops (43 respondent or 10.75%), fresh markets (41 respondent or 10.25%), special events or trade fairs (38 respondent or 9.50%), Royal Project shops (35 respondent or 8.75%), convenience stores (32 respondent or 8.00%), supermarkets (30 respondent or 7.50%), and phone orders (29 respondent or 7.25%).

When asked who influenced their purchase decision, most respondents said themselves (143 respondents or 35.75%). Others were influenced by their partner (60 respondents or 15.00%), family members (57 respondents or 14.25%), sales staff (53 respondents or 13.25%), friends (45 respondents or 11.25%), and experts such as those in agriculture or health (42 respondents or 10.50%).

Concerning how often they bought indigenous rice each month, most respondents said once per month (183 respondents or 45.75%). Others said once a week (125 respondents or 31.25%), once every two months (55 respondents or 13.75%), and once every three months or more (37 respondents or 9.25%).

Finally, the media that influenced their decision the most was online advertising through Facebook and Line, chosen by 208 respondents (52.00%). Other sources included radio and television ads (76 respondents or 19.00%), printed media such as brochures (59 respondents or 14.75%), and word-of-mouth from others (57 respondents or 14.25%).

In conclusion, the findings show that most consumers of local processed rice products from the Pako Nyo Community Enterprise in Ban Pa Teng Ngam were female, with a wide age distribution across all groups. The largest group of respondents had a monthly income between 15,001 and 20,000 baht. Their main reason for purchasing indigenous rice was its nutritional quality and safety from chemical-free production. Most preferred to buy 1–2 kilograms at a price between 51 and 60 baht per kilogram. Online shopping was the most common place to buy, and most respondents made purchase decisions by themselves. The most frequent buying pattern was once per month. Online media, especially Facebook and Line, played a key role in influencing their decisions. These results help to better understand the characteristics and preferences of consumers in this community.

2. The result of Marketing mix factors influencing the purchase of processed local rice products of the Pako Nyo Community Enterprise in Ban Pa Teng Ngam.

For research objective 2, which is to develop guidelines for adding value to local rice products based on the new consumption patterns of the Pako Nyo Community Enterprise in Ban Pa Teng Ngam, the research results are as follows:

Table 1 presents the total mean and standard deviation of the marketing mix factors that influence the purchase of processed local rice products of the Pako Nyo Community Enterprise in Ban Pa Teng Ngam. The results show that all four factors—product, price, place, and promotion—were rated as influential, with mean scores above 3.70 on a 5-point scale. The product factor received the highest mean score of 3.90 with a standard deviation of 0.70, followed closely by place (mean = 3.89, S.D. = 0.78) and price (mean = 3.88, S.D. = 0.73). The promotion factor had the lowest mean score of 3.73 with a standard deviation of 0.72, yet it was still considered influential. The overall mean score of all marketing mix factors combined was 3.85

with a standard deviation of 0.73, indicating that, in general, marketing mix strategies have a strong influence on consumer purchasing decisions in this community enterprise.

Table 1: The total mean and standard deviation of Marketing mix factors influencing the purchase of processed local rice products of the Pako Nyo Community Enterprise in Ban Pa Teng Ngam.

Marketing mix factors influencing the purchase of processed local rice products of the Pako Nyo Community Enterprise in Ban Pa Teng Ngam.	$\bar{x}$	S.D.	Meaning
Product	3.90	0.70	Influential
Price	3.88	0.73	Influential
Place	3.89	0.78	Influential
Promotion	3.73	0.72	Influential
Total	**3.85**	**0.73**	**Influential**

When considering the marketing mix factors influencing the purchase of processed local rice products from the Pako Nyo Community Enterprise in Ban Pa Teng Ngam, the findings show that all factors were rated at a high level, indicating they are influential in consumer decision-making.

For the product aspect, the overall mean score was 3.90, which is considered high. When examining individual items, the most important factor was the quality and completeness of local rice seeds (mean = 4.13), followed by the presence of quality and standard certification marks (mean = 3.95), and appropriate packaging design that is convenient to use (mean = 3.94). Other influential product factors included durable and safe packaging (mean = 3.93), cleanliness and freshness of the rice (mean = 3.88), softness of the rice (mean = 3.86), the taste, smell, and color when cooked (mean = 3.84), and a clear expiration date (mean = 3.67).

For the price aspect, the overall mean score was 3.88, also indicating a high level of influence. The most important item was that the price matched the quality of the local rice (mean = 3.95), followed by the perceived value for money (mean = 3.91), having a clear price tag (mean = 3.84), and the appropriateness of the price in relation to the quantity of rice (mean = 3.82).

Regarding the place or distribution channels, the overall mean was 3.89, which is considered high. The most important factor was having a delivery service to the customer's desired location (mean = 3.97), followed by availability through online platforms such as Facebook, Lazada, Shopee, or websites (mean = 3.93). Other significant items included distribution in places perceived as clean and safe (mean = 3.90), convenient store locations (mean = 3.87), and suitable operating hours (mean = 3.80).

In terms of promotion, the overall mean was 3.73, reflecting a high level of importance. The highest-rated item was providing information about the benefits of local rice (mean = 3.93), followed by online advertising through platforms like Facebook, Line, and Instagram (mean = 3.89). Other promotional strategies considered influential included attractive offers such as discounts or gifts (mean = 3.69), member or regular customer discounts (mean = 3.58), and bulk purchase discounts (mean = 3.56).

In conclusion of the section, he results of the study on marketing mix factors influencing the purchase of processed local rice products from the Pako Nyo Community Enterprise in Ban Pa Teng Ngam indicate that all four components—product, price, place, and promotion—are influential in consumer decision-making. The product factor showed the highest mean score, highlighting the importance of product quality, certification, and packaging design. The price factor was also highly rated, especially when aligned with product quality and value. Distribution channels played a key role, with delivery services and online accessibility being the most significant. Promotion was slightly lower but still influential, with emphasis on informative content and online advertising. Overall, the marketing mix strategies applied by the community enterprise are effective in motivating consumer purchases and can serve as a strong foundation for developing future marketing plans.

3. The result of Guidelines for adding value to local rice products based on the new consumption patterns of the Pako Nyo Community Enterprise in Ban Pa Teng Ngam.

For research objective 31, which is to develop guidelines for adding value to local rice products based on the new consumption patterns of the Pako Nyo Community Enterprise in Ban Pa Teng Ngam, the research results are as follows:

This study aims to develop guidelines for adding value to local rice products based on the new consumption patterns of the Pako Nyo Community Enterprise in Ban Pa Teng Ngam. The research in the section is based on findings from consumer behavior and marketing mix analysis. It focuses on the preferences, motivations, and purchasing behavior of consumers, as well as key factors such as product quality, price, distribution channels, and promotion. The results are used to design a business model that supports the development of value-added products and improves competitiveness in both local and online markets.

A Business Model Canvas was developed to guide the Pako Nyo Community Enterprise in Ban Pa Teng Ngam in adding value to its local rice products in line with new consumption patterns.

Customer Segments

The main customer group includes female consumers of various age groups, especially between 16 and 60 years old, with moderate income levels, particularly those earning between 15,001 and 20,000 baht per month. These consumers are health-conscious and value safe, chemical-free products. They prefer buying rice in small quantities, such as 1–2 kilograms, at affordable prices ranging from 51 to 60 baht per kilogram. Most of them shop online and often make purchase decisions independently. They are influenced by digital media, especially social media platforms like Facebook and Line. Therefore, the target segments are middle-income consumers, health-focused individuals, and digital platform users who value convenience and quality.

Value Propositions

The enterprise offers high-quality, indigenous rice that is nutritious, chemical-free, and safe for consumption. The rice comes from a traditional and trusted production process, giving consumers confidence in its health benefits. The packaging is clean, attractive, and easy to carry, making it suitable for modern lifestyles. The products also meet standard certifications, which increases consumer trust. Furthermore, the rice is competitively priced and reflects value for money. By combining cultural heritage with modern consumer expectations, the enterprise delivers products that are both meaningful and practical for daily use.

Channels

Online platforms are the most important distribution channels for reaching target customers. These include social media platforms such as Facebook and Line, as well as e-commerce sites like Shopee and Lazada. The enterprise also uses direct delivery services to customers' homes, which adds convenience and increases customer satisfaction. Other channels include local retail shops, fresh markets, Royal Project stores, and trade fairs. These offline channels support brand visibility and customer trust in physical locations. Digital advertising and word-of-mouth further strengthen these channels and help maintain a strong customer connection.

Customer Relationships

The enterprise builds relationships by providing clear and reliable information about its products, including health benefits and production methods. Social media is used to engage directly with customers, answer questions, and share updates. Providing occasional promotions, discounts for members, or small gifts with purchases helps to create a sense of appreciation and loyalty. By maintaining regular communication and responding to customer feedback, the enterprise fosters long-term relationships based on trust, transparency, and value.

Key Partners	Key Activities	Value Propositions	Customer Relationships	Customer Segments
Partnerships with local farmers. Collaborations with packaging suppliers, logistics providers, and online platforms. Support from government agencies and educational institutions. Partnerships with health-focused stores, Royal Project outlets, and cooperatives.	Rice cultivation and processing using traditional methods. Quality control, product packaging. Online and offline marketing. Customer service. Managing online platforms, coordinating delivery services. Product development activities, participation in trade fairs.	Offers high-quality, indigenous rice that is nutritious, chemical-free, and safe for consumption. Produced using a traditional process. Packaging is clean, attractive, and easy to carry, meeting standard certifications. Rice is competitively priced, combining cultural heritage with modern consumer expectations.	Providing reliable product information. Engaging with customers via social media. Offering promotions, member discounts, and small gifts. Building trust and loyalty through ongoing communication and feedback.	The main customer group is female consumers across various age groups, especially aged 16 to 60 with moderate income levels, 15,001–20,000 baht per month. Mostly shop online. They often make independent purchase decisions using digital media such as Facebook and Line. Most of them shop online.
	Key Resources High-quality indigenous rice varieties. Knowledgeable community members. Traditional farming and processing techniques. Modern packaging tools. Digital tools, human resources. Certifications and brand recognition.		**Channels** Online platforms like Facebook, Line, Shopee, and Lazada, as well as direct delivery, as a convenience. Local retail shops, fresh markets, Royal Project stores, and trade fairs. Other channels include digital advertising and word-of-mouth.	

Cost Structure	Revenue Streams
Investments in rice production and harvesting, processing, packaging, and logistics. Marketing expenses (online promotions, content creation). Online marketplace platform fees. Staff wages. Quality control, certifications, and customer service investments. Focus on creating value through quality and satisfaction.	Revenue is mainly from direct sales through online and offline channels. Most purchases are 1–2 kg packages, priced between 51–60 baht per kg. Additional revenue may come from bulk sales during special events. Discounts and promotions are used to increase sales.

Figure 2 Guidelines for adding value to local rice products based on the new consumption patterns of the Pako Nyo Community Enterprise in Ban Pa Teng Ngam by Business Model Canvas

Revenue Streams

Revenue is mainly generated from direct sales of processed rice products through online and offline channels. The most common purchases are 1–2 kilogram packages, priced between 51 and 60 baht per kilogram. Additional revenue may come from bulk sales during special events or through partnerships with health food shops. Discounts and promotions are used strategically to increase sales volume while maintaining overall profitability. Selling through multiple platforms also allows the enterprise to diversify its income and reduce dependence on any single channel.

Key Resources

Key resources include high-quality indigenous rice varieties, knowledgeable community members, traditional farming and processing techniques, and modern packaging tools. Digital tools such as e-commerce platforms, social media accounts, and mobile delivery networks are also essential. Human

resources, including staff involved in production, marketing, and logistics, play a key role. Certifications, brand recognition, and the trust built with consumers are valuable intangible resources that support business growth and differentiation.

Key Activities

Important activities include rice cultivation and processing using traditional methods, quality control, product packaging, online and offline marketing, and customer service. Managing online sales platforms, coordinating delivery services, and maintaining active communication with customers are also vital. Product development activities, such as designing new packaging or exploring new rice-based products, help the enterprise adapt to changing consumer needs. Participation in trade fairs and promotional events supports brand awareness and market expansion.

Key Partnerships

Partnerships with local farmers ensure a steady supply of raw materials. Collaborations with packaging suppliers, logistics providers, and online platforms are important for efficient operations. Support from government agencies or educational institutions can help with training, certification, and product development. Working with health-focused stores, Royal Project outlets, and agricultural cooperatives expands distribution channels and enhances credibility. These partnerships contribute to better product quality, wider market access, and improved competitiveness.

Cost Structure

Major costs include rice production and harvesting, processing, packaging, and logistics. Marketing expenses, especially for online promotions and digital content creation, are also significant. Platform fees for online marketplaces, transportation for deliveries, and wages for staff contribute to the operational costs. Investments in quality control, certifications, and customer service are necessary to maintain high standards. Although cost efficiency is important, the enterprise focuses on creating value through quality and customer satisfaction, which supports long-term sustainability.

Discussion

Based on research objective 1, which aims to explore consumer behavior in purchasing local processed rice products of the Pako Nyo Community Enterprise in Ban Pa Teng Ngam, the research findings can be discussed as follows:

The discussion of this study highlights the importance of understanding consumer behavior to develop effective guidelines for adding value to local rice products. The findings show that most consumers of processed local rice products from the Pako Nyo Community Enterprise were female and had different levels of income and age. Their key motivation for purchasing was the belief in the product's nutritional quality and safety due to chemical-free production. These preferences support the idea that health awareness and natural products are becoming more important to modern consumers (Kamkankaew, Meesubthong & Sawang, 2023). The purchase pattern also shows that most consumers buy small quantities once per month, which reflects careful spending behavior and regular but moderate consumption. The role of online platforms such as Facebook and Line as major information and purchasing channels supports the idea that digital media strongly influences decision-making in today's consumer market (Inthong et.al., 2022; Reyes, 2020). These results suggest that businesses should focus on promoting their products through social media and ensure their messaging highlights health benefits and safety.

In addition, this study confirms that consumer behavior is a process that includes not only the act of buying but also the thinking and decision-making stages before and after the purchase (Kamkankaew et.al., 2024). The results show that most consumers make independent decisions, meaning they rely on their own knowledge and preferences rather than others' opinions. This shows the importance of clear product information and attractive online content. Since consumers often evaluate whether the product meets their expectations after purchase, local producers need to focus on both quality and customer experience to maintain satisfaction and encourage repeat buying (Stephens, 2016). Businesses that understand this behavior can adjust their strategies by offering more suitable package sizes, fair pricing, and clear

communication through the right channels. Overall, the study supports the idea that observing and analyzing consumer behavior helps businesses respond better to market changes, build trust, and create long-term value for both producers and customers (Kamkankaew et.al., 2024; Inthong et.al., 2022).

Based on research objective 2, which aims to investigate the marketing mix factors influencing the purchase of processed local rice products of the Pako Nyo Community Enterprise in Ban Pa Teng Ngam, the research findings can be discussed as follows:

The results of this study confirm the importance of the marketing mix in influencing consumer purchasing behavior toward processed local rice products from the Pako Nyo Community Enterprise in Ban Pa Teng Ngam. All four elements—product, price, place, and promotion—received high mean scores, indicating their strong role in consumers' decision-making processes. These findings support the literature, which emphasizes that a well-structured marketing mix helps businesses understand customer needs and create value through balanced and targeted strategies (Goi, 2009; Kamkankaew et al., 2025; Srikhamhaeng, Thanitbenjasith & Kamkankaew, 2024). Among these elements, the product factor scored the highest, showing that consumers place great importance on the quality of rice, including its freshness, safety, packaging, and taste. This reflects the significance of offering high-value products that meet consumer expectations in terms of both tangible attributes and perceived trust.

The findings also show that price plays a crucial role in influencing purchase decisions. Consumers want prices that reflect the quality of the product, and they appreciate transparency, such as clear price tags and fair pricing based on quantity. This result is aligned with the idea that pricing must match customer perception of value to maintain satisfaction and loyalty (Pitri et al., 2025). Place, or distribution, was also rated as highly influential. In particular, convenience in accessing the product—such as through home delivery and online platforms—was very important. This shows that adapting to new consumption patterns, including digital purchasing behavior, is essential for community enterprises aiming to expand their market reach. Clean and safe distribution points and flexible store hours also supported consumer trust and ease of purchase, aligning with previous studies that highlight the importance of accessibility and convenience in modern distribution strategies (Thongkammee & Ngamvichaikit, 2024).

While promotion received the lowest mean score among the four, it still played an important role. Consumers responded positively to informative content that explained the health benefits and value of local rice. Online promotion through social media was also effective. These findings suggest that community enterprises should focus on educational and digital communication to attract attention and influence purchasing behavior. Incentives such as discounts and member benefits were appreciated but ranked slightly lower, indicating that while they add value, they should not be the only strategy used. Overall, these results show that the community enterprise already applies many marketing principles effectively. However, to add further value and adapt to new consumption patterns, future marketing efforts should emphasize high product quality, maintain fair pricing, strengthen digital channels, and invest in informative and targeted promotions. Together, these improvements can help build stronger consumer relationships and increase the market potential of local rice products in the long term.

Based on research objective 3, which aims to develop guidelines for adding value to local rice products based on the new consumption patterns of the Pako Nyo Community Enterprise in Ban Pa Teng Ngam, the research findings can be discussed as follows:

The results of this study show that the use of the Business Model Canvas can help the Pako Nyo Community Enterprise clearly understand how to add value to local rice products. By studying consumer behavior and marketing mix factors, the enterprise can design a business model that meets the needs of modern consumers while preserving local identity. The findings reveal that consumers prefer safe, chemical-free rice products in small packages at reasonable prices. Most of these consumers are middle-income women who value health and shop online. These results are supported by the idea that identifying customer segments helps businesses focus on specific groups and better design products and services to meet their needs (Osterwalder & Pigneur, 2010; Osterwalder, Nielsen & Pigneur, 2024; Razabillah et al., 2023).

The value propositions in the Business Model Canvas focus on offering high-quality rice that is safe and traditional but packaged to fit modern lifestyles. The enterprise uses channels that include both online and offline platforms to reach more consumers. Social media plays a key role in building customer relationships, which is important for encouraging repeat purchases and loyalty. Revenue mainly comes from small package sales, which match the purchasing patterns of the target market. Key resources like traditional rice varieties, modern packaging tools, and skilled community members support production and marketing. The results confirm that businesses need to manage both physical and digital assets to meet market demands and improve competitiveness (Brendel-Schauberger & Freiseisen, 2024; Siagian & Marsono, 2025).

Partnerships also play an important role. Working with local farmers, government agencies, and online platforms gives the enterprise more strength and better access to resources and markets. This shows how building networks and strong relationships helps small enterprises grow and remain sustainable. The cost structure reveals that while there are expenses related to production and digital marketing, these are necessary to maintain quality and customer satisfaction. This aligns with the concept that a good business model balances cost and value in order to create long-term success (Osterwalder, Nielsen & Pigneur, 2024). In summary, the use of the Business Model Canvas supports clear planning, better customer understanding, and strategic decision-making for adding value to local rice products in changing market conditions.

Conclusion

The findings from this study provide a clear understanding of the consumer behavior in purchasing local processed rice products from the Pako Nyo Community Enterprise in Ban Pa Teng Ngam. Most consumers were female with a balanced age distribution across all groups, and the largest income group earned between 15,001 and 20,000 baht per month. Health and safety were the main reasons for purchasing indigenous rice, especially its nutritious quality and chemical-free production process. Consumers preferred to buy in small quantities for 51–60 baht per kilogram. Online shopping was the most preferred channel, and most respondents made their own purchase decisions. They mostly bought rice once a month and were strongly influenced by online media, especially Facebook and Line. These results reflect a shift in purchasing patterns toward online platforms and a growing awareness of health and food safety. The insights gained from these consumer preferences help in designing marketing and product development strategies that match current demands.

The study also shows that all four elements of the marketing mix—product, price, place, and promotion—have a strong influence on consumer decisions. Product quality received the highest rating, emphasizing the importance of good rice seeds, standard certification, and attractive packaging. Price was also important, especially when it reflected the product's quality and value. Distribution channels, particularly those offering delivery and online access, were critical in reaching consumers. Promotion, especially informative and online advertising, also influenced purchasing behavior, although it was slightly less important than the other factors. These marketing insights were used to create practical guidelines through the Business Model Canvas. The model includes customer segmentation, value propositions, and digital distribution strategies that fit new consumer behaviors. By focusing on quality, convenience, and trust, the enterprise can strengthen its market position and develop more competitive and value-added rice products for local and online consumers.

Recommendation

Implementation Recommendations

Based on the findings of this research, the following four recommendations are proposed to support the effective implementation of value-added strategies for local rice products of the Pako Nyo Community Enterprise in Ban Pa Teng Ngam. The implementation recommendations are as follows:

1) It is recommended that the Pako Nyo Community Enterprise in Ban Pa Teng Ngam continue to improve product quality and packaging. Consumers highly value the quality, safety, and freshness of rice,

particularly when it is chemical-free and certified. Therefore, the enterprise should invest in maintaining strict quality control during production and use packaging that is not only clean and durable but also convenient and attractive. Clear labeling of nutritional information, expiration dates, and certification marks will help build trust. In addition, offering small package sizes such as 1–2 kilograms is essential, as this matches the preference of most consumers. These practices can help the enterprise meet consumer expectations and increase product satisfaction.

2) The Pako Nyo Community Enterprise in Ban Pa Teng Ngam should strengthen its digital marketing and online sales channels. The results show that most consumers discover and buy local rice products through online platforms, especially Facebook and Line. It is important to create informative and visually appealing content that highlights the health benefits, quality, and cultural value of the rice. Regular updates, customer interaction, and promotions can increase online engagement. The enterprise should also improve the customer experience through reliable delivery services and user-friendly online ordering systems on platforms such as Shopee and Lazada. This approach will expand the customer base and make the product more accessible to digital consumers.

3) It is advised that the Pako Nyo Community Enterprise in Ban Pa Teng Ngam build stronger customer relationships and loyalty programs. Since many consumers make purchase decisions on their own and value trust and transparency, the enterprise should focus on creating meaningful connections. This can be done by sharing the story of the rice, its local origins, and the benefits of traditional farming methods. Providing occasional discounts, special promotions for members, and small gifts can encourage repeat purchases. Responding to customer feedback and maintaining regular communication through social media can also build a loyal customer community that supports the enterprise over the long term.

4) The Pako Nyo Community Enterprise in Ban Pa Teng Ngam should develop strategic partnerships and expand its market access. Collaborating with local farmers ensures a steady supply of high-quality raw materials. Partnerships with health food stores, agricultural cooperatives, and Royal Project shops can help distribute the products in new areas. Working with government agencies, universities, and packaging companies can provide support in training, innovation, and quality certification. These collaborations will allow the enterprise to reduce costs, gain technical knowledge, and access new customer groups. Expanding into both online and offline markets through these partnerships will help the enterprise grow sustainably and add more value to local rice products.

Government Policy Recommendations

To support the value-added development of local rice products in the Pako Nyo Community Enterprise, the government should implement two key policy recommendations.

1) The government should establish a local product certification and branding support program. This policy should help small enterprises like the Pako Nyo Community Enterprise obtain quality and safety certifications for their rice products. Certification will increase consumer trust and improve market competitiveness. The program should also include training in packaging design, brand development, and online marketing to make local products more attractive and accessible to wider markets. This will allow community enterprises to respond to consumer demand for safe, chemical-free, and well-packaged rice products.

2) The government should develop a policy that promotes digital transformation in community enterprises. This policy should provide support in using online platforms, such as Facebook, Line, Shopee, and Lazada, to sell and promote local rice products. The government can offer digital literacy training, funding for digital marketing, and technical assistance for managing online shops. In addition, partnerships with logistics providers and mobile delivery services should be encouraged to expand distribution and improve customer convenience. This will help community enterprises adapt to new consumption patterns, especially among consumers who prefer to buy online. By promoting digital access and tools, the government can help local producers reach more consumers, increase income, and ensure the long-term sustainability of community-based enterprises.

Future Research Recommendations

1) Future research should explore the long-term impact of digital marketing strategies on consumer loyalty toward local rice products. While this study shows that online platforms such as Facebook and Line are effective in influencing purchase decisions, it is important to investigate how consistent digital communication, content design, and interaction with consumers can build trust and create repeat buying behavior over time. Researchers should also examine how digital media engagement differs across age groups and income levels. This will help the Pako Nyo Community Enterprise improve its online marketing and customer retention strategies by understanding which types of content and platforms are most effective for each target group.

2) Future studies should focus on developing and testing new product innovations based on consumer preferences and health trends. Since the findings highlight that most consumers value nutritious, chemical-free rice and prefer convenient packaging, researchers can investigate how to create value-added rice products such as ready-to-cook meal kits, organic rice snacks, or rice-based beverages. These products could be tested with consumer groups to measure acceptance, satisfaction, and willingness to pay. This type of research would support product development and help expand market opportunities beyond the traditional rice segment, ensuring that the community enterprise stays competitive and relevant in a changing market.

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