World Journal of Advanced Research and Reviews
eISSN: 2581-9615 CODEN (USA): WJARAI
Cross Ref DOI: 10.30574/wjarr
Journal homepage: https://wjarr.com/

(RESEARCH ARTICLE)

Check for updates

Determinants of online shopping behavior for organic vegetable products through digital marketing platforms

Windi Lestari [1], Laila Husin [2,*] and DwiWulan Sari [2]

[1] *Department of Master in Agribusiness, Faculty of Agriculture, Sriwijaya University, Palembang, Indonesia.*

[2] *Department of Social Economics, Faculty of Agriculture, Sriwijaya University, Palembang, Indonesia.*

World Journal of Advanced Research and Reviews, 2023, 20(01), 1099–1105

Publication history: Received on 13 September 2023; revised on 24 October 2023; accepted on 27 October 2023

Article DOI: https://doi.org/10.30574/wjarr.2023.20.1.2161

Abstract

This research aims to analyze factors that can influence online organic vegetable purchasing behavior through digital marketing platforms. The sample of respondents in this study used a quota sampling technique, consisting of 10 shops/outlets that sell organic vegetables online. From the 10 shops/outlets, 20 respondents were obtained for each, so the number of respondents in this study was 200 people. The analytical method used is PLS Structural Equation Modeling (SEM) analysis. The results of this research show that consumers' online buying interest in organic vegetable products is directly influenced by personal factors and consumer psychological factors and indicators of interest in using the technology acceptance model, but is not influenced by cultural factors, social factors and consumer technology acceptance model factors . The factual online purchasing factors of consumers of organic vegetable products are directly influenced by personal factors and consumer buying interests.

Keywords: Consumer behavior; Online organic vegetable purchasing behavior; Influence between factors

1. Introduction

Modern society's awareness of adopting a healthy lifestyle has resulted in increased public consumption of vegetables. This is supported by data on horticultural crop production in Palembang City for 2020-2022 and vegetable consumption data for South Sumatra Province for 2018-2021.

Table 1 Palembang City Horticultural Garden Production in 2020-2022

No	Plant Type	Production Year (quintal)		
		2020	2021	2022
1	Petsai/Sawi	686.00	661.00	5,793.00
2	Red onion	-	545.00	42.00
3	Chilli	999.00	554.00	767.00

Source: Central Statistics Agency, 2022 [3]

Based on Table 1, it can be seen that there is an increase in the production of horticultural crops, which indicates that the need for vegetables in Palembang City continues to increase over time, so that more and more business actors are cultivating vegetable plants to meet the needs of the community.

*Corresponding author: Laila Husin

Table 2 Vegetable Consumption in South Sumatra Province 2018-2021

No	Year	Consumption (kg/cap/year)	Consumption (grm/cap/day)
1	2018	52.8	144.6
2	2019	52.1	142.8
3	2020	54.1	148.2

Source: Food Security Agency, 2021 [2]

Based on Table 2, it can be seen that vegetable consumption in South Sumatra Province increases from year to year. The increase occurred in 2020, namely 54.1 kg/cap/year. Consumers consume vegetables according to their needs and preferences as well as the ease of obtaining these vegetables.

Table 3 Expenditure Costs for Vegetable Consumption Per Capita a Month in South Sumatra Province (Rupiah) 2020-2022

No	Year	Vegetable Consumption Expenditure (Rupiah)
		City
1	2020	47,188
2	2021	47,188
3	2022	53,294

Source: South Sumatra Province Central Statistics Agency, 2023 [4]

Table 3. Shows the increase in vegetable consumption expenditure in South Sumatra Province from Rp. 47,188 in 2020 to 2021 to Rp. 53,294 in 2023. The increase in vegetable consumption expenditure is in line with the increase in vegetable production and increase in vegetable consumption in the South Sumatra Province region.

The rapid development of information and communication technology, both in terms of speed and ease of accessing the internet, has inspired the business world to use it as the main media in marketing products and services. Based on a survey conducted by the Indonesian Internet Network Users Association [1] , it is reported that in 2021, of the 272 million Indonesian population, 210 million of them will be internet users (77.02%). Meanwhile, the results of a survey conducted by *We Are Social (2022), show that the number of active social media users in Indonesia was 191 million people in January 2022. WhatsApp* social media users were recorded at 88.7%, and *Instagram users* were recorded at 84.8%. %. From the data above, it can also be seen that the large number of internet users in Indonesia creates enormous opportunities in various fields, one of which is the opportunity to market a product or service product via the internet with various electronic trading platforms or social *media* .

The development of digital marketing has attracted the attention of many groups of people. This can be seen from changes in lifestyle, including consumption patterns carried out by individuals to meet their needs. In this digital era, people use information and communication technology to buy or sell goods or services through electronic commerce .The growing trend of social media users has also resulted in the development of online marketplace sites or *platforms.*

Online shopping businesses engaged in selling organic vegetable products spread across the Palembang City area, including Kunju Fresh Market, HRhouse, Shofiya Fruit Cart, Watermelon House, Sayour.me Farmers Market, Food Mart, Diamond, Hypemart, and Fresh Harvest. The *online shopping* business is a social/ *online media platform that carries the concept of a farm-to-table* business which provides quality fresh and healthy products directly from cultivation and there is also only a platform that markets organic vegetables without carrying out cultivation activities and then markets them to consumers. online ._ Through social media *platforms* , a product can be sold directly to consumers, consumers can buy products 24 hours wherever they are, there are discounts and many product choices. The main factors that influence buying behavior are cultural factors, social factors, personal factors and psychological factors. These four main consumer characteristic factors will directly influence the purchasing decision process through attitudes reflected in purchasing interest and indirectly or directly influence factual purchases by consumers. [6]

Consumer purchasing behavior is influenced by their own needs and as a result of their relationship with their environment. The purchasing decision itself depends on personal emotional conditions, social situations, goals and

values. Purchasing patterns, it is important to understand what causes buyers to make factual purchases or simply feel interested. [7]

2. Material and methods

The research method is a survey method carried out directly and indirectly (online survey) via a Google form link. Meanwhile, the data collection technique uses interview techniques and questionnaires. In this research, the sampling technique used was quota sampling. Quota sampling is a sampling technique by first determining certain numbers and characteristics as targets that must be met [8] . The characteristics of the sample that will be taken in this research are buyers or consumers who live in the Palembang City area and purchase organic vegetables *online* .

Table 4 Number of Research Samples

No	***Online Shopping*** **Name**	**Number of Samples**
1	Kunju Fresh Market	20
2	HR House	20
3	Shofiyah Fruit Cart	20
4	Watermelon House	20
5	Sayour.me	20
6	Farmers Market	20
7	Foodmart	20
8	Diamonds	20
9	Hypermart	20
10	Fresh Harvest	20
Amount		200

Based on table 4, the sample size in this study was 200 respondents consisting of 20 respondents for each *online shopping* for organic vegetables. The consideration for using quota sampling is that the population of online organic vegetable buyers *is* always changing or not constant. The variables observed include factors that influence buying interest, and factors that influence the decision to buy organic vegetables online.

The data obtained will then be processed according to analysis requirements. Consumer characteristic data is processed and presented based on the principles of descriptive statistics, presented in the form of a frequency distribution table with the help of SPSS software. Meanwhile, for the purposes of hypothesis testing, an inferential statistical approach is used. The analysis used is Structural Equation Modeling (SEM) analysis with the Partial Least Square (PLS) method. [5]

The PLS evaluation model is based on predictive measurements that have non-parametric properties. The structural model or hypothesis test is evaluated by looking at the parameter coefficient values and P-values as well as the significance of the parameter coefficients. The P-value is obtained from bootstrapping results by dividing the parameter coefficient value by the standard error value. The rules for rejecting and accepting hypotheses are as follows: (1) Ho is accepted and Ha is rejected if P-value ≥ 0.05 (2) Ho is rejected and Ha is accepted if P-value < 0.05.

3. Results and discussion

To test the structural model, Structural Equation Modeling (SEM) data analysis was carried out with PLS which produced 3 sets of relationships, namely: first, outer loading, which specifies the relationship between the latent variable and the indicator or manifest variable (measurement model), second, the weight relationship is the estimated value of the manifest variables. (indicators) that form latent variables, in the model is the outer weight value or regression coefficient, then the third is the inner model or inner weight is the estimated value or regression coefficient of the relationship between latent variables.

3.1. Test the relationship between structural model constructs

The results of the outer loading calculation using the PLS (Partial Least Square) program can be explained as follows: that convergent validity with reflexive indicators is seen from the correlation between the item/indicator scores and the construct scores. An indicator is said to be valid if the outer loadings value is greater than 0.5. From the model, it can be seen that loading values that are below the required numbers will be dropped from the model. Indicators that have a loading factor value of less than 0.5 and influence the average variance extracted (AVE) value are indicators of religion (0.222), parents (-0.159), neighbors (-0.194), gender (-0.674), benefits of social media (-0.472), benefit ig (-0.374), convenience ig (-0.267), number of purchases in 6 months (0.692), Next, re-estimation was carried out again to obtain a revised model.

After removing invalid indicators, the model is then estimated again, the graphic output resulting from the revised model is as follows:

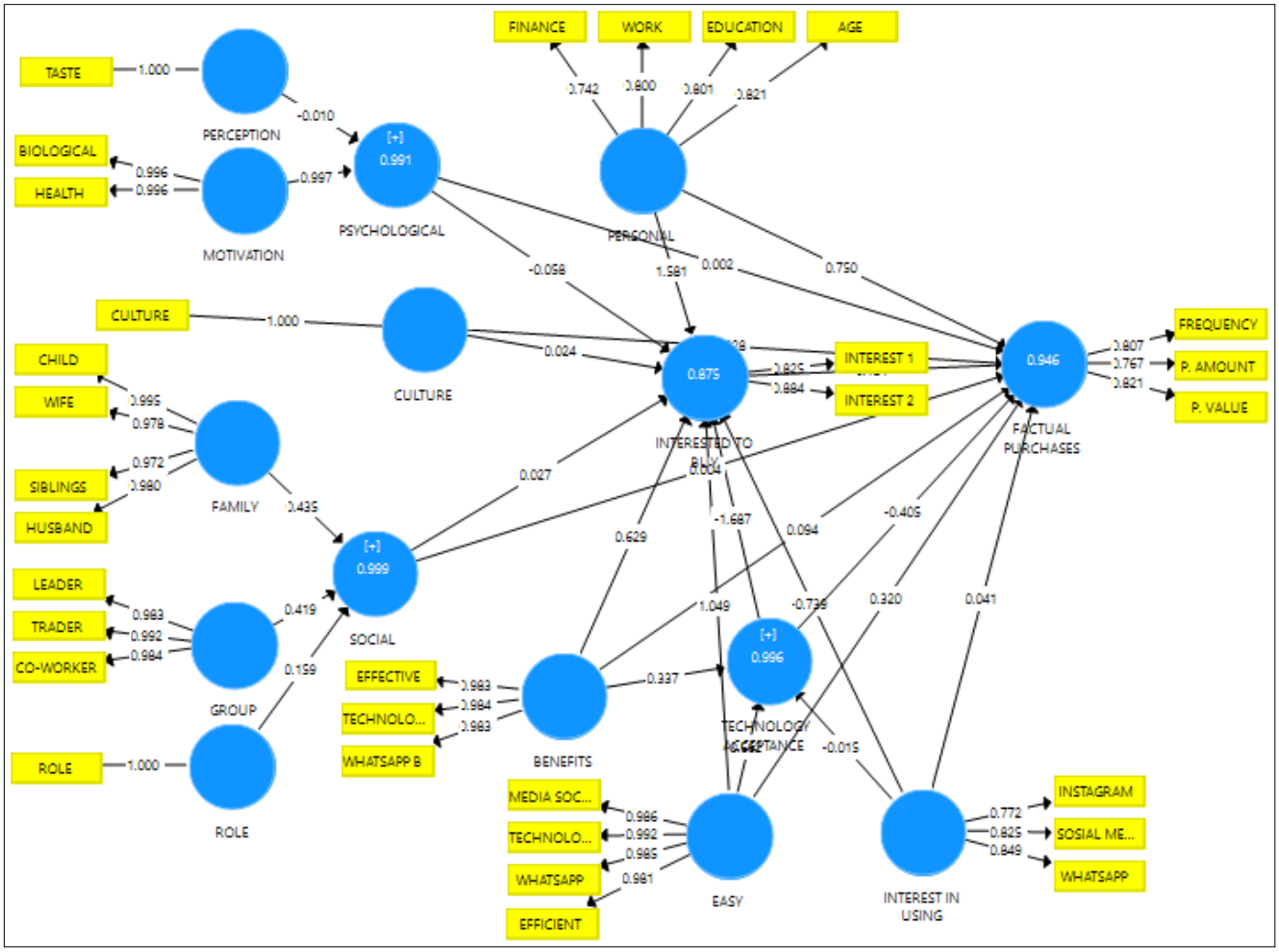

Figure 1 PLS Analysis Model

Structural model testing is carried out by looking at the R-square value which is a model goodnessfit test.

From the calculation results, it can be seen that the coefficient of determination is as shown in Table 4. The results of the research on the influence of perception and motivation on psychological factors are 0.991 or 99.1%. The R *square value* interprets the validity of the dimensions of psychological factors which can be explained by perception and motivation as 99.1%. while the remaining 0.9% (100%-99.1%) is explained by other variables not included in the research model. The research results show that the influence of family, groups and roles on social factors is 0.999 or 99.9%. The R *square* value interprets the validity of the social factor dimension which can be explained by family, group and role at 99.9% while the remaining 0.1% (100%-99.9%) is explained by other variables not included in the research model. The research results show that the influence of technology benefits and technology convenience on the *technology acceptance* model factor is 0.996 or 99.6%. The R *square value* interprets the validity of the dimensions of

the *technology acceptance* model factor which is explained by the benefits of technology and ease of technology as a whole of 99.6 % while the remaining 0.4% (100% -99.6%) is explained by other variables not included in Research Model.

Table 5 Determination Coefficient Value (R *Square*)

Items	**R *square***
Purchase Interest	0.869
Factual Purchase	0.943
Psychological	0.991
Social	0.999
Technology Acceptance	0.996

Source: processed data, 2023

The research results showed that the R *square value* of buying interest was 0.875 or 87.5%. The R *square* value interprets that the influence of buying interest variables including perception, motivation, cultural factors, role, group, family, personal factors, technological benefit factors and technological ease on buying interest is 87.5% while it is 12.5%. % (100%-87.5%) is explained by other variables not included in the research model. The R *square value* of 87.5% for the endogenous variable indicates that the model built is appropriate (good) based on the structural model evaluation criteria with PLS. [5]

The research results of the influence on factual purchases were 0.943 or 94.3. The R *square* value interprets that perception factors, motivation, cultural factors, role factors, groups, families, personal factors, technology benefits factors, ease of technology and purchase interest towards factual purchases is 94.3% while the remaining 5.7% is explained by other variables not included in the research model. The R *square value* of 94.3% for the endogenous latent variable indicates that the model built is appropriate (good) based on the structural model evaluation criteria with PLS. [5]

3.2. Factors influencing online purchases of organic vegetables

The results of testing the factors that influence online consumer purchasing behavior of organic vegetables can be seen in Table 6.

Table 6 Results for Inner Weights

Items	**Original Sample (O)**	**Sample Mean (M)**	**Standard Deviation (STDEV)**	**P Values**
Cultural Factors -> Purchase Interest	0.024	0.025	0.025	0.328
Cultural Factors -> Factual Purchases	0.028	0.029	0.019	0.138
Personal Factors -> Purchase Interest	1,581	1,594	0.084	0,000
Personal Factors -> Factual Purchases	0.750	0.774	0.140	0,000
Psychological Factors -> Purchase Interest	-0.058	-0.053	0.029	0.045
Psychological Factors -> Factual Purchases	0.002	0.002	0.014	0.884
Social Factors-> Purchase Interest	0.027	0.028	0.021	0.188
Social Factors -> Factual Purchases	0.004	0.006	0.015	0.771
Group -> F. SOCIAL	0.419	0.420	0.034	0,000
Family -> F. SOCIAL	0.435	0.435	0.039	0,000
Ease of Technology-> Purchase Interest	1,049	1,105	0.667	0.117

Ease of Technology -> Factual Purchase	0.320	0.319	0.394	0.418
Ease of Technology -> Technology Acceptance	0.662	0.655	0.051	0,000
Benefits of Technology -> Purchase Interest	0.629	0.688	0.444	0.159
Benefits of Technology -> Factual Purchase	0.094	0.101	0.271	0.728
Benefits of Technology -> Technology Acceptance	0.337	0.344	0.051	0,000
Purchase Interest -> Factual Purchase	0.184	0.179	0.074	0.013
Interest in Using Technology -> Interest in Buying	-0.739	-0.759	0.091	0,000
Interest in Using Technology -> Factual Purchase	0.041	0.020	0.100	0.679
Interest in Using Technology -> Technology Acceptance	-0.015	-0.014	0.012	0.219
Motivation -> F. PSYCHOLOGICAL	0.997	0.996	0.004	0,000
Role -> F. SOCIAL	0.159	0.159	0.020	0,000
Perception -> F. PSYCHOLOGICAL	-0.010	-0.009	0.009	0.295
Technology Acceptance -> Purchase Interest	-1,687	-1,805	0.988	0.089
Technology Acceptance->Factual Purchase	-0.405	-0.411	0.537	0.452

The results of the hypothesis testing analysis show that consumer buying interest is directly influenced by personal factors and psychological factors, while it is indirectly influenced by the construct of interest in using the technology acceptance model. Consumers' personal influence on their interest in buying organic vegetables online is formed by the influence of finances, employment, education and age. Consumer psychological influence is formed from the influence of motivation and perception. Consumer motivation for health needs and consumer perceptions of organic vegetable products as healthy food are the main factors influencing purchasing interest. Meanwhile, the technology acceptance factor in the construct of interest in using technology is formed from the influence of interest in using WhatsApp, interest in using Instagram, and interest in using social media.

The results of the analysis show that consumer factual purchases are directly influenced by consumer purchasing interest and consumer personal factors. It turns out that consumers' factual purchases are also indirectly influenced by consumer psychological factors through variables between purchase interest and use interest in the technology acceptance model factor.

From the results of the hypothesis test above, it can be concluded that the emergence of consumer buying interest is not influenced by cultural factors, consumer social factors and technology acceptance model factors, but in the realization of purchasing organic vegetables online, consumers are strongly influenced by consumer interest in organic vegetables and technological considerations. to buy vegetables online, namely the interest in using technology in the analysis results influences consumer buying interest. The results of the hypothesis test analysis above show that partially there is no real influence of social factors, cultural factors, technology acceptance model factors and psychological factors on consumer factual purchases, however, looking at the results of the coefficient of determination (R2) of 0.943 as mentioned above, factual purchases Organic vegetables online can be explained by 94.3% as simultaneously influenced by social, cultural, psychological, personal factors, technology acceptance models along with consumer buying interest.

4. Conclusion

Based on the research results, it can be concluded that consumers' buying interest in goat milk is directly influenced by personal factors, psychological factors, and the construct of interest in using technology in the consumer technology acceptance model, and is not influenced by social factors, technology acceptance model factors and consumer cultural

factors. Consumers' factual purchases are directly influenced by personal factors and consumer buying interests, and are not directly influenced by cultural, social, technology acceptance model and consumer psychological factors.

Due to the limitations of the research, it is recommended that further, more complete research be conducted on the behavior of online consumers of organic vegetable products by adding variables such as consumer experience factors, attributes of organic vegetables that consumers like and the influence of promotions on online purchasing behavior of organic vegetables.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

Statement of informed consent

Statement of informed consent was obtained from all participants included in the study.

References

[1] APJI. (2022). Internet Users in Indonesia 2022. Jakarta. Indonesian Internet Service Providers Association. Accessed March 20, 2023 from https://dataindonesia.id/digital/detail/apjii-user-internet-indonesia-tembus-210-juta-pada-2022

[2] Food Security Agency. 2021. South Sumatra Province Food Security Database 2021. Palembang. South Sumatra BKP

[3] Palembang City Central Statistics Agency. 2021. Palembang City in Figures 2022. Palembang. Central Bureau of Statistics.

[4] Palembang City Central Statistics Agency. 2022. Palembang City in Figures 2023. Palembang. Central Bureau of Statistics.

[5] Ghozali, I. (2008). Structural equation modeling alternative method with partial least squares.

[6] Kotler, P., and G. Armstrong. 2001. Marketing Principles. Jakarta: Erlangga.

[7] Mason, W.H., and D. Hausler. 2006. Consumer Behavior. Encyclopedia of Management. Ed. Marilyn M. Helms. 5th ed. Detroit. Gale: 121–125.

[8] Sugiyono. 2012. Understanding Qualitative Research. Alphabeta, Bandung