



A Product Diversification to Increase Marketing Value: Learning from E-commerce pasarmandalika.com

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Abstract. Service function as a determining factor in marketing value has long been neglected, especially the completeness factor in providing product diversification. Because Due of this phenomenon, the idea arose to test the hypothesis that the completeness of procurement of diversified food products determines marketing value. To prove this hypothesis, research was conducted using the case method and empirical qualitative analysis. Data were collected from all customers of 14 pasarmandalika.com stores spread across North Lombok Regency, West Lombok Regency, Mataram City, Central Lombok Regency in West Nusa Tenggara Province, Indonesia. Data was collected by combining observations, surveys, and in-depth interviews. Using Customer Satisfaction Index Analysis and continuing with the Analytical Hierarchy Process proves that the completeness factor in the procurement of diversified vegetable and fruit food products is a determining factor in the marketing of vegetables and fruit food products, in addition to product quality and transportation. The completeness factor in food diversification procurement and the analysis of the Customer Satisfaction Index and Analytical Hierarchy Process can be applied to various types of commodities.

Keywords: Fruits, Product Diversification, Marketing Value, Satisfaction, Vegetables.

1 Introduction

The food security system consists of four subsystems: food adequacy, food distribution, food access, and food security [1]. The food adequacy subsystem is the sum of food production, reserves, and imports that are balanced with the food needs of the population. The food in food barns is distributed to residential areas through storage and transportation mechanisms [2]. Consumers can access available food products, and they have the purchasing power to obtain these foods because food prices are relatively cheap [3,4]. Food products within the reach of households are safe to consume because they physically and chemically meet food health standards [5]. Food distribution and access to food are closely related to marketing functions, namely storage, transportation, and transaction functions.

Farmers often face the problem of low product value at the farmer level and expensive product value at the consumer level [6], meaning that there is a price gap between prices at the farmer level and prices at the consumer level. The problem of the food price gap has not yet been resolved because it is hampered by the behavior of farmers who only act as producers but ignore their role as traders. The results of a study conducted by Tajidan, Zaini, et al., 2022 prove that farmers who only act as producers have lower incomes when compared to farmer households who double as farmers and traders because food products directly to consumers can increase the economic value of the food products they produce [7]. However, changing the farmer's mindset from a single role as a producer to a dual role as a farmer and trader still requires appropriate intervention measures so that economic value is formed within the farmer's household [8].

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 seasonality, while consumption takes place throughout the year, as well as long distances between production centers and consumption centers that require storage and distribution or transportation [9,10].

The development of information technology (Durano et al., 2024) provided convenience in overcoming various obstacles to the implementation of marketing functions [1]. The progress achieved in information technology has brought producers together with consumers directly. Using the Internet can overcome distance and be accessed at any time without having to go to shopping centers because Internet use can be done from one's place of residence. Christopher and Kristianti (2020) said that the Internet provides an important role and benefit for business actors to enter the market easily [11], which used to be a traditional market where sellers and buyers had to meet and took time to get to the location, but with the presence of the web and Internet now; in this case, the process of carrying out transactions does not require meetings between buyers and sellers, and can be accessed easily, cheaply, and without geographical restrictions. Manufacturers use Internet technology to market their products directly to consumers. According to an Organizing Association [12], Indonesian Internet Services (APJII) 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). The application of Internet technology in marketing is called e-commerce [13].

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 through information networks, including the Internet [14]. E-commerce is an online marketing tool. E-commerce is used for buying, selling, and marketing goods and services [15]. Putri (2023) revealed that e-commerce involves other Internet technology activities, such as financial inclusion or mobile banking, automated teller machines, e-mail, WhatsApp, electronic data exchange, automated data collection systems, automated inventory systems, ordering, and shipping. goods (delivery orders) [16], whereas Aprilia (2021) revealed that e-commerce requires database or database technology, electronic mail, and other forms

of non-computer technology such as goods delivery systems and electronic payments [15].

Based on the results of empirical studies, it is revealed that the use of e-commerce is still limited to products that can be stored for a long time, namely industrial products, including agro-industrial products. The use of e-commerce for fresh produce is still in its early stages of experimentation. One e-commerce market for food products is pasarmandalika.com.

E-commerce marketing involves many other activities such as grading, communication, promotion, transactions, storage, transportation, databases, and outlets, and every activity produces economic value [8]. To date, no study has revealed the formation of economic value in each activity and the cumulative economic value of each food product marketing activity as value driven [17,27]. By learning from the experience of e-commerce pasarmandalika.com, it is hoped that we can formulate a model or formulation as a finding that can be applied more widely to other e-commerce, including providing various types of products that customers need. Therefore, it is important to add the attribute of product diversification as a form of intervention to increase customer satisfaction. This idea needs to be proven through the results of the empirical data analysis of e-commerce pasarmandalika.com.

Food is a basic human need is food [18]. Food is in the form of carbohydrates, proteins, fat or oil, vitamins, and minerals. Food is the result of agricultural, livestock, and fishery production. Some are fresh products, and some are processed or agro-industrial products. Food produced in production centers must be distributed to consumers' homes at affordable prices. Marketing functions as a bridge that brings food products from producers to consumer households.

Traders and buyers are the main actors in transactions. Traditionally, sellers and buyers meet face-to-face in the market, but today's Internet technology development means that sellers and buyers do not have to meet physically. Meetings can be held through information and/or social media, as well as through e-commerce.

E-commerce marketing requires a variety of activities including sorting, grading, packaging, promotion, communication, storage, transportation, and delivery of goods. Communication and promotion require e-mail and social media (WhatsApp, Facebook, Twitter, Links, Instagram, Telegram, etc.), whereas transportation requires a clear address, delivery orders, and expedition services, as well as a mobile banking payment system, automated teller machines, and databases. The complexity of each activity was traced so that the economic value of each activity could be measured. The economic value of each activity was measured using the resource sacrifice value approach. One attribute that is often overlooked is product diversification or meeting customer needs for various types of products; therefore, e-commerce needs to add the attribute of product diversification. The hypothesis is that product diversification increases customer satisfaction. The hypothesis is tested using empirical data so that it can be implemented in other e-commerce.

The problem is how to find analytical procedures for determining the economic value of customers in the marketing of vegetable and fruit food products in the case of pasarmandalika.com and formulate the accumulation of economic sacrifices in all activities in an effort to increase customer satisfaction, including product diversification

procurement activities. Attributes and product diversification activities are claimed to be a novelty that enriches knowledge and has practical benefits for entrepreneurs engaged in e-commerce.

The objective of this research is to determine the economic benefits of pasarmandalika.com e-commerce for customers by measuring the pasarmandila.com customer satisfaction index, proving that the completeness of procurement of product diversification is a value-driven factor in the marketing of vegetable and fruit food products in the e-commerce case of pasarmandalika.com.

2 Research Methods

2.1 Place and Time of Research

The research was conducted in West Nusa Tenggara Province. The 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 e-commerce customers. The study was conducted from June 14 to August 30, 2023.

2.2 Research Design

The unit of analysis is e-commerce customer pasarmandalika.com, which consists of hotels and restaurants, and Fresh Markets in the four research location areas. All registered customers were selected as sampling units by using saturated sampling or census techniques.

2.3 Data Collection Techniques

1. Data collection was carried out in an integrated manner by combining three data collection techniques (triangulation), as follows [19]:
2. The observation technique involves making direct observations at the e-commerce business location pasarmandalika.com and at 14 customer sampling unit locations.
3. Survey technique, namely, data collection by sending questionnaires in Google Form format. The data collected included the characteristics of the respondents and the sampling unit, service activities obtained from e-commerce pasarmandalika.com, level of customer satisfaction, and frequency of repurchasing within one year.
4. The interview technique involves the collection of in-depth data (depth interviews) to obtain the customer's emotional condition, which includes value for the customer, customer expectations, and expectations of the services needed, as well as the desire for continuity of subscription with e-commerce pasarmandalika.com. During the interviews, we used a previously prepared interview grid.

2.4 Variables and measurement methods

1. The sale amount is the number of vegetable and fruit products sold during one year from January until December 2022, expressed in units of kg/year.
2. Price is the selling price of vegetables and fruits to customers in 2022, expressed in IDR/kg.
3. The frequency of repeated orders was measured from the frequency of ordering vegetables and fruits expressed in units of times per month.
4. The value added is the additional value obtained by the owner of the e-commerce pasarmandalika.com, expressed in units of IDR/kg.
5. Customer satisfaction was measured from customer expectations of product and service attributes expressed on a Likert scale using a scoring technique from 1 to 4, from dissatisfied to very satisfied.

2.5 Data Analysis

Value Added

Added value is the added value owing to the implementation of marketing functions. The value added is analyzed using the formula (Tajidan, Zaini, et al., 2022):

$$\sum_{i=1}^n AVi = \sum_{i=1}^n PJi - \sum_{i=1}^n (PBi + RSCi)$$

Information:

AVi = added value to-i

PJi = selling price per unit to-i

PBi = purchase price to-i

RSCi = price of consumables to-i

n = sum of analysis unit

$$NT = \frac{\sum_{i=1}^n HJi - \sum_{i=1}^n (HBi + BBHi)}{n}$$

Customer Satisfaction Index

Customer Satisfaction Index Value

$$CSI = \frac{\sum_{i=1}^n Xi \times Fi}{\sum_{i=1}^n Fi}$$

Information:

CSI = customer satisfaction index

Xi = i-th satisfaction score

Fi = i-th number of analysis units

Analytical Hierarchy Process

The Analytical Hierarchy Process (AHP) analysis procedure using the AHP Calculator AHP-OS application at <https://bmsg.com/ahp/ahp-calc.php> is as follows:

- a. Open the AHP Calculator AHP-OS link,
- b. Type the number of categories,
- c. Clicking Go.
- d. Write the category names from category 1 (one) to the last category.
- e. Pairwise comparisons were performed by clicking on the priorities and pairwise comparisons from 1 (one) to 9 for all permutations.
- f. Clicking Calculate
- g. Check the Concentration Ratio (CR) value. If the CR value is $> 10\%$, then the pairwise comparison is corrected by following the green sign.
- h. Clicking Calculate,
- i. If the CR is still considered high, repeat steps 5 to 8.
- j. Focusing on the priority value, a priority value $>$ the expected value is used as the determining category. Because there are five categories, the critical value was 20%.

3 Results and Discussion

3.1 Economic Benefit Value

Rather than being called e-commerce, it is more accurately called online sales because the function of a web business is limited to promotion [20, 26]. In the web business, personal contact addresses are included via telephone, cell phone, and e-mail, so that transactions occur through communication via telephone, mobile phones, or e-mail. Transactions do not occur through web business because the platform on the web is limited to introducing products, while negotiations and transactions occur through communication media outside the web.

Table 1. Average Economic Benefit Value per month for customers

No	Description	Vol	Unit	Price (IDR/unit)	Economic Benefit Value (IDR/month)
1	Save labor	2.3	MH	23,000	52,900
2	Rent a 4- wheeled vehicle	4.0	O'clock	25,000	100,000
3	Fuel efficient	1.5	liter	10,000	15,000
4	Save on parking costs	4.0	O'clock	2,000	8,000
5	Save on insurance premiums	4.0	day	15,000	60,000

6	Save on storage costs	20.0	day	5,000	20,000
7	Save electricity usage	30.0	kWh	1,600	48,000
8	Credit fee	4.0	freq	16,000	-48,000
Amount					255,900

MH = Man-Hours

Source: obtained from various secondary sources.

The contribution of the web business as a communication medium is considered effective (Anugrah et al., 2023), because in a situation of social distancing policies and policies not allowing crowds or gatherings, including restrictions on buying and selling in traditional markets and limiting visits to modern markets, while food needs are every day, then with this web business making it easy for customers or consumers to make transactions from home, and receive orders for vegetables, fruit and other basic needs at home, without having to come to the store or come to the market. The value received and enjoyed by customers is willing to pay a higher price by considering several savings.

1. More efficient use of time, so that all the time spent in the market can be used for other, more productive work,
2. Saving fuel costs,
3. Saving energy,
4. Saving parking fees,
5. Anticipate the risk of traffic jams and other risks on the way to and from shopping,
6. Get the confidence to pay on the spot or transfer using banking or via an Automated Teller Machine (ATM),
7. The product price is affordable because it is almost the same as the price in the modern market (fresh market).

The profits and benefits obtained through online purchases are comparable to or lower than the additional prices resulting from transactions through online purchases by customers.

As explained, purchasing goods online can reduce customer costs. The amount of cost saved is the savings (benefit) for the customers. Quantitative calculations show that the benefits obtained by customers are greater than the costs incurred. The data in the table are the opportunity costs of customers who conduct online transactions.

Procuring goods through online transactions provides convenience in service. Ease of service has an impact on reducing transaction costs. The amount of savings due to online transactions reaches IDR 255,900/month (see Table 1). Meanwhile, if transactions are carried out offline, much higher costs are incurred. The cost that is sacrificed when an offline transaction is made is IDR 303,900 compared with IDR. 48,000 credit savings. A rational choice is that it is more profitable to conduct online transactions.

3.2 Relationship between the Value of Economic Benefits for Customers and Customer Satisfaction

Customer achievement affects the level of customer satisfaction [21]. Therefore, it is suspected that a relationship exists between finding value for customers and customer satisfaction.

The value for customers is measured by the amount of funds saved by carrying out transactions using *e-commerce* and online platforms. The amount of funds saved in each month is listed in Table 1. In addition to saving funds, the value for customers can be seen qualitatively from the customer satisfaction index value.

3.3 Added Value for CV Abbasy Karya Mandiri

The analysis explains how much value is obtained in carrying out marketing functions. Grading, sorting, packaging, transportation, storage, and transaction marketing functions. Activities that carry out marketing functions require labor and profit gains [22]. Therefore, the added value can be measured by utilizing the marketing margin after deducting sacrificial material costs.

Added value (AV) is the additional value obtained from activities that perform marketing functions that consist of profit margins plus labor wages. Mathematically, this can be formulated as Table 2.

Table 2. Marketing margin and added value at CV Abbasy Karya Mandiri

No	Type Products	SP (IDR/kg)	BP (IDR/kg)	MM (IDR/kg)	CM (IDR/kg)	AV (IDR/kg)	AV (%)
I	Vegetables						
	• Lettuce	40,875	35,000	5,875	1,680	4,195	10.263
	• Spinach water	8,239	5,000	3,239	55	3,184	38.648
	• Spinach	9,600	5,000	4,600	42	4,558	47.479
	• Chinese cabbage	13,125	7,000	6.125	125	6,000	45.714
	• Broccoli	42,014	35,500	6,514	1,000	5,514	13.125
	Average					4,690	31.046
II	Fruits						
	• Pawpaw	7,902	5,500	2,402	420	1,982	25.084
	• Watermelon	9,821	6,800	3,021	550	2,471	25.164
	• Orange	19,611	17,500	2,111	420	1691	8.621
	• Crystal Guava	22,750	18,550	4,200	150	4,050	17.802
	• Melon	12,964	8,750	4,214	550	3,664	28.264
	Average					2,772	20.987

Information:

SP = selling price,

BP = buying price,

CM = cost of materials

LW = labor wages

AV = Added Value

PM = profit margin

MM = marketing margin.

CV Abbasy Karya Mandiri, as the owner of pasarmandalika.com, has a bigger marketing margin for vegetables than a fruit marketing margin (Table 2) because vegetable products are riskier than fruit products, vegetable products are picked fresh and sold fresh, and delays in transportation and sales cause the product to decline the level of freshness. Fruit products can be picked in ripe conditions and sold after they are ripe, so the risk of decreasing quality can be anticipated by picking them in a ripe condition and can be sold a few days after picking.

Judging from the added value resulting from marketing vegetables and fruits, variations in the added value appear. The added value of vegetables was greater than that of fruit. The added value of vegetable and fruit products is 3:2, meaning that if vegetables generate an added value of around 30%, then the added value of fruit is around 20%, but this does not mean that you prefer the vegetable business over the fruit business. Cultivating vegetables and fruit is just as important, because each of them has a positive value, meaning that each type of vegetable and fruit contributes to the total added value obtained by CV Abbasy Karya Mandiri.

CV Abbasy Karya Mandiri produces more than 50 types of vegetables, fruits, fish, eggs, meat, and various herbs and spices. Whatever product type was requested by customers to be fulfilled. Several vegetable products are cultivated on the farms. There are 26 types of products that are cultivated on their own farms, while those that are not on the farm are supplied by vendors in Lombok, Bali, Malang, and Magelang.

Table 3. Volume and added value at CV Abbasy Karya Mandiri

No	Type Products	Volume (kg/year)	Value-added (IDR/kg)	Total value (IDR/year)
I	Vegetables			
	● Lettuce	5,463	4,195	22,917,285
	● Spinach water	1,659	3,184	5,282,737
	● Spinach	1,894	4,558	8,632,852
	● Chinese cabbage	2,575	6,000	15,450,000
	● Broccoli	5,844	5514	32,225,511
	Amount			84,508,385
II	Fruits			
	● Pawpaw	30,608	1982	60,669,341
	● Watermelon	71,884	2,471	177,656,274
	● Orange	3,941	1691	6,663,088
	● Crystal Guava	1,064	4,050	4,309,200
	● Melon	41,308	3,664	151,364,491
	Amount			400,662,395

CV Abbasy Karya Mandiri is a company with a cor business as a supplier of consumer goods, especially food such as vegetables, fruit, oil, fish, eggs, meat, rice,

spices, and seasonings, so that each unit of traded goods can generate value for a company in the form of added value or changes in the company's asset structure. Nur'aini et al., (2022) concluded from the results of their study that company value is determined by company size, equity and loan capital structure, profitability, and asset structure [23]. Therefore, although both determine the value of the company, different aspects of the study, namely, this research emphasizes the value of the company from the perspective of added value.

Qualitatively, the added value of vegetables is greater than that of fruit, namely 31% versus 21%, but quantitatively, the total added value of vegetables is less than the total added value of fruit (Table 3), because the marketing volume for fruit is greater than that for vegetables. The added value generated in marketing is not solely determined by the marketing margin (Table 1) but is also determined by marketing volume. Therefore, increasing added value can be achieved through efforts to reduce the marketing margin per unit, followed by increasing marketing volume. Reducing marketing margins through discounts is a strategic choice to increase sales turnover. As stated by Kotler et al., 2009 there are four marketing strategies known as the 4Ps: price, product, place, and promotion [24]. These four strategies have been implemented in the marketing of vegetable and fruit products. Prices are determined based on agreements with customers, products are fulfilled according to customer requests, the location is relocated from Bertais to Gerimak, and promotion is through the web business pasarmandalika.com. Customers welcomed the strategy by giving appreciation in satisfaction ratings from satisfied to very satisfied (Table 4).

3.4 Relationship between Order Frequency and Sales Volume and Selling Price

Customer satisfaction can be measured by the number of customers who repeat their purchases of a product or service at the same service location. It is thought that the more often a customer shops at one store, it indicates that customer satisfaction is higher than for those who only repeat purchases once at the same store [20], because using the satisfaction level option is not complete if it is not proven by the frequency of orders. Therefore, indicators of the frequency of repeat purchases of a product in the same store can be used to determine the level of customer satisfaction [25].

Frequency of repeat product orders at the online shop pasarmandalika.com owned by CV Abbasy Karya Mandiri in relation to order volume. The frequency of ordering vegetables and fruit is once per week, with an average of 3.86 times per week for vegetables and 3.89 for fruit. The order frequency data for each product, sales volume, and price are presented in Table 4.

Table 4. Frequency of orders, volume, and selling price of the pasarmandalika.com store

Types of products	Frequency Booking	Volume (kg/year)	Price (IDR/kg)
Lettuce	3.929	5,463	35,000
Spinach water	3.857	1,659	5,000

Types of products	Frequency Booking	Volume (kg/year)	Price (IDR/kg)
Spinach	3.714	1,894	5,000
Mustard greens	4.000	2,575	7,000
Broccoli	3.846	5,844	35,500
Pawpaw	4.000	30,608	5,500
Watermelon	3.929	71,884	6,800
Crystal Guava	3.893	3,941	17,500
Orange	3.857	1,064	18,550
Melon	3.786	41,308	8,750

The frequency of customer orders is correlated with the sales volume of vegetable and fruit products (Table 4). The more often customers place orders, the greater the sales volume. The correlation analysis between order frequency and sales volume produces a correlation coefficient of 0.1633, meaning that there is a positive relationship between order frequency and sales volume. This can be understood because CV Abbasy Karya Mandiri and its customers have entered into sales contracts, so there is certainty among buyers. In this context, CV Abbasy Karya Mandiri, as the owner of pasarmandilika.com, has certainty of purchase, while customers have certainty of supply. In this way, an equal partnership is established between CV Abbasy Karya Mandiri and its customers.

Table 5. Priority and rank of services type determining 1st customer satisfaction

No	Kind of services	1st priority	rank
1	Quality	44.3	1
2	Transportation	19.7	2
3	Storage	10.8	5
4	Transaction	11.3	4
5	Completeness of product diversification procurement	13.9	3
Amount		100.0	

The relationship between order frequency and product price shows a negative correlation, meaning that for products with high prices, the number of orders is lower because order frequency is a derivative of the demand function. Vegetable and fruit products with high prices have lower sales volumes. The correlation coefficient between order frequency and price was -0.3339. The results of the 1st AHP analysis are presented in Table 5, Table 6, and Table 7.

So far, the use of the Analytical Hierarchy Process (AHP) has been carried out using priority assumptions based on a one-sided assessment. To obtain more objective results, AHP was performed twice by changing the priority from the lowest critical priority to the highest critical priority. With the analysis steps from number 1 (one) to number 10, the 2nd Analytical Hierarchy Process (AHP) analysis is carried out with the order of the type of service and the results of the priority analysis on Table 6.

Table 6. Priority and rank of type of service determining 2nd customer satisfaction

No	Kind of services	2nd priority	rank
1	Completeness of product diversification procurement	33.0	1
2	Transaction	12.1	4
3	Storage	6.9	5
4	Transportation	21.7	3
5	Quality	26.3	2
Amount		100.0	

Among the types of critical services, the determining factors for customer satisfaction are product quality, completeness of procurement, diversification of available products, and transport. Product quality is the factor that most determines the level of customer satisfaction, followed by the product being sought after always available, as well as transportation services to the customer's place of activity.

Table 7. Average Priority and Rank

No	Kind of services	1st priority	2nd priority	Average	rank
1	Product Quality	44.3	26.3	35.3	1
2	Transportation	19.7	21.7	20.7	3
3	Storage	10.8	6.9	0	5
4	Transaction	11.3	12.1	11.7	4
5	Completeness of product diversification procurement	13.9	33.0	23.5	2
Amount		100.0	100.0	100.0	

Paying attention to the determinants of customer satisfaction are product quality, completeness of procurement of diversified types of products needed, and transportation services. The determining factor for this value is service quality, which includes freshness, wholeness, cleanliness, color, aroma, and food safety and health, with a value range of 2.9643 to 3.0714. The results of this study are consistent with those of Susanto's research (2017), who concluded that the variables of service quality, experience economy, price fairness, and customer value perception simultaneously affect customer value.

The coefficient for the level of customer satisfaction with CV Abbasy Karya Mandiri services is determined using the satisfaction value index, as Table 8.

Table 8. Average Customer Satisfaction Index Value

No	Attribute	Vegetables	Fruits	Average	Satisfaction Level
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
Amount		18.1429	18.2143	18.1786	Satisfied

This type of service, which determines value for customers, has been prepared by the management of CV Abbasy Karya Mandiri. Product quality is a top priority when selecting suppliers and products supplied; only products that meet quality requirements are accepted (Table 7). The type of service used is in accordance with customer expectations, as shown in Table 8, whereas those that do not meet the qualifications are rejected or rejected. Quality standards are not available in writing, but because managers and employees are experienced in sorting and grading, product quality is a priority to prevent complaints from customers.

Completeness for providing a wide variety of vegetable products needed by customers is supplied by existing vendors and new vendors so that the management collaborates with various vendors to meet each type of product demand. Efforts have been made to provide data on the quantity and quality of every product that customers require. Apart from being supplied by vendors, these products are also purchased directly from the market and produced at the farm owned by CV Abbasy Karya Mandiri. This farm is located in front of and behind grading, sorting, loading, and unloading rooms.

3.5 Customer Satisfaction Attributes

Information from CV Abbasy Karya Mandiri customers shows that the majority of them expressed satisfaction, with values between 2.9286 and 3.0714 (Table 8). The average satisfaction value was 3.0238, indicating that overall, customers were satisfied too very satisfied.

Table 9. Level of customer satisfaction with vegetable product attributes

No	Attribute	Less satisfied	Almost Satisfied	Satisfied	Very satisfied	Amount	Mark
		(1)	(2)	(3)	(4)		
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
	Amount	1	2	75	6		18.1429

Of the six attributes in Table 9, it is known that the lowest satisfaction value is freshness because, in storage and transportation, they have not implemented cold storage and cold boxes, while the distance between the location of the pasarmandalika.com store and the customer locus is more than 50 km with time travel of more than two hours. For customers whose locations are far away, cold boxes are

needed to store products during transportation, and before goods are sent to customers, they need storage. This process requires cold storage.

CV Abbasy Karya Mandiri, as the e-commerce manager of pasarmandalika.com, considers it important to use cold storage and cold box technology so that the product's freshness is maintained. The commodities traded by Toko Pasarmandalika.com are fruit and vegetables, spices, eggs, meat, and fish, which are susceptible to a decrease in quality. Because these products are available in fresh condition, it would be very wise to store them using cold storage, as long as transportation uses cold boxes.

Pay attention to the satisfaction level values in Table 7 indicate that the customer satisfaction level ranges from satisfied to very satisfied because the total satisfaction value is greater than 18 points from the maximum value of 24 points. Likewise, in terms of the percentage of respondents who stated that they were satisfied and very satisfied, they were 89.29% and 7.14%, respectively, while those who were almost satisfied and less satisfied were 2.38% and 1.19%, respectively.

The level of customer satisfaction with fruit products is better than that with vegetable products. In Table 8, the customer satisfaction value ranges from 3,000 to 3.0714, meaning that all customers have reached satisfaction to very satisfaction. It appears that fruit products are of better quality, especially in terms of freshness, because fruits have a longer shelf life than vegetables. The lowest satisfaction score was 3,000 for the attributes of freshness, wholeness, and color, while the food hygiene, aroma, safety, and health attributes showed a value of 3.0714 or above the average value of 3.0357, indicating that customer satisfaction ranged from satisfied to very satisfied.

Even though achieving customer satisfaction is considered conducive to fruit products, it would be better to anticipate storage and transportation using cold storage and cold boxes. Based on the information received during an in-depth interview with the owner of e-commerce, pasarmandalika.com explained that the vegetable and fruit marketing business will develop into various types of products, including crystal ice, and expand the marketing area to East Lombok and Sumbawa Island; inevitably, the technology for delivering goods will develop, one of which is cooling machine technology such as the cold box.

Table 10. Level of customer satisfaction with fruit product attributes

No	Attribute	Less satisfied	Almost Satisfied	Satisfied	Very satisfied	Amount	Mark
		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
	Amount	1	2	74	7		18.2143

The level of customer satisfaction with fruit products is almost the same as that with vegetable products (Table 9 and Table 10), namely from satisfied to very satisfied, with a satisfaction value greater than 18 points. The percentage of customers who said they were satisfied with the six types of fruit product attributes was 88.09%, and 8.33% said they were very satisfied, whereas those who were almost satisfied and less satisfied were 2.38% and 1.19%, respectively. Therefore, the research team assesses that CV Abbasy Karya Mandiri has provided good service so that customers obtain the expected level of satisfaction. Therefore, it is natural that CV Abbasy Karya Mandiri continues to grow and develop and strives to meet customer expectations.

4 Conclusions and Recommendations

Pasarmandalika.com e-commerce customers have provided economic value benefits of IDR 255,000/month for service functions in marketing vegetable and fruit products. These economic value benefits are obtained from savings on labor, vehicle rental, fuel, parking fees, insurance premiums, electricity, credit, and storage costs. Pasarmandalika.com e-commerce customers have reached a level of satisfaction to very satisfaction with a customer satisfaction index of 18.1786 for the service and attributes of vegetable and fruit food products. Completeness of procurement of product diversification is proven to be a determining factor in the marketing value of food products in the e-commerce case of pasarmandalika.com. There is a positive correlation between the frequency of customer orders for vegetable and fruit food products and the sales volume of pasarmandalika.com stores. Pasarmandalika.com stores gain added value from the implementation of marketing function activities for vegetable food products (30.046%) and fruit (20.987%) of the selling price per kilogram.

Increased restaurant and fresh market customer satisfaction can be achieved through the procurement of various types of food products.

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