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Explanatory study of factors affecting purchase intention of low-technology innovation of local products in Surabaya

Jeremy Jethro, Silvia Margaretha, Christina R. Honantha

The purpose of this study is to examine the effect of consumer doubt, skepticism, familiarity, value for money, information seeking, and aesthetic design on purchase intention of low-technology innovation of the local product. There are 7 variables used for this research, namely consumer doubt, skepticism,...

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Authors
Jeremy Jethro, Silvia Margaretha, Christina R. Honantha

Corresponding Author
Silvia Margaretha

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The purpose of this study is to examine the effect of consumer doubt, skepticism, familiarity, value for money, information seeking, and aesthetic design on purchase intention of low-technology innovation of the local product. There are 7 variables used for this research, namely consumer doubt, skepticism, familiarity, value for money, information seeking, aesthetic design, and purchase intention. This research applied a quantitative approach with multiple linear regression method. Data gathered from 200 respondents who bought low-technology innovation products of local products in Surabaya. The data processing used PASW Statistic 18 for Windows software. The results of this study indicate that consumer doubt, skepticism, familiarity, value for money, information seeking, and aesthetic design simultaneously have a significant effect on purchase intention of low-technology innovation of local products. However, if the variables are tested separately, it is found that consumer doubt and skepticism have a significant negative effect on purchase

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Proceedings	16th International Symposium on Management (INSYMA 2019)
Part of series	Advances in Social Science, Education and Humanities Research
Publication Date	March 2019
ISBN	978-94-6252-694-5
ISSN	2352-5398
DOI	https://doi.org/10.2991/insyma-19.2019.35 How to use a DOI?
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Frank van Harmelen is a Professor in Knowledge Representation & Reasoning in the AI department (Faculty of Science) at the Vrije Universiteit Amsterdam. After studying mathematics and computer science in Amsterdam, he moved to the Department of AI in Edinburgh, where he was awarded a PhD in 1989 for his research on meta-level reasoning. While in Edinburgh, he worked with Dr. Peter Jackson on Socrates, a logic-based toolkit for expert systems, and with Prof. Alan Bundy on proof planning for inductive theorem proving. After his PhD research, he moved back to Amsterdam where he worked from 1990 to 1995 in the SWI Department under Prof. Wielinga. He was involved in the REFLECT project on the use of reflection in expert systems, and in the KADS project, where he contributed to the development of the (ML)² language for formally specifying Knowledge-Based Systems. In 1995 he joined the AI research group at the Vrije Universiteit Amsterdam, where he was appointed Professor in 2002, and is currently leading the Knowledge Representation & Reasoning Group.

Prof. Chongfu Huang

Prof. Chongfu Huang is a full Professor at Beijing Normal University and President of the Society for Risk Analysis - China. He received his B.A.Sc. in Mathematics from Yunnan University, Kunming, China; his M.A.Sc. in Earthquake Engineering from the Institute of Engineering Mechanics, Harbin, China; and his Ph.D. in Applied Mathematics from Beijing Normal University. He worked at the Chinese University of Hong Kong as a Research Associate, and at Tokyo University of Science as an Associate Professor in 1996. As a visiting Professor, he worked at the University of Ghent in Belgium in 1997 and at the University Nebraska in Omaha in 2000. From 2000 to 2001, he was a Mercator Professor and worked at the University of Dortmund in Germany. As a visiting Professor, he worked again at Tokyo University of Science and at the University of Ghent in Belgium in 2004 and 2006 respectively.

Peter Hendriks

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Professor Jie Lu is the Head of the School of Software in the Faculty of Engineering and Information Technology, and Director of the Decision Systems and e-Service Intelligence Research Laboratory in the Centre for Quantum Computation & Intelligent Systems at the University of Technology Sydney (UTS) in Australia. She received her PhD from Curtin University of Technology in Western Australia in 2000. Her main research interests lie in the area of computational intelligence systems, decision support systems, uncertain information processing, recommender systems and e-Government and e-Service intelligence. She has published five research books and 300 articles in academic journals, including IEEE Transactions on Fuzzy Systems, DSS and Information Systems, and various conference proceedings, and has won five Australian Research Council (ARC) discovery grants, an Australian Learning & Teaching Council grant and 10 other research and industry linkage grants. She also received the first UTS Research Excellence Medal for Teaching and Research Integration in 2010.

Explanatory study of factors affecting purchase intention of low-technology innovation of local products in Surabaya

J. Jethro, S. Margaretha & C.R. Honantha
University of Surabaya, Surabaya, Indonesia

ABSTRACT: The purpose of this study is to examine the effect of consumer doubt, skepticism, familiarity, value for money, information seeking, and aesthetic design on purchase intention of low-technology innovation of the local product. There are 7 variables used for this research, namely consumer doubt, skepticism, familiarity, value for money, information seeking, aesthetic design, and purchase intention. This research applied a quantitative approach with multiple linear regression method. Data gathered from 200 respondents who bought low-technology innovation products of local products in Surabaya. The data processing used PASW Statistic 18 for Windows software. The results of this study indicate that consumer doubt, skepticism, familiarity, value for money, information seeking, and aesthetic design simultaneously have a significant effect on purchase intention of low-technology innovation of local products. However, if the variables are tested separately, it is found that consumer doubt and skepticism have a significant negative effect on purchase intention. Familiarity, information seeking, and aesthetic design have a significant positive influence on purchase intention. While of value for money has an insignificant effect on purchase intention.

Keywords: consumer doubt, skepticism, familiarity, value for money, purchase intention.

1 INTRODUCTION

Competition in the world of marketing is getting more difficult from time to time due to the rapid development of science and technology. Companies and industries are also required to think of ways and breakthroughs to win the competition. Innovation is needed in business because, in essence, people tend to get bored with the same things. Ellitan instead of Creusen et al. (2010) states that innovation is generally considered as an important aspect of some business processes because it can provide a competitive advantage. In fact, this competitive advantage is something needed by a company to win the competition.

In the world of marketing, Roehrch instead of Kim et al. (2004) explains that innovation is the ability of a company to create a new product as quickly as possible within a certain period of time. This innovation is one of the factors of the company's success and it is explained that companies that are capable of providing innovative products will enjoy long-term success in the competitive marketing world (Baker & Sinkula 2002).

Various companies continue to compete to produce innovative products to please consumers. New product innovations are divided into two, namely low-technology and high-technology products. Low-technology products are products that use familiar and generally accepted technology and the acceptance and use of these products can be easily understood by users. While high-technology products are products that apply the latest breakthrough technology and there are significant changes in the way they are used and require adjustments to users. An example of low-technology product innovation is a washing machine product; where the washing machine is able to do the laundry process in one go.

Consumers only do the same things like a washing machine in general, by putting in clothes to the machine and pressing a start button, clothes will go through the process of washing, rinsing, and drying. Here, consumers do not need to learn and re-adjust the process of using the washing machine. While, the example of a high-technology product is a smartphone product, where a phone in the previous era used the keypad as the basis for its operation. But on smartphones, consumers are required to

make adjustments in their use, namely using a touch screen.

Based on the reference journal used, Baker & Lutz (2000) used low-technology product objects such as washing machines, televisions, and vacuum cleaners. The reason for choosing the object was due to the respondents in the journal were the Universiti Malaya, Malaysia students with the average income per month are assumed to be insufficient to purchase high technology products. Therefore, Baker & Lutz (2000) used low-technology product objects because the price is relatively lower compared to high-technology products.

To find out the facts about consumer concerns about new products, the authors conducted interviews with several resource persons who had bought local products classified as low-technology innovation. Interviews were held directly, between authors with each resource person. The results of the interview found an apprehensive tendency to arise related to the aspects of durability, guarantee, quality, as well as the satisfaction and suitability of prices with product quality.

If talking about innovative products, even though the products come with a brilliant idea and is able to ease consumers, but not infrequently the innovation product does not sell well in the market; even companies must stop the production of these innovative products. For example, in 1990, the world's leading tire company, Michelin discovered a revolutionary innovation in tires that had a sensor and a hard layer as additional inner tube inside the tire. This innovation allows us to prolong a leaking tire even when we are driving because the sensor will light up and the hard layer of the additional inner tube will replace the leaky outer layer. As a result, the car can still move for about 125 miles after the leak.

But not long after the discovery of the product, until 2007, the level of product sales did not indicate an increase. As stated by Bettman & Park (1980), which was reported from www.johnson.corrnell.edu, Sun said that innovation must begin with consumer demand. Letting a scientist create an innovative product without the basis of consumer needs will clearly harm the company because the process of product innovation is full of uncertainty. If the process comes from consumer ideas and needs, then the whole process can be anticipated by the company.

The research gap that is in the Baker & Lutz (2000) study found that the consumer doubt variable does not affect the purchase intention variable and is not accepted. Whereas, research conducted by Saaksjarvi & Morel (2010) obtains the consumer doubt variable influences the purchase intention variable. The results of interviews with 3 resource persons who have bought low-technology innovation of

local products show consumer doubt, especially in terms of product durability.

2 RESEARCH METHODS

This research is included in the basic research because the purpose of this research is to develop science and not to solve a problem in a phenomenon. While based on the type, this research is included in causal research because, in this research, the authors sought identification of causal relationships. Moreover, this study used a quantitative approach, because this study is discussed empirically and using numerical analysis and measurement.

The data collection technique used was offline questionnaire distribution. The level used for all variables (dependent and independent) in this study was the interval level, which is the level of measurement that shows the same distance and a clear difference on the scale. The choice of answers at the interval level was arranged on a Likert scale with the aim that respondents give an assessment of the statements and questions measured in 7-point scale.

The sampling method in this research was a non-probability sampling. With this method, the probability of each particular member of the selected population is unknown, while the selection of sampling units on non-probability sampling depends on the personal judgment of the researcher. In this study, respondents were 200 consumers who had purchased and used low-technology innovation of local products in the past year and living in Surabaya city, Indonesia.

Data processing was done using IBM SPSS for Windows software. The type of data processing done were the validity and the reliability tests, the classic assumption test (normality test, heteroscedasticity test, and multicollinearity test), and the hypothesis test (R^2 test, T-test, and F-test).

3 RESULTS AND DISCUSSIONS

Table 1. The Result of R^2 test.

Model	R	R Square	Adjusted R Square	Std Error of the Estimate	Durbin-Watson
1	0.977	0.955	0.954	0.117	1.487

a Predictors: (Contant), Mean_IS, Mean_VM, Mean_F, Mean_S, Mean_AD, Mean_CD.
b Dependent Variable: Mean_PU

from the table above, it can be seen that R^2 value is 0.955 (> 0.5), which shows the ability of variations in the independent variable to explain the variation of the dependent variable by 95%.
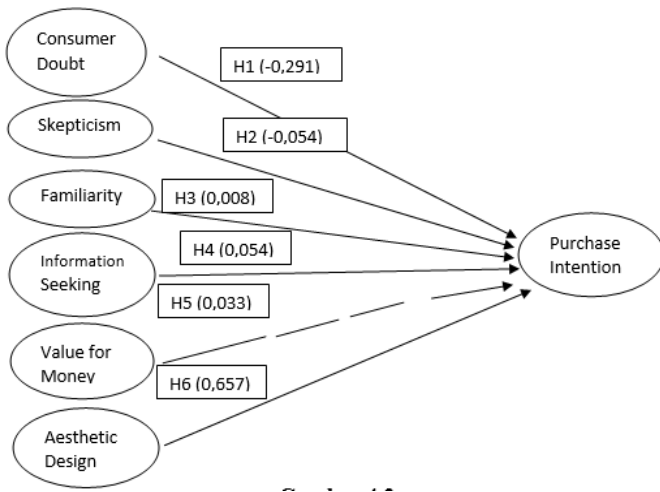
Figure 1. Model of Hypothesis Testing Results.

Table 2. The results of Simultaneous Hypothesis Testing (F test).

Model	Sum of Squares	df	Mean Square	F	Sig
1 Regression	56.043	6	9.340	681.632	0.00ᵃ
Residual	2.645	193	0.014		

a Predictors: (Contant), Mean_IS, Mean_VM, Mean_F, Mean_S, Mean_AD, Mean_CD.
b Dependent Variable: Mean_PU

From the table above, it can be seen that Sig. value is 0.000 which meets the requirements of less than 0.05. So that, it can be concluded that the hypothesis testing is simultaneously accepted/significant.

Table 3. The results of Hypothesis Testing

Hypothesis	Structural Relationship Between Constructs	Sig.	Note
H1	CD – PI	0.000**	Supported
H2	S – PI	0.001**	Supported
H3	F – PI	0.035*	Supported
H4	IS – PI	0.000**	Supported
H5	VM – PI	0.608	Not Supported
H6	AD – PI	0.030*	Supported

** significant $\alpha = 1\%$, * significant $\alpha = 5\%$

Table 3 shows the significance value after data processing. From the table, it can be seen that all hypotheses are accepted (significant) because they have a Sig. value <0.05, except H5 which is not accepted because it has a Sig> 0.05.

4 CONCLUSION

Based on the results of hypothesis testing in the previous chapter, conclusions can be drawn for hypothesis 1, namely, Consumer Doubt has a negative and

significant effect on the Purchase Intention of low-technology innovation of the local product. Hypothesis 2 shows that skepticism has a negative and significant effect on the Purchase Intention of low-technology innovation of the local product. Hypothesis 3 of Familiarity has a positive and significant effect on the Purchase Intention of low-technology innovation of the local product. Hypothesis 4 of Information Seeking has a positive and significant effect on the Purchase Intention of low-technology innovation of the local product. Hypothesis 5 of Value for Money has no effect on the Purchase Intention of low-technology innovation of the local product. While, hypothesis 6, Aesthetic Design has a positive and significant effect on the Purchase Intention of low- technology innovation of the local product.

From the results of this study, the recommendations that can be given to the manufacturers of low-technology innovation of local product lie in aesthetic design that shows the highest factor affecting purchase intention with β value of 0.6557. Management needs to know the consumer preferences, especially in terms of design (shape, color, size) such as colors that give the impression of elegance and luxury, and these factors need to be considered and applied in new products to be produced. By providing the desired product and according to consumer preferences, the company will be able to retain consumers, lead to increased customer loyalty and eventually reach a wider market. This will certainly provide a significant increase in profit for the producer company.

The recommendation for further research is the use of a wider range of areas, such as the whole of Indonesia so that the results obtained are more diverse. In addition, further research can use high-technology innovation product objects such as smart phones, computers, tablets, and various new innovative products with high-technology levels, which in some ways are certainly different from the low-technology innovation products, in terms of cost, consumer concerns, and skeptical thinking from consumers. With the differences in the results that occur, it can be compared between this research and subsequent research with the object of high-technology innovation product. While the last, the majority of respondents in this study were 20-24 years of age who are students and have a relatively low-income level, which influence the value of money in the eyes of respondents. Subsequent research can focus more on over 25 years of age respondents and have a fixed and sufficient income so that the characteristics of the respondents in terms of income are more varied which leads to more diverse research results.

REFERENCES

Baker, W.E.& Lutz, R.E. 2000. An empirical test of an updated relevance accessibility model of advertising effectiveness. *Journal of Advertising* 29 (1): 1-14.

Baker, W.E. & Sinkula, J.M. 2002. Market orientation, learning orientation and product innovation: delving into the organization's black box. *Journal of Market-focused Management* 5(1): 5-23.

Bettman, J.A. & Park, C.W. 1980. Effects of prior knowledge and experience and phase of the choice process on consumer decision- making processes: a protocol analysis. *Journal of Consumer Research* 7(3):234-248.

Creusen, M.E.H. Veryzer, R.W. & Schoormans, J.P.L. 2010. Product value importance and consumer preference for visual complexity and symmetry. *European Journal of Marketing* 4(9/10): 1437-1452.

Kim, E. Nam, D. & Stimpert, J.L. 2004. The applicability of Porter's generic strategies in the digital age: assumptions, conjectures, and suggestions. *Journal of Management* 30(5): 569-589.

Sääksjärvi, M. & Morel, K.P.N. 2010. The development of a scale to measure consumer doubt toward new products. *European Journal of Innovation Management* 13(3): 272-293.