# Testing Validity and Reliability of Local Products Using the Digital Market Mouth to Mouth Abouth Purchase Decisions Consumer

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Abstrak This research is accompanied by accurate data collection. The processed data is cross section data or cross data where the data consists of one object but requires other sub objects. The cross-section data is then processed using statistical methods so that the authors will obtain results and can provide conclusions on the results of this study. The research data is taken from the respondents' answers (the number of customers who use e-commerce applications. The minimum required in this study amounted to 97.75 respondents. Data analysis technique Data analysis techniques are directed to answer the problem with a framework and formulation of the problem as well as hypotheses that can be concluded. by using data analysis data in this research method, with the Structural Equation Model approach, which is based on Partial Least Square. The questionnaire is a data collection questionnaire to analyze attitudes, beliefs, knowledge and characteristics of several people in an environment that affect an existing system. The questionnaire is a list of questions asked to people called respondents. Each item of questions made in the questionnaire must be valid in order to measure what is intended to be measured. In addition, the questionnaire must also be reliable, which means it will produce consistent results over time so that the questionnaire can be trusted or relied on.

Keywords: testing validity; local products; digital market; decisions consumer

## 1 Introduction

Developments in the world of technology and information and digital electronics have developed very rapidly in Indonesia. The rapid development of internet technology in Indonesia can be seen from the number of internet users which continues to increase every year. Based on data from the Indonesian Internet Service Providers Association, which conducted a survey of Internet User Penetration and Behavior in Indonesia, it is predicted that this will continue to increase every year. The phenomenon of the increasing number of internet users ultimately supports the growth of the marketplace in Indonesia. Marketing and trading through digital electronics, namely a distribution in buying or selling, and marketing of local goods and services through digital electronic systems such as on the internet or on television screens, which are made through networks and computerization. (Alfiani et al., 2021).

Mockups that may involve selling and paying through digital electronics, such as exchanges on electronic data, which use a management system to automatically inventory, and an automated data collection system as well. The information technology industry sees this marketplace activity as the application and application of e-business related to commercial transactions, such as electronic funds transfer, supply chain management, electronic marketing,

or online marketing, online transaction processing, electronic data exchange, and others. (wikipedia.org). The essence of the presence of a marketplace is to become a place for buying and selling activities that can be carried out without breaking a lot of time, distance and effort. Marketplace supports sellers to offer a wide selection of products (Ilyas, 2018).

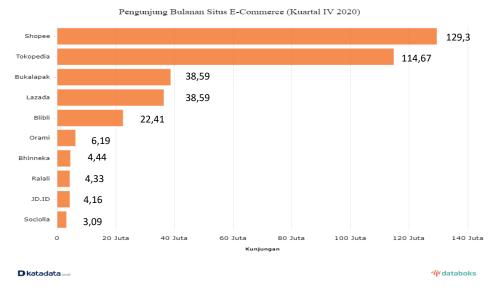


Figure 1.1. E-Commerce Site Monthly Visitors Source: <a href="https://databoks.katadata.co.id">https://databoks.katadata.co.id</a>

In online purchases, consumers tend to only get information about products but cannot see directly about the products offered, so building consumer trust is an important thing for producers so shopee users do not switch to other e-commerce. There are several factors that affect customer trust, including:

That the quality of information depends on the overall description and characteristics of the local products and services offered and also depends on the ability of the producer to satisfy consumers as promised by the company and implied needs (Johan & Juwita, 2021). Information is defined as an explanation of everything in the product displayed by the seller in the market place. (Anwar & Aprillia, 2018).

The next factor that influences consumer trust is Electronic word of mouth according to (Azmi & Sudaryana, 2021). Electronic word of mouth is a form of marketing communication that contains positive or negative statements made by potential, actual, or former customers about a product or company, which is available to many people and institutions via the internet. Electronic word of mouth has now become an important place for consumers to express their opinions and is considered more effective because it has a greater level of accessibility and wide reach. Consumers can carry out electronic word of mouth activities through a website, discussion forum, review site, and social media or social networks. The existence of electronic word of mouth will automatically help consumers share experiences about products or services experienced in the online purchasing process (Alfiani et al., 2021).

## 2 Study of Theory and Hypotheses

## **Buying decision**

Purchase decision is the final decision on which brand to buy. Purchase decisions include product types, brands, models, store or company selection, and methods (Aisyah & Engriani, 2019).

#### **Consumer Trust**

According to: Kotler and Keller (2020:219). That the level of trust is a company's willingness to depend on consumers as its business partners, so trust depends on a number of interpersonal factors between consumers and company organizations, which pay attention to competence, honesty and excellence and company integrity. Meanwhile, according to: Alfiani et al., (2021). Having defined that consumer trust depends on all the insight and knowledge possessed by these consumers, it can be concluded that consumers are objects and business partners of the company.

## **Information Quality**

According to (Alfiani et al., 2021).information quality is defined as customer perceptions of the quality of information about products or services provided by a website. The higher the quality of the information provided to online buyers, the higher the interest of online buyers to buy these products. Information Quality, is the quality of output (output) in the form of information generated by the information system used. Indicators used to measure the quality of information are completeness, presentation of information (format), relevance (relevance), accuracy (accurate) and timeliness (timeliness).

#### **Electronic Word Of Mouth**

According to (Alfiani et al., 2021) said electronic word of mouth is a statement made by actual, potential or previous consumers about products or companies where this information is available to people or institutions through internet media. According to (Muninggar et al., 2022) states that although similar to the form of word of mouth, electronic word of mouth offers various ways to exchange information, many of which are anonymous or confidential.

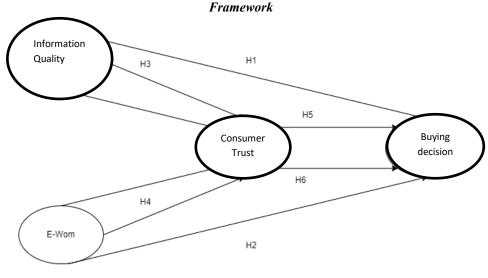


Image 1 Framework

## 2 Research Methods

This research is accompanied by accurate data collection. The processed data is cross section data or cross data where the data consists of one object but requires other sub objects. The cross section data is then processed using statistical methods so that the authors will obtain results and can provide conclusions on the results of this study. The research data is taken from the respondents' answers (the number of customers who use e-commerce applications). In this study, the population used is the finite population (the population is all consumers of the Ministry of Agriculture employees in the financing sector who use digital marketing applications totaling 4,361 employees. This study probability sampling technique,. This, sampling using the Lemeshow formula the sample size for an unknown or infinite number of populations as follows.

## 3 Data Analysis

#### **Measurement Model (Outer Model)**

The validity of convergent and construction test data as a reflective indicator that evaluate with the average value of the Extracted Variables. AVE value of = 0.5 or greater. With an AVE value of = 0.5 or greater, which means that the construction can explain 50% or greater in the item variance. (Furadantin, 2018).

# a. Convergent Validity Test

Table 1. Convergent Validity Test Results

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Outer Loadings				
	X1	X2	Y	Z
KI_1	0,869			
KI_2	0,877			
KI_3	0,742			
KI_4	0,772			
KI_5	0,880			
KI_6	0,831			
$EWM_1$		0,748		
EWM_2		0,732		
EWM_3		0,809		
EWM_4		0,800		
KP_1			0,852	
KP_2			0,752	
KP 3			0,848	
KP_4			0,755	
KP 5			0,777	
$PC\overline{Y}$ 1				0,850
PCY_2				0,748
PCY_3				0,746
PCY 4				0,832
PCY_5				0,753

Source: Primary Data Processed by the Author 2022

Based on the table above, the outer model value meets convergent validity with a value  $\geq 0.5$ 

## **Discriminant Validity**

The validity of discrimination contains the objective of determining for each reflection indicator which is truly the correct measure of its construction, which is in accordance with the principle that each indicator must be able to correlate with its construction, with different construction sizes and must not be correlated to high.

Table 2. Discriminant Validity Test Results

Cross Loadings				
	X1	X2	Y	Z
KI_1	0,869	0,425	0,524	0,696
KI_2	0,877	0,494	0,538	0,638
KI_3	0,742	0,458	0,525	0,732
KI_4	0,772	0,600	0,446	0,645
KI_5	0,880	0,405	0,436	0,597
KI_6	0,831	0,641	0,598	0,631
$EWM_1$	0,248	0,748	0,278	0,463
EWM_2	0,601	0,732	0,551	0,532
EWM_3	0,633	0,809	0,320	0,613

EWM_4	0,347	0,800	0,509	0,501
KP_1	0,628	0,380	0,852	0,686
$KP_2$	0,444	0,531	0,752	0,386
KP_3	0,527	0,554	0,848	0,520
KP_4	0,369	0,551	0,755	0,467
KP_5	0,474	0,162	0,777	0,449
PCY_1	0,714	0,577	0,671	0,850
PCY_2	0,706	0,577	0,652	0,748
PCY_3	0,609	0,440	0,317	0,746
PCY_4	0,497	0,548	0,422	0,832
PCY_5	0,545	0,533	0,329	0,753

(Source: Primary Data Processed by the Author 2022)

From the table above, it has been shown that for each indicator and each latent variable it must be greater than the cross loading value with the latent variable of the AVE (Avarege Validity Extracted) value > = 0.5, so that each latent variable has fulfilled discrimination validity correct.

## **Model Reliability Test**

Pada Internal Consistency Reliability dapat mengukur beberapa indikator dan juga dapat mengukur konstruksi laten. Dengan alat yang dapat digunakan untuk menilai pada reliabilitas konfigurasi dan alfa Cronbach. Maka nilai composite reliability 0.6-0.7, dapat dianggap memiliki reliabilitas yang benar dan dapat diharapkan bahwa nilai Cronbach's alpha > 0.7 (Ghozali dan Latan, 2015) pada (Furadantin, 2018).

Table 3 Construction Results on Reliability and Validity Values

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
X1	0,909	0,910	0,930	0,689
X2	0,777	0,781	0,856	0,597
Y	0,857	0,872	0,897	0,637
Z	0,850	0,863	0,890	0,620

(Source: Primary Data Processed by the Author 2022)

Based on the table above, when viewed from the Cronbach's Alpha value, the results show > 0.7, and so on the Composite Reliability value. So it can be said in this study. all constructs met the reliability requirements.

#### 4 Conclusion

The questionnaire is a data collection questionnaire to analyze attitudes, beliefs, knowledge and characteristics of several people in an environment that affect an existing system. The questionnaire is a list of questions asked to people called respondents.

Each item of questions made in the questionnaire must be valid in order to measure what is intended to be measured. In addition, the questionnaire must also be reliable, which means it will produce consistent results over time so that the questionnaire can be trusted or relied on.

Based on the table above, the results of each indicator on each latent variable must be greater than the cross loading value on the other latent variables and the AVE (Avarege Validity Extracted) value > 0.5 So, it can be said that each latent variable meets good discriminant validity. seen from the Cronbach's Alpha value shows results > 0.7, and so on the Composite Reliability value. So it can be said in this study. all constructs met the reliability requirements.

The high and low level of community participation of local brand consumers which is influenced by factors, including the quality factor of information, electronic word of mouth through the level of public trust, the large number of public participation using digital as a transaction medium can help consumers in making purchasing decisions for local brands. Each of these factors cannot be measured directly to the respondent but is measured by instruments. Based on the research that has been done, each instrument in the questionnaire is valid to measure the factors that influence the level of participation of the Indonesian people to raise local brands to become superior brands.

# Acknowledgments.

With thanks to the editor, who has perfected the writing on my manuscript so that it is suitable for publication in the journal and proceedings that I want, also thanks to my fellow lecturers who have provided moral support so that my enthusiasm has been sparked.

## Reference

- [1] Amalia Lili. (2017). Educational Services Marketing Strategy at Harapan Baru Bekasi Middle School. Jakarta
- [2] Ardianti, Asri N. & Widiartanto. (2019). The Influence of Decisions through the Shopee Marketplace. Undip Electronic Journal.
- [3] Dayat M. 2019. Marketing Strategy and Marketing Mix Optimization in Seizing Prospective Consumers of Education Services. Journal of Mu'allim, 1(2), 299-218.
- [4] Early, Dwi., (2020). Gifted Children and the World of Education. EISSN 2686 5661 Vol 02 No 02 September 2020 Intellectuals: Journal of Economics, Social & Humanities 12
- [5] Doembana, Ismawati., (2017). Textbook of Management and Marketing Communication Strategy. Yogyakarta: Zahir Publishing.
- [6] Elytasari Suvidian. (2017). Marketing Strategy for Educational Services to Increase Stakeholder Trust in Insani Kindergarten, Depok, Yogyakarta. Journal of Color Vol. 1 No. 1 June 2017.
- [7] Erni, P. Kurniasih., et. al., (2020). The Impact of the Covid 19 Pandemic on the Decrease in the Welfare of the Pontianak City People. Faculty of Economics and Business, Tanjungpura University, Indonesia Proceedings of the 2020 Annual Academic Seminar on Economics and Development Studies ISBN: 978-602-53460-5-7 277 93
- [8] Faizin, Imam., (2017). Marketing Strategy for Education Services in Increasing the Selling Value of Madrasahs. Madaniyah Journal Vol. 7 No. 2 August 2017 Edition.
- [9] Erlbaum Associates. Indonesian CNN., (2019). Most Crime Online Fraud in 2019. https://www.cnnindonesia.com. (On line). Accessed March 20, 2020.
- [10] Databox., (2019). 10 E-commerce with the biggest visitors. (On line). https://databoks.katadata.co.id. Accessed March 19, 2020.
- [11] databox. (2019). Indonesia Becomes a Country with the Fastest E-commerce Growth in the World. https://databoks.katadata.co.id. (On line).

- [12] Farki, A., et. al., (2016). The Influence of Online Customer Reviews and Ratings on Trust and Purchase Interest in Online Marketplaces in Indonesia. ITS Engineering Journal. Vol. 5. No. 2. Fadjrin, M., & Muhsin, M., (2017). The Effect of School Location, School Promotion, Perceptions and Peers on Students' Interests in Choosing Majors. Economic Education Analysis Journal, 6(2), 352-364. https://journal.unnes.ac.id/sju/index.php/eeaj/article/view/16425
- [13] Fandy Tjiptono., (2012). Service Management Creating Excellent Service. Yogyakarta: CV Andi Offset
- [14] Fatkuroji., (2015). Design of Education Service-Based Marketing Management Model at Private MTs in Semarang City. Semarang: UIN Walisongo. Journal of Islamic Education Vol. 9 No.1 April 2015.
- [15] Fini, Rizkita., Purnama, Ayu., and Wimpi, Srihandoko., (2021). The Role of Customer Service in Improving Service Quality at the Ibnu Hajar Islamic School. Banking and Finance Study Program, Unitary Institute of Business and Informatics. Journal of Unitary Business Applications Vol. 1 No. 1, 2021 Page 31
- [16] Fitria Suhailah., (2018). Educational Services Marketing Strategy at SDIT Diniyyah Al-Azhar Jambi. Jambi: UIN Sultan Thaha Saiffudin
- [17] Fred R David., (2011). Strategic Management Strategic Management Concept,. Edition 12. Jakarta: Salemba Empat
- [18] Ferdinand, Augusty. (2014). Management Research Methods. Edition 5. Semarang: Diponegoro University Research Agency.
- [19] Ghozali, Imam. (2013). Multivariate Application with IBM SPSS 21 Update PLS Regression Program. Semarang: Diponegoro University Publishing Agency.
- [20] Ghozali, Imam & Latan, Hengky. (2015). Partial Least Squares Concepts, Techniques and Applications Using the SmartPLS 3.0 Program. Publishing Agency, Diponegoro University Semarang.
- [21] Gultom, Dedek K., Ginting, Paham., & Sembiring, Beby KF., (2014). The influence of service marketing mix and service quality on student satisfaction in the Management Study Program, Faculty of Economics, Muhammaadiyah University, North Sumatra" Journal of Management & Business, 14(1): 21-33.
- [22] Hanifa, F. Husnul., (2018). Various Factors Influencing Consumer Purchase Decisions on Fashion Products (Study on C2C Shopee E-commerce Consumers). Ikraith-Humanities. Vol. 2. No. 2.
- [23] Iprice., (2019). Indonesia E-commerce Map. https://iprice.co.id. (On line). Accessed March 20, 2020.
- [24] Stanti, Fredianaika. (2017). The Influence of Price, Trust, Ease of Shopping and E-promotion on Purchase Decisions for Online Shopping in the City of Surabaya. Journal of Business & Technology Polytechnic.
- [25] Indriyo Gitosudarmo., (2014). Marketing Management. Yogyakarta: BPFEYogyakarta Jackson, Graham & Ahuja, Vandana. Dawn of the digital age and the evolution of the marketing mix. 2016. MACMILLAN PUBLISHERS LTD. 1746-0166 Vol. 17 No.. 3
- [26] Karim Ridwan., (2020). Definition and Concept of Marketing Mix (Marketing Mix) 7P. Yogyakarta: Deepublish
- [27] Khasanah Afidatun., (2015). Marketing of Educational Services as a Quality Improvement Strategy in SD Alam Baturraden. Yogyakarta: UIN. Journal of el-Tarbawi vol VIII No.2, 2015

- [28] Labaso', S., (2018). Application of marketing mix as a marketing strategy for educational services at MAN 1 Yogyakarta. Journal of Islamic Education Management, 3(2): 289-311...
- [29] Lisnawati Aat, luhsasi Dwi Iga, & sadjiarto arief. 2019). Marketing Strategy for Educational Institutions at SD Dharma Dusun Banaran Getasan. Scientific Journal of Business Economics Vol.17 No 2
- [30] Machali Imam & Hidayat Ara., (2018). The Handbook of Education Management. Jakarta: Prenadamedia Group
- [31] Martono Nanang, et al., (2020). The Second Choice Private High School Survival Strategy Facing Competition in Educators. Journal of Education and Culture, Vol. 5, Number 1, June 2020
- [32] Moleong, Lexy Y., (2019). Qualitative Research Methodology (Rev edition). Bandung: PT Juvenile Rosdakarya
- [33] Nugroho Agus Dwi., (2017). Introduction to Marketing Science. Yogyakarta: Faperta Nurliyati. 2020. Implementation of the Marketing Mix Strategy in the Marketing of Educational Services in TK Negeri 2 Yogyakarta. Qurroti Journal: Journal of Early Childhood Islamic Education, Vol.2 No. 1, April 2020, e-ISSN: 2721-1509
- [34] Oentoro D., (2012). Modern Marketing Management. Yogyakarta: Laksbang Pressindo. PP 170–186. Journal of Direct, Data and Digital Marketing Practice
- [35] Putri Budi Rahayu Tanama. 2017. Marketing Management. Bali: Udayana University. Rofik Haerul. 2019. The Influence of Marketing Mix Factors on Students' Decisions to Choose Schools at Al-Azhar Islamic Middle School 15 Cilacap. Purwokerto: IAIN.
- [36] Ryan Indy Fonny J. and Waani N. Kandowangko . (2019). The Role of Education in the Process of Social Change in Tumaluntung Village, Kauditan District, North Minahasa Regency. Vol. 12 No.4 / October 2019 https://ejournal.unsrat.ac.id/index.php/holistik/article/download/25466/25124
- [37] Siti Maria. (2021). School Community Support as Real Action for the Prospective Teacher Mobilization Program. https://ayoguruberbagi.kemdikbud.go.id/artikel/tandasupportan-dan-kalimat-motivasi/
- [38] Stanton William. 1996. Marketing Principles. Second Volume. Seventh Edition. Elangga: Jakarta.
- [39] Suarsa Senny Handayanim & Munawar Muhammad Meki. (2020). Marketing Strategy for Higher Education Institution Based On Marketing Stimuli (Case Study at Politeknik Pos Indonesia). Journal of Management vol.7 No.1 January-June 2020 Hal: 25-32.
- [40] Sumarwan Ujang. (2014). Consumer Behavior (Theory and Its Application in Marketing). Bogor: Ghalia Indonesia Publisher
- [41] Supriyani & Susilo Heryanto. 2016. The Influence of Marketing Mix Strategy on Students' Decisions in Choosing Tuban State Aliyah Madrasah. Journal of Educational Management Dynamics Vol. 1 No. 1 of 2016 Pg. 68-78
- [42] Sembiring Beby Karina Fawzeea, Maas Linda Trimurti, & Pranajaya Ade. 2019. The Analysis of Marketing Mix Strategy Effect on Students Decision to Choose Economics and Business Faculty of Dharmawangsa University Medan. International Journal Of Multicultural and Multiregious Understanding vol.6 No.6 2019 Glendy's response,
- [43] Oroh Sem G., & Soegoto Agus Supandi. (2014). Marketing Mix of Education Services Influences Students' Decisions in Choosing Schools at SMK 1 Manado. EMBA Journal 269 Vol.2 No.4 December 2014, Hal. 269-277. 96
- [44] Tjiptono Fandy. (2007). Service Marketing. Malang: Banyumedia Publishing Tjiptono Fandy. 2002. Marketing Strategy. Yogyakarta: Publisher Andi

- [45] Triawati Ageng. 2019. The Effect of Service Marketing Mix on Parents' Decisions to Send Their Children to MI Istiqomah Sambas Purbalingga. Purwokerto: IAIN.
- [46] Wright Benjamin K. (2018). Marketing Mix-Based Facebook Posts and Potential Consumers. Proceedings of the Academy of Marketing Science, DOI 10.1007/978-3-319-66023-3\_2