

The customer satisfaction of store pasarmandalika.com regarding the attributes of vegetable and fruit products and strategies for increasing sustainable sales turnover

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DOI: <https://doi.org/10.5281/zenodo.8375689>

Published Date: 25-September-2023

Abstract: Online marketing is increasingly sought after by customers to meet their needs, however the online marketing business is considered risky due to sharp fluctuations in sales turnover from time to time. In an effort to anticipate this risk, research was carried out with the aim of determining the level of customer satisfaction and the sustainability strategy of the online marketing business for fruit and vegetable products. To achieve the research objectives, research was carried out on the customers of the pasarmandalika.com store. As customers are hotels, restaurants and fresh markets. Data collection is carried out on all customers using census techniques. Primary data was obtained from 14 population units in North Lombok Regency, Mataram City, West Lombok Regency and Central Lombok Regency in West Nusa Tenggara Province. Data collection was carried out by combining observation, survey and in-depth interview techniques. The collected data was analyzed using the Customer Satisfaction Index and continued with SWOT analysis to formulate a sustainable online marketing strategy. The results of the analysis show that the customers of the pasarmandalika.com store are satisfied with the attributes of vegetable and fruit products. To achieve sustainability in the online marketing business, the strategy chosen is to increase customer accessibility to the pasarmandalika.com website by increasing the capacity to become a big data-based business website.

Keywords: big data, big data, turnover, web, accessibility.

1. INTRODUCTION

The food security system consists of four subsystems, namely the food sufficiency subsystem, food distribution subsystem, food access subsystem, and food security subsystem [1, 2]. The food sufficiency subsystem is the sum of food production, food reserves and food imports that is balanced with the population's food needs.

Food ingredients in food barns are distributed to residential areas through storage and transportation mechanisms [3]. Available food products can be accessed by consumers and consumers have the purchasing power to obtain this food, because food prices are relatively cheap [4]. Food products that are affordable to households are safe for consumption, because physically and chemically they meet food health standards [4]. Food distribution and access to food are closely related to the marketing function, namely the storage function, transportation function and transaction function.

Food distribution involves marketing institutions that act as intermediaries between producers and consumers. Marketing can be done offline and/or online. The research results of Reni Diana [5] and Riri [6] show that there are fluctuations in the sales volume of fruit and vegetable products, so it is interpreted that the online marketing business is a risky business. Online marketing business risks need to be prevented and anticipated by formulating appropriate strategies to achieve a continuous increase in sales turnover, as well as minimizing fluctuations in sales volume.

The strategy of shortening marketing channels is recommended by experts, but in reality it is not easy to apply to food products, because food production is constrained by seasons while consumption takes place throughout the year, as well as the long distance between production centers and consumption centers. that require storage, distribution and/or transportation [7, 8].

Current developments in information technology have made it easier to overcome various obstacles in implementing the marketing function. Progress achieved in information technology has been able to bring producers and consumers together directly. Internet use can overcome distance, and can be accessed at any time without having to go to a shopping center, because internet use can be done from where someone lives. Christopher and Kristianti [9] say that the internet provides an important role and benefit for business actors to be able to enter markets easily, which used to be traditional markets where sellers and buyers had to meet and took time to get to the location. However, with the presence of the web and internet today, the process of carrying out transactions does not require meetings between buyers and sellers, and can be accessed easily, cheaply, and without geographical restrictions. Internet technology has been used by manufacturers to market their products directly to consumers. According to the Association of Organizers Indonesian Internet Services [10] stated that the growth in the number of internet users in Indonesia until the end of 2018 reached 171.17 million users, an increase quite drastically compared to 2017 which was 143.26 million users (APJII, 2018). In its development, the application of internet technology in marketing is called e-commerce [11]

Electronic commerce (E-Commerce) is a concept that can be described as the process of buying and selling goods on the internet, or the process of buying and selling products, services and information via information networks including the internet [12]. E-commerce is an online marketing medium. E-commerce is used for purchasing, selling and/or marketing activities of goods or services [13]. Putri [14] revealed that E-commerce involves other internet technology activities such as financial inclusion or mobile banking, automated teller machines, email, WhatsApp, electronic data exchange, automatic data collection systems, and automatic inventory systems, as well as ordering and delivery. goods (delivery orders), while [13] revealed that e-commerce requires database technology, electronic mail, and other forms of non-computer technology such as goods delivery systems and electronic payments.

Online marketing requires various activities including: sorting, grading, packaging, promotion, communication, storage, transportation or delivery of goods. Communication and promotion require email and social media (whatsapp, facebook, twitter, link, instagram, or telegram, etc.); while transportation requires a clear address, delivery letter, expedition service; as well as mobile banking payment systems, automated teller machines, and databases. One of the weaknesses of online marketing is that you cannot directly check the quality of the product, so the goods ordered are at risk of product quality. Customers worry whether the price they pay is commensurate with the quality of the product they receive. Customers are often disappointed with the quality of the products they order, because they do not meet their expectations.

Knowing customer satisfaction with online marketing services is an urgent need, because delays in obtaining knowledge of customer satisfaction can result in customers no longer being interested in making purchases, which will have an impact on decreasing sales turnover. Therefore, research to determine customer satisfaction is a necessity, especially in efforts to formulate appropriate strategies to increase sales turnover in the future, thereby creating a sustainable online marketing business.

The aim of this research is: to determine customer satisfaction at the pasarmandalika.com store regarding the attributes of vegetable and fruit products, and to formulate appropriate strategies to increase sustainable sales turnover.

2. MATERIALS AND METHODS

2.1. Place and time of research

The research was conducted in West Nusa Tenggara Province. Research locations include North Lombok Regency, West Lombok Regency, Mataram City, and Central Lombok Regency. Location selection is based on the domicile location of the pasarmandalika.com shop customer. The research was carried out from June 14 to August 30 2023.

2.2. Research design

The unit of analysis is the customers of the pasarmandalika.com shop, which consists of hotels and restaurants, as well as the fresh market at the research location. All registered customers were selected as sampling units using saturated sampling or census techniques.

2.3. Data collection technique

Data collection was carried out in an integrated manner by combining three data collection techniques (triangulation) as follows [15]:

- 1) The observation technique is by conducting direct observations at the pasarmandalika.com store business location and at 14 customer sampling unit locations.
- 2) The survey technique is collecting data by sending a questionnaire in google.form format. The data collected includes the characteristics of respondents and sampling units, service activities obtained from the pasarmandalika.com store, level of customer satisfaction, and frequency of repeat purchases in one month.
- 3) The interview technique is collecting in-depth data to obtain the customer's emotional condition which includes value for the customer, customer expectations and expectations for the services needed, as well as the desire to continue to subscribe to the pasarmandalika.com store. When conducting interviews, use the interview guide that has been prepared previously.

2.4. Variables and measurement methods

- 1) Total sales are the number of vegetable and fruit products sold during one year from January to December 2022, expressed in units of kg/year;
- 2) Price is the selling price of vegetables and fruit in 2022 expressed in IDR/kg;
- 3) Frequency of repeat orders is measured from the frequency of orders for vegetables and fruit expressed in units of time per month;
- 4) Customer satisfaction is measured from customer expectations regarding product and service attributes expressed on a Likert scale using a 1 to 4 assessment technique, from not satisfied to very satisfied.
- 5) Strategic internal factors consisting of strengths and weaknesses with their respective priority indicators and ratings,
- 6) Factor external strategic which consists of opportunities and threats with their respective indicators, priorities and ratings.

2.5. Data analysis

- 1) Customer Satisfaction Index

Customer Satisfaction Index Value [16]:

$$M_i = \frac{\sum_1^n X_i \times F_i}{n}$$

Information:

M_i = average satisfaction index on the i-th attribute

X_i = level i satisfaction score

F_i = number of analysis units at level i satisfaction score

n = number of analysis units

$$CSI = \frac{\sum_1^k M_i}{k}$$

Information:

CSI = customer satisfaction index

Mi = average satisfaction per attribute

k = number of attributes

2) SWOT analysis

One of the analytical tools for formulating strategies is SWOT analysis. SWOT analysis consists of strategic internal factors consisting of strengths and weaknesses, strategic external factors consisting of opportunities and challenges [17]. The continuation of the SWOT analysis is to formulate SO strategies, WO strategies, ST strategies and WT strategies. Each strategy is arranged in four SWOT analysis quadrants.

SO's strategy is to utilize strengths to seize opportunities. The WO strategy is to use opportunities to minimize weaknesses. ST's strategy is to use strengths to face challenges, while turning challenges into opportunities. WT's strategy is to turn weaknesses into strengths, and turn challenges into opportunities.

3. RESULTS AND DISCUSSION

3.1 Customer Satisfaction

Information from CV Abbasy Karya Mandiri customers shows that the majority of vegetable product customers stated that they were satisfied with the products obtained from the pasarmandalika.com store with values ranging from 2.9286 to 3.0714. The average satisfaction value is 3.0238, meaning that customers are overall satisfied to very satisfied. The data in Table 1 shows that the six attribute categories scored more than three, except for freshness. Of the 14 analysis units, there is one analysis unit that shows less satisfaction with the freshness attribute, and two analysis units are almost satisfied, 12 to 13 analysis units say they are satisfied, one analysis unit says they are very satisfied. In the future, what needs to be improved is freshness, integrity and color so that it is maintained. Delivery techniques need to be improved, namely proper storage and transport vehicles need to be equipped with refrigeration or cold storage equipment.

Table 1. Level of customer satisfaction with vegetable product attributes

No	Attribute	Less satisfied (1)	Almost Satisfied (2)	Satisfied (3)	Very satisfied (4)	Number of analysis units	Average (Mi)
1	Freshness	1		12	1	14	2.9286
2	Wholeness		1	12	1	14	3.0000
3	Cleanliness			13	1	14	3.0714
4	Color		1	12	1	14	3.0000
5	Aroma			13	1	14	3.0714
6	Food Safety and Health			13	1	14	3.0714
Customer satisfaction index							3.0238

From the six attributes in Table 1, it is known that the lowest satisfaction value is freshness, this is because storage and transportation have not implemented cold storage and cold boxes, while the distance between the pasarmandalika.com store location and the customer location is more than 50 km with travel time more than two hours. For customers who are located far away, a cold box is needed as a place to store the product during transportation, apart from that, before the goods are sent to the customer, they need a storage place. This storage process requires cold storage [18].

CV Abbasy Karya Mandiri, manager of the pasarmandalika.com store, considers it important to use cold storage and cold box technology so that product freshness is maintained. Commodities traded by the pasarmandalika.com store in the form of fruit and vegetables, spices, eggs, meat and fish are susceptible to quality reduction, because these products require their availability in fresh condition. Therefore, it is very wise to store it using cold storage, and during transportation using a cold box.

Pay attention to the satisfaction level values in Table 1 above that the customer satisfaction level is from satisfied to very satisfied, because the customer satisfaction index value is greater than 3 (three) out of a maximum value of 4 (four).

Likewise, the percentage of respondents who stated they were satisfied and very satisfied was 89.29% and 7.14% respectively; while those who are almost satisfied and less satisfied are 2.38% and 1.19% respectively.

The level of customer satisfaction for fruit products is better than for vegetable products. In Table 2, the customer satisfaction index ranges from 3.000 to 3.0714, meaning that all customers have reached satisfaction to very satisfaction. Fruit products appear to have better quality, especially in terms of freshness, because fruit has a longer shelf life compared to vegetables. The lowest satisfaction score was 3,000 for the attributes of freshness, wholeness and color; Meanwhile, the attributes of cleanliness, aroma, food safety and health show a value of 3.0714 or above the average value of 3.0357, meaning that consumer satisfaction ranges from satisfied to very satisfied.

Even though achieving customer satisfaction is considered conducive to fruit products, it would be better if storage and transportation were anticipated using cold storage and cold boxes [18]. Based on information obtained during an in-depth interview with the owner of the pasarmandalika.com shop, the vegetable and fruit marketing business will be developed to various types of products, including crystal ice, and expand the marketing area to East Lombok and Sumbawa Island, so inevitably the technology for delivering goods will continue to develop. , one of which is cooling machine technology such as cold boxes.

Table 2. Level of customer satisfaction with fruit product attributes

No	Attribute	Less satisfied	Almost Satisfied	Satisfied	Very satisfied	Number of analysis units	Average (Mi)
		(1)	(2)	(3)	(4)		
1	Freshness	1	0	11	2	14	3.0000
2	Wholeness	0	1	12	1	14	3.0000
3	Cleanliness	0	0	13	1	14	3.0714
4	Color	0	1	12	1	14	3.0000
5	Aroma	0	0	13	1	14	3.0714
6	Food Safety and Health	0	0	13	1	14	3.0714
Customer satisfaction index							3.0357

The level of customer satisfaction with fruit products is almost the same as for vegetable products, namely from satisfied to very satisfied with a satisfaction score greater than 3 (three). The percentage of customers who said they were satisfied with the six categories of fruit product attributes was 88.09%, and 8.33% said they were very satisfied, while those who said they were almost satisfied and less than satisfied were 2.38% and 1.19% respectively. Therefore, the research team assessed that CV Abbasy Karya Mandiri had provided good service, so that customers received the level of satisfaction that was expected. Therefore, it is natural that CV Abbasy Karya Mandiri continues to grow and develop, and strives to meet customer expectations.

Table 3. Customer Satisfaction Index (CSI) Values

No	Category Attribute	Average customer satisfaction with the product			Level Satisfaction
		Vegetable	Fruit	Aggregate	
1	Freshness	2.9286	3.0000	2.9643	Satisfied
2	Wholeness	3.0000	3.0000	3,0000	Satisfied
3	Cleanliness	3.0714	3.0714	3.0714	Satisfied
4	Color	3.0000	3.0000	3,0000	Satisfied
5	Aroma	3.0714	3.0714	3.0714	Satisfied
6	Food safety and health	3.0714	3.0714	3.0714	Satisfied
CSI		3.0238	3.0357	3.0298	Satisfied

This type of service that determines value for customers has been prepared by the management of CV Abbasy Karya Mandiri. Product quality is a top priority by selecting suppliers and products supplied, only products that meet quality requirements are accepted. The type of service used is in line with customer expectations as shown in Table 3, while those that do not meet the qualifications are rejected. Quality standards are not available in writing, but because managers and employees are experienced in selecting and assessing, product quality is a priority and has become a concern to prevent complaints from customers.

The completeness of providing various kinds of vegetable products needed by customers is supplied from existing vendors as well as from new vendors, so that the management collaborates with various vendors to fulfill each type of product demand. The efforts made are to provide data on the quantity and quality of each product that customers need. Apart from being supplied through vendors, these products are also purchased directly from the market, and are also produced themselves in the farming unit owned by CV Abbasy Karya Mandiri. This farm is located at the front and back of the grading, sorting and loading and unloading rooms.

3.2 Identification of Strategic Internal Factor Indicators

3.2.1 Strength

- a. The company has a legal entity
- b. The company has formal permits and legality
- c. The company has capital and business premises in strategic locations
- d. The company has its own farming business

3.2.2 Weaknesses

- a. The company still has MSME status
- b. The number of employees is not sufficient
- c. Web capacity is still small and web-based big data business is not yet available
- d. Online marketing is considered risky

3.3 Identify indicators of Strategic External Factors

3.3.1 Opportunities

- a. Open opportunities for collaboration with business partners
- b. Conducive economic growth after Covid-19
- c. Banks offer subsidized credit schemes

3.3.2 Threats

- a. Competition is getting tougher
- b. Burdensome tax burden
- c. Renting business premises is increasingly expensive

3.4 Strategy to Increase Sales Turnover

3.4.1 SO Strategy

- Take advantage of every new business opportunity by collaborating with business partners
- Expanding the work area to East Lombok Regency and Sumbawa Regency and West Sumbawa Regency by taking advantage of post-Covid-19 business opportunities
- Enlarge the business scale by establishing a new company so that you can borrow subsidized credit
- Implement supply chain management in the procurement and distribution of vegetable and fruit products for improve sales volume [19].

3.4.2 WO Strategy

- Increasing the capacity of big data-based business web
- Improving employee quality through training and recruiting new employees to increase company strength
- Increasing business scale through collaboration using trust capital by building new business partners

- Using consideration of transportation costs, product quality grading sorting costs, and material purchase prices as a pricing strategy

3.4.3 ST Strategy

- Increase the effectiveness and efficiency of the company's business. Increasing effectiveness is through choosing a priority scale, while efficiency is achieved by increasing business scale and utilizing technology in sorting, grading and packaging.
- Utilize statutory regulations by taking advantage of the facilities provided by the government and business partners.
- Obtain a business location that is more strategic than the current location, so that it is easier to access the receipt of supplies of goods, and makes delivery of goods easier.
- Paying the loan using return payments.

3.4.4 WT Strategy

- Competition can be overcome by choosing specific market segments and producing unique products or using branding
- Using the services of a tax consultant so that tax payments are paid according to the company's capabilities;
- Using cost driven as a strategy for determining selling prices so that market share for restaurant and fresh market customers increases;

4. CONCLUSIONS AND RECOMMENDATIONS

Pasarmandalika.com store customers have reached a level of satisfaction to very satisfied with product attributes, meaning that the pasarmandalika.com store has earned the trust of customers for freshness, wholeness, cleanliness, color, aroma, and food safety and health. The strategy to increase sales turnover can be pursued by increasing customer accessibility to the pasarmandalika.com shop business website by increasing the capacity of the big data-based business website, establishing networking with various parties to expand the business scale, and increasing effectiveness and efficiency through the use of technology, as well as expanding the work area to East Lombok Regency, Sumbawa Regency, and West Sumbawa Regency. To increase customer satisfaction, it is necessary to maintain product freshness in the hands of customers by utilizing storage technology using cold storage and transport vehicles to be equipped with cold boxes.

DISCLOSURE AND CONFLICTS OF INTEREST

Tajidan Tajidan, Halil Halil, Sudirman, Edy Fernandez, Sharfina Nabilah, and Sri Mulyawati each declare that there is no conflict of interest regarding the publication of this manuscript.

ACKNOWLEDGMENT

Thank you to the Chancellor of the University of Mataram and his staff who have allocated funds to carry out research activities so that this manuscript can be published as an international journal article.

REFERENCES

- [1] Suharyanto, H. Food Security. Journal of Social Humanities. Vol. 4 no. 2. 2011. <http://iptek.its.ac.id/index.php/jsh/article/view/633>
- [2] Lantarsih, R., Widodo, S., Darwanto, DH, Lestari, SB, and Paramita, S. "National Food Security System: Contribution of Energy Availability and Consumption, and Optimizing Rice Distribution". Journal of Agricultural Policy Analysis. Volume 9 Number 1, pp.33-51. 2021. <http://repository.pertanian.go.id:8080/server/api/core/bitstreams/b57dc248-384d-4ae9-a737-5478ac411ed5/content>
- [3] Adhikari, J., Timsina, J., Khadka, S., Ghale, Y., Ojha, H., impact of COVID-19 on agriculture and food systems in Nepal: Implications for SDGs. Agricultural Systems, Volume 186, Special Issue. p.102990. 2021 <https://www.sciencedirect.com/science/article/pii/S0308521X20308519>

- [4] Nukala, R., Panduru, K., Shields, A., Riordan, D., Doody, P., and Walsh, J., "Internet of Things: A Review from 'Farm to Fork'," 2016 *Conference 27th Irish Systems and Signals (ISSC)* , Londonderry, UK, 2016, p. 1-6, doi: 10.1109/ISSC.2016.7528456.
- [5] Reni Diana, 2023. Fruit Sales Volume Trend Analysis at Mandalika Market E-commerce. Agricultural Faculty. Mataram University. p.70. Mataram.
- [6] Riri Rizki Mauliya, 2023. Analysis of Vegetable Sales Volume at CV. Abbasy Karya Mandiri Through ecommerce pasarmandalika.com. Agricultural Faculty. Mataram University. p.65. Mataram.
- [7] Bryan , E., Deressa , T.T., Gbetibouo , G.A., Ringler , C., Adaptation to climate change in Ethiopia and South Africa: options and constraints. *Environmental Science & Policy*. Volume 12, Issue 4, pp. 413-426. June 2009, <https://www.sciencedirect.com/science/article/abs/pii/S1462901108001263>
- [8] Pierotti, RS, Ridenour, SF, Olayiwola. Farming women what they can manage: How time constraints affect the quantity and quality of labor for married women's agricultural production in southwest Nigeria. *World Development* . Volume 152 , p.105800. 2022 <https://www.sciencedirect.com/science/article/pii/S0305750X21004150>
- [9] Christopher, SWH, and Kristianti, I., The Relationship of E-Commerce to Financial Literacy and Business Continuity in Boyolali. *Accounting journal*. Volume 10. No.1 p.1-12. 2020. <https://ejournal.unib.ac.id/index.php/JurnalAkuntansi/article/view/9493>
- [10] Benzinga. Dani Nadel Appointed as Chief Digital Marketing Officer, Gramedia Book Club and e-Commerce. *Pro-Search. things*. 512. 2011 <https://www.benzinga.com/amp/content/1967070>
- [11] Funabasi, M., and Grzech. A. Challenges of Internet Expansion: e-Commerce Business and E-Government. *Jumper. Pro-Quest* p.616. 2005. <https://link.springer.com/book/10.1007/0-387-29773-1>
- [12] Suyanto, M. Advertising Strategy in the World's Top E-Commerce Companies. *Andi Balances*. 2003. Yogyakarta
- [13] Aprila, P. What is online marketing? Learn the benefits, examples and strategies below! *Niagahoster.dll*. 2021. <https://www.niagahoster.co.id/blog/pemasaran-online/>
- [14] Putri, MRD Digital financial inclusion in e-commerce increased during the pandemic. *Between*. March 24 2023. https://www.antaranews.com/berita/3456357/semangat-dan-keinginan-player-antar-persib-bandung-raih-kemenangan?utm_source=antaranews&utm_medium=desktop&utm_campaign=menu_news
- [15] Tajidan, T. , Halil, H. , Fernandez, E. , Nabilah, S. , Effendy . Cost-Driven Method for Determining the Optimal Selling Price for Tofu Production in the Household Scale Tofu Agroindustry: Case Study in Mataram, Indonesia, 17 (3), pp. 1033–1039. 2022, **DOI:** <https://doi.org/10.18280/ijdp.170335>
- [16] Lulu Dian Anggraini, Panji Deoranto, Dhita Morita Ikasar, 2015. The Analysis of Consumer Perception Used Importance Performance Analysis Method and Customer Satisfaction Index. *Jurnal Industri* Vol 4 No 2. p.74-81. <https://industri.ub.ac.id/index.php/industri/article/view/179/184>
- [17] Helms, M.M. and Nixon, J. 2010. Exploring SWOT analysis – where are we now? A review of academic research from the last decade, *Journal of Strategy and Management*, Vol. 3 No. 3, pp. 215-251. <https://doi.org/10.1108/17554251011064837>
- [18] Chuanxiao Cheng, Fan Wang, Yongjia Tian, Xuehong Wu, Jili Zheng, Jun Zhang, Longwei Li, Penglin Yang, Jiafei Zhao, 2010. Review and prospects of hydrate cold storage technology. *Renewable and Sustainable Energy Reviews*. Volume 117, January 2020, 109492. <https://doi.org/10.1016/j.rser.2019.109492>
- [19] Lestari, L. The Influence of E-Commerce on Sales Volume at the Bekasi Men's Shirt Online Store. Thesis. 2017. <https://www.semanticscholar.org/paper/PENGARUH-E-COMMERCE-TERHADAP-VOLUME-PENJUALAN-PADA-Lestari-Ginting/921af5655e1c908209e2a7e3c292baec12cdb5f4>