Contents lists available at GrowingScience

International Journal of Data and Network Science

homepage: www.GrowingScience.com/ijds

Dominant factors influencing consumer satisfaction with the online purchase decision process through social commerce: A study of organic black rice in Indonesia

Kuswarini Kusno[a*], Yosini Deliana[a], Lies Sulistyowati[a], Rita Komaladewi[b], Dini Rochdiani[a] and Lucyana Trimo[a]

[a]*Agricultural Social-Economics Department, Faculty of Agriculture, Universitas, Padjadjaran, Sumedang 45363, Indonesia*
[b]*Faculty of Economics and Business, Universitas Padjadjaran, Sumedang 45363, Indonesia*

C H R O N I C L E

Article history:
Received: October 20, 2022
Received in revised format: October 28, 2022
Accepted: January 13, 2023
Available online: January 13, 2023

Keywords:
Online consumer behavior
Satisfaction with online purchase decision process
Social commerce
Online marketing
Organic black rice

A B S T R A C T

The rapid increase in social media users in Indonesia has caused organic black rice (OBR) to be traded online via social commerce (s-commerce). OBR is an environmentally friendly functional food that meets the requirements for sustainable agricultural products. Unfortunately, in Indonesia the demand is still low, so some producers are reluctant to continue the OBR business. Therefore, it is important to study consumer satisfaction. Previous studies have primarily focused on satisfaction with choices and results of the decision process, not satisfaction with the decision process. Satisfaction in the perspective of the decision process has not been widely studied. This paper aims to identify the dominant factors that influence satisfaction with the online OBR purchase decision process via s-commerce. The research design is quantitative with a survey technique of 200 online consumers drawn by stratified random and convenience sampling. Data analysis using Exploratory Factor Analysis and Path Analysis. The results showed that the dominant factors were security in purchasing decisions, Instagram and other social media, friends, satisfaction with the results, Internet, references of friends and family as well as consideration of product taste and aroma, attractiveness, and disease treatment. These eight dominant factors can be used as important considerations in online OBR business through s-commerce.

1. Introduction

This paper is the result of follow-up research from previous research conducted by Kusno et al. (2022). The previous paper aimed to develop a conceptual model of the online OBR purchase decision process via s-commerce and analyzing the factors underlying the decision process. Meanwhile, this paper, as mentioned above, aims to analyze online OBR consumer satisfaction with the process.

Black rice is a functional food that contains anthocyanins which are antioxidants (Dewi et al., 2017; Lee, 2010; Qi et al., 2020; Stefani et al., 2017) which are not found in white rice or brown rice. The development of black rice into organic black rice (OBR) is one way to get better quality rice, because OBR is rice produced from cultivation with the principles of organic farming or without the use of chemicals based on certain standards. The main goal of organic farming is to optimize the health and productivity of interdependent communities of life in soil, plants, animals and people (Dewan Guru Besar IPB, 2016). Thus, OBR is a solution to improve the quality of black rice where a sustainable farming system is applied which is a very promising strategy because this strategy can increase rice production and farmers' income.

* Corresponding author.
E-mail address: kuswarini.kusno@unpad.ac.id (K. Kusno)

ISSN 2561-8156 (Online) - ISSN 2561-8148 (Print)

doi: 10.5267/j.ijdns.2023.1.005

However, based on interviews with OBR producers, demand for OBR in Indonesia is still low because people perceive black rice as black glutinous and the price is expensive, namely IDR 25,000 – IDR 50,000 per kg. Additionally, this is due to the consumption pattern of white rice (Kusno et al., 2020). Meanwhile, black rice has great potential to be developed in Indonesia because it has local varieties that are still rare, has a high selling value, and is suitable for cultivation based on its farming analysis (Stefani et al., 2017). OBR farming also has competitiveness (Kusno et al., 2020). Thus, it is important to know how customer satisfaction is.

Consumer satisfaction with decisions is an important issue that has been studied in psychology and decision research. However, studies on satisfaction are primarily focused on satisfaction with choices and results of the decision process (Karimi, 2013), not satisfaction with the decision process. Satisfaction in the perspective of the decision process has not been widely studied (Karimi et al., 2018). Consumer satisfaction is the output of the purchasing decision process (Karimi, 2013). The process consists of 5 stages that are similar to processes related to traditional buying behavior (offline) (Kanade & Kulkarni, 2018; Karimi et al., 2018; T. P. Liang & Lai, 2000; Stankevich, 2017). The 5-stage process consists of need recognition, information search, alternative evaluation, purchasing decision, and post-purchase behavior (Engel et al., 1995; Hawkins & Mothersbaugh, 2010; Kotler & Keller, 2009).

Satisfaction is a consequence of consumer experience during all stages of the buying process (Gu et al., 2013; McKinney et al., 2002). Consumer satisfaction after purchase reflects product consumption, and has received significant attention in previous studies. While consumer satisfaction in relation to decision-making behavior involving the experience of searching, evaluating and choosing alternatives is mostly not done, because it requires further research (Huber & Seiser, 2001). Confirmed by Karimi et al. (2018) that satisfaction in the perspective of the decision-making process has not been widely researched. The rapid development of the use of social media in Indonesia, which ranks 3rd in the world (Statista, 2021) has caused OBR to be traded online through social commerce. Social commerce (s-commerce) is the online trading of physical products through social media and messaging platforms (Das et al., 2018). Research on satisfaction with the purchasing decision process in non-specific online markets and non-specific products has been carried out by, among others, (Iyengar & Lepper, 2000; Karimi et al., 2018; Valenzuela et al., 2009). However, satisfaction research for social commerce platforms for organic products and based on the conceptual model of the purchasing decision process developed with empirical data has never been carried out. Online consumers are not only buyers but also internet users (Koufaris, 2002). Hence, for online consumers, the purchasing decision process is more complex than the traditional (offline) process. Thus, their buying behavior is influenced by factors related to offline purchases in general and their interaction with the internet environment. Based on the conceptual model of the OBR purchase decision process online via s-commerce that has been developed by Kusno et al. (2022), we will examine consumer satisfaction with the process.

This paper aims to identify the dominant factors that influence satisfaction with the online purchasing decision process of OBR through s-commerce. The results of this study are expected to be useful for OBR online producers, online resellers or online marketers as an important consideration for improving their online business performance via s-commerce. For theory development, the results of this research are expected to contribute to the development of a theory of consumer behavior in the context of satisfaction with the decision process to purchase functional food online through s-commerce. This paper consists of six sections: introduction, literature review, methodology, results and discussions, conclusion, and appendices.

2. Literature Review

2.1 Organic Black Rice

Black rice which is a functional food contains anthocyanin pigments which are antioxidants. Its antioxidant content, namely vitamin E, B, magnesium, iron, zinc, and phosphorus (Kristamtini et al., 2017; Stefani et al., 2017), is up to five times that of white rice (Firdaus et al., 2022). The protein content test results showed that black rice had the highest protein content, namely 13.77%, while brown rice had 13.30% (Azis et al., 2015). Another advantage, the fiber content in black rice per 100 grams of rice is 20.1 grams, while in brown rice and white rice it is 0.8 gram and 0.2 gram respectively (Kementerian Kesehatan RI, 2018). Because of its many advantages, Kushwaha (2016) stated that nutritionists consider black rice as a modern superfood which is very good for consumption in this modern era. The development of non-organic and organic black rice business in Indonesia still faces several obstacles. From a farmer's point of view, many farmers are still reluctant to plant black rice. The main reason for this is the lack of demand for and consumption patterns of white rice (Kusno et al., 2020). In West Java Province, which is the largest producer of organic rice in Indonesia (Sofyanti, 2019), there are only a few OBR producing areas that are certified organic. Among others, OBR centers are in Tasikmalaya Regency, Subang Regency and Indramayu Regency (Kementan, 2020).

2.2 Online Consumer Behavior

Online consumers are buyers and internet users. Consumer behavior in online purchases refers to the process of buying products or services via the internet (Li & Zhang, 2002). The process consists of 5 stages that are similar to processes related to traditional buying behavior (offline) (Kanade & Kulkarni, 2018; Karimi et al., 2018; T. P. Liang & Lai, 2000; Stankevich, 2017). Thus, their behavior is influenced by factors related to purchases in general and their interactions with the internet

environment (Kusno et al., 2022). The stages of the process are 1) need recognition, 2) information search, 3) evaluation of alternatives, 4) purchasing decisions, and 5) post-purchase behavior (Engel et al., 1995; Hawkins & Mothersbaugh, 2010; Kotler & Keller, 2009).

2.2.1. Online Purchasing Decision Process via S-commerce

S-commerce does not have a standard definition yet (Busalim et al., 2021; T. Liang & Turban, 2011). There are twenty two different definitions of s-commerce (Marsden, 2011) which include several characteristics of s-commerce, for example word of mouth, trusted advice, or buying through the help of friends (T. Liang & Turban, 2011). Social commerce is a form of commerce mediated by social media that involves convergence (meeting somewhere) between online and offline environments (Wang & Zhang, 2012). Another definition, social commerce raises business transactions by connecting producers and consumers through social media (Sohn & Kim, 2020). Social commerce refers to buying and selling that occurs entirely on social media and other networking sites (Facebook & Bain & Co., 2021). Social commerce in this paper refers to the definition of social commerce according to Das et al. (Das et al., 2018), namely online commerce of physical goods through social media and messaging platforms. Based on the various definitions above, social media is a key concept in s-commerce. S-commerce is part of e-commerce (Busalim et al., 2021; T. Liang & Turban, 2011) According to Huseynov & Yildirim (2016) e-commerce is conducting, transacting and facilitating business activities via computer networks. So, a conceptual model of the purchasing decision process in s-commerce can be developed from the process model in e-commerce. The 5-stage online purchase decision process via e-commerce is based on the 5-stage offline purchase decision process. The variables in each stage for non-specific products have been developed by Kanade & Kulkarni, 2018). Based on these references, Kusno et al. (2022) have developed a conceptual model for the online OBR purchasing process via s-commerce with empirical data. The conceptual model is presented in Fig. 1.

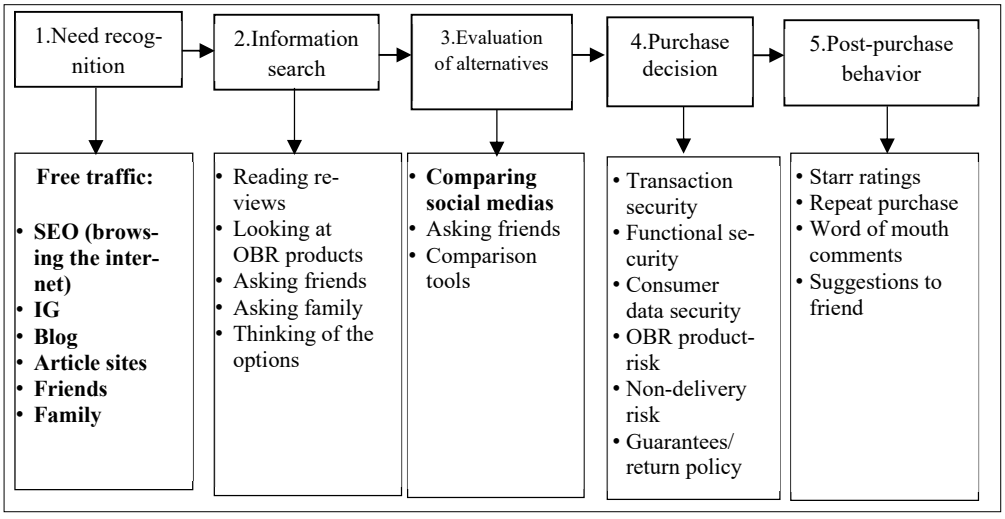


Fig. 1. Conceptual Model of Online OBR Purchase Decision Process via S-commerce
Source: (Kusno et al., 2022)

2.2.2. Satisfaction with the Online Purchasing Decision Process via S-commerce

Consumer satisfaction is a feeling of pleasure or disappointment that arises after comparing product performance with the expected performance before buying a product (Babin et al., 2005; Kotler & Keller, 2009). However, consumer satisfaction in the online context exceeds satisfaction with the process that is formed from consumer interactions with e-retailers and satisfaction with the final choice. Online consumer satisfaction can be defined as the extent to which consumers' perceptions of the online buying experience confirm their expectations (Li & Zhang, 2002). These expectations influence their attitudes and intentions to shop at a particular Internet store and affect their decision-making process and buying behavior (Jahng et al., 2001).

Online consumer satisfaction is the output of the online purchasing decision process (Karimi et al., 2018). The online-based purchasing decision process model considers the external influence of website marketing, the socio-cultural environment, and psychological problems on online consumer activity followed by buying and post-purchasing behavior (Smith & Rupp, 2003). Experience in the decision-making process is influenced by the variables that shape the situation in which the decision occurs (Zhang & Fitzsimons, 1999). Satisfaction with the process is therefore conceptually different from satisfaction with the choice. Satisfaction with the process is higher when the choices have comparable attributes (Zhang & Fitzsimons, 1999). So, satisfaction with the process and satisfaction with the choice are significant contributors to overall customer satisfaction (Fitzsimons, 2000).

Online purchasing decisions (stage 4 of 5 stages of the buying decision process) are influenced by internal and external factors (Bhattacharjee & Priya, 2019) as well as the marketing mix (Kotler & Keller, 2012). The 4Ps of marketing mix associated with online purchasing decisions have been studied by previous researchers, (e.g. (Kanade & Kulkarni, 2018; Suhari, 2008)). Hence, this research uses 7P, namely product, price, promotion, place, people, process, physical evidence. Based on the description above, satisfaction with the online purchasing decision process via s-commerce is influenced by experience in activities at the five stages of the decision process (see Fig. 1), internal aspects: ease of use, personal experience, time management, personal traits (Bhattacharjee & Priya, 2019) and external aspects: service quality, easy payment options, easy accessibility, consumer reviews/ recommendations (Bhattacharjee & Priya, 2019) and the 7Ps marketing mix (Kotler & Keller, 2009).

2.3 Underlying Factors

The availability of a large amount of online information makes the consumer buying decision process a tedious and frustrating task (Ho & Strube, 2000). Therefore, an underlying structure is needed for the process which looks chaotic and complex (Karimi et al., 2014). Consumer psychologists devote a great deal of attention to understanding the processes that underlie the use of information to make judgments and decisions (Posavac et al., 2012). Given that there are so many variables in online satisfaction, consumers must rely on several factors to make their decision. These factors are the implicit attitude of consumers. According to Posavac et al. (2012), implicit attitudes are far more automatic than explicit attitudes and are based on associations in memory that are not always realized. The explicit stance itself is consultative, based on consumers' introspection of their evaluations, and then self-reporting of those evaluations (Posavac et al., 2012). Implicit attitudes can be interpreted as dimensions or constructs or factors, or immeasurable (latent) variables that consumers use as the basis for their judgments regarding all stages of the online product purchasing decision process through s-commerce (Kusno et al., 2022), as well as internal and external aspects (Bhattacharjee & Priya, 2019; Kotler & Keller, 2009).

Kusno et al. (2022) found that the underlying factors (latent variables) of the online OBR purchasing decision process via s-commerce (OOPDPS) were: security in purchasing decisions (P1), Internet (P2), friends (P3), satisfaction with the results (P4), Instagram and other social media (P5), and family factor (P6). In this research, these six factors together with the factors that underlie the internal and external aspects that influence purchase decision (AIPD) will be associated with the satisfaction with OOPDPS.

2.4 Theoretical Framework and Hypothesis

Fig. 2 is a framework that shows satisfaction with the online OBR buying decision process through s-commerce is influenced by all stages of the decision process (Kusno et al., 2022) as well as internal aspects (Bhattacharjee & Priya, 2019) and external aspects (Bhattacharjee & Priya, 2019; Kotler & Keller, 2009). Furthermore, the underlying factors of the OOPDPS and the underlying factors of the AIPD are hypothesized to have a direct, positive, and significant effect on consumer satisfaction with the OOPDPS.

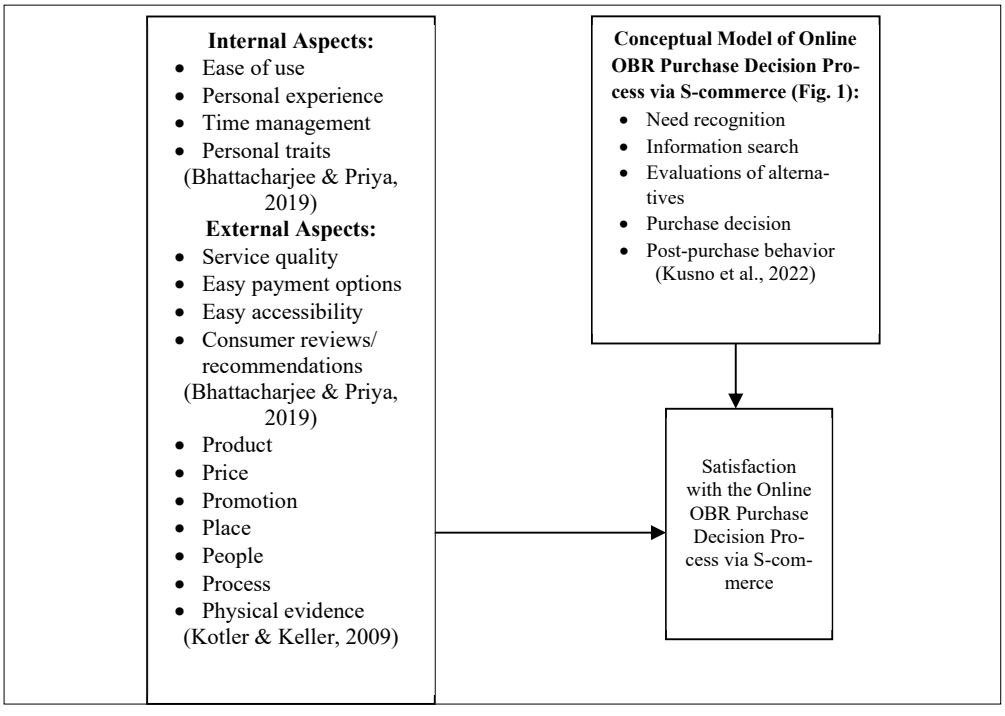
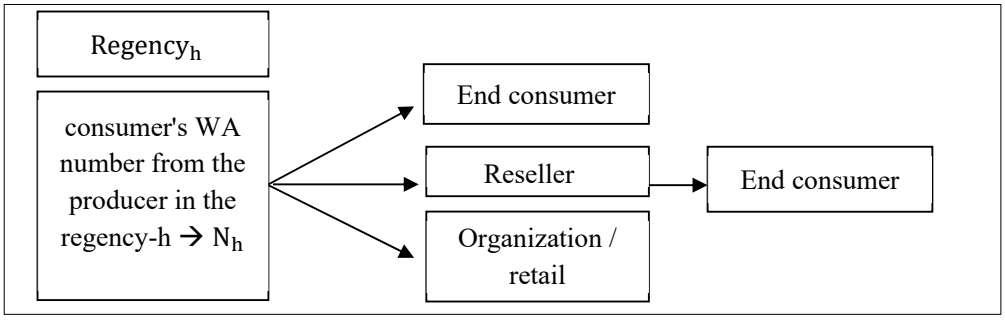


Fig. 2. Theoretical Framework

3. Methodology

3.1 Population and Sample

In this research, sampling of end consumers (respondents) used a combination of random and non-random sampling (Hedt & Pagano, 2011) namely stratified random and convenience sampling. Meanwhile, producer informants were selected purposely, and resellers were selected by word of mouth. Initially, the population of this study were end consumers who bought OBR online through s-commerce produced by Tasikmalaya, Subang and Indramayu Regencies (see Fig. 3). Sampling was done proportionally stratified random sampling. However, the initial population size (N) was small, namely 42. This was due to the fact that the majority of consumers from producers in Tasikmalaya were supermarkets where supermarket consumers bought OBR offline, so it was not suitable for this research topic. The initial sample was set = 50% of the population size (Parel et al., 1973). So, n = 21.



Note:

h = 1, 2, 3; 1 = Tasikmalaya, 2 = Subang, 3 = Indramayu. N = population size = $\sum_1^3 N_h$

Fig. 3. Determination of the Initial Population of End Consumers

The initial population size N is calculated by: 1). collect WA numbers of consumers from each producer, so that the number and types of OBR consumers in each regency are known, 2). collecting end consumer WA numbers from resellers obtained from the first step, and 3). calculate the number of end consumers of OBR in each regency = population size in each regency. Then the overall population size N is calculated by adding up the population sizes in each regency (see Fig. 3). The form of black rice grain varies between regencies in West Java (Dewi et al., 2017). Therefore, the sampling of end consumers can be carried out using the stratified random sampling method with regencies as the stratum. Then from each regency, the respondents were randomly selected proportionally using the formula:

$$n_h = \frac{N_h}{N}.n$$

n = end consumer sample size
n_h = sample size allocated to the h-th regency; h = 1 (Tasikmalaya), 2 (Subang), 3 (Indramayu)
N_h = sub population size of the h-th regency
N = population size

The distribution of sample sizes is presented in Table 1. The data will be analyzed by inferential statistical methods, therefore, it must be taken from a random sample or justified as random, and the sample size must be >30. For this, the sample is added with a convenience sample from a new population (Hedt & Pagano, 2011).

Table 1
Sample Size Distribution of the Initial Population

No.	Regency	Initial Population Size N_h	Initial Sample Size n_h
1	Tasikmalaya	6	3
2	Subang	28	14
3	Indramayu	8	4
	Total	42 = N	21 = n

Source: (Kusno et al., 2022)

The new population is end consumers who buy OBR online through s-commerce domiciled in West Java, DKI Jakarta and Banten Province. The reason is that the majority of consumers of organic products live in these three provinces (Institute et al., 2019). Based on available resources, the final sample size was set = 200. So, the convenience sample size = 200 - 21 = 179.

3.2 Data Collection

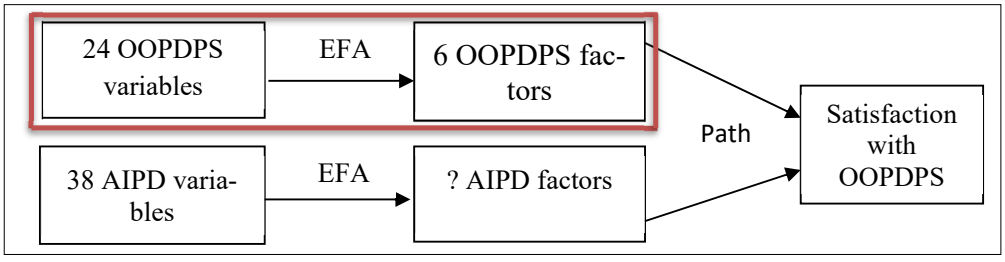
Data collection was conducted from August to December 2021 using an online questionnaire sent to the personal WhatsApp (WA) or personal Instagram (IG) of each respondent. The questionnaire contains closed questions and a few open questions. If the answers to the open questions are not clear, clarification is made to the respondent by means of an interview via WA or telephone.

3.3 Variable and Measurement

Variables and the measurements can be seen in Table A1 (see Appendix 1) and Table A2 (see Appendix 2). The measurement used a 5-point Likert scale, following research conducted by (Kusno, Liandy, et al., 2021) for organic rice which is proven reliable and valid. The data was then transformed into an interval scale with Successive Interval method using Macro application.

3.4 Data Analysis

To find out the dominant factors that influence satisfaction with the OOPDPS, the exploratory factor analysis and path analysis methods are used. The data analysis framework can be seen in Fig. 4.



Note: What is delimited by the red line has been done by (Kusno et al., 2022)

Fig. 4. Data Analysis Framework

EFA was performed using SPSS 25 and path analysis using LISREL 8.80 software. The results of EFA are factors (latent variables) or also called constructs or dimensions or underlying factors, which are no longer correlated with each other. EFA also generates new data in the form of factor scores for each individual respondent for each factor formed. The factor scores data are then analyzed by a path analysis method. The hypothesis is then formulated as follows: Each of the factors underlying the online OBR buying decision process via s-commerce and the aspects that influence the buying decision have a direct and significant effect on satisfaction with the process. The significant factor path coefficient is the dominant factor influencing satisfaction with the process.

4. Results and Discussions

Before conducting EFA on 38 AIPD variables, the reliability and validity were tested first. The results are presented in Table 2. It appears that the Cronbach's Alpha values for all items (variables) are > 0.7, therefore, the questionnaire is reliable (Taber, 2018).

Table 2
Results of Reliability Test of 38 AIPD Variables

No.	Item	Cronbach's Alpha	No.	Item	Cronbach's Alpha
	All items	.951			
1	IN1	.950	20	PD1	.949
2	IN2	.950	21	PD2	.949
3	IN3	.950	22	PD3	.950
4	IN4	.950	23	PD4	.952
5	IN5	.950	24	PR1	.950
6	IN6	.950	25	PR2	.949
7	IN7	.951	26	PR3	.950
8	IN8	.949	27	PM1	.950
9	IN9	.949	28	PM2	.950
10	IN10	.949	29	PL1	.949
11	IN11	.950	30	PL2	.949
12	EX1	.949	31	PL3	.949
13	EX2	.949	32	PP4	.950
14	EX3	.950	33	PP5	.949
15	EX4	.949	34	PC1	.949
16	EX5	.949	35	PC2	.949
17	EX6	.950	36	ED2	.950
18	EX7	.950	37	ED3	.950
19	EX8	.950	38	ED4	.949

Source: Author's calculations

The validity test resulted in a KMO value (Kaiser-Mayer-Okin on Sampling Adequacy) = 0.881 > 0.5. Thus, EFA is feasible. Significance value = 0.000 < 0.05 means that the correlation between 38 variables is significant. In conclusion, the 38 variables are valid. Furthermore, the EFA of 38 variables is reduced to 8 factors (See Table 3). There is a factor loading value = 0.359 < 0.4 which is a correlation between EX6 and Factor 5. The factor loading value which is < 0.4 does not meet the EFA requirements according to (Hair et al., 2010). However, a value of 0.32 is a good rule of thumb for the minimum factor loading of a variable on a factor (Tabachnick & Fidell, 2019). Hence, factor loading > 0.32 is the decision criterion for EFA over AIPD, so EX6 does not need to be excluded for further analysis.

Table 3
Results of EFA of 38 AIPD Variables

% Variance		Factor							
	Item	1	2	3	4	5	6	7	8
	PR1	.611							
	PR2	.618							
	PR3	.632							
36.382	PL1	.736							
	PL2	**.753**							
	PL3	.726							
	PC1	.624							
	PC2	.594							
	IN2		.543						
	IN9		.456						
	IN10		.572						
	IN11		.678						
8.240	EX1		.610						
	EX2		.681						
	EX3		**.706**						
	EX5		.581						
	PD3		.605						
	IN4			.579					
	IN5			.490					
6.080	IN6			.809					
	IN7			**.865**					
	IN8			.588					
	EX8			.611					
	PP4				.671				
	PP5				.593				
4.039	ED1				**.735**				
	ED2				.604				
	ED3				.490				
	EX6					.359			
3.703	EX7					**.714**			
	PD1					.710			
	PD2					.643			
	EX4						.403		
3.182	PM1						**.718**		
	PM2						.710		
3.022	IN1							**.744**	
	IN3							.692	
2.918	PD4								**.713**

Source: Author's calculations

The meaning of the symbols for each variable can be seen in Table A2 (see Appendix A). Each factor is then named with a short sentence adapted to the question sentence in the questionnaire. Factor 1 can be named Price, location, and process in purchasing. Factor 2 can be named Personal experience, service quality and ease of purchase. Factor 3 is personal traits, demographic characteristics, and prestige. Factor 4 is Attractiveness. Factor 5 is Reference from friends and family as well as consideration of product taste and aroma. Factor 6 is Promotion. Factor 7 is Time efficiency, and Factor 8 is Disease treatment. From Table 3 we can also see that Factor 1 can explain 36.382% of the total variance. Factor 2 can explain 8.240% of the total variance, and then Factor 8 can explain 2.918% of the total variance. That is, 38 variables are reduced to 8 factors, of course there is missing information (Kusno, Natawidjaja, et al., 2021). In other words, the eight factors cannot fully absorb all the information contained in the 38 AIPD variables. The proportion of information absorbed by the eight factors = 36.382% + 8.240% + 6.080% + 4.039% + 3.703% + 3.182% + 3.022% + 2.918% = 67.566%. EFA on 24 OOPDPS variables (Fig. 1) which has been done by (Kusno et al., 2022) produces 6 factors as previously mentioned above. The six factors are denoted as P1, P2, P3, P4, P5, and P6, and the 8 AIPD factors are denoted as F1, F2, F3, F4, F5, F6, F7, and F8. These fourteen factors are exogenous variables in path analysis, while the level of satisfaction with OOPDPS is the endogenous variable.

Normality, multicollinearity and heteroscedasticity tests were performed prior to path analysis. The results of these tests showed that the data were normally distributed, there was no multicollinearity between exogenous variables (independent

variables), and there was heteroscedasticity at P6 so that P6 was excluded from further analysis. Thus, only 13 factors were included in the analysis, namely P1, P2, P3, P4, P5, F1, F2, F3, F4, F5, F6, F7, and F8.

Table 4 presents the results of the measurement model fit test. It can be seen that the model fit perfectly. The hypotheses are formulated as follows:

H_1: P1 had a direct, positive and significant effect on satisfaction with the OOPDPS.

H_2: P2 had a direct, positive and significant effect on satisfaction with the OOPDPS.

H_3: P3 had a direct, positive and significant effect on satisfaction with the OOPDPS.

H_4: P4 had a direct, positive and significant effect on satisfaction with the OOPDPS.

H_5: P5 had a direct, positive and significant effect on satisfaction with the OOPDPS.

H_6: F1 had a direct, positive and significant effect on satisfaction with the OOPDPS.

H_7: F2 had a direct, positive and significant effect on satisfaction with the OOPDPS.

H_8: F3 had a direct, positive and significant effect on satisfaction with the OOPDPS.

H_9: F4 had a direct, positive and significant effect on satisfaction with the OOPDPS.

H_{10}: F5 had a direct, positive and significant effect on satisfaction with the OOPDPS.

H_{11}: F6 had a direct, positive and significant effect on satisfaction with the OOPDPS.

H_{12}: F7 had a direct, positive and significant effect on satisfaction with the OOPDPS.

H_{13}: F8 had a direct, positive and significant effect on satisfaction with the OOPDPS.

Table 4
Results of Goodness of Fit

Goodness of Fit Measures	Fit Criteria	Parameter Estimates	Description
Degree of Freedom	Small value	0	The Model is Saturated, the Fit is Perfect
Chi Square	Small value	0.000	
p-value	> 0.05	1.000	
Root Mean Square Error of Approximation (RMSEA)	< 0.05	0.000	

Source: Author's calculations. Fit criteria according to Yamin (2014)

Fig. 5 depicts the results of the path analysis of 5 OOPDPS factors and 8 AIPD factors on satisfaction with the OOPDPS. To make it easier to interpret, the information in Fig. 5 is tabulated in Table 5.

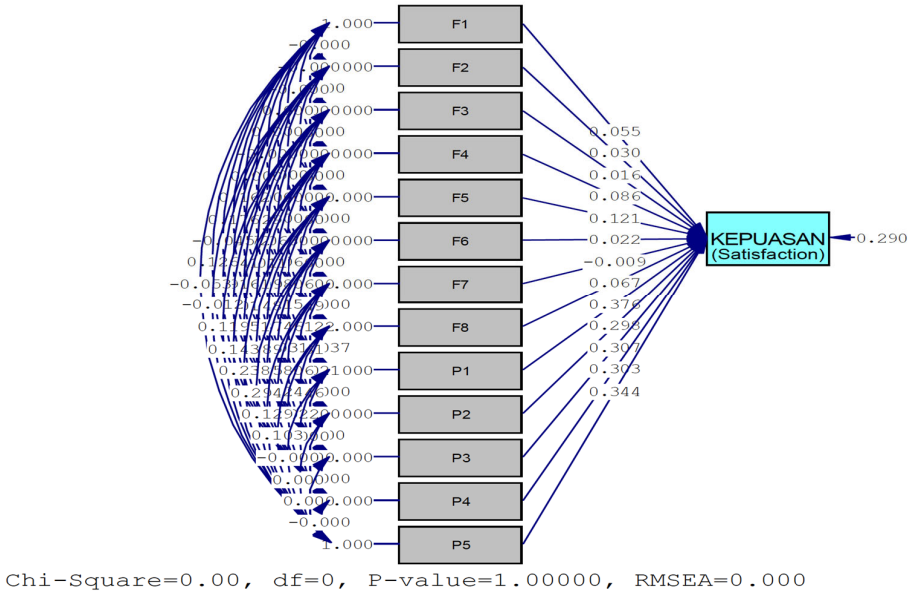


Fig. 5. Path Coefficient of OOPDPS Factor and AIPD Factor on Satisfaction with the OOPDPS
Source: LISREL 8.80 output

Path coefficient is a standardized regression coefficient. Based on Table 5, F7 (time efficiency factor) non-significant and the path coefficient is negative = -0.009. That is, if F7 increases then satisfaction with the process actually decreases. Time efficiency represents 2 variables, namely IN1 (I bought OBR online because it's easy to use) and IN3 (I bought OBR online out of time management considerations) (see Table A2). Field facts show that if the time spent searching for OBR online is short, consumers actually become suspicious, so they look for further OBR specification on social media, especially WA. For example, researching whether a certain brand of black rice is truly organic even though the word "organic" is listed on the packaging. So, in general consumers use chat to get information about product and price information, make offers, and build trust (SIRCLO, 2020). According to Gong et al. (2013), if consumers face a shortage of time, they tend to choose online shopping for the products or services they need. However, because OBR is a functional food whose price is relatively expensive compared to other types of rice, consumers deliberately set aside time to study online information about OBR before deciding whether to buy online or offline at the supermarket. Thus, this result is not in line with the statement of Gong et al. (2013) mentioned above as well as the findings of Petcharat & Leelasantitham (2021).

Table 5
Path Coefficient and Significance of Exogenous Variables

Exogenous Variables	Path Coefficient	t Value	t Table Value
P1	0.376	7.218***	2.603
P2	0.298	6.756***	2.603
P3	0.307	6.590***	2.603
P4	0.303	5.875***	2.603
P5	0.344	7.191***	2.603
F1	0.055	1.306	1.973
F2	0.030	0.600	1.973
F3	0.016	0.379	1.973
F4	0.086	1.991**	1.973
F5	0.121	2.401**	1.973
F6	0.022	0.468	1.973
F7	-0.009	-0.189	1.973
F8	0.067	1.691*	1.653
Coefficient of determination $R^2 = 0.710$			

Note: * significant at α = 10%; ** significant at α = 5%; *** significant at α = 1%
Source: Author's calculations

Based on Table 5, $R^2 = 0.710$. It is concluded that the OOPDPS factors: P1, P2, P3, P4, P5, and AIPD factors: F1, F2, F3, F4, F5, F6. F7, F8 can simultaneously explain variations in OOPDPS Satisfaction of 71%. The OOPDPS factors and AIPD factors that have a positive and significant effect on OOPDPS satisfaction are P1, P2, P3, P4, P5, F4, F5, and F8. Meanwhile, F1, F2, F3, F6 and F7 had no significant effect on OOPDPS satisfaction. The order of domination of the effect on OOPDPS satisfaction is based on the value of the path coefficient, from the highest to the lowest, namely P1, P5, P3, P4, P2, F5, F4 and F8. P1 (security in purchasing decisions) ranks first, indicating that consumers prioritize security in the online OBR shopping experience. Security is related to trust. Thus, trust is ranked first. This is in line with the findings of (Kanade & Kulkarni, 2018; Petcharat & Leelasantitham, 2021) for non-specific products that one of the main important factors in the online experience is trust.

5. Conclusions

This study aims to determine the dominant factors that influence consumer satisfaction with the decision process to purchase organic black rice online via s-commerce based on the theory of 5 stages of the purchasing decision process. This was done because previous studies of satisfaction, whether for certain products or not, analyzed satisfaction with the choices and with the results of decisions, not with the decision process. The results showed that the dominant factors influencing consumer satisfaction with the online OBR purchase decision process via s-commerce were 8: safety in purchasing decisions factor, Instagram and other social media factor, friends factor, satisfaction with the result factor, internet factor, factor of reference from friends and family as well as taste and aroma considerations, and disease treatment factor respectively. These eight factors can explain the variation in satisfaction with the process of 71% (= R^2). In order to increase the R^2, it is recommended to add the independent variables for further research. For example, OBR product attributes. These eight factors can be used as important considerations in online OBR business through s-commerce. Another finding is that although time efficiency is not the dominant factor influencing satisfaction with the process, the relationship is negative. This means that if time efficiency increases, OBR customer satisfaction with the process decreases. This is because consumers need a lot of time to research OBR specifications before buying it. For example, researching through social media, especially WA, whether a certain brand of black rice is truly organic even though the word "organic" is listed on the packaging. The limitation of this research is that only respondents who domicile in the provinces of West Java, Banten and DKI Jakarta were studied so that it is not sufficient to represent Indonesia. Therefore, for further research, it is suggested to add respondents who live in other provinces. In addition, it is recommended to conduct research on consumer satisfaction with OBR products, and the level of satisfaction with OBR attributes purchased online through s-commerce. As such, the overall consumer satisfaction will be known as stated by (Fitzsimons, 2000; Zhang & Fitzsimons, 1999). By knowing overall satisfaction, producers, resellers and online marketers can improve their performance according to what consumers want and need so that in the long run it can be expected that the

number of OBR consumers will increase as well as the number of producers. For theory development, the results of this study are expected to contribute to the development of a theory of consumer behavior in the context of satisfaction with the decision process to purchase functional food online through s-commerce.

Acknowledgments

The author would like to thank the producers and resellers for their kindness in providing their customers' WhatsApp numbers. We also thank the respondents who answered our online questionnaire and all the participants who took part in our research.

References

Azis, A., Izzati, M., & Haryanti, S. (2015). Aktivitas Antioksidan Dan Nilai Gizi Dari Beberapa Jenis Beras Dan Millet Sebagai Bahan Pangan Fungsional Indonesia. *Jurnal Biologi*, *4*(1), 45–61.

Babin, B. J., Lee, Y.-K., Kim, E.-J., & Griffin, M. (2005). Modeling consumer satisfaction and word-of-mouth : restaurant patronage in Korea. *Journal of Service Marketing*, *19*(No. 3), 133–139. https://doi.org/10.1108/08876040510596803

Bhattacharjee, J., & Priya, C. (2019). *Internal and external factors influencing online purchase decision* (pp. 1–8). https://www.projectguru.in/online-purchase-decision/

Busalim, A. H., Ghabban, F., Razak, A., & Hussin, C. (2021). Customer engagement behaviour on social commerce platforms : An empirical study. *Technology in Society*, *64*(October 2020), 101437. https://doi.org/10.1016/j.techsoc.2020.101437

Das, K., Tamhane, T., Vatterott, B., Wibowo, P., & Wintels, S. (2018). *The digital archipelago: How online commerce is driving Indonesia's economic development*. McKinsey & Company. https://www.mckinsey.com/featured-insights/asia-pacific/the-digital-archipelago-how-online-commerce-is-driving-indonesias-economic-development

Dewan Guru Besar IPB. (2016). *Pengembangan Pertanian Organik di Indonesia* (D. A. Astuti, Sudarsono, A. Sulaeman, & M. Syukur, Eds.; 1st ed.). PT Penerbit IPB Press.

Dewi, T. K., Nurmala, T., Ruminta, Djali, M., & Margana, D. M. (2017). *Eksplorasi Padi Hitam (Oryza sativa L.) Jawa Barat Halaman 29-37*. 29–37.

Engel, J. F., Blackwell, R. D., & Miniard, P. W. (1995). *Consumer Behavior* (8th ed.). Fort Worth : Dryden Press.

Facebook, & Bain & Co. (2021). *Southeast Asia, The Home For Digital Transformation | Report | Facebook for Business*. https://www.facebook.com/business/news/southeast-asia-the-home-for-digital-transformation

Firdaus, M. J., Sapta Purwoko, B., Saraswati Dewi, I., & Suwarno, W. B. (2022). Karakterisasi Fisikokimia Beras Galur-galur Padi Hitam Dihaploid. *J. Agron. Indonesia*, *50*(1), 1–9. https://dx.doi.org/0.2483/jai.v50i.39850

Fitzsimons, G. J. (2000). Consumer Response to Stockouts. *Journal of Consumer Research*, *27*(September 2000), 249–266.

Gong, W., Stump, R. L., & Maddox, L. M. (2013). Factors influencing consumers' online shopping in China. *Journal of Asia Business Studies*, *7*(3), 214–230. https://doi.org/10.1108/JABS-02-2013-0006

Gu, Y., Botti, S., & Faro, D. (2013). Turning the page: The Impact of choice closure on satisfaction. *Journal of Consumer Research*, *40*(2), 268–283. https://doi.org/10.1086/670252

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis* (Seventh ed). Pearson Prentice Hall. https://www.academia.edu/41117363/Multivariate_Data_Analysis_7th_Edition_by_Joseph_F_Hair_Jr

Hawkins, D. I., & Mothersbaugh, D. L. (2010). *Building Marketing Strategy Consumer Behavior* (K. Pekelder, Ed.; 11th ed.). New York: McGraw-Hill Irwin.

Hedt, B. L., & Pagano, M. (2011). Health indicators: Eliminating bias from convenience sampling estimators. *Statistics in Medicine*, *30*(5), 560–568. https://doi.org/10.1002/sim.3920

Ho, C., & Strube, G. (2000). Web search behavior of Internet experts and newbies. *Computer Networks*, *33*, 337–346.

Huber, O., & Seiser, G. (2001). Accounting and Convincing: The Effect of Two Types of justification on the Decision Process. *Journal of Behavioral Decision Making*, *14*(1), 69–85.

Huseynov, F., & Yildirim, S. O. (2016). Internet users ' attitudes toward business-to-consumer online shopping : A survey. *Information Development*, *32*(1), 452–465. https://doi.org/10.1177/0266666914554812

Institute, O., Alifa, Y., & Kombas.id. (2019). *Statistik Pertanian Organik Indonesia 2019* (A. R. Firman & W. David, Eds.). Aliansi Organis Indonesia.

Iyengar, S. S., & Lepper, M. R. (2000). When choice is demotivating: Can one desire too much of a good thing? *Journal of Personality and Social Psychology*, *79*(6), 995–1006. https://doi.org/10.1037/0022-3514.79.6.995

Jahng, J., Jain, H., & K, R. (2001). The Impact of Electronic Commerce Environment on User Behavior: The Case of a Complex Product. *E-Service Journal*, *1*(1), 41–53. http://muse.jhu.edu/journals/esj/summary/v001/1.1jahng.html

Kanade, V. S., & Kulkarni, P. M. (2018). Predicting Consumer Behavior in online purchase. *PARIPEX - Indian Journal of Research*, *7*(9), 413–415.

Karimi, S. (2013). A purchase decision-making process model of online consumers and its influential factor a cross sector analysis. *Published Doctoral Dissertation*, 1–326. https://www.escholar.manchester.ac.uk/api/datastream?publicationPid=uk-ac-man-scw:189583&datastreamId=FULL-TEXT.PDF

Karimi, S., Holland, C. P., & Papamichail, K. N. (2018). The impact of consumer archetypes on online purchase decision-making processes and outcomes : A behavioural process perspective. *Journal of Business Research*, *91*(May 2017), 71–82. https://doi.org/10.1016/j.jbusres.2018.05.038

Karimi, S., Papamichail, K. N., & Holland, C. P. (2014). Purchase Decision Processes in the Internet Age. *Lecture Notes in Business Information Processing*, *184 LNBIP*, 57–66. https://doi.org/10.1007/978-3-319-11364-7_6

Kementan. (2020). *Kementerian Pertanian - Kementan Dorong Pertanian Organik*. https://www.pertanian.go.id/home/?show=news&act=view&id=3924

Kementerian Kesehatan RI. (2018). *Tabel Komposisi Pangan Indonesia 2017*.

Kotler, P., & Keller, K. lane. (2009). *Manajemen Pemasaran Jilid 1. Terjemahan* (13th ed.). Erlangga.

Kotler, P., & Keller, K. lane. (2012). *Manajemen Pemasaran Jilid 1 dan 2 Terjemahan* (13th ed.). Erlangga.

Koufaris, M. (2002). Applying the Technology Acceptance Model and Flow Theory to Online Consumer Behavior. *Information Systems Research*, *13*(2), 205–223.

Kristamtini, Taryono, Basunanda, P., & Murti, R. H. (2017). *Korelasi Kandungan Antosianin Total dengan Peubah Warna (L * , a * , dan b *) dan Penanda Mikrosatelit pada Beras Hitam Correlation Between Total Anthocyanin Content and Microsatellite Markers with L * a *, and b * Color Variables on Black Grain Rice Va*. *Chaudhary 2003*, 115–124. https://doi.org/DOI: 10.21082/jpptp.v1n2.2017.p115-124

Kushwaha, U. Kr. S. (2016). *Black Rice - Research, History and Development | Kushwaha Ujjawal | Springer*.

Kusno, K., Deliana, Y., Sulistyowati, L., & Nugraha, Y. (2022). Determinant factors of online purchase decision process via social commerce: An empirical study of organic black rice in Indonesia. *International Journal of Data and Network Science*, *6*(4), 1065–1076. https://doi.org/10.5267/j.ijdns.2022.8.002

Kusno, K., Liandy, R. S., Mukti, G. W., & Sadeli, A. H. (2021). Driven Factors for Purchasing Decision and Satisfaction of Organic Rice Consumers on Supermarket – A Study in Indonesia. *Journal of Agricultural Sciences - Sri Lanka*, *16*(2), 271–282. https://doi.org/http://doi.org/10.4038/jas.v16i2.9333

Kusno, K., Natawidjaja, R. S., Sulistyowati, L., & Saefudin, B. R. (2021). Analisis Faktor Yang Mendasari Harapan Konsumen Terhadap Atribut Produk Beras. *Mimbar Agribisnis: Jurnal Pemikiran Masyarakat Ilmiah Berwawasan Agribisnis*, *7*(2), 1461. https://doi.org/10.25157/ma.v7i2.5449

Kusno, K., Wilarko, G., Budiman, M. A., & Sulystiowati, L. (2020). Analysis of Black Rice Farming Competitiveness (a Case Study in Merkarwangi Village, Cisayong District, Tasikmalaya Regency, West Java Province). *AGROLAND The Agricultural Sciences Journal (e-Journal)*, *7*(2), 78–90. https://doi.org/10.22487/agroland.v7i2.615

Lee, J. H. (2010). Identification and Quantification of Anthocyanins from the Grains of Black Rice (L .) Varieties. *Food Sci. Biotechnol*, *19*(2), 391–397. https://doi.org/10.1007/s10068-010-0055-5

Li, N., & Zhang, P. (2002). Consumer Online Shopping Attitudes And Bahavior: An Assesment of Research. *AMCIS 2002 Proceedings. 74.*, 508–517. http://aisel.aisnet.org/amcis2002/74

Liang, T. P., & Lai, H. J. (2000). Electronic store design and consumer choice: an empirical study. *Proceedings of the Hawaii International Conference on System Sciences*, 152. https://doi.org/10.1109/hicss.2000.926863

Liang, T., & Turban, E. (2011). *Introduction to the Special Issue Social Commerce : A Research Framework for Social Commerce Introduction to the Special Issue Social Commerce : A Research Framework for Social Commerce*. *December*. https://doi.org/10.2307/23106391

Marsden, P. (2011). *Simple Definition of Social Commerce*. Social Commerce Today. http://digitalintelligencetoday.com/social-commerce-definition-word-cloud-definitive-definition-list

McKinney, V., Yoon, K., & Zahedi, F. (2002). The measurement of Web-customer satisfaction: An expectation and disconfirmation approach. *Information Systems Research*, *13*(3), 296–315. https://doi.org/10.1287/isre.13.3.296.76

Parel, C. P., Caldito, G. C., Ferrer, P. L., de Guzman, G. G., Sinsioco, C. S., & Tan, R. H. (1973). *Sampling Design and Procedure*. Quezon City: Agricultural Development Council.

Petcharat, T., & Leelasantitham, A. (2021). A retentive consumer behavior assessment model of the online purchase decision-making process. *Heliyon*, *7*(10), e08169. https://doi.org/10.1016/j.heliyon.2021.e08169

Posavac, S. S., Kardes, F. R., & Hoeffler, S. (2012). Consumer Psychology. *Encyclopedia of Human Behavior*, 589–595. https://doi.org/10.1016/B978-0-12-375000-6.00107-5

Qi, S. S., He, J., Dong, L. C., Yuan, L. P., Wu, J. le, Zu, Y. X., & Zheng, H. X. (2020). Cyanidin-3-glucoside from black rice prevents renal dysfunction and renal fi brosis in streptozotocin-diabetic rats. *Journal of Functional Foods*, *72*(January), 104062. https://doi.org/10.1016/j.jff.2020.104062

SIRCLO. (2020). *Bagaimana Tren Perkembangan Social Commerce di Indonesia dan Asia?* -. https://www.sirclo.com/blog/bagaimana-tren-perkembangan-social-commerce-di-indonesia-dan-asia/

Smith, A. D., & Rupp, W. T. (2003). Strategic online customer decision making: Leveraging the transformational power of the Internet. *Online Information Review*, *27*(6), 418–432. https://doi.org/10.1108/14684520310510055

Sofyanti, A. (2019). *Kementan: Jawa Barat Jadi Penghasil Beras Organik Terbesar di Indonesia*.

Sohn, J. W., & Kim, J. K. (2020). Technology in Society Factors that influence purchase intentions in social commerce. *Technology in Society*, *63*(August), 101365. https://doi.org/10.1016/j.techsoc.2020.101365

Stankevich, A. (2017). Explaining the Consumer Decision-Making Process: Critical Literature Review. *Journal of International Business Research and Marketing*, *2*(6), 7–14. https://doi.org/10.18775/jibrm.1849-8558.2015.26.3001

Statista. (2021). *Social Media in Indonesia - statistics & facts*. Statista. https://www.statista.com/statistics/284437/indonesia-social-network-penetration/

Stefani, E., Nurmalina, R., & Rifin, A. (2017). *Strategi Pegembangan Usaha Beras Hitam pada Asosiasi Tani Organik Sawangan di Kabupaten Magelang*. 57–66. https://doi.org/10.18196/agr.3145

Suhari, Y. (2008). Keputusan Membeli Secara Online dan Faktor-Faktor yang Mempengaruhinya. *Jurnal Teknologi Informasi DINAMIK*, *XIII*, 140–146.

Tabachnick, B. G., & Fidell, L. S. (2019). *Using Multivariate Statistics* (7th ed.). Pearson.

Taber, K. S. (2018). The Use of Cronbach ' s Alpha When Developing and Reporting Research Instruments in Science Education. *Res Sci Educ*, 1273–1296. https://doi.org/10.1007/s11165-016-9602-2

Valenzuela, A., Dhar, R., & Zettelmeyer, F. (2009). Contingent Response to Self-Customization Procedures: Implications for Decision Satisfaction and Choice. *Journal of Marketing Research*, *XLVI*(Desember), 754–763.

Wang, C., & Zhang, P. (2012). The evolution of social commerce: The people, management, technology, and information dimensions. *Communications of the Association for Information Systems*, *31*(1), 105–127. https://doi.org/10.17705/1cais.03105

Yamin, S. (2014). *Rahasia Olah Data Lisrel* (1st ed.). Mitra Wacana Media.

Zhang, S., & Fitzsimons, G. J. (1999). Choice-Process Satisfaction: The Influence of Attribute Alignability and Option Limitation. *Organizational Behavior and Human Decision Processes*, *77*(3), 192–214.

Appendices

Table A1

Variable and Measurement of OBR Online Purchase Decision Process via S-commerce and the Satisfaction

Stage	Variable	Measurement	
		Agreement	Satisfaction
Need recognition	I realized the need for OBR by browsing the internet (N1)	SD, D, N, A, SA	VD, NS, SS, S, VS
	I realized the need for OBR via WA (N2)	SD, D, N, A, SA	VD, NS, SS, S, VS
	I realized the need for OBR via FB (N3)	SD, D, N, A, SA	VD, NS, SS, S, VS
	I realized the need for OBR via IG (N4)	SD, D, N, A, SA	VD, NS, SS, S, VS
	I realized the need for OBR via Twitter (N5)	SD, D, N, A, SA	VD, NS, SS, S, VS
	I realized the need for OBR via Email (N6)	SD, D, N, A, SA	VD, NS, SS, S, VS
	I realized the need for OBR via Blog (N7)	SD, D, N, A, SA	VD, NS, SS, S, VS
	I realized the need for OBR via Q and A site (N8)	SD, D, N, A, SA	VD, NS, SS, S, VS
	I realized the need for OBR via Article site (N9)	SD, D, N, A, SA	VD, NS, SS, S, VS
	I realized the need for OBR via Google ads (N10)	SD, D, N, A, SA	VD, NS, SS, S, VS
	I realized the need for OBR from friend (N11)	SD, D, N, A, SA	VD, NS, SS, S, VS
	I realized the need for OBR from family (N12)	SD, D, N, A, SA	VD, NS, SS, S, VS
Information search	I searched for information about OBR by reading reviews (I1)	SD, D, N, A, SA	VD, NS, SS, S, VS
	I searched for information about OBR by looking at the product on the internet (I2)	SD, D, N, A, SA	VD, NS, SS, S, VS
	I searched for information about OBR by asking friends (I3)	SD, D, N, A, SA	VD, NS, SS, S, VS
	I searched for information about OBR by asking family (I4)	SD, D, N, A, SA	VD, NS, SS, S, VS
	I searched for information about OBR by considering various OBR options on the internet (I5)	SD, D, N, A, SA	VD, NS, SS, S, VS
Evaluation of alternatives	I evaluated OBR options by comparing social media of various sellers (E1)	SD, D, N, A, SA	VD, NS, SS, S, VS
	I evaluated OBR options by asking friends (E2)	SD, D, N, A, SA	VD, NS, SS, S, VS
	I evaluated OBR options using a specific website that provides benchmarking (E3)	SD, D, N, A, SA	VD, NS, SS, S, VS
Purchase decision	I feel secure transacting when buying OBR online (D1)	SD, D, N, A, SA	VD, NS, SS, S, VS
	I feel secure that OBR purchased online fits its function (D2)	SD, D, N, A, SA	VD, NS, SS, S, VS
	I feel my data is safe when buying OBR online (D3)	SD, D, N, A, SA	VD, NS, SS, S, VS
	Risk of damage to the OBR product is small (D4)	SD, D, N, A, SA	VD, NS, SS, S, VS
	Risk of the OBR not being delivered is small (D5)	SD, D, N, A, SA	VD, NS, SS, S, VS
	If the OBR doesn't match what I ordered, the return is guaranteed (D6)	SD, D, N, A, SA	VD, NS, SS, S, VS
Post-purchase behaviour	I give a star rating after the OBR is received (B1)	SD, D, N, A, SA	VD, NS, SS, S, VS
	I made a repeat purchase of OBR (B2)	SD, D, N, A, SA	VD, NS, SS, S, VS
	I evaluate my satisfaction with the OBR by paying attention to word of mouth comment (B3)	SD, D, N, A, SA	VD, NS, SS, S, VS
	I suggest friends to buy OBR (B4)	SD, D, N, A, SA	VD, NS, SS, S, VS

Note: SD = Strongly disagree = 1, D = Disagree = 2, N = Neutral = 3, A = Agree = 4, SA = Strongly agree = 5. VD = Very dissatisfied = 1, NS = Not satisfied = 2, SS = Somewhat satisfied = 3, S = Satisfied = 4, VS = Very satisfied = 5

Source: Developed from (Kanade & Kulkarni, 2018; Kusno et al., 2022)

Table A2
Variable and Measurement of Aspects that Influence OBR Online Purchase Decision via S-commerce

No.	Internal Aspects	Measurement
1.	I bought OBR online because it's easy to use (IN1)	SD, D, N, A, SA
2.	I bought OBR online due to personal experience (IN2)	SD, D, N, A, SA
3.	I bought OBR online out of time management considerations (IN3)	SD, D, N, A, SA
4.	I bought OBR online because of my personal nature (IN4)	SD, D, N, A, SA
5.	Age is a consideration in buying OBR (IN5)	SD, D, N, A, SA
6.	The type of work is a consideration in buying OBR (IN6)	SD, D, N, A, SA
7.	Education level is a consideration in buying OBR (IN7)	SD, D, N, A, SA
8.	Income level is a consideration in buying OBR (IN8)	SD, D, N, A, SA
9.	The feeling of comfort when eating OBR is a consideration for buying OBR (IN9)	SD, D, N, A, SA
10.	Encouragement from within is a consideration to buy OBR (IN10)	SD, D, N, A, SA
11.	The perceived benefits for health are a consideration for buying OBR (IN11)	SD, D, N, A, SA
	External Aspects	SD, D, N, A, SA
12.	I bought OBR online because of the good quality of service (EX1)	SD, D, N, A, SA
13.	I bought OBR online because the payment options are easy (EX2)	SD, D, N, A, SA
14.	I bought OBR online because of easy accessibility (EX3)	SD, D, N, A, SA
15.	I bought OBR online after reading reviews (EX4)	SD, D, N, A, SA
16.	The habit of consuming OBR is a consideration for buying OBR online (EX5)	SD, D, N, A, SA
17.	Family is a reference in buying OBR online (EX6)	SD, D, N, A, SA
18.	Friends are a reference in buying OBR online (EX7)	SD, D, N, A, SA
19.	Increasing social status is a consideration in buying OBR online (EX8)	SD, D, N, A, SA
	a. Product	SD, D, N, A, SA
20.	I bought OBR because the flavors suit my taste (PD1)	SD, D, N, A, SA
21.	I bought OBR because of the distinct scent (PD2)	SD, D, N, A, SA
22.	I bought OBR for disease prevention (PD3)	SD, D, N, A, SA
23.	I bought OBR for the treatment of ailments (PD4)	SD, D, N, A, SA
	b. Price	SD, D, N, A, SA
24.	Price is a major consideration in buying OBR (PR1)	SD, D, N, A, SA
25.	Appropriateness of price and quantity is a consideration in buying OBR (PR2)	SD, D, N, A, SA
26.	Appropriateness of price and quality is a consideration in buying OBR (PR3)	SD, D, N, A, SA
	c. Promotion	SD, D, N, A, SA
27.	Gifts can make me interested in buying OBR (PM1)	SD, D, N, A, SA
28.	Advertising on social media is a consideration in buying OBR (PM2)	SD, D, N, A, SA
	d. Place	SD, D, N, A, SA
29.	Easy-to-reach location is a consideration for buying OBR (PL1)	SD, D, N, A, SA
30.	Situation of a safe location is a consideration in buying OBR (PL2)	SD, D, N, A, SA
31.	Convenient location situation is a consideration in buying OBR (PL3)	SD, D, N, A, SA
	e. People	SD, D, N, A, SA
32.	The felicity of the seller in conversation is a consideration in buying OBR (PP1)	SD, D, N, A, SA
33.	The friendliness of the seller in conversation is a consideration in buying OBR (PP2)	SD, D, N, A, SA
	f. Process	SD, D, N, A, SA
34.	The speed of transaction processing is a consideration in buying OBR (PC1)	SD, D, N, A, SA
35.	The speed of the shipping process is a consideration in buying OBR (PC2)	SD, D, N, A, SA
	g. Physical evidence	SD, D, N, A, SA
36.	An attractive seller's website is a consideration in buying OBR (ED1)	SD, D, N, A, SA
37.	An attractive billing report is a consideration in buying OBR (ED2)	SD, D, N, A, SA
38.	The variety of products sold is a consideration in buying OBR (ED3)	SD, D, N, A, SA

Note: SD = Strongly disagree = 1, D = Disagree = 2, N = Neutral = 3, A = Agree = 4, SA = Strongly agree
Source: Developed from (Bhattacharjee & Priya, 2019; Kotler & Keller, 2009)