ANALYSIS OF THE ACCEPTANCE OF THE USERS ON THE WEBSITE USING THE LAZADA TECHNOLOGY ACCEPTANCE MODEL (TAM)

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ABSTRACT

Technology Acceptance Model or TAM is a model that is used to measure the user's acceptance of a technology. TAM was first found by Davis at the beginning of TAM there are two initial i.e. variables influence the usefulness and influence is easy to use. Model TAM used in this research is a model that has been developed by TAM Pavlou is a special model which is used to view the user acceptance factor against selling online, where the factors are used i.e. Intention to transact (IT), Perceived Risk (PR), Perceived Ease of Use (PEOU), Perceived Usefulness (PU), Trust (T) and Satisfaction with past transact (S). The results obtained from this study is the relationship between each of the factors that affect the acceptance of a user when it will make transaction selling online, namely Satisfaction with past transactions affect the Trust, the Trust affect the PU, the Trust affect the IT and PU effect on IT.

Keywords: Lazada, (TAM), IT, PR, PEOU, T, S, PU

1. INTRODUCTION

Lazada is one website known as The Fastest Growing E-Commerce, where in a period of one year since it was founded in March 2012 with the address http: //www/lazada.co.id been able to become one of the largest trading website in Indonesia , Lazada itself a subsidiary branch network from Germany, based in Berlin and is known as Rocket Internet. Lazada sell a variety of products, ranging from clothing, electronics, household appliances, health, and so forth. But do not rule out the possibility that there are still a lot of visitors from the website lazada are disappointed with the service provided, for example, some customers write down impressions during use Lazada.

Some users Lazada give their impressions message after making the purchase. Some say that the information available on Lazada goods do not conform with the goods received, no one was disappointed because the delivery time is very long, there are also users who feel disappointed because of the length of the process of confirmation of payment of the Lazada. Some users Lazada give a positive message after using Lazada. Users say that shopping in Lazada more comfortable because a lot of promo and stuff in Lazada cheaper. From the opinions of users, more likely to give a negative opinion of a positive opinion, the opinion of more users give a negative message about Lazada, in this study the researchers wanted to know the factors that affect the acceptance of information technology from a user acceptance of information technology and the linkages between each factor.

1.1 Research Methods

The method used is survey method, where survey methods used to obtain information in the form of opinions from a number of people, where the information has been obtained will be collected, the information is collected through asking questions, and information obtained from the sample. The research method aims to make the research process can run well and structured.

The Research method can be seen in the picture.

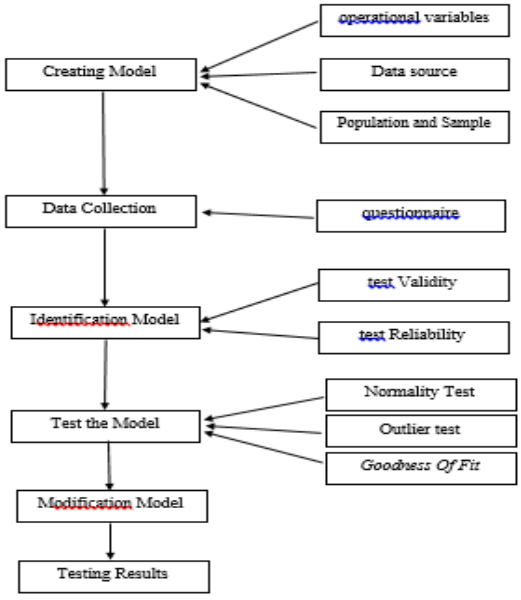


Image 1 Research Methods

1.2 User Acceptance Analysis Method

User acceptance analysis method that will be used as follows:
1. Problem Analysis
This phase is carried out on issues contained in Lazada, where this issue is taken by users who perform transactions in Lazada.
2. Analysis of User Acceptance Variables
This stage of analyzing the variables that will be used on-line technology testing
3. Variable Operational Analysis
At this stage, the analysis of indicators drawn from each of the variables in testing technology Online
4. Establish Criteria Question Based Analysis User Acceptance
At this stage of the analysis will be conducted on the relationship between the variables of internal and external variables.
5. Establishment Statement Based User Acceptance
At this stage it would be making a questionnaire based on criteria formation stage questions. Question questionnaire will be distributed to the respondents.
6. Distribution and Treatment Questionnaire
Distribution of questionnaires conducted to seek the opinion of the respondents who use Lazada. Respondents were defined in this study were respondents who had used the purchase in Lazada. Once the data is collected data will be processed later.
7. Testing the validity and reliability
This stage will be tested vaiditas and reliability whether the indicator is valid and worthy questions used in this study or not.
8. Testing Goodness of fit

1.3 *Structural Equation Model* (SEM)

SEM is a multivariate statistical technique which is a combination of factor analysis and regression analysis (correlation) that aims to examine the relationships between variables that exist in a model, be it an indicator of the konstruknya, or relationships between constructs. , There are several main stages to be traversed to use SEM in a research activity.

1. Creating a Model SEM (Model Specification)
At this stage, a model "on the basis of a particular theory" was made, either in the form of a mathematical equation or in the form of a diagram. Diagram will enter measurenment models and structural models.

2. Prepare the study design and data collection
Once the model is created, before the model was tested, will be tested assumptions should be met in the SEM, the treatment of missing data (if the data is quite a lot), collect data, and so on.

3. Identification Model (Model Identification)
Once a model is created and the design has been determined, the test model of identification, whether the model can be analyzed further. Calculation large degree of freedom becomes an important part in this stage.

4. Test Model (Model Testing and Estimation Model)
Once the model is created and can be identified, followed by a test phase measurenment structural models and then test the models. Measurenment of testing the model, will be obtained relationship between the indicator with konstruknya. If measurenment model can be considered valid, the test continued on structural models to obtain a correlation which shows the relationship between the constructs. Included in this activity is the possibility respesicification models in a model of SEM [6].

1.4 *Technology Acceptance Model* (TAM)

Technology Acceptance Model (TAM) is an adaptation of the TRA introduced by Fred Davis in 1986. Where TAM is devoted to explaining the behavior of the users computer (Computer usage behavior). TAM theory schematically described as follows:

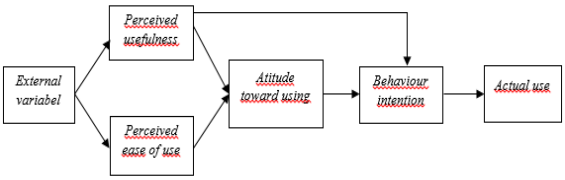


Image 2. Technology Acceptance Model (TAM)

2. CONTENTS OF RESEARCH

2.1 Research Hypothesis

The model used in this study is acceptence Technology Model (TAM) that has been introduced by Pavlou in research conducted by Ali, Caecilia and Ricky [16]. Where in the variables that will be tested is the actual transaction, intention to Transact, perceived risk, perceived ease of use, perceived usefulness, reputation, satisfaction with past transactions, and trust. Model can be seen in the

picture

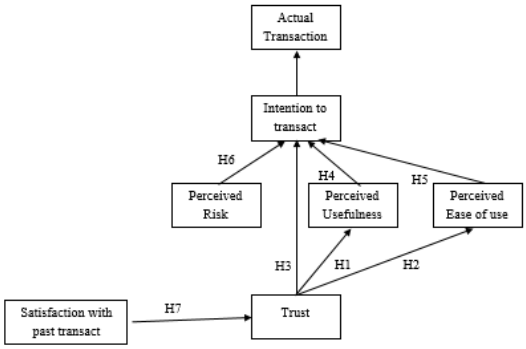


Image 3 Research Hypothesis

2.2 Users Revenue Analysis By Lazada

An analysis of user acceptance models need to be considered to determine the relationship between each variable of the model TAM. Here is a matrix of internal and external factors on TAM model as seen in the table

Trust	A perceived trust of users towards online shopping technology acceptance in Lazada
a. be trusted	
b. keeping interest	
c.Keeping promises and commitments	
d.Trusting the information available	
e. Really care	
Perceived Usefulness	A user confidence against something that will be in the can after use online technologies at Lazada
a. Work easier	
b. helpful	
c. improve productivity	
d. Improve the performance of work	
e. Easy to use overall	
Perceived Ease Of Use	Ease perceived by the user when they want to use technology Online in Lazada
a. easy to learn	
b. Easy to use	
c. Clear and easy to understand	
d. Adding to the skill of the user	
Perceived Risk	User perceived concerns when using online technology in Lazada
a. economic risk	
b. personal risk	
c. Risks performance sellers	
d. privacy risks	
Intention to transact	The user wishes to use technology as a medium of online shopping in Lazada
a. Having access to the internet	
b. Consider using the internet in the transaction	
c. Transaction in the near future	

2.3 Questionnaires deployment

In accordance with the determination of the sample using the formula Maximum Likehold (ML) contained in SEM, then spread to the questionnaire on 200 respondents in particular respondent who has been doing transactions in Lazada. Questionnaire consisted of 50 questions using a Likert scale. Distribution of questionnaires made online or offline. From the distribution of questionnaires were conducted there were 40 160 valid data and invalid data. Number of dissemination and collection of the questionnaire and the number of answers in the questionnaire if it can be seen in the following table.

Analysis	Information
samples	200
questionnaires were distributed	200
questionnaires were collected	160
Invalid questionnaire	40
questionnaires were processed	160

2.4 Testing the Feasibility Model

Phase testing the feasibility of this model consists of two phases of testing, ie, testing measurenment models and structural models. To test the validity of the model measurenment, GOF testing was conducted to determine how fit model with research data obtained. The following image is a path diagram generated after fulfillment stages assumption test SEM.

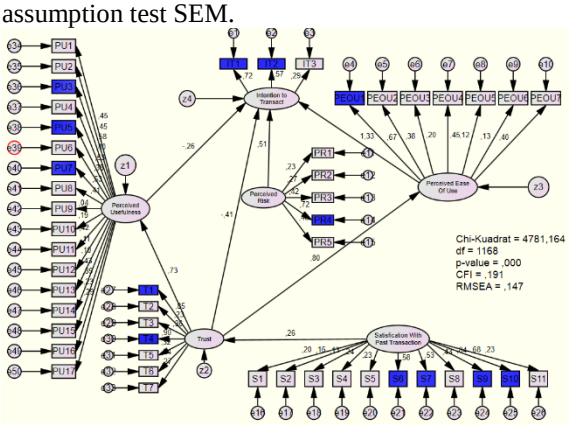


Image 4. Output Path Early Model Diagram

Based on the output path diagram, made a summary of the test results GOF can be seen in the following Table

GOF size	Acceptance limits	Values in Model research	information
Chi-square (x^2)	The smaller, the more fit	4781	
p-value	≥ 0.05	0.000	poorly
GFI	≥ 0.90	0.464	poorly
AGFI	≥ 0.90	0.415	poorly
RMSEA	≤ 0.05 : fit; > 0.10 : does not fit	0.147	poorly
ECVI	Model ECVI lower than the saturated model and Independence models	Model : 34,931 *Saturated* : 17,832 *Independence* : 40,513	poorly

Based on the test results GOF above model, it was concluded that the model does not fit with the research data. Deletion indicators that have a factor loading <0:50 can be done to make the GOF test results become better. Image output on the blue colored box indicates that the value of the indicator IT1, IT2, IT3, PEOU1, PR4, pu3, PU5, PU7, T1, T4, S6, S7, S9 and S10 which has a value of factor loading> 0:50 will used for further modification of the model.

Because of the variable perceived ease of use and perceived risk variable has only one indicator that has a loading factor <0:50 then according to Dahlan, SEM analysis at a minimum AMOS has two indicators, then with the statement of variables perceived ease of use and perceived risk variables in the clear.

Here are the results of the analysis of modification of the model after removing some items where the value of factor loading indicator <0:50 can be seen in the picture bela.

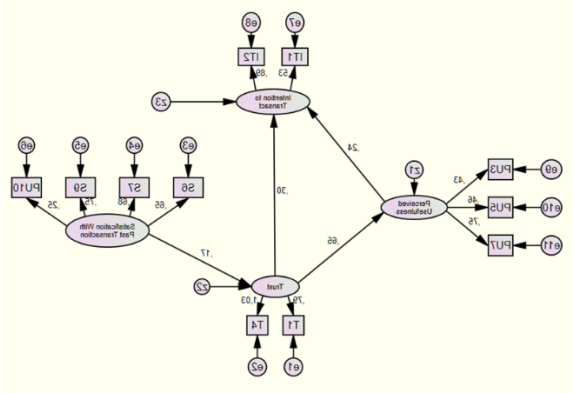


Image 5. Output Path Diagram Modified

Based on the output path diagram, made a summary of the test results GOF after the modifications that can be seen in Table

GOF size	Acceptance limits	Value at the beginning of the research model	Value in the research model after modification	information
Chi-square (x^2)	The smaller, the more fit	4781	72,635	
p-value	≥ 0.05	0.000	0.001	Baik
GFI	≥ 0.90	0.464	0.924	Baik
AGFI	≥ 0.90	0.415	0.875	Marginal
RMSEA	≤ 0.05 : fit; > 0.10 : does not fit	0.147	0.076	Baik
ECVI	Model ECVI lower than the saturated model and Independence models	Model : 34,931 *Saturated* : 17,832 *Independence* : 40,513	Model : 0.872 *Saturated* : 0.923 *Independence* : 3.514	Baik

2.5 Analysis Hypothesis Testing

Once the criteria of goodness-of-fit structural model which destinations can be met, then the next step is an analysis of structural relationships models (hypothesis testing). To see the relationship between the constructs in the hypothesis in the show by the value of regression weights, Weights regression value can be seen in the table.

			P
Trust	<---	Satisficatio n With_Past Transaction	,076
Perceived_Usefulness	<---	Trust	***
Intention to_Transact	<---	Trust	,058
Intention to_Transact	<---	Perceived_ Usefulness	,172

1 Relationship Trust against the perceived usefulness

The results of the structural model analysis showed a significant relationship between perceived usefulness because the Trust with p value 0.001> 0.05

2 Relationship Trust against perceived oasis of use

Results of the analysis of the structural model shows that there is no significant relationship between the trust with the perceived ease of use because of perceived variables oasis of use have been deleted on the model that has been modified.

3 Relationship Trust to the intention to Transact

The results of the structural model analysis showed that there was no significant relationship between perceived usefulness because the Trust with p value 0.058> 0.05

4 Relations perceived usefulness of the intention to Transact

The results of the structural model analysis showed that there was no significant relationship between perceived usefulness and Trust since 0172 p value> 0.05

5 Relationship perceived ease of use of the intention to Transact

Results of the analysis of the structural model shows that there is no significant relationship between the trust with the perceived ease of use because of perceived variables oasis of use have been deleted on the model that has been modified.

6 Relations perceived risk against the intention to Transact

Results of the analysis of the structural model shows that there is no significant relationship between the trust with the perceived risk as perceived risk variables have been deleted on the model that has been modified.

7 Relationship with past satisfication Transact against trust

The results of the structural model analysis showed no significant correlation between intention to Transact and perceived usefulness because the p value 0.076> 0.05.

3. CONCLUSIONS AND SUGGESTIONS

3.1 Conclusions

Based on the results of the research that has been done during this final project, it can be concluded that:

1. The analysis showed that the factors that influence user acceptance in Lazada, namely the factor of confidence (trust), usability factors (perceived usefulness), factor intention to conduct transactions (intention to Transact) and the factor of the experience gained when conducting a transaction (satisfication with past transaction).
2. The results of the analysis showed that the relationship between the shopping experience factor (satisfication with past transaction) on Lazada affecting user acceptance in the perception of confidence (trust), the factors of confidence (trust) in Lazada affecting user acceptance in the perception of the usefulness (perceived usefulness), the trust factor (trust) in Lazada affecting user acceptance in the perception of a desire to make transactions (intention to Transact), and usability factors (perceived usefulness) on Lazada affecting user acceptance in the perception of a desire to make transactions (intention to Transact)

3.2 Suggestions

From the research that has been done so far, there are still shortcomings or mistakes made during the study. For that, there are some suggestions that can be done to correct the error of this study, namely:

1. The use of a variable for the assessment of user acceptance is expected to not only see the acceptance of the user based on the user side only (subjective), but can be viewed in terms of development and in terms of the provider (objective)
2. In similar ecommerce research, for the future could choose other assessment factors that can be tailored to the characteristics of the research object itself, such as adding external factors such as attitude, behavioral, and so forth.
3. For future research in hopes to multiply and expand the area for the sample of respondents.

4. BIBLIOGRAPHY

[1] F. Facebook, "Lazada Indonesia," Rocket Internet, Maret 2012. [Online]. Available: https://www.facebook.com/LazadaIndonesia.
[2] "Lazada Indonesia," Rocket Internet, Maret 2012. [Online]. Available: https://twitter.com/search?q=lazada&src=tyah.
[3] K. R. Siregar, "Kajian Mengenai Penerimaan Teknologi dan Informasi Menggunakan Technology Acceptance Model (TAM)," Rekayasa, vol. 4, no. 1, pp. 27-32, 2011.
[4] P. Moh. Nazir, Metode Penelitian, Bogor: Ghalia Indonesia, 2011.
[5] P. D. Sugiyono, Metode Penelitian Kombinasi (Mixed Methods), Bandung: Penerbit Alfabeta, 2013.
[6] S. Santoso, Structural Equation Modeling, Jakarta: PT Elex Media Komputindo, 2011.
[7] D. Wirdasari, "Teknologi E-Commerce Dalam Proses Bisnis," SAINTIKOM, vol. 7, no. 2, pp. 324-335, 2009.
[8] Y. Y. Nazaruddin, Modul Pembelajaran SPSS, Jakarta: Pusat Data dan Statistik Pendidikan, 2014.
[9] T. I. Prihandini dan S. Sunaryo, "Structural Equation Modelling (SEM) dengan Model Struktural Regresi Spasial," Seminar Nasional Statistika Universitas Diponegoro, 2011.
[10] F. Fahmi, H. Yozza dan I. R. HG, "Analsis Faktor-faktor Yang Mempengaruhi Minat Berwirausaha Mahasiswa Dengan Teknik SEM," Matematika UNAND, vol. I, no. 2, pp. 5-12.
[11] M. Syaifudin, "Analisis Pengaruh Privasi, Keamanan, dan Kepercayaan Terhadap Niat Untuk Bertransaksi Secara Online di OLX.co.id," Jurnal Manajemen Pemasaran, FEB Universitas Brawijaya, pp. 1-16.
[12] J. Widiyanto, "SPSS For Windows," FKIP Universitas Muhammadiyah Surakarta, 2012.
[13] A. R. Poetri, "Adopsi E-Commerce Dengan Pendekatan Technology Acceptance Model (TAM)," Universitas Sebelas Maret, pp. 8-30, 2010.
[14] P. A. Pavlou, "Consumer Acceptance of Electronic Commerce: Integrating Trust and Risk with the Technology Acceptance Model," International Journal of Electronic Commerce, vol. 7, no. 3, pp. 69-103, 2003.
[15] S. Novitasari dan Z. Baridwan, "Pengaruh Kepercayaan, Persepsi Resiko, Persepsi Manfaat, dan Persepsi Kontrol Perilaku Terhadap Niat Penggunaan Sistem E-Commerce".
[16] A. Sadiyoko, C. Tesavrita dan R. Kurniawan, "Increasing the Acceptance and Online Transaction of an Ecommerce Site Using Technology Acceptance Model," Proccedings of National Seminar on Applied Technology, Science, and Arts, pp. 216-220, 2009.
[17] M. S. Featherman dan P. A. Pavlou, "Predicting e-service adoption: a perceived risk facets perspective," Human Computer Studies, no. 59, pp. 451-474, 2003.
[18] T. Hendrawati, "Analisis Penerimaan Sistem Informasi Integrated Library System (INLIS)," VISI PUSTAKA, vol. 15, no. 3, pp. 153-164, 2013.
[19] A. Gunawan, "Aplikasi Technology Acceptance Model Pada Minat Nasabah Untuk Menggunakan Internet Banking," Nominal, vol. III, no. 2, pp. 55-74, 2014.
[20] H. Prabowo, Darman dan E. Noegraheni, "Analisis Kepercayaan Dalam C2C E-Commerce Terhadap Keputusan Pembelian dan Dampaknya Terhadap Repurchase Pada Kaskus," Binus Business Review, vol. V, no. 1, pp. 301-314, 2014.
[21] A. C. Shomad, "Pengaruh Kepercayaan, Persepsi Kegunaan, Persepsi Kemudahan, dan Persepsi Resiko Terhadap Perilaku Penggunaan E-Commerce," pp. 1-20.
[22] S. Azwar, "Reliabilitas dan Validitas," Statistika Pendidikan, p. 2, 2013.
[23] Besral, "Pengolahan dan Analisa Data-1 Menggunakan SPSS," FKM UI, 2010.
[24] U. Dachlan, Panduan Lengkap STRUCTURAL EQUATION MODELING, 1 penyunt., Semarang: Lentera Ilmu, 2014.
[25] S. Santoso, Structural Equation Modeling Konsep dan Aplikasi Dengan AMOS, Jakarta: PT. Elex Media Komputindo, 2007.