

กลยุทธ์ทางการตลาดสำหรับผลิตภัณฑ์แปรรูปจากมันเทศ

กรณีศึกษา ผู้บริโภคในเขตอำเภอเมือง จังหวัดสกลนคร

MARKETING STRATEGIES FOR THE PROCESSED SWEET POTATO PRODUCTS: CASE STUDIES OF CONSUMERS IN MUANG DISTRICT, SAKON NAKHON PROVINCE

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(Received: March 22, 2021; Revised: August 5, 2021; Accepted: December 3, 2021)

บทคัดย่อ

งานวิจัยนี้มีวัตถุประสงค์เพื่อ (1) ศึกษาพฤติกรรมของผู้บริโภคในการซื้อผลิตภัณฑ์แปรรูปจากมันเทศ (2) ศึกษาปัจจัยส่วนประสมทางการตลาดในการตัดสินใจซื้อผลิตภัณฑ์แปรรูปจากมันเทศ และ (3) เพื่อศึกษาพฤติกรรมผู้บริโภคที่มีผลต่อปัจจัยส่วนประสมทางการตลาดในการตัดสินใจซื้อผลิตภัณฑ์แปรรูปจากมันเทศผู้บริโภค ใช้แบบสอบถามเป็นเครื่องมือในการเก็บรวบรวมข้อมูล โดยสุ่มกลุ่มตัวอย่างแบบเฉพาะเจาะจงจากผู้บริโภคที่เป็นประชากรในเขตอำเภอเมือง จังหวัดสกลนคร จำนวน 400 คน สถิติที่ใช้ในการวิเคราะห์ข้อมูลของงานวิจัย ได้แก่ ความถี่ ร้อยละ ค่าเฉลี่ย และส่วนเบี่ยงเบนมาตรฐาน การทดสอบสมมติฐานใช้การทดสอบด้วยวิธี t-test F-test และ LSD ผลการศึกษาพบว่าระดับความคิดเห็นของผู้บริโภคที่มีต่อส่วนประสมการตลาดในภาพรวมอยู่ในระดับมาก ($\bar{X} = 4.38$) โดยความคิดเห็นในแต่ละปัจจัยอยู่ในระดับมากทุกด้าน ได้แก่ ด้านผลิตภัณฑ์ ($\bar{X} = 4.42$) ด้านราคา ($\bar{X} = 4.38$) ด้านการส่งเสริมการตลาด ($\bar{X} = 4.36$) และด้านช่องทางการตลาด ($\bar{X} = 4.34$) ตามลำดับ ผลการทดสอบสมมติฐานพบว่าการเลือกช่องทางการจำหน่ายผลิตภัณฑ์และปริมาณการซื้อต่อครั้งของผู้บริโภคมีอิทธิพลต่อปัจจัยส่วนประสมทางการตลาดในการซื้อผลิตภัณฑ์แปรรูปจากมันเทศที่แตกต่างกันอย่างมีนัยสำคัญทางสถิติที่ระดับ 0.05 ผลการวิจัยที่ได้ผู้วิจัยได้นำเสนอเป็นตัวอย่างแผนกลยุทธ์ทางการตลาดผลิตภัณฑ์แครกเกอร์มันเทศเพื่อเป็นแนวทางสำหรับเกษตรกรและผู้ผลิตผลิตภัณฑ์อาหารเพื่อเพิ่มมูลค่าให้กับผลผลิตทางการเกษตร

คำสำคัญ: ส่วนประสมทางการตลาด พฤติกรรมผู้บริโภค ผลิตภัณฑ์แปรรูปจากมันเทศ

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Abstract

The study of marketing strategies for new processed sweet potato products had three objectives. (1) To study consumer behavior in purchasing processed sweet potato products. (2) To study the marketing mix factors in purchasing processed sweet potato products. (3) To investigate the different consumer behavior affecting the marketing mix factors that affect consumers' purchases of processed sweet potato products. This research adopted a survey approach and used a questionnaire to collect data. Researchers used the Cochran method to estimate the sample sizes with the confidence level at 95 percentage. The sample consisted of 400 samples by purposive random sampling from consumers in the Muang district, Sakon Nakhon province. Descriptive statistics employed in this research were frequency, percentage, mean, and standard deviation-the hypothesis testing by t-test, F-test, and LSD. The research results revealed that the marketing mix's opinion level of overall marketing mix factors presented at the high-important level ($\bar{x} = 4.38$). Interestingly, consumers commented on the marketing mix as product factors ($\bar{x} = 4.42$), price factors ($\bar{x} = 4.38$), promotion factors ($\bar{x} = 4.36$), and place/ channels factors ($\bar{x} = 4.34$), respectively. The hypotheses test resulted that the product distribution selection and purchase amount per time had resulted in different factors affecting the purchase of processed sweet potato products, statistically significant at a level of 0.05. Furthermore, the output of this research, the strategic marketing plan for sweet potatoes crackers, was presented as guidelines for the farmer of food product manufacturers to add value to agriculture productivity.

Keywords: Marketing Mix, Consumer Behavior, Sweet Potato Processed Products

1. Introduction

The seasonal drought and rise of the COVID-19 pandemic affect people, especially the agricultural sector of Thailand, leading to farmers having lower incomes and suffering losses. Sweet potato farmers in Sakon Nakhon province are also affected by these problems (National News Bureau of Thailand, 2020). According to the season, the price of the small size sweet potatoes fell from 12 - 18 to 12 - 15 baht/ kilograms in the harvest in the year 2020 (Talaadthai, 2020). While farmers could sell at 7 baht/ kilograms at the farm, some surplus Agri-products could not be sold to the market resulting in spoilage.

The sweet potato is scientifically known as *Ipomoea Batatas Lam*. Sweet potato is an annual plant, ivy creeping along the ground widely grown in tropical, subtropical regions, over 6,500 varieties of sweet potatoes worldwide. Sweet potato varieties range in color from dark red to brown to purple to orange-yellow to white. Sweet potatoes have different sizes, shapes, and textures with a sweet, creamy taste (Hayati et al., 2020). United Nations Food and Agriculture Organization (2020) reported that sweet potato was a

potential crop in developing countries but might be a less important crop in some developed countries. Sweet potatoes are a good source of vitamins A, B2, B6, C, E, and minerals such as manganese, folate, calcium, potassium, copper, iron, pantothenic acid, and antioxidants beta-carotene (Pobpad, 2020). In addition, the sweet potato also helps the digestive system works better, helps with the constipation system, and can prevent colon cancer (Paolo Hospital, 2020). Nowadays, sweet potatoes can be processed into snack food such as Bua Loy, fresh plant-based milk, french fries, or fried crispy. Thus, if any agri-business could produce sweet potatoes into a healthy product, it would get even more attention as consumers' health trends (Kasikorn Research Center, 2020).

Finally, to comprehend the purpose of this article, which aims to introduce brand-new processed sweet potato products. Researchers followed the new-product development process as constructed by Marshall & Johnston (2015) that compiled three main activities: (1) identifying the opportunities of the product, (2) setting the product opportunity, and (3) developing the product opportunity. This study scope only the consumer in Muang district, Sakon Nakhon province, and the sweet potato farmer in Sakon Nakhon province affected by drought and low income. Therefore, the researchers were interested in discovering consumer behavior and marketing mix factors of processed sweet potatoes for developing new products and creating a marketing strategy plan for processed sweet potatoes, which guideline for farmer and food product manufacturers to add value to productivity.

2. Objectives

1. To study consumer behavior in purchasing processed sweet potato products.
2. To study the marketing mix factors affecting consumers' purchase of processed sweet potato products.
3. To investigate the different consumer behavior affecting the marketing mix factors that affect consumers' purchases of processed sweet potato products.

3. Literature Review

“Marketing” is the process of value-creating for customers and driving customer relationships strongly; thus, the enterprises will receive high revenue in return. The marketing process model for creating and capturing customer value was in steps. First, the enterprises need to know customer insights, create customer value, develop customer loyalty, and finally avail superior customer value rewards. Moreover, the 4Ps strategy: product, price, place /channel, and promotion strategies could drive the marketing value creation (Kotler & Armstrong, 2016).

“Consumer behavior” is widely studied nowadays to understand consumer insight or marketing factors that stimulate consumers both internal and external influences (Armstrong et al., 2018). Personal attributes frequently used to define an individual

consumer include gender, age, education, profession, income, and lifestyle (Marshall & Johnston, 2015). When consumers made the purchasing decisions, used and disposed of purchased goods or services, it also included factors that influence decisions and product use. Meanwhile, consumer products and service preferences are constantly changing in trend. Therefore, marketing managers must understand consumers' desires to create the appropriate marketing mix for a well-defined market (Kotler & Armstrong, 2016; Lamb, Hair, & McDaniel, 2017).

Tomczak, Reinecke and Kuss (2018) stated that "another marketing feature was innovation orientation." For example, suppose a company aligned its range of goods and services with fast changes in customer demands. Then, the new products must be launched, or new sub - markets must be developed at regular intervals - innovations in terms of products, product features, or advertising. Thus, the key instruments for differentiating oneself from the competition and offering potential buyers advantages led to purchasing decisions and satisfied the target market. In addition, the marketing manager should deal with digital marketing communication as follow: using a newsletter to generate interest, communicating the value proposing of brand - product, creating visual media, launching a campaign on a crowdfunding website, and recording customer detail for the next contact (Pranam, 2018).

Visanyangkul and Khamdej (2011) indicated that consumers mostly purchased healthy food for healthy purposes. The relationship of marketing mix factors and purchasing decision found that factors of product, place, and promotion influenced the decision of purchasing healthcare products of the workingman in Bangkok. Interestingly, Sirisatsuvon, Tiangsoongnern and Parncharoen (2019) suggested that the model assessment of the causal factors between marketing factors (brand, communication, attribute, consumption environment, sales promotion, price, package, sales interaction, and health/nutrition benefit) that impulse purchasing behavior of snack food consumers in Thailand. As a study by Oliveira et al. (2020) indicated, the consumers in preference were often related to price, flavor, and subtle differences between the processed sweet potato products. Moreover, Marshall and Johnston (2015) described that the unique characteristic of consumers were the critical factors in consumer decision-making, affecting information search, possible product choices, and product purchasing decisions. Finally, the researchers would summarize the conceptual framework as presented in Figure 1.

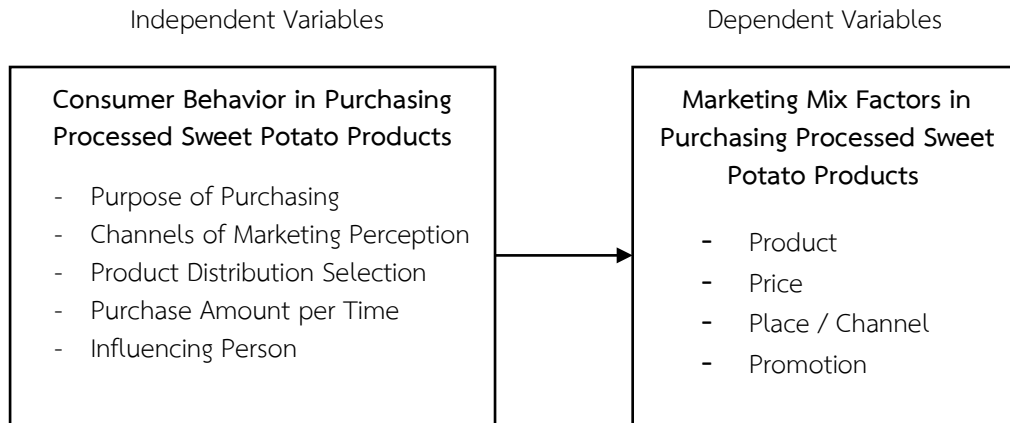


Figure 1 Conceptual Framework

As figure 1, this research focused on the variables, which were (1) the independent variables: consumer behavior in purchasing processed sweet potato products; the purpose of purchasing, channels of marketing perception, product distribution selection, purchase amount per time, and influencing person and (2) the dependent variables: the marketing mix factors in purchasing processed sweet potato products: product, price, place /channel, and promotion. Therefore, this research hypothesis was “Difference of consumer behavior influenced the marketing mix factors that differently affect consumers’ purchases of processed sweet potato products decision.”

4. Research Methodology

Population and Sample

The people selected for this study were consumers in Muang district, Sakon Nakhon province. Since Sakon Nakhon’s citizens were 1.15 million people (Sakon Nakhon Provincial Statistical Office, 2020), the exact number of the population who had ever purchased sweet potato products in the past six months was unknown. Then, the sample size calculation with a 95% confidence level led to a sample size of at least 384 samples (Cochran & Cox, 1957). Thus, for the convenience of data analysis, the researchers decided to use a sample size of 400 samples, considering exceeding the earlier criteria. This study used non-probability sampling by employing the purposive sampling method from Sakon Nakhon’s consumers in the Muang district.

Research Tools

The quantitative research tool used in this study was the questionnaire present in 4 parts: (1) consumer demographic factors, (2) consumer behavior in purchasing processed sweet potato products, (3) marketing mix affecting the purchase of processed sweet potato

products, and (4) suggestion on sweet potato products development. In addition, the questionnaire contained the questions of closed-ended type (part no. 1 - 2), Likert's scale method with five levels including the very low important level – very high important level (part no. 3), and opened-ended type (part no. 4).

For construct validity, the draft questionnaire had been validated and evaluated by three experts (Kumar, 2011). Finally, researchers obtained the appropriate questionnaire for 30 try-out samples (Stockemer, 2019). Then, the questionnaire reliability of 25 item Likert scale questions that statistically evaluated at 0.96, and all factor elements also passed the evaluation accepted at >0.80 from Cronbach's alpha reliability testing (Engel & Schutt, 2017).

Data Analysis

The collected data from the completed questionnaires were analyzed using the Statistical Package for Social Sciences (SPSS) version 22. This research had employed descriptive statistics: Frequency and Percentage for analyzing collected data of part no. 1 - 3 of the questionnaire and Mean (\bar{x}), and Standard Deviation (S.D.) for analyzing collected data in part 4 of the questionnaire and Content Analysis using for part 5 of the questionnaire (Engel & Schutt, 2017). The interpreting data analysis of the mean level was as follows: mean score 1.00 - 1.49 = Very Low Important, 1.50 - 2.49 = Low Important, 2.50 - 3.49 = Average Important, 3.50 - 4.49 = High Important, and 4.50 - 5.00 = Very High Important (Silpcharu, 2020).

Hypothesis testing by the dependent t-test comparing the means of two related groups to determine whether there is a statistically significant difference between these means. The inferential statistics consist of t-Test and One-way Analysis of Variance (ANOVA). In finding differences with statistical significance, the researchers would investigate them in pairs with a significant level of 0.05 using Fisher's Least Significant Difference. (Kirk, 1995).

5. Research Result

According to the analysis of the data, the result of the research can be summarized as follows:

Consumer Demographic Factors

Most of the consumers were female (66.00%), age not over 25 years (81.30%), bachelor's degree education (82.50%), an average personal income not more than 10,000 baht (68.60%), and the current profession is the student (72.80%).

Consumer Behavior

Based on the research, consumers decided to buy processed sweet potato products for consumption by themselves (72.10%). Interestingly, the consumers recognized processed sweet potato products via the internet and social media platforms (46.40%). Consumers bought processed sweet potato products at a store/ convenience store

(79.30%), the amount of purchase was not more than 100 baht/time (63.80%), and the friends were their influencing person (41.90%).

The Importance Extent of Marketing Mix Factors

Table 1 The importance level of consumers' opinion on the marketing mix factors in purchasing processed sweet potato products

Marketing Mix Factors in Purchasing Processed Sweet Potato Products	\bar{X}	S.D.	Importance Level	Cronbach's Alpha
Product Factors	4.42	0.51	High Important	0.925
- Modern Design Packaging	4.34	0.67	High Important	
- Product Quality	4.47	0.62	High Important	
- High Nutrition	4.42	0.66	High Important	
- Low Calories	4.34	0.73	High Important	
- GMP Standard	4.43	0.67	High Important	
- Organic Product	4.44	0.68	High Important	
- Variety of Pack Size	4.43	0.71	High Important	
- Specifying Manufacture and Expiration Date	4.54	0.67	Very High Important	
Price Factors	4.38	0.59	High Important	0.871
- Reasonable Quantity Price	4.44	0.72	High Important	
- Reasonable Quality Price	4.42	0.69	High Important	
- Various Payment Methods	4.39	0.73	High Important	
- Special Promotional Price	4.26	0.81	High Important	
Place/ Channel Factors	4.34	0.61	High Important	0.902
- Offline/ Convenience Shop	4.45	0.68	High Important	
- OTOP Shop	4.22	0.84	High Important	
- Kiosk in Department Store	4.27	0.75	High Important	
- Online Platform	4.32	0.79	High Important	
- Social Media	4.38	0.75	High Important	
- Home Delivery	4.40	0.72	High Important	
- Cash on Delivery (COD)	4.36	0.77	High Important	
Promotion Factors	4.36	0.57	High Important	0.906
- Social Media Communication	4.46	0.64	High Important	
- Outdoor Advertising	4.23	0.84	High Important	
- Sales Representative	4.41	0.67	High Important	
- Sales Promotion	4.39	0.67	High Important	
- Tasting Booth	4.35	0.69	High Important	
- Review of Influencer via social media	4.30	0.78	High Important	
Overall	4.38	0.52	High Important	

Table 1, overall marketing mix factors in purchasing sweet potato products at the high-important level (\bar{X} = 4.38). There was also a high-important level in each element factor; product (\bar{X} 4.42), price (\bar{X} = 4.38), promotion (\bar{X} = 4.36), and place /channel (\bar{X} = 4.34), respectively.

When considered individually, the top 3 ranking on the product factors; consumers opinioned at the very high important level about the issue of specifying the manufacturer and expiration date (\bar{x} = 4.54), followed by the high-important level about the product quality (\bar{x} = 4.47), and organic products (\bar{x} = 4.44), respectively.

In terms of price, shown; consumers gave opinions on price factors at the high-important level regarding the price factors, whether it was reasonable quantity price (\bar{x} = 4.44), followed by reasonable quality price (\bar{x} = 4.42), various payment methods (\bar{x} = 4.39), and special promotional price (\bar{x} = 4.26), respectively.

Regarding place/ channel, researchers found that top 3 rankings; consumers gave opinions on place/ channel factors at the high-important level, regarding the product distribution channels through the offline/convenience store (\bar{x} = 4.45), home delivery (\bar{x} = 4.40), and social media channels (\bar{x} = 4.38), respectively.

When considering marketing promotion factors, the top 3 rankings were; consumers gave opinions at high-important level regarding communication through the social media platforms such as Facebook, Instagram, or YouTube (\bar{x} = 4.46), followed by good services of sales representatives (\bar{x} = 4.41), and sales promotion \bar{x} = 4.39), respectively.

Hypothesis Testing Results

Table 2 Hypothesis test result of different consumer behavior resulted in different marketing mix factors in purchasing processed sweet potato products

Consumer Behavior	Marketing Mix Factors				
	Product	Price	Place/ Channel	Promotion	Overall
Purpose of Purchasing	0.705	0.515	0.283	0.255	0.422
Channels of Marketing	0.063	0.300	0.158	0.268	0.151
Product Distribution Selection	0.038*	0.006*	0.010*	0.007*	0.005*
Purchase Amount per Time	0.002*	0.041*	0.004*	0.006*	0.005*
Influencing Person	0.245	0.296	0.752	0.251	0.344

*Statistically significance level at 0.05

Table 2, hypothesis test results show that consumers chose the different selecting on product distribution selection and purchase amount per time commented on the decision to purchase processed sweet potato products differ statistically significantly at a level of 0.05 both overall and marketing factors. Nevertheless, there were no differences between consumers' behavior factors with purchasing purpose, channels of marketing

perception, and influencing persons toward the marketing mix factors in purchasing processed sweet potato products.

Table 3 Test result of different consumer behavior on channels of product distribution selection resulted in different marketing mix factors in purchasing processed sweet potato products

Marketing Mix Factors	Consumer Behavior: Channels of Product Distribution Selection			
	Offline	Online	t-value	P-value
	\bar{x}	\bar{x}		
Product	4.53	4.40	-2.080	0.038*
Price	4.54	4.33	-2.778	0.006*
Place/ Channel	4.49	4.30	-2.599	0.010*
Promotion	4.51	4.32	-2.717	0.007*
Overall	4.52	4.34	-2.796	0.005*

*Statistically significance level at 0.05

Table 3, the LSD test result found that the consumers who purchase processed sweet potato products through the offline store rated importance in purchasing processed sweet potato products over consumers who chose online in all factors at statistically significant of a 0.05 level

Table 4 Test result of different consumer behavior on purchase amount per time resulted in different marketing mix factors in purchasing processed sweet potato products

Marketing Mix Factors	Consumer Behavior: Purchase Amount per Time					F-Value	P-Value
	<100฿	101-300฿	301-500฿	>500฿			
	\bar{x}	\bar{x}	\bar{x}	\bar{x}			
Product	4.42	4.37	4.74	4.25	5.071	0.002*	
Price	4.36	4.31	4.66	4.46	2.780	0.041*	
Place/ Channel	4.30	4.34	4.73	4.31	4.456	0.004*	
Promotion	4.32	4.36	4.71	4.30	4.240	0.006*	
Overall	4.35	4.35	4.71	4.33	4.346	0.005*	

*Statistically significance level at 0.05

Table 4 shows that consumers who spent 301-500 baht per purchase/ time of processed sweet potato products were more focused on the purchase factor of processed sweet potato products than consumers who spent other amounts on all marketing mix factors at the statistical significance of 0.05 level.

6. Conclusion and Discussion

This study contributes to understanding different factors on consumer purchasing behavior based on several independent variables: gender, age, education level, personal income, profession led to consumer behavior which affect the decision on marketing mix factors. Supported as Marshall and Johnston (2015) described, unique characteristics like age, income, and education play a critical role in consumer decision-making, affecting information search, possible product choices, and product decisions. In this study, most of the respondents were students, age not over 25 years; thus, this generation consumer behavior would be interested in new food products with reasonable price affordable. In addition, the hypothesis test results revealed that the difference in the amount of money that consumers purchased the processed sweet potatoes per time affected the different decisions on the marketing mix factors.

The researcher had compared the research results with the study of Sirisatsuvon, Tiangsoongnern and Parncharoen (2019) and found a positive output that the marketing factors that impulse purchasing behavior of snack food consumers in Thailand separated by XYZ generation. For example, generation X was concerned about the price factor; meanwhile, generation Y was concerned about nutrition, but generation Z paid attention to the packaging as an essential factor. This issue also was supported by Oliveira et al. (2020), who found that the consumers in São Paulo prefer non-traditional sweet potato products that meet the consumers' expectations. Consequently, Arwachyntia and Dyna Herlina (2014) pointed out that satisfied young customers in Indonesia were always searching for information from alternative food manufacturers because high acceptance level of sweet Potato-Based Foods Product Innovation factors. Furthermore, Oliveira et al. (2020) mentioned that the consumers were willing to pay for susceptible prices relative to more traditional and familiar potatoes. Thus, this value research output helps the marketers create a market or consumer segmentation.

In Thai consumers' opinion, the product element is an essential element of the marketing mix; this point supported by Mmasa and Mlambiti (2015) revealed that consumers in Tanzania mentioned that the primary factors for purchasing processed food products were product factors, especially the attractive packaging and brand loyalty. In addition, the consumer rate the price, promotion, and place/channel as consequent elements, supported with Mmasa and Mlambiti's study (2015), pointed out that advertisements, availability, price, and shop loyalty as other decision factors to purchase processed food. Therefore, this research could strongly insist that the product strategies were critical to driving the marketing value creation, as Kotler and Armstrong (2016) suggested.

The research discovered that consumers rated high-level opinions on product distribution channels through the offline/ convenience store. Moreover, the hypothesis testing result also showed that the consumers who purchased processed sweet potato products through the offline store commented on all marketing mix factors over

consumers who chose online at a statistically significant of 0.05 level. Therefore, because the processed sweet potato products were consumer product likes snack either or fresh-cooked product, thus offline convenience shop must be the best channel for product distribution. Visanyangkul and Khamdej (2011) supported these results, who found that different purchasing behavior on purchasing objective, purchasing place purchasing frequency, repurchasing, purchasing time, and average expense influenced the different purchasing decisions healthcare products of working people in Bangkok. In addition, consumer demographics are essential in market segmentation and marketing plans (Kotler & Armstrong, 2016; Lamb, Hair, & McDaniel, 2017).

In conclusion, this research revealed that consumers could accept the new healthy product produced from sweet potatoes as innovative products that should be launched to respond to fast changes in customer demands (Tomczak, Reinecke, & Kuss, 2018). Furthermore, consumer insight can potentially assist product manufacturers, or marketers know which attributes to target to enhance innovative product development and marketing.

7. Limitation and Suggestion

1. In this research, the sample was just selected from the consumers in Muang district, Sakon Nakhon province only, due to restrictions in the time of the Covid-19 pandemic situation. Thus, in future studies, the researcher would expand the area to collect samples. Further analysis of consumer preferences and willingness to pay for sweet potatoes should be of great interest for growers, manufacturers, distributors, and retailers in the industry.

2. For future researchers or marketers require a deeper analysis of demographic factors, especially gender and personal income, which directly affect consumer behavior for other new products. Moreover, the study of offline and online product distribution channels should focus on future studies to analyze the differences between these consumers' behavior to develop the right marketing strategies. Interestingly, marketing communication through social media platforms such as Facebook, Instagram, or YouTube was of the highest importance for consumers because most teenagers are familiar with mobile use as a multi-purpose device. Therefore, future studies may analyze the communication content of new food products, which arouse high impact through consumers via a social media platform.

3. According to the surplus Agri-products; thus, the researchers would like to suggest a strategic marketing plan that can benefit from this work, especially for sweet potato farmers in Sakon Nakhon province or food manufacturers. Therefore, guidelines of strategic marketing plan for the new product development of processed sweet potato crackers product are divided into 5-part as follows.

3.1 Target consumer: Major target market is female consumers, age not over 25 years, personal income not over 10,000 baht.

3.2 Product Strategy: Sweet potato crackers is a healthy product baked with purple sweet potato flour. According to the consumers' opinions, the manufacturer should produce the processed product from organic ingredients, high nutrition, low calories, GMP standard, and modern packaging. Therefore, the designed packaging with a white plastic stand-up sachet with a clear window and zip lock for easy storage or sharing in the next meal, measuring 12 x 20 x 4 centimeters, and the logo in front of the packaging. The detail on the label showed the product and manufacturing information with the purple font (Figure 2-3).

3.3 Price Strategy: The selling price calculation, using the mark-up on price method, calculated the production cost plus 40% of margin, so the estimated selling price should be at least 38.03 baht/pack. Therefore, the price strategy such as psychological pricing was an odd number ending price. As a result, the sweet potato cracker with mulberry on top, which contains 70 grams, retail price of 39.00 baht per pack.

3.4 Place /Channel Strategy: The distribution of products should be in two channels. An offline channel through a kiosk at the convenience stores and OTOP shop (Figure 4) while online channels via a social media platform. In addition, the producers and distributors should distribute a wide variety of products to reach the desired target groups, such as Shopee, a popular e-marketplace, and selling this can attract more consumers.

3.5 Promotion Strategy: The variety of promotion activities would arouse consumers to perceive, recognize, understand, and convince them to purchase products to achieve the sales goals. Integrated marketing communication tools should be applied to online and offline platforms, whether via advertising, public relations, or sales promotion, which could help motivate consumers to try out and purchase intention. For example, the product samples distributed must be at the kiosk during the product launch period. In addition, consumer challenge activities, such as new product testing or sharing posts on Facebook to get rewards, will be the suitable motivation tactic (Figure 5).



Figure 2 Mockup of sweet potato cracker with dry mulberry topping

หม่อน ม่วง มิน
แคร์เกอร์มินเทศ

**Sweet Potato Crackers
On Top Mulberry**

ส่วนประกอบ	
แป้งสาลี	40 กรัม
เนื้อมันเทศ	20 กรัม
แป้งมันเทศ	20 กรัม
บัลเบอร์รี่	4 กรัม

ประโยชน์ของมันเทศ

- วิตามิน เอ มีบทบาทสำคัญต่อสุขภาพ ช่วยบำรุงสายตาและผิวพรรณ เสริมสร้างระบบภูมิคุ้มกัน ช่วยป้องกันการเจ็บป่วยด้วยโรคและอาการทางชนิด
- มีส่วนช่วยในเรื่องของการลดระดับน้ำตาลในเลือดในผู้ป่วยโรคเบาหวานได้
- มีสารแอนโทไซยานินสูง ซึ่งสารนี้มีคุณสมบัติเป็นสารต้านอนุมูลอิสระในร่างกาย

น้ำหนักสุทธิ 70 กรัม

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Figure 3 Prototype of logo and packaging design



Figure 4 Prototype of a kiosk at convenience stores

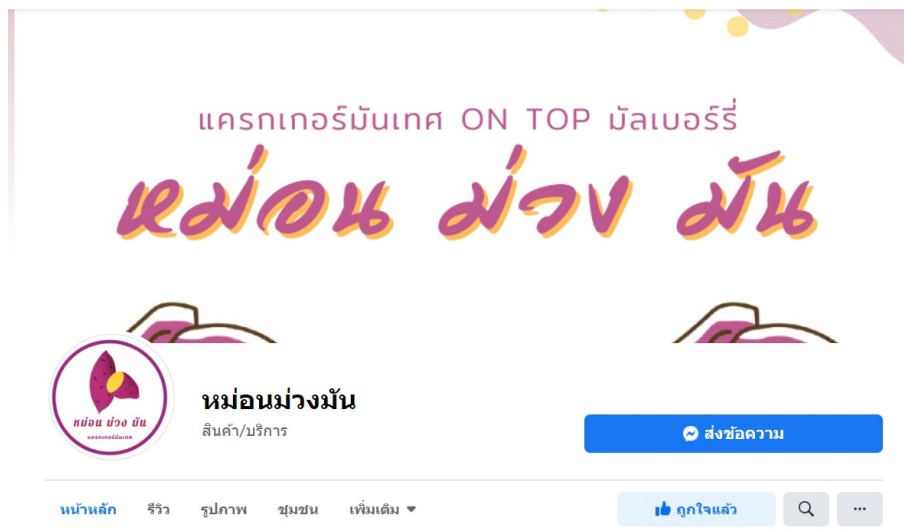


Figure 5 Facebook Fanpage “หม่อน ม่วง มัน”

8. Acknowledgment

Thankful for the support team: Natthanicha Yanin, Duangkamon Maneerat, Thitima Yaipheng, and Netnapha Phangdee.

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