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Performance of Food Products Distribution During the COVID-19 Pandemic in Indonesia

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Abstract

Purpose: This study aims to determine the online shop service performance of fresh food products distribution, consumer motivation, and their relationship during the COVID-19 pandemic. **Research design, data, and methodology:** A survey was conducted online using Google Forms on 100 consumers of TaniHub application users. Data in the form of scale were analyzed descriptively to explain the service performance and consumer motivation. The service performance consists of technical services and marketing services. Technical service indicators consist of payment, delivery, and products. Meanwhile, the marketing service indicator consists of promotions and prices. The consumer motivation is characterized by reference, actualization, and lifestyle. The relationship between the two was analyzed using Spearman's rank correlation. **Results:** The most consumers are millennial generation who were active in social media. They are employees with Bachelor's and Master's qualifications and included in the middle economic groups. TaniHub online shop had good technical and fair marketing performance. The motivation of online shop consumers of fresh food products through the TaniHub application was high. **Conclusions:** The findings discovered a significant relationship between online shop service performance and consumer motivation. It indicates the need for improvement in marketing services, especially promotions, to improve the performance of this e-agribusiness company.

Keywords: Distribution, Fresh Food Products, Motivation, Online Shop, Service

JEL Classification Code: M13, M31, O13, Q13, L18

1. Introduction

Indonesia is located in a tropical area with abundant biodiversity, thereby having great potential for developing agricultural products. Its agricultural land area reached 37,132,382 hectares in 2017 (Ministry of Agriculture of the Republic of Indonesia, 2018), thus producing great food

products. However, it has not provided welfare for Indonesian farmers. One of the reasons is fresh food products with the characteristics of perishability, rot quickly, and bulky. Therefore, fresh food products require special treatment to reduce risks during the marketing and distribution process. Accordingly, it has an impact on the high cost of marketing food products as well as less competitive prices. Besides, the weak access to market

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information by farmers and relatively long marketing channels have caused marketing less effective and inefficient. Hence, it requires a breakthrough in marketing agricultural products using advances in information technology.

The development of information technology has changed conventional businesses to become more modern digital-based. As a digital business platform, E-commerce has used the Internet to develop business ventures (Manalu et al., 2007) as production farmers in Kobe City have considered building new sales channels for agricultural products by collaborating with community-based tool stores and online sales companies (Yoshida, 2019). The research results in Southeast Asia, Indonesia contributes up to 50% of e-commerce transactions. During 2016-2017, e-commerce users increased by 11% (Aras et al., 2019).

The existence of an online marketplace or e-commerce has now penetrated the agricultural sector. TaniHub is an e-commerce engaged in selling online fresh and processed food products, starting to be of interest to the Indonesian people. According to TaniHub data, there were 84,975 users of the TaniHub application as of November 2019. Through TaniHub, local farmers can sell their crops to individuals and Micro, Small, and Medium Enterprises (MSMEs) in various regions.

As one of the agribusiness e-commerce platforms, TaniHub is expected to assist local farmers in marketing agricultural products, especially fresh food. This business model is also expected to help consumers shop for their daily food product needs effectively and efficiently. Consumers may have felt this benefit during the COVID-19 pandemic outbreak in early 2020. When WHO announced the COVID-19 pandemic and the government announced community activity restrictions, business activities encountered obstacles, including trade in agricultural products. Therefore, people can utilize one of these e-agribusiness forms to safely and healthily buy their daily food needs during this pandemic. Palomino Pita et al. (2020) revealed that this pandemic has radically changed people's preferences, making companies and consumers try and experiment with new buying and selling models such as online shopping. During the COVID-19 pandemic, internet shopping has reached 61.35%, leading the market, with a growth of 51.77%, while before the pandemic, physical shopping in stores led the market by 90.42%. This finding is reinforced by Nguyen et al. (2020), stating that the COVID-19 pandemic situation positively and significantly affects consumer intentions toward online book shopping.

The growth of online shopping during the pandemic, as found by Palomino Pita et al. (2020) and Nguyen et al. (2020), raises new questions on how the performance of TaniHub's online shop service for fresh food products responds to this growth? Besides, is consumer motivation to

shop for these products online related to the service performance provided by e-retail? Previous studies have discussed shopping motivation under normal conditions. Meanwhile, the pandemic is an abnormal condition in which community activities are limited. During the community activity restriction, food as the daily basic need for the community is crucial. Therefore, this study reviewed the performance of TaniHub's online shop services in responding to shopping growth as an essential topic to anticipate abnormal conditions or the new normal era. The authors also present demographic conditions, shopping profiles, and consumer motivation to shop online to meet food needs during the pandemic.

2. Literature Review

2.1. Consumer Motivation

Meta-theoretic Model of Motivation is a theory that seeks to explain how personality traits interact with situations to influence consumer attitudes and actions. Examples of situational traits investigated include impulse buying, value awareness, sports interest, and health motivation (Mowen, 2000). In the context of the COVID-19 pandemic, consumers are faced with situations related to health motivation.

Referring to the research results of Palomino Pita et al. (2020) and Nguyen et al. (2020), shopping motivation during a pandemic is utilitarian motivation because of the benefits that can be enjoyed Kebah et al. (2019). In addition to implementing the social distancing health protocol, the benefits for consumers are saving time and effort and feeling comfortable (Flavián et al., 2019; Sajjad et al., 2011; Albastroiu et al., 2018). During the pandemic, health motivation is one crucial motivation in choosing online shopping products, as discovered by Laguna et al. (2020). Meanwhile, the utilitarian shopping motivation of online shopping could be based on five factors, consisting of information availability, accessibility, search, product availability, and convenience (Kumar & Kashyap, 2018). The availability of information helps customers know the price of goods in advance and compares prices with different vendors (Kalaivani & Arunkumar, 2018).

Apart from utilitarian motivation, some consumers also possess hedonic motivation in shopping. Hedonic motivation is a fun and emotional shopping experience that stimulates and satisfies these emotions (Kwon & Brinthaup, 2015). Such motivation is commonly found in obsessive-compulsive purchases, although it harms the role of shopping and shopping value (Ali et al., 2020). Besides, online shopping on a website can increase self-confidence as a smart buyer (Flavián et al., 2019; Flavián et al., 2020).

It suggests that online shopping is also motivated by self-actualization needs (self-focus) and social needs (focusing on others) (Park et al., 2019).

Consumer motivation is inseparable from consumer characteristics, such as external environment, demographics, personal characteristics, and e-store characteristics, significantly influencing shopping intentions, behavior, and customer satisfaction (Li & Zhang, 2015). Sociodemographic are crucial drivers of e-commerce use of foodstuffs and channel choice, with women, more affluent households, and those in the 25–44-year age group most likely to use home delivery services, strengthening previous research (Hood et al., 2020). Martins and Slongo (2014) mentioned that profiles of the Internet or social media users have the potential to shop online and are willing to pay. It is confirmed by Hsu et al. (2013) that the perception of benefit recommendations and blogger beliefs have a significant effect on the attitudes and intentions of blog users to shop online.

A study shows that affordability (Price), practicality (Home), and social desirability are the three most prevalent shopping orientations (decision-styles) that prevail among Indian (Millennials and Generation Z) internet customers, but to variable degrees. The analysis of the ANOVA data revealed that while both cohorts like internet purchasing, Generation Z is more passionate than their Millennial counterparts about it (Thangavel et al., 2021). Different groups of users in terms of age and gender have similar preferences. As is the current popular trend among young people, in which reward points as attractiveness given by stores can affect motivation and store conversion rates as an indicator of increasing sales turnover (Chen et al., 2018). Young, well-educated, high-income male consumers who frequently bought wine online from home were motivated by convenience, a more expansive wine selection, availability, and price (Santos & Ribeiro, 2012). In the booming online shopping market, urban women's attitudes and perceptions of behavioral control positively influenced their intention to buy organic agricultural products (vegetables and fruit) online (Lai et al., 2020). Thus, the heterogeneity of consumers in terms of gender, age, and motivation to shop resulted in different configurations for achieving electronic fidelity (Wong et al., 2018).

2.2. Service Performance

Service performance is an essential part of online marketing that the estimation of the economic impact model of characteristics and services, as well as the role of social media from the online shop, are considerations for service improvement (Ghose et al., 2012). A total service quality consists of five-factor structures from the 'quality of service' of online retailers, comprising e-reliability, e-servicescape,

e-technology dissatisfiers, e-security, and e-delivery (Prabhu, 2019). The study also explored the 'quality of service recovery' factors of online retailers, namely e-support and e-compensation. However, some online customers preferred personal shoppers over official online product stores due to the personal touch given by personal shoppers during the transaction process. In making product purchases, customers have identified their needs. They have sought information from several different personal shoppers to reduce asymmetric information, evaluate information, make decisions, and show their satisfaction level regarding services by providing testimonials (Kurniasih, 2019).

Information services are essential, it means that access to various information is related to food quality, environmental and social impacts, and animal welfare (Fehrenbach & Wharton, 2012). Therefore, e-servicescape service (website screen display) as a good information service will build positive perceptions and customer loyalty. The dimensions of e-servicescape that stand out are the attributes of layout, functionality, and financial security (Tankovic & Benazic, 2018).

Service for customers has a significant influence on women's attitudes to online shopping and perceived behavior control acts as the most influential factor in the willingness of female buyers to shop online (Raman, 2020). Price is the most crucial criterion in choosing an omnichannel retailer, followed by waiting time and convenience. Czech online consumers exhibited high customer sensitivity in terms of delivery times and costs, whereas the impact of minimum order requirements on consumers' intentions to shop for groceries online was less decisive. Delivery passes were the most requested service by consumers and could play a role in building loyalty (Bauerová, 2018). Regarding convenience, home delivery took precedence over the pick-up option (Gawor & Hoberg, 2019). In general, the main service problems of online shopping were delays in product delivery, product quality, inadequate choice of payment methods, difficult return procedures, and limited product information (Davidaviciene et al., 2019).

3. Research Methods and Materials

3.1. Design and Sampling

This research utilized a descriptive method. It is a method that aims to examine problems from a population in facts (Pandjaitan & Aripin, 2017). This method also aims to create a systematic, factual, and accurate description of the facts, characteristics, and relationships between the investigated phenomena (Nazir, 2005).

The location determination was conducted deliberately considering that TaniHub is one of the largest fresh food e-commerce in Indonesia. TaniHub has four branch offices located in Jakarta (Jabodetabek), Bandung, Surabaya and Yogyakarta. TaniHub application users have reached 84,975 people.

The sample in this study was taken based on the availability of elements and the ease of obtaining them (Sekaran & Bougie, 2016). Information about TaniHub consumers was limited due to the absence of direct physical contact as potential respondents. Hence, respondent determination applied a reference based on regular internet users' visits to specific sites, which described the users' interests in specific topics or products (Sarwono, 2012). The reference referred to was TaniHub consumers who reviewed their shopping results through social media searches such as Instagram, Twitter, Facebook, and Youtube. The results of consumer identification through social media searches obtained 201 potential respondent consumers. Of the 201 consumers surveyed, 100 responded on Google Forms, thus having a response rate of 50%. This number was sufficient to represent the sample size and meet the minimum number of respondents in statistical research with a tolerance of 10% (Sarwono, 2012).

3.2. Research Instruments

An online survey using Google Forms was conducted during the beginning of the COVID-19 pandemic from April to August 2020. The questionnaire contained questions about the demographic characteristics of consumers, online shopping activities at TaniHub, consumer motivation, and their perceptions of online shopping services during the pandemic.

3.3. Data Analysis

Description analysis was used to describe demographic conditions, shopping profiles, consumer motivation, and the performance of food product shopping services of TaniHub e-commerce. Measurement of consumer motivation and performance of TaniHub services employed a Likert scale (1-5). Service performance indicators included technical services (payments, delivery, and products) and marketing services (prices and promotions). TaniHub services performance were determined based on the results of the achievement score, divided into three categories as follows:

Table 1: Services Performance Category of Fresh Food Products of Tanihub

Category	Score
Good	3.67 – 5.00
Fair	2.34 – 3.66
Poor	1.00 – 2.33

Meanwhile, the indicators of consumer motivation consist of references, actualization, and lifestyle. Consumer motivation can be divided into three categories based on the results of the score as follows:

Table 2: Consumer Motivation Category of Fresh Food Products of Tanihub

Category	Score
High	3.67 – 5.00
Moderate	2.34 – 3.66
Low	1.00 – 2.33

Meanwhile, the relationship between service performance and consumer motivation was analyzed using Spearman's rank correlation. According to (Djarwanto, 1991) and (Sugiyono, 2017), the value of Spearman's rank correlation formulation is as follows:

$$R_s = \frac{1 - 6\sum D_i^2}{n(n^2 - 1)} \tag{1}$$

Description:

Rs: Spearman's rank correlation coefficient

Di: The difference in scores between indicators

n: Number of samples

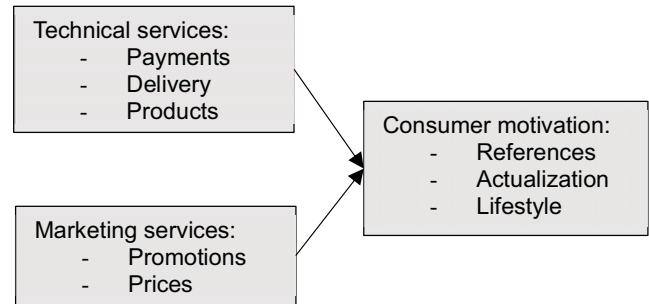


Figure 1: Conceptual Framework

4. Results and Discussion

4.1. Consumer Demographics

Female consumers totaling 82% dominated TaniHub consumers. In terms of age, these consumers belonged to the category of generations Z and Y, with the details of generation Z amounting to 39% and generation Y amounting to 60%. Most of them (37%) lived in Jakarta and the surroundings (Jabodetabek), while the least consumers (2%) were in Bali.

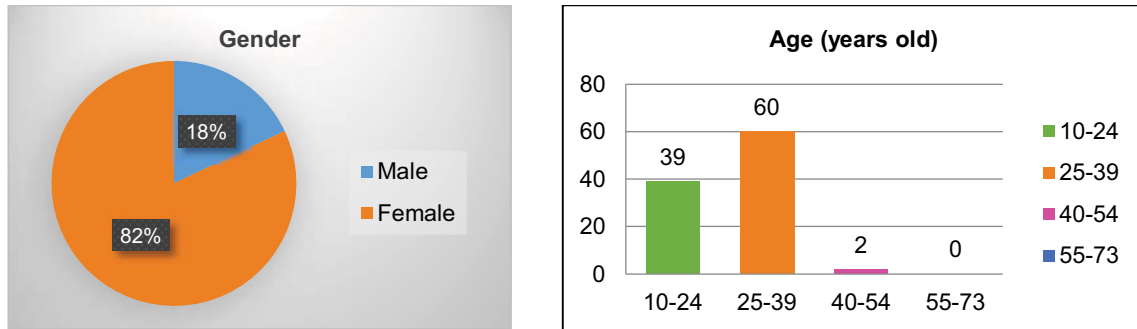


Figure 2: Graph of Age and Gender Distribution of Tanihub Consumers

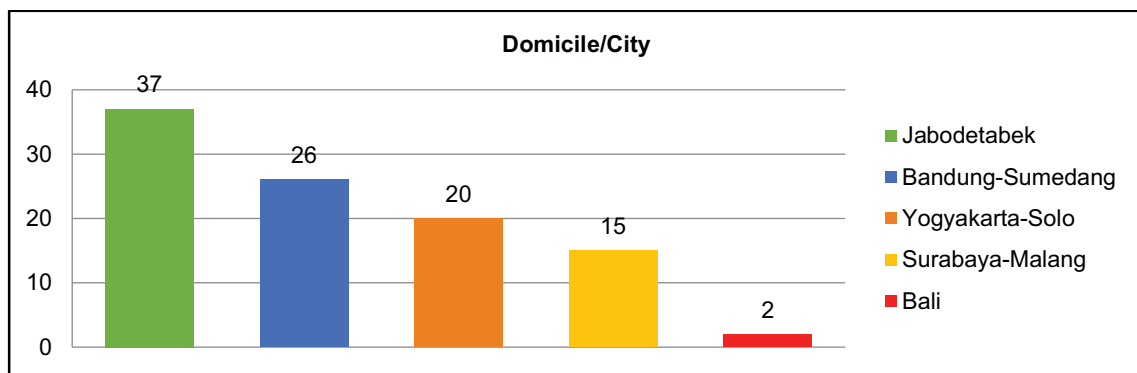


Figure 3: Graph of Consumer Distribution Based on Domicile

The majority of Tanihub consumers (81%) had taken higher education at the diploma, undergraduate and postgraduate levels. Meanwhile, the remaining 19% had a high school education. Generally, most of them worked as employees in private and government institutions, with income ranging from Rp. 4,545,000 - 14,064,000 per month. In other words, they belonged to the middle and upper classes. The distribution of education and consumer income levels is presented in Figures 4 and 5.

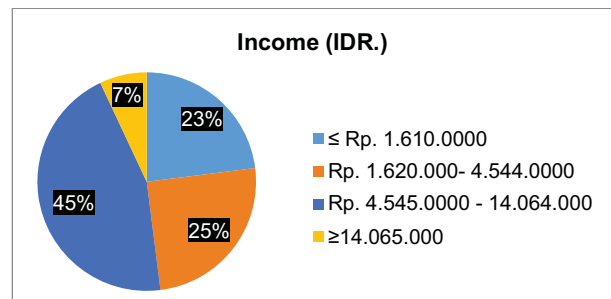


Figure 5: Income Distribution of Tanihub Consumers

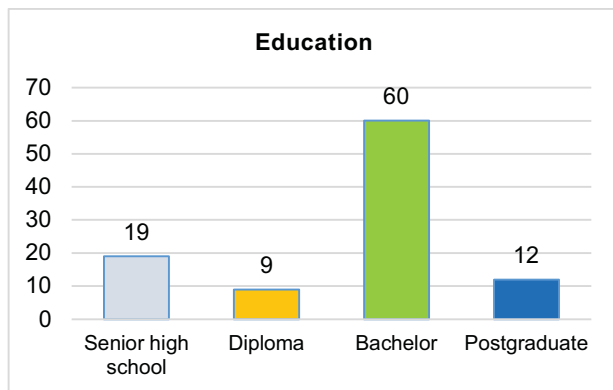


Figure 4: Education Level Distribution of Tanihub Consumers

Most TaniHub consumers (57%) used the Internet ranging from 1-8 hours per day to access social media. They had at least one social media account; however, some other consumers had more than one account. The frequently used social media were Facebook, Instagram, YouTube, and WhatsApp. Figure 6 displays the distribution of consumer internet access intensity.

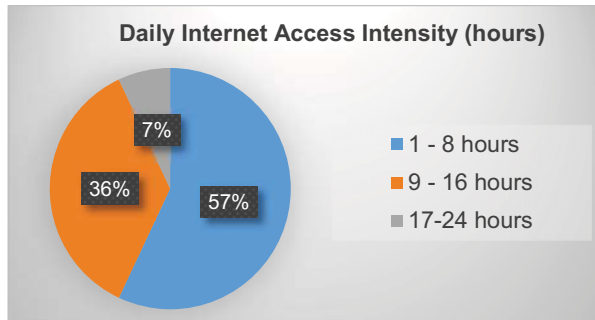


Figure 6: Daily Internet Access Intensity of Tanihub Consumers

4.2. Consumer Spending Profile

Most consumers bought fresh food products such as fruit, vegetables, eggs, and meat. These products were in great demand, especially during a pandemic, to meet the adequacy of nutrition and vitamins. By consuming these food products, consumers hoped their bodies would remain healthy and fit and ward off virus and disease outbreaks. Apart from that, consumers also bought other processed foods for their daily menu variations. Various food products purchased by consumers are presented in Figure 7.

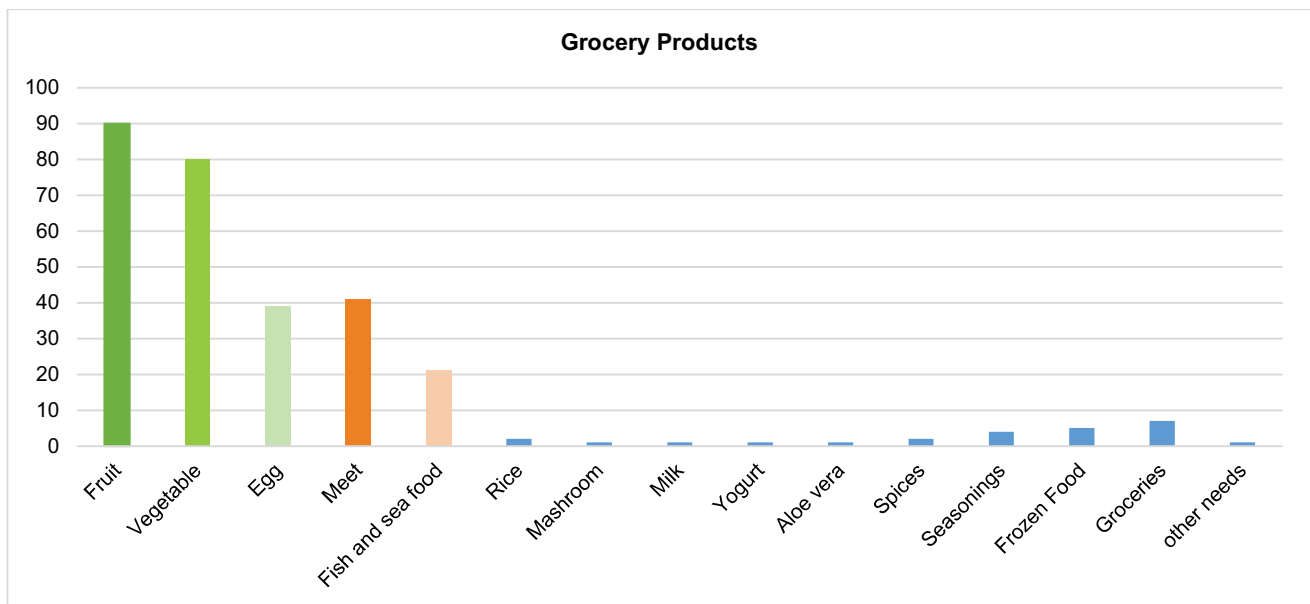


Figure 7: The Types of Products Bought by Tanihub Consumers

Most consumers were new consumers trying the TaniHub application in shopping for their daily food products. Their shopping frequency ranged from 1-10 times a year. The frequency of spending was likely to increase with the enactment of social distancing and WFH policies during the COVID-19 pandemic. Figure 8 exhibits the frequency distribution of food product purchases by consumers.

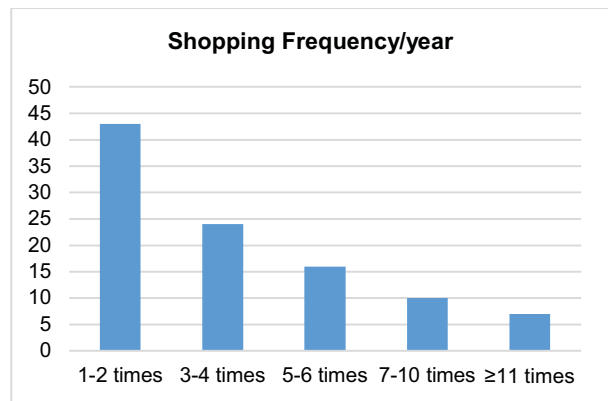


Figure 8: Consumer Shopping Frequency at Tanihub

Meanwhile, the value of consumer shopping transactions varied depending on the needs and abilities of consumer spending. Most consumer shopping transaction values ranged from IDR. 100,000-200,000. It happened due to the effect of free shipping promos during the COVID-19 pandemic for consumers with a minimum transaction of IDR. 100,000. Figure 9 depicts the value range of consumer shopping transactions.

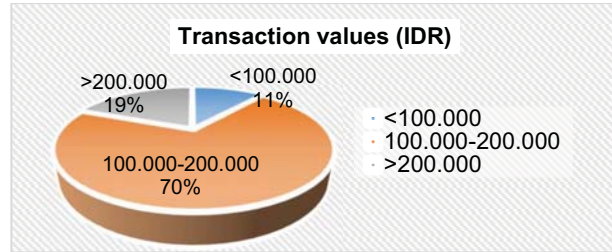


Figure 9: Shopping Transaction Values of Tanihub Consumers

4.3. The Online Shop Service Performance of Fresh Food Products

4.3.1. Technical Service

TaniHub’s technical services for fresh food products consisted of payment, delivery, and products. Each technical service consisted of three consumer assessment indicators. Table 3 displays the technical service performance score of TaniHub’s fresh food products.

The results indicate a good technical service performance. Consumers considered that TaniHub’s payment methods were easier, faster, and safer. It could answer one of the main problems of online buyers, as stated by Davidaviciene et al. (2019), namely the inadequate choice of payment methods.

Table 3: Tanihub's Technical Service Performance for Fresh Food Products

No	Indicator	Score
A. Payment		
1	Payment methods are easier than conventional	3.87
2	Payment methods are faster than conventional	4.00
3	Safe and reliable payment methods	4.06
B. Order and delivery		
1	The application is easy to use in accessing product orders.	3.96
2	Fast product distribution to consumers	3.92
3	Customer service admin answers all consumer's questions and complaints in a friendly and kind manner.	3.70
C. Products		
1	The products are complete.	3.23
2	The required products are available in the application.	3.47
3	The products purchased are appropriately packaged.	4.20

Total	34.41
Average	3.82
Category	Good

Source: Authors' own research.

The performance of TaniHub’s order and delivery services was relatively high. An easy-to-access ordering application, fast delivery of orders, and friendly customer service in answering customers’ questions and complaints were benchmarks for the performance of the order and delivery services. Delivery services related to time speed and customer convenience play a role in building customer loyalty (Bauerová, 2018; Gawor & Hoberg, 2019). This performance could answer the problem of late product delivery, as stated by Davidaviciene et al. (2019). Therefore, it is necessary to utilize digital technology to improve the accuracy of data forecasting and reservation requests quickly (Apriyani et al., 2021).

The performance of TaniHub’s product services included availability according to the application, completeness, and product packaging. Availability is one of the motivations for consumers to buy online (Santos & Ribeiro, 2012; Kumar & Kashyap, 2018). Even though the products are available according to the application, the impact of consumer growth due to the COVID-19 pandemic can not be anticipated by e-retail, resulting in the sub-indicator value of product completeness being lower than others. The growth of consumers allows consumer tastes to be more varied, but e-retail cannot fulfill it. Similarly, Wong et al. (2018) stated that consumer heterogeneity in terms of gender, age, and shopping motivation has resulted in different configurations to achieve online shop customer loyalty.

4.3.2. Marketing Services

Prices and promotions could demonstrate TaniHub’s marketing service performance for fresh food products. Affordable prices, competitive prices compared to conventional retails, and conformity with product quality are the key indicators in this study.

Table 4: Tanihub's Marketing Service Performance for Fresh Food Products

No	Indicator	Score
A. Price		
1	Affordable prices	3.79
2	Lower prices than conventional	3.45
3	Prices equal product quality	3.95
B. Promotion		
1	Interesting and communicative advertising	3.40
2	Frequent promos	3.30
Average		3.58
Category		Fair

Source: Authors' own research.

Table 4 displays that the performance of price and promotion services belongs to a good category. Notably, price service indicators have relatively high performance than promotional service indicators. Price was the most crucial criterion in the selection of an omnichannel retailer (Bauerová, 2018). Fair prices were one of the interests considered by online shoppers (Liu et al., 2013). Meanwhile, lower prices and equal product quality were the main benchmarks for consumer assessment. It is consistent with the findings of Bruneel et al. (2014), indicating that satisfaction depended on the price/quality ratio and the real effect of the product. Better prices impacted online shoppers (Skarauskiene et al., 2018). Therefore, price hunters were among the basic target segments of consumers (Dubovyk & Ortynska, 2015). It is also reinforced by the findings of Habenstein et al. (2020), revealing that price had the highest relative importance (47%).

4.4. Consumer Motivation

Consumer motivation on the TaniHub application could be seen from the reference indicator, their actualization, and lifestyle. Each indicator describes consumer motivation from a different perspective from other indicators.

Table 5. Consumer Motivation to Shop for Fresh Food Products at Tanihub

No	Indicator	Score
Reference		
1	Relative recommendations	3.29
2	Customer testimonials	3.20
Actualization		
1	Interested in the slogan "Supporting local farmers"	4.19
2	Keeping up with the development of e-agribusiness innovations	4.10
Lifestyle		
1	Frequently shopping using e-commerce	4.06
2	Saving more time	4.15
	Average	3.83
	Category	High

Source: Authors' own research.

Table 5 displays the high consumer motivation to shop for fresh food products online during the COVID-19 pandemic. The actualization motivation indicator occupies the highest position, followed by lifestyle motivation. As discovered by (Park et al., 2019), there was a need for self-actualization, in which consumers wanted to try e-agribusiness innovations, while social needs were in the form of a desire to support local farmers to sell their crops at reasonable prices. This motivation could increase self-confidence as a smart buyer (Flavián et al., 2019; Flavián et al., 2020).

The motivation indicator from external sources, namely the need for reference, ranks the lowest even though

classified as moderate. Recommendations from relatives and consumer testimonials could build consumer trust as found by Krbová & Pavelek (2015) and Flavián et al. (2016), stating that former customer reviews were one of the essential considerations for consumers to shop online. Online consumer reviews (OCR) were the indicator of online transactions that succeeded in attracting potential buyers (Fagerstrøm et al., 2016). This OCR significantly affected customer intentions and customer trust in e-vendors (Elwolda et al., 2016).

Based on the age group, the analysis results do not show a difference in motivation between generations Z and Y because both have high motivation (Table 6). The two generations have close age ranges that pass through almost the same social and cultural situations, especially exposure to technology (Subandowo, 2017). Generation Z is more familiar with the TaniHub application because they often use mobile phone applications for their lives, especially online shopping, while Generation Y prefers using laptops (Dabija & Lung, 2019). It implies that the millennial youth group familiar with information technology and social media is the potential for e-marketing. It is supported by (Santos & Ribeiro, 2012), revealing that an online market was mainly made up of young, male, and highly educated consumers.

Table 6. Consumer Motivation for Generations Y and Z

Generation	Score	Motivation
Y	3.79	High
Z	3.89	High

Source: Authors' own research.

4.5. Reliability Analysis

We consider testing the reliability of the data on the variables in the study, namely service performance and consumer motivation. Table 5 presents the results of the data reliability test which shows that all variables in this study are declared valid based on Conbrach's alpha value, namely all values above 0.600

Table 7: Reliability Data Analysis of Services Performances and Motivation

Variable		Cronbach's Alpha
Performance services	Technical:	
	- Payment	0.892
	- Order-delivery	0.766
	- Product	0.612
	Marketing:	
	- Price	0.745
Motivation	- Promotion	0.792
	Reference	0.692
	Actualization	0.743
	Lifestyle	0.878

Source: Authors' own research.

4.6. Relation Between Online Shop Service Performances and Consumer Motivation

In the marketing of goods and services, service performance impacts changes in customer motivation. Therefore, the relationship between service performance and consumer motivation is an essential concern in this paper.

Table 8 displays that almost all service indicators have a positive correlation to consumer motivation. All technical service performance indicators have a significant positive correlation with all aspects of consumer motivation at the alpha level of 1% and 5%. Likewise, the marketing service performance has a significant positive correlation with all aspects of consumer motivation at the alpha level of 1-10%.

Table 8: The Relationship Between TaniHub's Service Performance for Fresh Food Products and Consumer Motivation

Service Performance	Consumer Motivation					
	Reference		Actualization		Lifestyle	
	Rs	Sign	Rs	Sign	Rs	Sign
Technical:						
- Payment	0.254**	0.011	0.475***	0.000	0.468***	0.000
- Order-delivery	0.384***	0.000	0.439***	0.000	0.482***	0.000
- Product	0.353***	0.000	0.442***	0.000	0.415***	0.000
Marketing:						
- Price	0.371***	0.000	0.300***	0.002	0.313***	0.002
- Promotion	0.432***	0.000	0.247**	0.013	0.167*	0.097

Description: *** significant at the α level of 1%

** significant at the α level of 5%

* significant at the α level of 10%

Order and delivery service indicators have a positive correlation with consumer motivation. These results reinforce the findings of Bauerová (2018) and Gawor & Hoberg (2019), stating that delivery services were most in-demand by customers. The analysis results answer major service problems, as disclosed by Davidaviciene et al. (2019), regarding product delivery, product quality, inadequate choice of payment methods, complicated return procedures, and minimum product information.

Following the marketing service performance, the price was the most essential criterion in-retailer selection (Bauerová, 2018). Likewise, this study also disclosed that price had a vital role in consumer motivation, as indicated by a positive correlation between marketing service performance and consumer motivation. This result was reinforced by the promotion of free shipping during the COVID-19 pandemic. Thus, online shopping services have been highly beneficial for consumers in meeting their food needs during the pandemic.

5. Conclusions

The demographics of TaniHub's online shop consumers of fresh food products were primarily female, including the millennial generation who were active on social media. They mostly possessed Bachelor's and Master's degrees. Most of them worked as employees and belonged to the middle and upper classes.

The technical service performance was classified as good, but the marketing service performance was relatively fair. Marketing services have not promoted prices or promotions properly.

In general, consumers had high motivation to shop for fresh food products online during the COVID-19 pandemic. The service performance and consumer motivation had a significant positive relationship. Therefore, to increase consumer motivation, the service performance must be improved, especially marketing services in terms of promotions. The Companies management must intensify promotions and information through social media evenly, mainly in social media active hours, especially during prime time to better reach out to the public, particularly prospective millennial consumers. In addition, the free shipping promo will be a special attraction for the consumer in the distribution of fresh food products.

References

- Albastroiu, I., Vasiliu, C., & Dinu, V. (2018). Consumer perspective toward delivery and return policies of online stores: An exploratory research from Romania. In *Transformations in Business and Economics*, 17(1), 133-151. <https://www.scopus.com/inward/record.uri?partnerID=HzOxMe3b&scp=85046345854&origin=inward>
- Ali, A., Li, C., Hussain, A., & Bakhtawar. (2020). Hedonic Shopping Motivations and Obsessive-Compulsive Buying on the Internet. *Global Business Review*. 21(4), 1-18. <https://doi.org/10.1177/0972150920937535>
- Apriyani, D., Nurmalina, R., & Burhanuddin. (2021). Bullwhip effect study in leaf organic supply chain. *Agraris*, 7(1), 1-10. <https://doi.org/10.18196/agraris.v7i1.9842>
- Aras, M., Fujianti, V. R., & Gunawan, F. E. (2019). The factors affecting online purchase intention in Indonesia. *ICIC Express Letters, Part B: Applications*, 10(12), 1057-1065. <https://doi.org/10.24507/icicelb.10.12.1057>
- Bauerová, R. (2018). Consumers' decision-making in online grocery shopping: The impact of services offered and delivery conditions. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 66(5), 1239-1247. <https://doi.org/10.11118/actaun201866051239>
- Bruneel, C. A., Lakhdar, C. Ben, & Vaillant, N. G. (2014). Are "legal highs" users satisfied evidence from online customer comments. *Substance Use and Misuse*, 49(4), 364-373. <https://doi.org/10.3109/10826084.2013.841243>
- Chen, P. L., Yang, P. C., & Ku, T. (2018). Social network and

- consumer behavior analysis: A case study in the shopping district. In *Lecture Notes in Electrical Engineering*, 422, 879-890. https://doi.org/10.1007/978-981-10-3187-8_84
- Dabija, D.-C., & Lung, L. (2019). *Millennials Versus Gen Z: Online Shopping Behaviour in an Emerging Market*. Springer International Publishing. <https://doi.org/10.1007/978-3-030-17215-21>
- Davidaviciene, V., Raudeliuniene, J., Tvaronaviciene, M., & Kaušinis, J. (2019). The importance of security aspects in consumer preferences in electronic environment. *Journal of Security and Sustainability Issues*, 8(3), 399-411. [https://doi.org/10.9770/jssi.2019.8.3\(9\)](https://doi.org/10.9770/jssi.2019.8.3(9))
- Djarwanto. (1991). *Non Parametric Statistic*. BPFE UGM.
- Dubovyk, T., & Ortynska, V. (2015). Internet-marketing communications of trade companies based on consumer typology. *Economic Annals-XXI*, 155(11-12), 91-95. <https://www.scopus.com/inward/record.uri?partnerID=HzOxMe3b&scp=84960126167&origin=inward>
- Elwalda, A., Lü, K., & Ali, M. (2016). Perceived derived attributes of online customer reviews. *Computers in Human Behavior*, 56, 306-319. <https://doi.org/10.1016/j.chb.2015.11.051>
- Fagerström, A., Ghinea, G., & Sydnés, L. (2016). How Does Probability Impact Consumers' Choice? The Case of Online Reviews. *Managerial and Decision Economics*, 37(4-5), 331-336. <https://doi.org/10.1002/mde.2720>
- Fehrenbach, K. S., & Wharton, C. (2012). Consumer information-seeking preferences at a university farmers' market. *Journal of Hunger and Environmental Nutrition*, 7(1), 53-63. <https://doi.org/10.1080/19320248.2012.649669>
- Flavián, C., Gurrea, R., & Orús, C. (2016). Choice confidence in the webrooming purchase process: The impact of online positive reviews and the motivation to touch. *Journal of Consumer Behaviour*, 15(5), 459-476. <https://doi.org/10.1002/cb.1585>
- Flavián, C., Gurrea, R., & Orús, C. (2019). Feeling Confident and Smart with Webrooming: Understanding the Consumer's Path to Satisfaction. *Journal of Interactive Marketing*, 47, 1-15. <https://doi.org/10.1016/j.intmar.2019.02.002>
- Flavián, C., Gurrea, R., & Orús, C. (2020). Combining channels to make smart purchases: The role of webrooming and showrooming. *Journal of Retailing and Consumer Services*, 52. <https://doi.org/10.1016/j.jretconser.2019.101923>
- Gawor, T., & Hoberg, K. (2019). Customers' valuation of time and convenience in e-fulfillment. *International Journal of Physical Distribution and Logistics Management*, 49(1), 75-98. <https://doi.org/10.1108/IJPDLM-09-2017-0275>
- Ghose, A., Ipeirots, P. G., & Li, B. (2012). Designing ranking systems for hotels on travel search engines by mining user-generated and crowdsourced content. *Marketing Science*, 31(3), 493-520. <https://doi.org/10.1287/mksc.1110.0700>
- Habenstein, D., Kirchoff, K., & Schlesinger, T. (2020). Club fan shop or not? A conjoint analysis of online jersey purchase behavior. *Sport, Business and Management: An International Journal*. <https://doi.org/10.1108/SBM-10-2019-0102>
- Hood, N., Urquhart, R., Newing, A., & Heppenstall, A. (2020). Sociodemographic and spatial disaggregation of e-commerce channel use in the grocery market in Great Britain. *Journal of Retailing and Consumer Services*, 55. <https://doi.org/10.1016/j.jretconser.2020.102076>
- Hsu, C. L., Lin, J. C. C., & Chiang, H. Sen. (2013). The effects of blogger recommendations on customers' online shopping intentions. *Internet Research*, 23(1), 69-88. <https://doi.org/10.1108/10662241311295782>
- Kalaivani, D., & Arunkumar, T. (2018). Multi process prediction model for customer behaviour analysis. *International Journal of Web Based Communities*, 14(1), 54-63. <https://doi.org/10.1504/IJWBC.2018.090918>
- Kebah, M., Raju, V., & Osman, Z. (2019). Online purchasing trend in the retail industry in Saudi. *International Journal of Recent Technology and Engineering*, 8(3), 865-868. <https://doi.org/10.35940/ijrte.C4053.098319>
- Krbová, P., & Pavelek, T. (2015). Generation Y: Online shopping behaviour of the secondary school and university students. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 63(2), 567-575. <https://doi.org/10.11118/actaun201563020567>
- Kumar, A., & Kashyap, A. K. (2018). Leveraging utilitarian perspective of online shopping to motivate online shoppers. *International Journal of Retail and Distribution Management*, 46(3), 247-263. <https://doi.org/10.1108/IJRDM-08-2017-0161>
- Kurniasih, N. (2019). Customers information behavior of Indonesian personal shopper on instagram. *Humanities and Social Sciences Reviews*, 7(4), 237-244. <https://doi.org/10.18510/hssr.2019.7430>
- Kwon, H. J., & Brinthead, T. M. (2015). The motives, characteristics and experiences of US black friday shoppers. *Journal of Global Fashion Marketing*, 6(4), 292-302. <https://doi.org/10.1080/20932685.2015.1070681>
- Laguna, L., Fiszman, S., Puerta, P., Chaya, C., & Tárrega, A. (2020). The impact of COVID-19 lockdown on food priorities. Results from a preliminary study using social media and an online survey with Spanish consumers. *Food Quality and Preference*, 86. <https://doi.org/10.1016/j.foodqual.2020.104028>
- Lai, J. J., Pai, N. Y., & Wang, W. C. (2020). The environmental awareness influence urban female's purchasing intention of organic agricultural products. *International Journal of Information Systems in the Service Sector*, 12(2), 1-18. <https://doi.org/10.4018/IJISS.2020040101>
- Li, N., & Zhang, P. (2015). What makes customers shop online? In *Electronic customer relationship management* (pp. 149-176). <https://www.scopus.com/inward/record.uri?partnerID=HzOxMe3b&scp=85076522675&origin=inward>
- Liu, W. Y., Lin, C. C., Lee, Y. S., & Deng, D. J. (2013). On gender differences in consumer behavior for online financial transaction of cosmetics. *Mathematical and Computer Modelling*, 58(1-2), 238-253. <https://doi.org/10.1016/j.mcm.2012.08.010>
- Manalu, A. S. B., Sumarwan, U., & Suroso, A. I. (2007). Analysis of Factors Affecting Online Customer Satisfaction. *Jurnal Manajemen Dan Agribisnis*, 4(2), 67-80. <http://jesl.journal.ipb.ac.id/index.php/jmagr/article/view/3323>
- Martins, J. P. C., & Slongo, L. A. (2014). O mercado de música digital: Um estudo sobre o comportamento do consumidor brasileiro. *Revista Brasileira de Gestao de Negocios*, 16(53), 638-657. <https://doi.org/10.7819/rbgn.v16i52.1487>
- Ministry of Agriculture of the Republic of Indonesia. (2018). *Statistic of Agriculture*.

- Mowen, J. C. (2000). The 3M Model of Motivation and Personality. In *The 3M Model of Motivation and Personality*. Springer Science+Business Media. <https://doi.org/10.1007/978-1-4757-6708-7>
- Nazir, M. (2005). *Research Method*. Ghalia Indonesia.
- Nguyen, H. V., Tran, H. X., Van Huy, L., Nguyen, X. N., Do, M. T., & Nguyen, N. (2020). Online Book Shopping in Vietnam: The Impact of the COVID-19 Pandemic Situation. *Publishing Research Quarterly*, 36(3), 437-445. <https://doi.org/10.1007/s12109-020-09732-2>
- Palomino, A. F., Carolina, M. V., & Oblitas, J. F. (2020). E-commerce and its importance in times of covid-19 in Northern Peru. *Revista Venezolana de Gerencia*, 25(3), 253-266. <https://doi.org/10.37960/rvg.v25i3.33367>
- Pandjaitan, D. R. H., & Aripin, A. (2017). *Research Method for Business*. (P. Media (ed.)).
- Park, H. E., Yap, S. F. C., & Makkar, M. (2019). A laddering study of motivational complexities in mobile shopping. *Marketing Intelligence and Planning*, 37(2), 182-196. <https://doi.org/10.1108/MIP-03-2018-0104>
- Prabhu, S. (2019). Factors of service quality and service-recovery quality of online retailers. *International Journal of Innovative Technology and Exploring Engineering*, 8(11 Special Issue), 356-361. <https://doi.org/10.35940/ijitee.K1065.09811S19>
- Raman, P. (2020). Online shopping characteristics and their influence on female buying behavior: An extension of the theory of planned behavior. *Journal of Electronic Commerce in Organizations*, 18(4), 1-29. <https://doi.org/10.4018/JECO.2020100101>
- Sajjad, S. I., Shafi, H., Akhtar, N., Tahir, M. B., & Rehman, K. U. (2011). The influence of product type on internet shopping behavior of consumers. *World Applied Sciences Journal*, 13(5), 1141-1146. <https://www.scopus.com/inward/record.uri?partnerID=HzOxMe3b&scp=84864933704&origin=inward>
- Santos, J. F., & Ribeiro, J. C. (2012). The Portuguese online wine buying consumer : Characteristics, motivations and behaviour. *EuroMed Journal of Business*, 7(3), 294-311. <https://doi.org/10.1108/14502191211265343>
- Sarwono, J. (2012). Reseach online Methode : Theory, practical, and apliction by using HTML, PHP, dan CSS. In *PT. ELek media Koputindo* (Vol. 3). Elex Media Komputindo.
- Sekaran, U., & Bougie, R. (2016). Research methods for business: A skill building approach. In *Long Range Planning* (7th Editio, Vol. 26, Issue 2). John Wiley & Sons. [https://doi.org/10.1016/0024-6301\(93\)90168-f](https://doi.org/10.1016/0024-6301(93)90168-f)
- Skarauskiene, A., Bauboniene, I., & Guleviute, G. (2018). Factors influencing consumers online shopping decision: Present and future evidence from Lithuania. In *Proceedings of the 5th European Conference on Social Media, ECSM 2018* (pp. 301-311). <https://www.scopus.com/inward/record.uri?partnerID=HzOxMe3b&scp=85064616010&origin=inward>
- Subandowo, M. (2017). Civilization and Productivity in a Demographic Bonus Perspective and Generations Y and Z. *SOSIOHUMANIKA: Jurnal Pendidikan Sains Sosial Dan Kemanusiaan*, 10(November), 191-208.
- Sugiyono. (2017). Business Research Method (Pendekatan Kuantitatif, Kualitatif, Combination, and R&D Approach. In *Metodelogi Penelitian*. Alfabeta.
- Thangavel, P., Pathak, P., & Chandra, B. (2021). Millennials and Generation Z: a generational cohort analysis of Indian consumers. *Benchmarking*, 28(7), 2157-2177. <https://doi.org/10.1108/BIJ-01-2020-0050>
- Tankovic, A. C., & Benazic, D. (2018). The perception of e-servicescape and its influence on perceived e-shopping value and customer loyalty. *Online Information Review*, 42(7), 1124-1145. <https://doi.org/10.1108/OIR-12-2016-0354>
- Wong, R. M. M., Wong, S. C., & Ke, G. N. (2018). Exploring online and offline shopping motivational values in Malaysia. *Asia Pacific Journal of Marketing and Logistics*, 30(2), 352-379. <https://doi.org/10.1108/APJML-10-2016-0197>
- Yoshida, C. (2019). Community-based businesses cooperate with agriculture and commerce via online ordering. In *ACM International Conference Proceeding Series* (pp. 11-14). <https://doi.org/10.1145/3361785.3361811>