

THE INFLUENCE OF MARKETING FACTORS ON CONSUMERS' DECISION IN PURCHASING PACKAGED DAIRY PRODUCTS: THE EVIDENCE FROM SICHUAN PROVINCE

Yinglong Zhang¹

Phatthararuethai Kenikasahmanworakhun^{1*}

Received 2 March 2023

Revised 24 March 2023

Accepted 29 March 2023

Abstract

Understanding the factors that influence consumers' purchasing decisions is essential for businesses in the packaged dairy products industry. As these factors could assist companies to understand customers' expectations and requirements, responding to them, and providing goods and services at values at which consumers are prepared to pay, this study had two primary objectives: 1) to investigate the personal factors affecting consumers' decisions in purchasing packaged dairy products, and 2) to examine the marketing mix factors (4C's) affecting consumers' decisions in purchasing packaged dairy products. The sample used in this study was 400 consumers purchasing packaged dairy products from Yili and Yangping brands and residing in Sichuan Province, China. The method for collecting data in this research was a questionnaire with a reliability of 0.957. Statistics used in data analysis were frequency, percentage, mean, standard deviation, and multiple regression analysis.

The study reports that: 1) Customers' personal characteristics, such as gender and age, have a statistically significant impact on their decisions to purchase packaged dairy products.; and 2) marketing mix factors, also known as the "4 C's," have a statistically significant impact on consumers' decisions to buy packaged dairy products; the "4 C's" include consumers' want and needs, cost to satisfy, convenience to buy, and communication.

Keywords: Marketing Mix Factors (4c's), Consumers' Decision, Dairy Products

¹ Faculty of Business Administration, Thongsook College. E-mail: yinglong.thongsookcollege@hotmail.com

* Corresponding author e-mail: oilpunpun2522@gmail.com

Introduction

With a total sales volume of \$66.05 billion, China is currently the world's second-biggest dairy market, ranking behind only the United States, which holds the title of the world's largest dairy market. At the same time, it was anticipated that the market for dairy products in the United States would be worth \$64.8 billion (Euromonitor International, 2020). The Sichuan New Hope Dairy Company, Ltd. is in the business of manufacturing a variety of dairy products and milk beverages, among other things. By placing a high value on the quality and safety of its products and making a commitment to society, the company adopts governance, acts with integrity, employs advanced technology and equipment, and employs strict quality control management. This is the foundation of the company's commitment to society, and consumers are willing to buy confidently.

In the present time, many different types of businesses that are associated with processed products are becoming increasingly competitive. This is one of the circumstances leading to the creation and development of new products that are related to processed goods. Many marketing strategies have been invented with similar aims in customer interest for the business to operate efficiently and grow among future entrepreneurs. Because of this, more emphasis is being made on the packaging that is associated with processed items to make their products stand out as being innovative and eye-catching (Kauf & Tuczak, 2016).

As a result, product packaging has assumed a position of utmost importance, and it is now the primary component of the manufacturer that serves as a tool for assisting in the ongoing competition in the market (Azad & Masoumi, 2012). Therefore, products and packaging have always been a pair—the more competitive the product, the better the packaging. It has been widely assumed that packaging plays a significant role in business success. In the old days, the purpose of packaging was to keep the product intact for a while or until it was applied. Still, when there is more commercial competition, the packaging plays a role in the field of marketing promotion, starting to focus on beauty and an eye-catching design in addition to user-friendliness. This is because the packaging has a direct impact on consumer purchasing decisions. In addition to the style of packaging, there is a role for consumers' further decisions in choosing to consume that product. The external and internal elements that influence consumers' decisions to purchase a wide variety of products are collectively referred to as consumer behaviour. Consumer behaviour is about a specific aspect of human expression in certain subjects, such as matters relating to purchasing goods and services from various marketing organizations. What is the process of

deciding for consumers to purchase goods and services, together with the mental and physical activities necessary to make a decision? Much of it is a matter of understanding the individual's existence and the practices or actions between them and their surroundings, including all business organizations.

The behaviours that people take concerning purchasing and consuming goods or services go through a process known as an exchange, in which those people are required to make decisions both before and after carrying out their behaviours (Qazzafi, 2019). This depends on the preferences and needs of the individual, who must have a stimulus that causes demand and cause a response by the nature of the buyer, who is influenced by various factors including cultural factors, social factors, personal factors, and psychological factors. The individual must have a stimulus that causes demand and cause a response by the nature of the buyer (Santosa, 2021). Nonetheless, issues related to the market are essential for business operations. The 4P marketing principle is a traditional marketing perspective that focuses on pushing the product through various marketing strategies. Because this principle serves as the foundation of both the company and numerous marketing research articles, it is often referred to as "traditional marketing." However, this study examines the customer's point of view through the 4C's of market mix factors, which are the consumer's point of view and consist of consumers' wants and needs, cost to satisfy, convenience to buy, and communication. These factors assist businesses in gaining an understanding of the needs and requirements of customers, providing a response to those needs and requirements, and providing goods and services at prices that customers are ready to pay for. Customers will find it much simpler to explore and purchase items in this way. Businesses can benefit from this since it helps them learn how to convey customer needs more effectively (Kotler & Armstrong, 2021).

As a result, the researchers intended to investigate both the personal factors and the marketing mix factors (4C's) that influence consumers' decisions regarding the purchase of packaged dairy products. A clearer picture of the opinions and behaviours of customers would emerge as a result of this. The findings of this study will be used as a reference for the strategic planning of the dairy products business, which is essential for the company to enter the market efficiently and effectively. In addition to this, there is a possibility that it will raise the level of satisfaction perceived by customers regarding the things they purchase. It has the potential to eventually have a direct effect on the increase in sales for the entire company.

Research Objectives

1. To investigate the personal factors affecting consumers' decisions in purchasing packaged dairy products.
2. To examine the marketing mix factors (4C's) affecting consumers' decisions in purchasing packaged dairy products.

Research Hypothesis

1. The differences in customers' personal factors have a statistically significant impact on their decisions in purchasing packaged dairy products.
2. The marketing mix factors (4C's) have a statistically significant impact on consumers' decisions in purchasing packaged dairy products.

Conceptual Framework

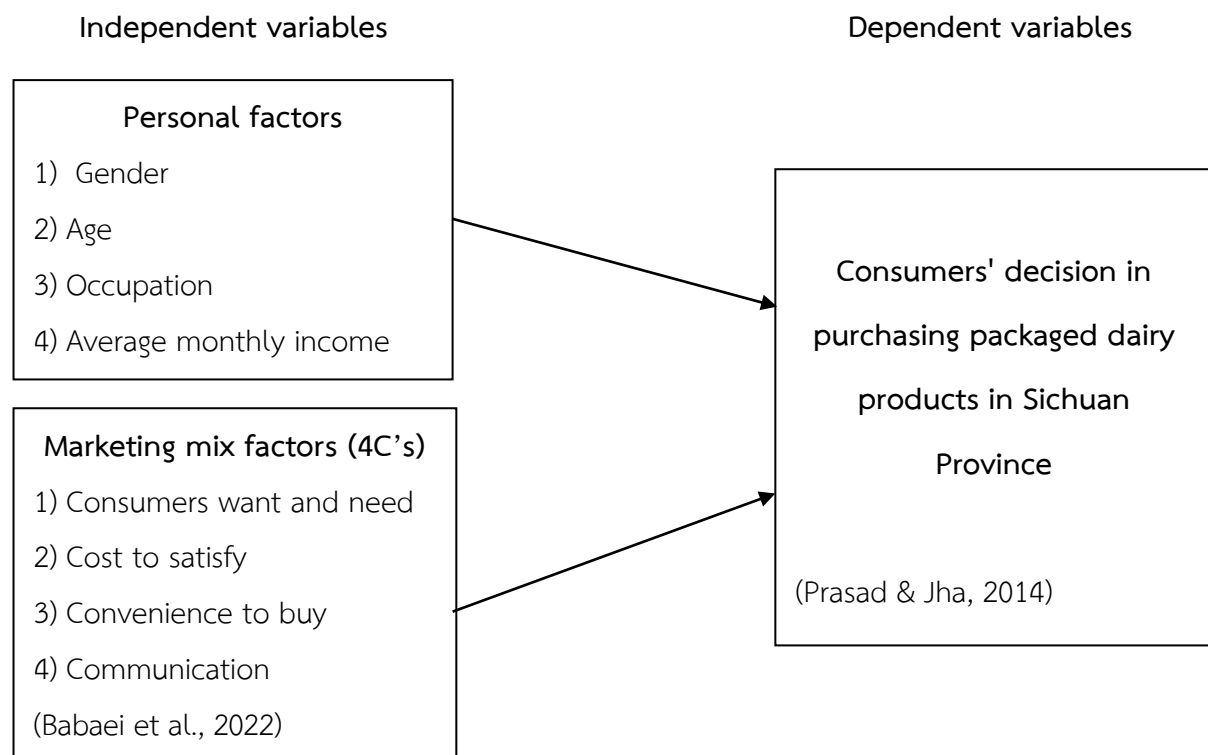


Figure 1 the conceptual framework

Literature Review

Concepts and theories about marketing mix factors (4C's)

To achieve marketing objectives, businesses must meet the needs of their customers, which is why consumers' perspectives on the marketing mix are crucial. Wu and

Li (2018) highlight the importance of considering the marketing mix from the consumers' point of view. The 4C's marketing mix, which differs from the classic 4P's, emphasizes a consumer-oriented approach that takes into account the needs and preferences of modern, well-informed consumers who are faced with an oversaturated market of goods and services (Jarad, 2020). The 4C's model encompasses four key factors that businesses must consider when catering to customers: 1) customers' wants and needs, as they always weigh the value and benefits against the cost of a service or product; 2) cost to satisfy, which reflects the price that customers are willing to pay for a high-quality service; 3) convenience to buy, which refers to the efforts made by businesses to make it easier for customers to purchase their products or services; and 4) communication, which includes providing helpful information to customers and establishing channels for feedback and complaint resolution (Babaei et al., 2022).

Concepts and theories about consumers' decision to purchasing

The decision to purchase a consumer refers to buying goods or services in exchange for money in the market, both before, during, and after the purchase process (Qazzafi, 2019). The seller of the product or service and the buyer have a direct relationship in both organizational and consumer purchasing settings (Jaakkola, 2007). The basic concepts for understanding the consumer evaluation process in purchasing are: 1) consumers seek to satisfy their preferences, 2) consumers looking for the benefits of a product to solve problems, and 3) consumers evaluate each product based on its properties that can deliver benefits to satisfy their needs. The properties that interest consumers vary depending on the product type, such as a hotel's location, atmosphere, service, cleanliness, price, and more (Prasad & Jha, 2014).

Research Methodology

The research population consisted of consumers who purchased packaged dairy products from Yili and Yangping brands and resided in Sichuan Province, China. The exact population size is unknown. Data was collected from a sample of 400 individuals, calculated using the Cochran (1977) sampling formula. The researchers used convenience sampling methods to select participants and distributed questionnaires to collect the necessary data.

The data collection tool utilized in this research was a questionnaire that was developed based on previous studies, literature review, and related research to ensure that the questions aligned with the research objectives. The questionnaire consisted of four parts.

The first part was related to personal factors and comprised four items: gender, age, occupation, and average monthly income. The second part was focused on the marketing mix factors (4C's) and comprised of four items: consumers' wants and needs, the cost to satisfy, convenience to buy, and communication. It utilized a 5-point rating scale and demonstrated good reliability between 0.821 to 0.855. The third part consisted of five items related to consumers' decisions in purchasing packaged dairy products, with a 5-point rating scale and reliability of 0.801. The fourth part was open-ended and intended for additional suggestions and comments. The overall questionnaire had a high reliability of 0.957, which exceeded the acceptable threshold of 0.70, indicating its strong reliability (George & Mallery, 2016).

In this research, the collected data was analyzed using both descriptive and inferential statistics. Descriptive statistics, including frequency, percentage, mean, and standard deviation, were utilized to provide an overview of the preliminary data. Additionally, inferential statistics were employed to test research hypotheses with a statistical significance level set at 0.05. Various statistical techniques, such as t-test, F-test, and multiple regression analysis, were utilized to analyze the data and draw meaningful conclusions.

Research Results

Upon analyzing the personal factors of the respondents, it was discovered that the majority of the participants were female (56.00%). Furthermore, 37.50% of the respondents were between the ages of 20-30 years old, and 48.75% of the participants worked for private companies. In addition, 39.75% of the respondents had an average monthly income not exceeding 2,000 yuan.

Table 1 shows the average and standard deviation of marketing mix factors (4C's).

Factors	Mean	SD	Level of opinion
Marketing mix factors (4C's)	3.71	0.72	High
- Consumers want and need	3.78	0.75	High
- Cost to satisfy	3.73	0.76	High
- Convenience to buy	3.67	0.77	High
- Communication	3.65	0.88	High
Consumers' decision in purchasing packaged dairy products	3.72	0.72	High

Based on the data presented in Table 1, it can be observed that the respondents hold a high level of positive opinions towards each aspect of the marketing mix factors (4C's) and their decision to purchase packaged dairy products in Sichuan province.

Table 2 shows the hypothesis testing of personal factors on consumers' decisions in purchasing packaged dairy products.

Personal factors	Statistics used	Statistical values	p-value
- Gender	t-test	-3.234	0.001*
- Age	F-test	9.438	0.000*
- Occupation	F-test	0.451	0.637
- Average monthly income	F-test	1.813	0.144

* Statistically significant at the level of 0.05.

Table 2 indicates that the differences in personal factors, such as gender and age, have a significant impact on consumers' purchasing decisions for packaged dairy products in Sichuan Province at a 0.05 level of statistical significance.

Table 3 shows the hypothesis testing of marketing mix factors (4C's) on consumers' decisions in purchasing packaged dairy products.

Marketing mix factors (4C's)	b	Std. Error	B	t	p-value	Tolerance	VIF
Constant	0.544	0.100		5.439	0.000*		
- Consumers want and need	0.175	0.040	0.182	4.428	0.000*	0.366	2.733
- Cost to satisfy	0.245	0.047	0.259	5.155	0.000*	0.245	4.086
- Convenience to buy	0.177	0.041	0.191	4.277	0.000*	0.309	3.238
- Communication	0.261	0.043	0.319	6.116	0.000*	0.227	4.408
R = 0.870, R ² = 0.757, Adjusted R ² = 0.754, SE _{EST} = 0.356, F = 307.051, p-value = 0.000*							

* Statistically significant at the level of 0.05.

Based on the results presented in Table 3, it was found that marketing mix factors (4C's), namely consumers' wants and needs, cost to satisfy, convenience to buy, and communication, significantly influenced consumers' decision to purchase packaged dairy

products in Sichuan Province at a statistical significance level of 0.05. The four variables combined were able to predict 75.7% of the variability in consumers' decision to purchase packaged dairy products in Sichuan Province.

The forecasting equation can be written in terms of the score as follows:

$$Z = 0.182 \text{ (Consumer want and need)} + 0.259 \text{ (Cost to satisfy)} + 0.191 \text{ (Convenience to buy)} + 0.319 \text{ (Communication)}$$

Discussions

The present study examined the impact of personal factors on consumers' purchasing decisions for packaged dairy products in Sichuan province. The results indicated that gender and age had a statistically significant effect on consumers' purchasing decisions at the .05 level. Specifically, female consumers were found to be more likely to make a purchasing decision for packaged dairy products in Sichuan province compared to males, as they tend to have a greater influence in decision-making when it comes to purchasing dairy products. This finding is consistent with previous research conducted by Katrodia et al. (2018) who also found significant differences in consumer buying behaviour based on gender in shopping malls. Additionally, Rahman et al. (2018) found that females tend to be more attracted to discount offers than males when it comes to online shopping. The study also revealed that consumers in the age groups of less than 20 and 20-30 years old had a stronger inclination to make purchasing decisions for packaged dairy products in Sichuan province than those aged 41-50 years old. This finding is attributed to the higher availability of the younger generation to shop and purchase products. This result is consistent with the study conducted by Von Helversen et al. (2018), which explored the impact of consumer reviews on online purchasing decisions in older and younger adults and found a significant difference in buying behaviour between younger and older consumers. Additionally, Jang et al. (2018) study on the effects of gamified customer benefits and characteristics on behavioural engagement and purchase reported that younger customers are more likely to purchase gamified products than older customers. Regarding the study of marketing mix factors (4C's) including consumers' wants and needs, the cost to satisfy, convenience to buy, and communication affecting the consumers' purchasing decision of packaged dairy products in Sichuan province at the statistically significant level of .05 with the predictive power of 75.7 percent, the discussion can be portrayed as follows.

The study revealed that various marketing mix factors, namely communication, the cost to satisfy, convenience to buy, and consumers' wants and needs, had a significant impact on the purchasing decisions of packaged dairy products in Sichuan province at a level of .05. The communication factor was found to be essential as consumers were able to access up-to-date information on promotions and activities through online advertising and convenience stores, leading to increased demand. This finding is consistent with Wang and Yu's (2017) study that emphasized the importance of communication in consumer decision-making, while Duffett (2017) found that social media marketing had a significant impact on young consumers' attitudes.

Moreover, cost to satisfy had a significant effect on consumers' purchasing decisions as they perceived the product to be worth its price, with online discounts being a factor that influenced purchasing decisions. This finding aligns with Nagle and Müller's (2017) study on pricing strategies leading to increased profits and Faith's (2018) review that pricing strategies can influence consumer purchasing behaviour.

The study also found that convenience to buy played a crucial role in consumer decision-making as consumers could easily obtain products from various channels, including department stores, roadside stores, and online stores, making it easy for them to purchase. This finding is consistent with Matos and Krielow's (2019) study that found convenience to be a crucial factor in business success, while Roy et al.'s (2018) study found that customer engagement behaviour can result from service convenience, fairness, and quality.

Lastly, consumers' wants and needs were found to significantly affect their purchasing decisions, with the company's ability to provide high-quality products that meet advertised qualifications and cater to a wide range of purchasing needs being a crucial factor. This finding aligns with Chen et al. (2017) study that emphasized the importance of understanding consumers' wants and needs in the purchase decision-making process in social commerce.

Study Implications

The study has several implications for the company's marketing strategy. Firstly, the company should focus on advertising up-to-date information and products on its websites to keep consumers informed. Regular product information and promotions should also be sent to customers. The company should also provide clear channels for customers to express their opinions, suggestions, and complaints.

Secondly, the company should ensure that its products offer good value for money and are priced appropriately for consumers' purchasing power. The pricing strategy should be competitive with other similar products in the market. Additionally, the payment process for goods should be convenient to make it easier for customers to make purchases.

Thirdly, the company should leverage online shopping to offer discounts to customers, making it more attractive to make online purchases. The products should also be easily accessible through various channels such as department stores, roadside stores, and online stores. The company should consider expanding its branches in the business district and community to make it easier for customers to access their products.

Lastly, the company should prioritize understanding customers' wants and needs, offering products that meet a broad range of purchasing needs. The products should be of high quality and meet advertised qualifications. The company should also regularly release new product collections that are in line with customers' needs and wants.

Overall, by implementing these marketing strategies, the company can improve its competitiveness in the market, increase customer satisfaction, and ultimately increase its profitability.

Future Research

To advance the understanding of the factors influencing consumers' purchasing decisions on packaged dairy products, future research could investigate additional variables such as brand equity, product features, brand awareness, and lifestyle. In addition, to gain a deeper understanding of consumers' sentiments, including emotions when buying packaged dairy products, further qualitative research is recommended. Such research could provide valuable insights into the underlying motivations of consumers and help companies to develop effective marketing strategies.

References

Azad, N., & Masoumi, M. (2012). The impact of packaging on product competition.

Management Science Letters, 2(8), 2789-2794.

Babaei, M. R., Mostakhtemi, R., & Esmaili, S. (2022). Identifying the effect of marketing mix 4C's on customers' satisfaction of life insurance (Case study: Pasargad insurance offices in Tehran). **Agricultural Marketing and Commercialization Journal**, 1(1), 43-53.

- Chen, A., Lu, Y., & Wang, B. (2017). Customers' purchase decision-making process in social commerce: A social learning perspective. **International Journal of Information Management**, 37(6), 627-638.
- Cochran, W. G. (1977). **Sampling techniques**. John Wiley & Sons.
- Duffett, R. G. (2017). Influence of social media marketing communications on young consumers' attitudes. **Young Consumers**, 18(1), 19-39.
- Euromonitor International. (2020). **Dairy products in the US**.
<https://www.euromonitor.com/dairy-products-in-the-us/report>
- Faith, D. O. (2018). A review of the effect of pricing strategies on the purchase of consumer goods. **International Journal of Research in Management, Science & Technology**, 2.
- George, D., & Mallery, P. (2016). **SPSS for Windows Step by Step: A Simple Guide and Reference** (13th ed.). Pearson.
- Jaakkola, J. (2007). Strategic marketing planning and firm performance: A proposed framework. **Academy of Marketing Science Review**, 2007(10), 1-27.
- Jang, S., Kitchen, P. J., & Kim, J. (2018). The effects of gamified customer benefits and characteristics on behavioral engagement and purchase: Evidence from mobile exercise application uses. **Journal of Business Research**, 92, 250-259.
- Jarad, G. A. (2020). Application of the 4Cs marketing mix in the digital environment. **International Journal of Psychological Rehabilitation**, 24(10), 2113-2122.
- Katrodia, A., Naude, M. J., & Soni, S. (2018). Consumer buying behavior at shopping malls: Does gender matter?. **Journal of Economics and Behavioral Studies**, 10(1), 125-134.
- Kauf, S., & Tłuczak, A. (2016). The Brand "Made in China" as a Part of the Growth of China's Competitive Advantage. **Chinese Business Review**, 15(4), 165-171.
- Kotler, P., & Armstrong, G. (2021). **Principles of marketing**. Pearson Education Limited.
- Matos, C. A. D., & Krielow, A. (2019). The effects of environmental factors on B2B e-services purchase: perceived risk and convenience as mediators. **Journal of Business & Industrial Marketing**, 34(4), 767-778.
- Nagle, T. T., & Müller, G. (2017). **The strategy and tactics of pricing: A guide to growing more profitably**. Routledge.
- Prasad, R. K., & Jha, M. K. (2014). Consumer buying decisions models: A descriptive study. **International journal of innovation and applied studies**, 6(3), 335.

- Qazzafi, S. H. E. I. K. H. (2019). Consumer buying decision process toward products. **International Journal of Scientific Research and Engineering Development**, 2(5), 130-134.
- Rahman, M. A., Islam, M. A., Esha, B. H., Sultana, N., & Chakravorty, S. (2018). Consumer buying behavior towards online shopping: An empirical study on Dhaka city, Bangladesh. **Cogent Business & Management**, 5(1), 1514940.
- Roy, S. K., Shekhar, V., Lassar, W. M., & Chen, T. (2018). Customer engagement behaviors: The role of service convenience, fairness and quality. **Journal of Retailing and Consumer Services**, 44, 293-304.
- Santosa, R. (2021). The Influence of Cultural Factors, Social Factors, and Personal Factors against Customer Purchase Decisions in Using Wedding Services Organizer in Surabaya. **International Journal of Review Management Business and Entrepreneurship (RMBE)**, 1(2), 77-90.
- Von Helversen, B., Abramczuk, K., Kopeć, W., & Nielek, R. (2018). Influence of consumer reviews on online purchasing decisions in older and younger adults. **Decision Support Systems**, 113, 1-10.
- Wang, Y., & Yu, C. (2017). Social interaction-based consumer decision-making model in social commerce: The role of word of mouth and observational learning. **International Journal of Information Management**, 37(3), 179-189.
- Wu, Y. L., & Li, E. Y. (2018). Marketing mix, customer value, and customer loyalty in social commerce: A stimulus-organism-response perspective. **Internet Research**, 28(1), 74-104.