

Factors Affecting Consumer Intention to Purchase Organic Vegetables Online



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ABSTRACT: This study aims to identify the factors that influence the desired outcome of purchasing organic vegetable products online in generation X. This research sets the location in DKI Jakarta through the application of purposive location determination method. In this study, 156 samples were used. The sample criteria are residents of DKI Jakarta who are between 43 and 58 years old and have purchased organic agricultural products, but not through an online platform. Data collection was carried out through distributing online questionnaires using social media. Data analysis was carried out using structural equation modeling (SEM) and analyzed using AMOS 24 software. The results of the structural equation modeling (SEM) analysis show that the model is suitable and can be considered good, with a relatively satisfactory goodness of fit value, as indicated by the CMIN/Df ratio = 1.34; TLI = 0.97; CFI = 0.98; NFI = 0.97; IFI = 0.98; IFI = 0.98; RMSEA = 0.047; GFI = 0.902; NFI = 0.94 AGFI 0.9. The model estimation results show that trust ($p = 0.00$; $cr = 6.170$), perceived usefulness ($p = 0.00$; $cr = 5.054$), perceived ease of use ($p = 0.00$; $cr = 14.469$), subjective norm ($p = 0.00$; $cr = 5.131$), attitude ($p = 0.00$; $cr = 4.957$), and behavioral control ($p = 0.00$; $cr = 7.073$), have a positive impact on the desire to buy organic agricultural products online.

KEYWORDS: Purchase intention, organic vegetables, generation X

I. INTRODUCTION

The Internet has become a transaction medium that makes it easier for economic actors to conduct business, overcoming distance and time constraints so that many have begun to enthusiastically utilize the internet as the main support for business activities (Wardoyo & Herdiani, 2017). The phenomenon of online sales also extends to fresh agricultural products, such as vegetables (Listyowati et al., 2020). As a solution to environmental sustainability challenges, such as greenhouse emissions, soil erosion, and biodiversity, organic farming is now the main alternative to conventional farming (Crowder & Reganold, 2015)

Although online shopping offers many advantages over traditional shopping (Moshref-Javadi et al., 2017), consumers still tend to underestimate the need to transact in a risk-averse manner due to several possible disadvantages, including the risk of fraud, damage to goods, and the potential for break-in crimes committed through electronic money payments. Generation X, a group born between 1965 and 1980, with an estimated current age ranging from 43 to 58 years.

Planned behavior theory emerged as a useful tool to explain and analyze consumer behavior in online transactions (Choi & Saikkonen, 2004). Online shopping refers to the ability of consumers to make purchases online (Delafruz et al., 2011), while the TPB, introduced by Ajzen in 1991, is a relevant working tool. Attitudes, subjective norms, and perceived behavioral control influence consumer perceptions. About customer analysis, success will be achieved if vendors can understand aspects of human psychology. Therefore, the Theory of Planned Behavior is a useful tool for understanding consumer attitudes regarding online commerce (Choi & Saikkonen, 2004)

II. LITERATURE REVIEW

A. *Theory of Planned Behavior*

Pencipta Theory of Planned Behavior is (Ajzen, 1991). The TPB links attitudes, subjective norms, and behavioral control with behavioral intentions. Below is a brief explanation of each element:

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- 1) Attitude towards the behavior
Beliefs about the impact of a behavior form attitudes towards it (Ajzen, 1991). Attitudes are psychological feelings that are influenced by how consumers perceive you. Positive reinforcement changes behavioral intentions to positive (Chen et al., 2014).
- 2) Subjective Norm
Subjective norms are the motivation that consumers receive from friends, family, and colleagues, to make purchases through online stores (E. Kim & Hargrove, 2013). If consumers believe that their peers support online purchases, online purchase intentions will be greater (Schepers & Van Den Berg, 2007a).
- 3) Perceived Behavioral Control
In accordance with (Ajzen, 1991), the Theory of Planned Behavior argues that individuals' perception of control over their behavior depends on their abilities, competencies, and capacities that facilitate or inhibit the anticipated behavior, given the efficacy of the relevant behavior. The threshold of awareness that customers apply to outside factors during the online buying process is known as perceived behavioral control, or PBC (Amaro & Duarte, 2015).

B. Psychological Factors

Psychological factors play an important role in the formation of online purchase intentions (Martín-Hernández et al., 2012). Psychological factors have a significant positive effect on purchase intention (Tan & Wang, 2018). For psychological factors consist of perceptions and beliefs (Setiadi & SE, 2015).

- 1) Perception
Online shoppers consider how consumers perceive the use of technology; if the technology is useful and easy to use, they will make a purchase (Listiyowati et al., 2020).
 - a) Perceived ease of use
How simple it is to use the internet for shopping is measured by perceived ease of use. Perceived ease of use influences online purchase intention (C. H. Kim & Kim, 2015).
 - b) Perceived usability
A person's perception of the value of new technology lies in his expectations of increased productivity and performance. Perceived usefulness is the most dominant factor influencing online purchase intentions (Sin et al., 2012).
- 2) Trust
According to trust is recognized as an important component in buyer-seller relationships and online purchase intentions. Customers' perceived risk in making an online purchase is lowered and their intention to make a purchase increases when they have greater trust in the online buying and selling site.

C. Generation X

Generation x produces a generation characterized by its adaptability, its ability to face new challenges with grace, its reputation as a resilient generation, its independence and loyalty, its strong emphasis on image, status, and financial gain, its hardworking nature, and its ability to calculate the company's contribution to its work output (Jurkiewicz, 2000).

III. RESEARCH METHODS

This research uses a quantitative descriptive approach as its basic method, this method is used to assess independent variables without making comparisons or linking them to other variables (D. Sugiyono, 2013). In this research, the survey technique is applied as a research method. This research determines its location purposively based on certain considerations (F. X. Sugiyono, 2017). DKI Jakarta Province was chosen as the research location because it is a metropolitan area and has many e-commerce sites that offer agricultural products. The sample is part of the number and characteristics possessed by the population (F. X. Sugiyono, 2017). According to (Ulum et al., 2008), the minimum sample size recommended in using SEM is around 100 samples. Population refers to an area consisting of objects or subjects that have certain qualities and characteristics, which are determined by the researcher to be investigated with the aim of drawing conclusions. The population in this study consisted of consumers of organic agricultural products in DKI Jakarta Province. In this study, a sample of 156 people was used. The sample criteria involved DKI Jakarta residents in the age range of 43-58 years who had purchased organic agricultural products, but not through online transactions.

This research utilizes the Likert Scale as a measurement method to evaluate the attitudes, views, and perceptions of individuals or groups towards social phenomena. The Likert scale applied ranges from 1 to 5, with categories (strongly disagree, disagree, neutral, agree, strongly agree) (F. X. Sugiyono, 2017). The data analysis method uses SEM which is analyzed with AMOS 24 software.

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IV. RESULTS AND DATA ANALYSIS

A. Test The Research Instrument

Validity is a measure of the extent to which an indicator precisely measures the intended aspect. The recommended value for variance extracted is more than 0.50. Reliability is a parameter that measures the internal consistency of indicators of a construct. High reliability in the results provides confidence that each indicator consistently reflects the measurement of the construct. In general, acceptable reliability is usually more than 0.70, while reliability below 0.70 is acceptable in exploratory research (Haryono et al., 2017).

1) Validity Test with Variance Extracted Test (VE>0.5)

Table 1. Validity Test Results

Variable	Construct	Variable value	e value	(Σ standart loading) ²	(Σ standart loading) ² variable	Σ standart loading) ² variable $\Sigma \xi_j$	Σ standart loading) ² / Σ standart loading) ² + $\Sigma \xi_j$
PK	PK1	0.7	0.26	0.49	VE 2.7097	2.7097	0.669111
	PK2	0.64	0.31	0.4096	1.34	4.0497	
	PK3	0.87	0.14	0.7569			
	PK4	0.86	0.15	0.7396			
	PK5	0.56	0.48	0.3136			
K	K1	0.9	0.14	0.81	VE 2.3774	2.3774	0.657212
	K2	0.88	0.22	0.7744	1.24	3.6174	
	K3	0.73	0.26	0.5329			
	K4	0.51	0.62	0.2601			
NS	NS1	0.85	0.21	0.7225	VE 2.2023	2.2023	0.596457
	NS2	0.62	0.4	0.3844	1.49	3.6923	
	NS3	0.73	0.46	0.5329			
	NS4	0.75	0.42	0.5625			
S	S1	0.73	0.19	0.5329	VE 1.8949	1.8949	0.612265
	S2	0.64	0.34	0.4096	1.2	3.0949	
	S3	0.68	0.41	0.4624			
	S4	0.7	0.26	0.49			
KP	KP1	1.07	-0.16	1.1449	VE 1.6074	1.6074	0.638516
	KP2	0.4	0.64	0.16	0.91	2.5174	
	KP3	0.55	0.43	0.3025			
N	N1	0.7	0.33	0.49	VE 2.404	2.404	0.7189
	N2	0.98	0.02	0.9604	0.94	3.344	
	N3	0.8	0.18	0.64			
	N4	0.56	0.41	0.3136			

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KP	KP1	0.7	0.22	0.49	VE	2.196	2.196	0.716243
	KP2	0.8	0.13	0.64		0.87	3.066	
	KP3	0.88	0.14	0.7744				
	KP4	0.54	0.38	0.2916				

Source: Primary data processed 2023 (AMOS 24)

Validity is how accurately an indicator measures something. The variance extracted value should be more than 0.50 in accordance with the recommendations. From the validity test using the Variance Extracted Test, it was found that all variables (PK, K, NS, S, KP, N, PKP) were considered valid because the variance extracted value was more than 0.50 respectively 0.5.

2) Reliability Test With Construct Reliability Test (reliability value >0.70)

Table 2. Reliability Test Results

Variable	Construct	Variable value	e value		Σ standart loading)2	Σ standart loading)2+ $\Sigma\xi_j$	Σ standart loading)2 / Σ standart loading)2+ $\Sigma\xi_j$
PK	PK1	0.7	0.26	CR	13.1769	13.1769	0.907694
	PK2	0.64	0.31		1.34	14.5169	
	PK3	0.87	0.14				
	PK4	0.86	0.15				
	PK5	0.56	0.48				
K	K1	0.9	0.14	CR	9.1204	9.1204	0.880314
	K2	0.88	0.22		1.24	10.3604	
	K3	0.73	0.26				
	K4	0.51	0.62				
NS	NS1	0.85	0.21	CR	8.7025	8.7025	0.853814
	NS2	0.62	0.4		1.49	10.1925	
	NS3	0.73	0.46				
	NS4	0.75	0.42				
S	S1	0.73	0.19	CR	7.5625	7.5625	0.863053
	S2	0.64	0.34		1.2	8.7625	
	S3	0.68	0.41				
	S4	0.7	0.26				
KP	KP1	1.07	-0.16	CR	4.0804	4.0804	0.81765
	KP2	0.4	0.64		0.91	4.9904	
	KP3	0.55	0.43				
N	N1	0.7	0.33	CR	9.2416	9.2416	0.907677
	N2	0.98	0.02		0.94	10.1816	
	N3	0.8	0.18				

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	N4	0.56	0.41				
PKP	PKP1	0.7	0.22	CR	8.5264	8.5264	0.907411
	PKP2	0.8	0.13		0.87	9.3964	
	PKP3	0.88	0.14				
	PKP4	0.54	0.38				

Source: Primary data processed 2023 (AMOS 24)

Reliability is an assessment of the internal consistency of a construct's indicators. High reliability provides confidence that each indicator consistently measures the same aspect. In general, the level of reliability is considered acceptable if it is more than 0.70, while reliability below 0.70 is still acceptable for exploratory research (Haryono et al., 2017). Based on the results of the Reliability Test with the construct reliability test, the results of the PK = 0.9 variable; K = 0.8; NS = 0.8; S = 0.8; KP = 0.8; N = 0.9; PKP = 0.9, so that all variables pass the test because the Cr value is more than 0.70. 0.7.

3) Validity Test with CFA Test

The construct validity test uses the CFA Test or Validity Test using the Critical Ratio (Cr) > 1.96 and Probability (P) < 0.05. Sign *** Is Significant < 0.001). Of the 28 constructs tested, 4 constructs do not meet P, namely PK5, K4, BC2, and KP4.

4) Validity Test with Convergent Validity Test

Convergent validity is considered to meet the criteria if the "loading factor" or "standardized loading estimate" is greater than 0.5 in the validity test. Of the 28 constructs, there is one that does not meet the value, namely BC2, so of the 28 constructs tested, there are 4 constructs that must be discarded and 24 constructs remain.

B. Validity Model

The results of this SEM analysis indicate that the fit of the model is relatively acceptable and can be considered by the requirements of model fit according to (Hair Jr et al., 2014) Using 4-5 goodness of fit criteria is considered adequate to assess the fit of a model if it meets each criterion of the goodness of fit, including absolute fit indices, incremental indices, and parsimony fit indices. CMIN/Df = 1.3; TLI = 0.97; CFI = 0.98; NFI = 0.97; IFI = 0.98; RMSEA = 0.047; GFI = 0.902; NFI = 0.94 AGFI 0.9. Structural model testing is used to investigate the relationship between latent variables, both independent and dependent, which cannot be measured directly and require indicators for measurement. The results of the Structural Equation Modeling model are shown in Figure 1.

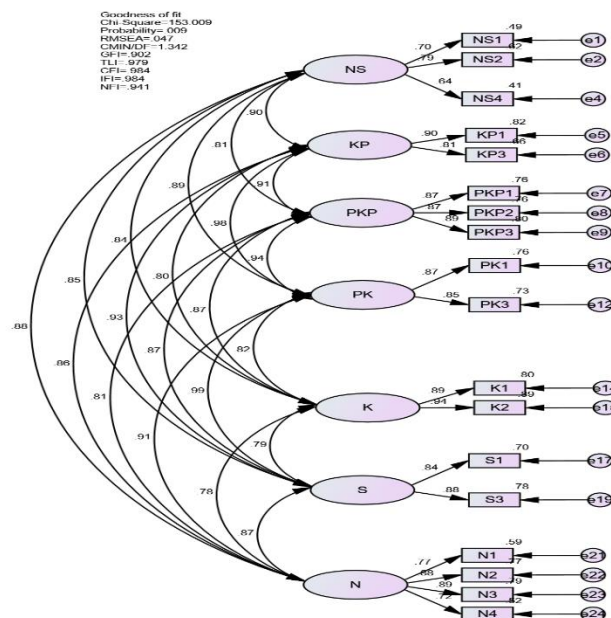


Figure 1 Results of the Structural Equation Modeling

Source: Primary data processed 2023 (AMOS 24)

C. Hypothesis Test

Table 3. Hypothesis Test Results

			Estimate	S.E.	C.R.	P	Label
N	<--	K	.264	.043	6.170	**	par_1
						*	2
N	<--	PK	.211	.042	5.054	**	par_1
						*	3
N	<--	PK P	1.105	.076	14.46 9	**	par_1
						*	4
N	<--	NS	.282	.055	5.131	**	par_1
						*	5
N	<--	S	.157	.032	4.957	**	par_1
						*	6
N	<--	KP	.743	.105	7.073	**	par_1
						*	7

Source: Primary data processed 2023 (AMOS 24)

Based on the initial hypothesis of the study, namely that trust has a significant impact on intention, the critical ratio value of 6.170 was found, exceeding the threshold value of 1.96, and the probability value of $p = 0.00 < 0.05$, meeting the test criteria. These results indicate that the higher the customer's trust in the online buying and selling website, the less perceived risk of online transactions, and the greater the desire to make a purchase on the website, in accordance with the findings of (T. K. Kim et al., 2009). This finding is also in line with the research of (Alexander et al., 2019), which states that trust has a positive influence on intention, so the first hypothesis can be accepted. From the second hypothesis which states that perceived usefulness affects purchase intentions, a critical ratio value of 5.054 was found, exceeding the threshold value of 1.96, and a probability value of $p = 0.00 < 0.05$, in accordance with the test criteria. These results indicate that the perceived usefulness variable plays a role in influencing the purchase intention of organic agricultural products online. Therefore, the second hypothesis can be accepted because it is consistent with the theory which states that perceived usefulness is the main factor influencing online purchase intentions (Sin et al., 2012). The perceived ease of use variable was found to have a positive effect on the intention to purchase organic agricultural products online, with a critical ratio value of $14.469 > 1.96$ and a probability of $0.00 < 0.05$. This finding supports the view that the intention to purchase organic agricultural products online is influenced by various factors, including perceived ease of use, so the third hypothesis can be accepted. The fourth hypothesis in this study states that subjective norm income affects the purchase intention of organic agricultural products online. It was found that the critical ratio value was $5.131 > 1.96$ and the probability value $p = 0.00 < 0.05$, meeting the test criteria. This finding is in line with (Schepers & Van Den Berg, 2007) research which states that if consumers believe that their peers support online purchases, the intention to buy online will be higher. The fifth hypothesis in this study states that nature has an effect on the intention to purchase organic agricultural products online. It was found that the critical ratio value of $4.957 > 1.96$ and the probability value of $p = 0.00 < 0.05$, meeting the test criteria. This finding is in accordance with the theory proposed by (Chen et al., 2014) which states that attitude is an emotional evaluation that affects consumer behavioral intentions. Therefore, the fifth hypothesis is acceptable. The sixth hypothesis states that behavioral control affects the purchase intention of organic agricultural products online. It was found that the critical ratio value was $7.073 > 1.96$ and the probability value $p = 0.00 < 0.05$, meeting the test criteria. These results indicate that the behavior control variable has a significant influence on the intention to purchase organic agricultural products online. The sixth hypothesis is acceptable because it is in line with the research findings of (Cheah, 2015), which states that perceived behavioral control has a positive impact on online purchase intentions.

V. CONCLUSIONS

Based on statistical tests and analyses conducted by researchers, it has been found that six variables have a positive effect on the intention to purchase organic agricultural products online among Generation X in the DKI Jakarta Province area. These variables are trust variables ($p = 0.00$; $cr = 6.170$), perceived usefulness ($p = 0.00$; $cr = 5.054$), perceived ease of use ($p = 0.00$; $cr = 14.469$), subjective

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norms ($p = 0.00$; $cr = 5.131$), attitudes ($p = 0.00$; $cr = 4.957$), and behavioral control ($p = 0.00$; $cr = 7.073$). Among these variables, the perception of ease of use has the most significant influence on the intention to purchase organic agricultural products online. This is evident from the highest critical ratio value of 14.469, which is greater than the accepted threshold of 1.96.

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