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Examining Factors Influencing Continuance Intention to Use for Agricultural E-Commerce Platforms in Indonesia using SEM-PLS

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Abstract. This study analyzes factors influencing continuance intention to use agricultural e-commerce platforms in Indonesia, focusing on Sayurbox and Segari. Data was collected via a survey of 400 respondents in Greater Jakarta and analyzed using SEM-PLS. The findings reveal that perceived usefulness and satisfaction determine continuance intention, while system quality, information quality and service quality have no significant impacts. The results contribute by highlighting key drivers of continuance intention specific to agricultural e-commerce in the Indonesian context. For practice, enhancing application usefulness and customer satisfaction by adding several features mentioned in research discussion emerge as priorities for player retention.

Keywords: agricultural e-commerce, continuance intention, SEM-PLS, information systems success model, expectation-confirmation model.

1. Introduction

To ensure business growth aligns with technological advancements, companies must digitize their operations through electronic commerce (e-commerce) as it offers speed and convenience to both sellers and buyers. E-commerce transactions are the primary driving force behind Indonesia's digital economy. In 2021, the total value of e-commerce transactions amounted to $53 billion, and it is projected to surge to $104 billion by 2025, displaying an anticipated growth rate of 18% (Coordinating Ministry for Economic Affairs of the Republic of Indonesia, 2022). Thus, by engaging in electronic selling and buying, we not only keep up with technological advancements but also participate in the growth of Indonesia's digital economy.

One sector of e-commerce is agriculture, commonly referred to as agricultural e-commerce, which involves the electronic trading of agricultural products. The agricultural distribution chain is one of the most complex issues in Indonesia. There are still several hierarchies through which agricultural products pass, starting from farmers and ending up in the hands of consumers. Therefore, agricultural e-commerce is introduced to simplify the food distribution chain in Indonesia by utilizing technology and empowering communities as partners in more efficient sales and distribution (Andriani, 2021).

Agricultural e-commerce is also known as e-grocery because it serves as a platform for purchasing daily necessities online. The presence of e-grocery platforms has been well-received and considered beneficial by the Indonesian community, especially during the COVID-19 pandemic. Despite social distancing measures and restrictions on public activities, people could still shop for vegetables, fruits, and other household items without going to the market, as they only need to shop online through a mobile application (Jujang, 2020). People who used to find it strange and ask, "Won't the vegetables wither on the streets?" when someone shopped online have now normalized purchasing vegetables online (Handayani & Aprian, 2023).

However, despite the benefits, the agricultural e-commerce industry is not easily conquered. Firstly, data from Tech in Asia indicates that the number of agricultural technology startups (including agricultural e-commerce) has declined by 5 from 57 to 52 startups after the pandemic (Tech in Asia, 2022). Secondly, the closure of agricultural e-commerce startups, including the prominent one like TaniHub (Dewi, 2022). Thirdly, based on the latest survey by Home Credit, post-pandemic, 54% of the respondents prefer offline shopping over online for certain product categories, including necessities (Putri, 2023). Lastly, there are competitors in the e-grocery landscape, ranging from retailers, marketplaces to quick commerce platforms. Based on the data of the Most Used Applications for Groceries in Indonesia by Databox in June 2022, the top 8 were: 1) Alfagift by Alfamart, 2) GoMart by GoJek, 3) Shopee Segar by Shopee (no longer operating), 4) Sayurbox, 5) HappyFresh, 6) Tokopedia Now by Tokopedia, 7) GrabFresh (now GrabMart by Grab), dan 8) Segari (Rizaty, 2022). Besides those, there is a newcomer called AlloFresh by Transmart that has its own ecosystem of retailer (Transmart) and banking (Allo Bank) (Eka, 2022); and also Astro that has a concept of quick commerce by depending on “dark stores”, that is a series of logistics hubs in densely populated settlements (Bestari, 2022). The mapping of *e-grocery* is visualized in Figure 1.

Fig. 1: E-Grocery Mapping

This research focuses on finding the factors that affect the continuance intention to use agricultural e-commerce, thus the research question is “What are the factors affecting the continuance intention to use for agricultural e-commerce?”. The agricultural e-commerce samples are Sayurbox and Segari as those are the most popular agricultural e-commerce that are still available until now. Sayurbox was established in 2016 with the latest data of users reached 1 million (Safitri & Pratama, 2022) while Segari was established in 2020 and the latest data of users are 250,000 (Wafi, 2021).

2. Literature Review and Hypotheses Development

2.1. Agricultural E-Commerce

E-commerce has been implemented as a competitive advantage in various sectors, including agriculture (Fernando et al., 2017). With the digital transformation, the way people buy agricultural products is not only physical markets but also online (Zhuansun et al., 2022). Agricultural e-commerce is an electronic trading platform that offers services for purchasing agricultural products without leaving home (Cai et al., 2015).

The agricultural sector has unique characteristics that set it apart from other industries. Some of its products are perishable, and the types of products can vary with each season and region, leading to different storage requirements and potentially higher costs compared to products from other sectors (J. Li et al., 2023). Additionally, there is a long supply chain, posing a challenge to maintaining product quality stability (L. Li et al., 2020).

2.2. Continuance Intention

Continuance intention here means the intention to continue using an information system (IS) (Bhattacherjee, 2001). The choice made by users to continue using a system is similar to the decisions made by consumers when deciding to repurchase. This resemblance stems from the fact that both kinds of choices occur after the initial acceptance or purchase decision, and they are shaped by the initial experience with the information system or product. Furthermore, they possess the potential to change at a later time (Bhattacherjee, 2001). Within the realm of retail, the concept of "continuance intention" refers to “consumers' loyalty and ongoing commitment to retailers, which plays a crucial role in boosting sales and overall profitability” (Gao et al., 2015). Retailers should prioritize efforts to sustain consumers' commitment to revisiting their retail apps, as keeping current customers is more cost-effective than attracting new ones (Ng et al., 2022).

2.3. Updated Information Systems Success Model

“The Information Systems Success Model” was initially introduced in 1992 by DeLone and McLean. The variables include System Quality, Information Quality, Use, User Satisfaction, Individual Impact, and Organizational Impact (DeLone & McLean, 1992). The measurement of information system success is essential to determine the value of actions taken in managing and investing in information systems. Ten years later, there is another model called the “Updated Information Systems Success Model” with additional variables of Service Quality and Intention to Use as well as modification of Individual and Organizational Impact to Net Benefits (DeLone & McLean, 2003). This new model can also be a measurement for e-commerce success (DeLone & McLean, 2004).

2.3.1. System Quality

The variable of system quality measures the intended attributes of an e-commerce system (DeLone & McLean, 2004). In this case, it is related to the technical qualities of agricultural e-commerce. Numerous empirical studies employing the information systems success model have consistently identified system quality as the primary factor that organizations should prioritize due to its direct correlation with enhanced value generation within the system (Abbasi et al., 2022). Previous research showed that “system quality had direct effects on both continuance intention and satisfaction” (Ng et al., 2022).

H1: System Quality has a significant effect on Continuance Intention

H2: System Quality has a significant effect on Satisfaction

2.3.2. Information Quality

The variable of information quality measures the content of an e-commerce system (DeLone & McLean, 2004). In this case, it is related to the quality of output or the semantical side of agricultural e-commerce. Previous research showed that "there was a significant relationship between information quality and satisfaction" (Hung & Hsu, 2013).

H3: Information Quality has a significant effect on Satisfaction

2.3.3. Service Quality

The variable of service quality measures the overall support delivered by an e-commerce system (DeLone & McLean, 2004). In this case, it is related to the quality of services to agricultural e-commerce customers. Previous research showed that service quality contributed significantly to satisfaction (Wang, 2013).

H4: Service Quality has a significant effect on Satisfaction

2.4. Expectation-Confirmation Model

The dependent variable to be examined in this research is related to continuance intention. This variable can be found in the "Expectation-Confirmation Model (ECM)" by Bhattacherjee in 2001. The foundation of ECM is the theory of confirmation of expectations, which measures how user satisfaction influences the intention to reuse an information system (Bhattacherjee, 2001).

2.4.1. Perceived Usefulness

The variable of perceived usefulness measures the users' perceptions of the expected benefits of an information system (Bhattacherjee, 2001). Previous research showed that perceived usefulness positively affected user satisfaction and continuance intention (Al-Nabhani et al., 2022).

H5: Perceived Usefulness has a significant effect on Satisfaction

H6: Perceived Usefulness has a significant effect on Continuance Intention

2.4.2. Satisfaction

The variable of satisfaction measures the feelings of users about a system (Bhattacherjee, 2001). Within the literature on information systems and consumer behavior, it is well-established that satisfaction serves as a highly reliable and valid predictor of intention. This indicates that satisfaction strongly foretells the intention to continue (Al-Nabhani et al., 2022). It is believed that "the continuance intention is primarily determined by users' satisfaction with previous experience in an app" (Ng et al., 2022). Thus, based on past research, satisfaction is said to "have a positive relationship with continuance intention".

H7: Satisfaction has a significant effect on Continuance Intention

3. Research Methodology

This study applied the quantitative research method with a total of 404 respondents (400 valid ones and 4 invalid ones) across Greater Jakarta (Jakarta, Bogor, Depok, Tangerang, Bekasi). All survey respondents have used either Sayurbox, Segari, or both. The survey was designed on Google Form and spread online. In the beginning of the form, respondents have already consented to contribute to this

research by filling it out based on their experiences and their data were kept confidential. The questionnaire utilized Likert scale from 1 to 5 with 1 is "Totally Disagree" and 5 is "Totally Agree". The method used to analyze the data in this study was the Structural Equation Model (SEM) using SmartPLS 3, which consisted of an analysis of outer model and inner model. SEM-PLS is used to test hypotheses by involving linearly combining indicators from a measurement model to form interdependent variables and is assumed to be a comprehensive representation of the construct (Hair Jr. et al., 2021).

3.1. Sampling Technique

As stated previously, the users of Sayurbox and Segari are 1.000.000 dan 250.000 respectively, thus the total of population is 1.250.000. This research uses the Slovin Formula with an error margin of 5% as follows:

$$n = N / (1 + (N \times e^2))$$
$$n = 1.250.000 / (1 + 1.250.000 \times 5\%))$$
$$n = 399.87 = 400$$

Therefore, a minimum of **400 respondents** is needed as research sample.

3.2. Research Model

The research model combined the "Updated Information Systems Success Model" by DeLone & McLean and "Expectation-Confirmation Theory by Bhattacherjee", as shown in Figure 2. The variables from the Updated IS Success Model are System Quality, Information Quality, and Service Quality (DeLone & McLean, 2003). Meanwhile, the variables from the Expectation-Confirmation Theory are Perceived Usefulness, Satisfaction, and Continuance Intention (Bhattacherjee, 2001).

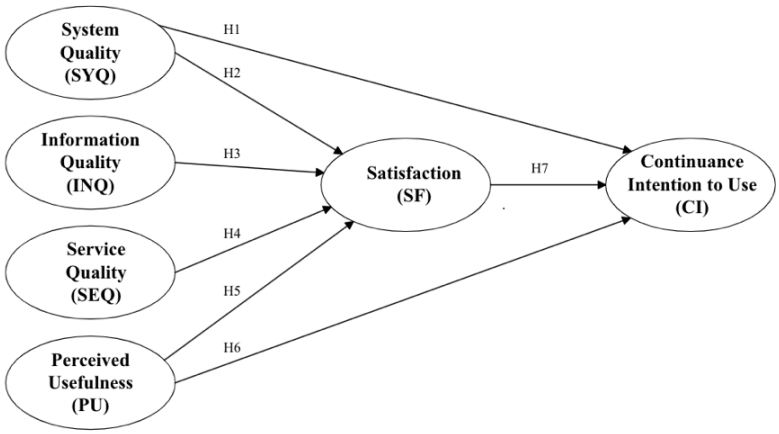

Fig. 2: Research Model

The following Table 1 contains the indicators of each variable:

Table 1. Research Indicators

Variable	Indicator	Reference
System Quality (SYQ)	SYQ1: Availability	(DeLone & McLean, 2003)
	SYQ2: Reliability	
	SYQ3: Response time (Order)	
	SYQ4: Response time (Payment)	
	SYQ5: Usability (Interface)	

	SYQ6: Usability (Order)	
	SYQ7: Usability (Payment)	
Information Quality (INQ)	INQ1: Updated information (Product Promotion)	(DeLone & McLean, 2003)
	INQ2: Updated Information (Product Description)	
	INQ3: Updated Information (Delivery)	
	INQ4: Ease of understanding	
	INQ5: Personalized	
	INQ6: Accuracy (Stock)	
	INQ7: Accuracy (Product description)	
	INQ8: Consistency	
Service Quality (SEQ	SEQ1: Reliability (Delivery availability)	(DeLone & McLean, 2003)
	SEQ2: Reliability (Punctual Delivery)	
	SEQ3: Reliability (Order Match)	
	SEQ4: Reliability (Refund Option)	(DeLone & McLean, 2003)
	SEQ5: Response Time	
	SEQ6: Empathy (Human Touch)	
	SEQ7: Empathy (Option for unavailable products)	
	SEQ8: Reassurance	
Perceived Usefulness (PU)	PU1: Increase Performance	(Bhattacherjee, 2001)
	PU2: Increase Productivity	
	PU3: Increase Effectivity	
	PU4: Function	
Satisfaction (SF)	SF1: Repeat Visit	(DeLone & McLean, 2003)
	SF2: Repeat Purchase	
	SF3: Expectation Confirmed	(Bhattacherjee, 2001)
	SF4: Overall Satisfaction	
	SF5: Recommendation	
Continuance Intention to Use (CI)	CI1: Continue Rather Than Not	(Bhattacherjee, 2001)
	CI2: Continue Rather Than Alternative	
	CI3: Continue to Use in the Future	
	CI4: More Frequent to Use	

3.3. Demographic Profile

The total of respondents in this research is 400. Female dominates the respondents in terms of gender, the age group of 23-28 years old, and private employees as their occupation. The following Table 3 shows the full demographic profile with the dominance in bold:

Table 2. Demographic Profile

Variable	Data
Age	17-22 years old (26.8%, Qty: 107) **23-28 years old (43%, Qty: 172)** 29-34 years old (26.5%, Qty: 106) ≥35 years old (3.7%, Qty: 15)
Gender	**Female (64.5%, Qty: 258)** Male (35.5%, Qty: 142)
Occupation	Student (24.8%, Qty: 99) **Private Employee (33.5% , Qty: 134)** Public Employee (11.7%, Qty: 47) Housewife (24.8%, Qty: 36) Entrepreneur (14.7%, Qty: 59) Freelancer (6.3%, Qty: 25)

4. Research Findings and Discussion

4.1. Outer Model Analysis

The outer model evaluates the relationship between latent and manifest variables. This analysis aims to show the validity and reliability of data. The validity tests consist of convergent and discriminant. The convergent validity test is shown in Table 3 below. The data are considered valid because the loading factor and AVE are >0.5 (Hair et al., 2017).

Table 3. Convergent Validity Test

Variable	Indicator	Factor Loading	AVE	Description
Continuance Intention	CI1	0.696	0.530969	Valid
	CI2	0.741		Valid
	CI3	0.722		Valid
	CI4	0.755		Valid
Information Quality	INQ3	0.699	0.502318	Valid
	INQ4	0.716		Valid
	INQ5	0.729		Valid
	INQ6	0.730		Valid
	INQ7	0.668		Valid

Perceived Usefulness	PU1	0.682	0.539195	Valid
	PU2	0.746		Valid
	PU3	0.742		Valid
	PU4	0.765		Valid
Service Quality	SEQ4	0.693	0.542225	Valid
	SEQ5	0.725		Valid
	SEQ6	0.768		Valid
	SEQ7	0.757		Valid
Satisfaction	SF2	0.734	0.527199	Valid
	SF3	0.746		Valid
	SF4	0.743		Valid
	SF5	0.680		Valid
System Quality	SYQ1	0.699	0.50476	Valid
	SYQ2	0.709		Valid
	SYQ3	0.724		Valid
	SYQ4	0.725		Valid
	SYQ5	0.696		Valid

The discriminant validity test can be carried out by reviewing the cross-sectional value of each indicator. The cross-loading value is useful for finding out whether the construct has adequate discriminant, namely by comparing the loading value on the targeted construct. This value must be greater than the other values. The discriminant validity test result is shown in Table 4 below. As the value of each construct to its own greater than others, the data are considered valid (Hair et al., 2020).

Table 4. Discriminant Validity Test

	CI	INQ	PU	SEQ	SF	SYQ
CI1	**0.696**	0.359	0.658	0.309	0.345	0.361
CI2	**0.741**	0.416	0.683	0.386	0.449	0.415
CI3	**0.722**	0.410	0.676	0.363	0.431	0.404
CI4	**0.755**	0.319	0.709	0.274	0.357	0.316
INQ3	0.278	**0.699**	0.268	0.685	0.543	0.675
INQ4	0.304	**0.716**	0.305	0.716	0.717	0.706
INQ5	0.379	**0.729**	0.379	0.753	0.721	0.718
INQ6	0.360	**0.730**	0.353	0.761	0.728	0.722
INQ7	0.494	**0.668**	0.476	0.462	0.674	0.683
PU1	0.651	0.332	**0.682**	0.285	0.316	0.334
PU2	0.693	0.418	**0.746**	0.373	0.450	0.420
PU3	0.694	0.398	**0.742**	0.356	0.393	0.392
PU4	0.708	0.335	**0.765**	0.295	0.365	0.333
SEQ4	0.273	0.690	0.272	**0.693**	0.540	0.670

SEQ5	0.299	0.697	0.297	**0.725**	0.701	0.686
SEQ6	0.393	0.708	0.377	**0.768**	0.712	0.702
SEQ7	0.368	0.724	0.360	**0.757**	0.723	0.716
SF2	0.307	0.701	0.306	0.701	**0.734**	0.690
SF3	0.391	0.716	0.378	0.760	**0.746**	0.713
SF4	0.371	0.722	0.355	0.756	**0.743**	0.712
SF5	0.498	0.658	0.467	0.451	**0.680**	0.673
SYQ1	0.245	0.690	0.238	0.663	0.539	**0.699**
SYQ2	0.305	0.702	0.306	0.695	0.706	**0.709**
SYQ3	0.389	0.723	0.389	0.765	0.729	**0.724**
SYQ4	0.357	0.726	0.350	0.756	0.724	**0.725**
SYQ5	0.487	0.676	0.473	0.469	0.681	**0.696**

The reliability test is shown in Table 5 below. The values of Cronbach's Alpha, rho_A, and Composite Reliability that are more than 0.70 show that the data are reliable (Hair et al., 2020).

Table 5. Reliability Test

Variable	Cronbach's Alpha	rho_A	Composite Reliability
Continuance Intention	0.705	0.706	0.819
Information Quality	0.753	0.755	0.834
Perceived Usefulness	0.714	0.717	0.824
System quality	0.720	0.725	0.825
Satisfaction	0.700	0.700	0.817
System Quality	0.756	0.757	0.836

4.2. Inner Model Analysis

The inner model evaluates the relationship between latent variables. In hypothesis testing, "if the T-statistic is more significant than 1.96 and the P-Value is less than 0.05, it means the hypothesis is accepted" (Hair Jr. et al., 2021). The hypotheses' testing result is shown in Table 6 below.

Table 6. Hypotheses Testing

Hypothesis	Relation	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics	P Values	Description
H1	System Quality -> Continuance Intention	-0.172	-0.162	0.089	1.935	0.054	Rejected
H2	System Quality -> Satisfaction	0.340	0.290	0.218	1.558	0.120	Rejected
H3	Information Quality -> Satisfaction	0.614	0.692	0.276	2.222	0.027	Accepted
H4	Service Quality -> Satisfaction	-0.009	-0.036	0.079	0.115	0.909	Rejected

H5	Perceived Usefulness -> Satisfaction	0.042	0.039	0.012	3.607	0.000	Accepted
H6	Perceived Usefulness -> Continuance Intention	0.896	0.897	0.025	36.391	0.000	Accepted
H7	Satisfaction -> Continuance Intention	0.241	0.231	0.089	2.721	0.007	Accepted

According to the result, there are four accepted hypotheses and three rejected ones. This study showed that system quality does not have a significant influence on continuance intention. It contradicts the research conducted by Ng et al. in 2022, which stated that system quality had a significant effect on continuance intention (Ng et al., 2022). However, in that study, respondents were limited only to Malaysia who had experience in using retail application services. The age range was also only 18-29 years old. Meanwhile, in this study, the respondents are in Greater Jakarta, Indonesia, with experience using at least one agricultural e-commerce mobile application (either Sayurbox or Segari), and the age range starts from 17 years old (dominated by 23-28 years old).

Second of all, this study presents that system quality has no significant effect on satisfaction. It is the opposite of the empirical research by DeLone & McLean in 2003 and the research conducted by Hung & Hsu in 2013 because both studies showed that system quality had a significant effect on satisfaction. However, in the latter research, respondents were limited to students from four universities in Taiwan who carried out online shopping activities (Hung & Hsu, 2013). In contrast, in this research, respondents were not limited to just students. There are six occupation groups (students, private employees, public employees, housewives, entrepreneurs, and freelancers), and private employees dominate the respondents. Third of all, this research shows that service quality has no significant effect on satisfaction. This is contradictory to the research by DeLone & McLean in 2003 and Wang in 2013 that stated service quality had a significant effect toward satisfaction. However, the latter research only focused on one e-grocery in Canada, and the researcher stated that there was a limitation in that the result could not be generalized (Wang, 2013).

Meanwhile, talking about the accepted ones, first of all, this research shows that information quality has a significant effect on satisfaction. The result supports the studies by DeLone & McLean in 2003 and Hung & Hsu in 2013. The influence of information quality on satisfaction shows that it is very important for agricultural e-commerce to provide quality information to increase user satisfaction. The indicators include updated information, easy-to-understand information, personalized information, accurate information, and consistent information. Therefore, companies can implement information personalization, such as product recommendations and promotions based on past preferences, can be from pre-purchase data (based on the products searched, clicked, and added to cart yet abandoned) and post-purchase (products that were actually bought). Additionally, they can enhance information transparency regarding the origin of products from specific farmers and introduce a donation feature to support farmers.

Secondly, this study presents that perceived usefulness has a significant effect toward satisfaction. This outcome is aligned with the studies by Bhattacherjee in 2001 and Al-Nabhani et al. in 2021. The research by Al-Nabhani has a similar demographic profile to this study as the respondents are dominated by females, with the age range of 20s to 30s, level of education of university (Bachelor's), and a full-time job. It means that it is pivotal for agricultural e-commerce companies to enhance the application usefulness for users so that they are satisfied. Thirdly, this research shows that perceived usefulness has a significant effect on continuance intention to use. This result supported the researches by Bhattacherjee in 2001 and Al-Nabhani et al. in 2021. This means, for people to continue using the

application, agricultural e-commerce companies need to enhance the application's usefulness for users.

Some indicators of perceived usefulness include improving performance, increasing productivity, and enhancing effectiveness. Thus, companies can add features that can increase the speed and improve the process of purchasing daily needs, such as one-click checkout, product comparison, wish list, rating and review, weekly subscription, cooking recipes, and product filtering. Last but not least, this study presents that satisfaction has a significant effect on continuance intention. This outcome is aligned with previous studies by Bhattacherjee (2001), Hung & Hsu (2013), Al-Nabhani et al. (2021), Kumar et al. (2022), and Ng et al. (2022). Therefore, agricultural e-commerce companies must listen to their customers and increase user satisfaction in order to attract people to continue their usage. For example, on AppStore, users suggested the live-tracking feature. Thus, both companies should add this feature to prove that they listen to customers' feedback.

5. Conclusion

This research holds several theoretical and managerial implications in the context of the factors influencing the continuance intention to use agricultural e-commerce in Indonesia. Firstly, this study found that the factors influencing the continuance intention to use agricultural e-commerce in Indonesia are perceived usefulness and satisfaction. Satisfaction is influenced by perceived usefulness and information quality. Meanwhile, system quality, information quality, and service quality have little impact on both satisfaction and continuance intention to use.

Secondly, the results of this study contribute to understanding the differences from previous studies that did not focus on agricultural e-commerce and were not conducted in Indonesia. Previous studies depicted that all variables of system quality, information quality, service quality, perceived usefulness, and satisfaction influence the continuance intention to use. However, these findings indicate that the focus on agricultural e-commerce applications in Indonesia yields different results, where only perceived usefulness and satisfaction are the main factors influencing continuance intention to use. It underscores the importance of considering specific context and location when analyzing the factors behind the continuance intention to use a system.

Thirdly, concerning the factors affecting the continuance intention to use agricultural e-commerce, the management of agricultural e-commerce can add features to retain the users. First of all, to strengthen perceived usefulness, make it easier and faster for consumers' purchase decisions in buying groceries by adding features like one-click checkout, product comparison, wish list, rating and review, weekly subscription, cooking recipes, and product filtering. Second, to focus on customer satisfaction, listen to the feedback of customers by adding live tracking so users know the exact location of the courier. Next, to increase information quality, make personalized information in terms of product recommendations and promotions referring to pre-purchase (the products searched, clicked, and added to the cart yet abandoned) and post-purchase data (the products bought), make transparency in from which farmers the products are and allow users to donate to the farmers. Lastly, further studies in the context of agricultural e-commerce can focus on analyzing the behavior of consumers related to abandoned carts.

In conclusion, this study contributes empirically by demonstrating that perceived usefulness and satisfaction are the main factors shaping continuance intention for agricultural e-commerce platforms in Indonesia. The findings emphasize the need to consider contextual factors in analyzing drivers of continuance intention. For agricultural e-commerce providers, practical implications include focusing on improving application utility and customer satisfaction through personalization, transparency and feedback incorporation. However, research limitations pertain to the sample being restricted to Greater Jakarta. Future studies can validate the continuance models in different locales and platforms. Comparative research on e-grocery continuance versus other online services can also bring additional insights.

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