



Artikel

# Analysis and Implementation of Online-Based Rice Sales (e-commerce) at UD. Toko Beras Santy

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## SUBMISSION TRACK

Received 1 December 2018;  
Revised 15 December 2018;  
Accepted 10 February 2019;  
Available online 20 February 2019

## KEY WORD

*UD. Toko Beras Santy, Unified Modeling Language (UML), Technology Acceptance Model (TAM), web-based rice sales*

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## A B S T R A C T

Improvements in human resources have made rapid developments in technology and information. In the business sector the use of technology greatly affects sales and marketing, but not all business sectors have used technology in their sales and marketing. One way to increase the area of marketing is to use internet technology that can cover many areas. With the existence of internet technology everyone from many areas can be connected easily and quickly. The use of the internet in the business sector is not only limited to the expansion of the marketing area but can also be used as a medium of transaction that uses the internet network called e-commerce which is very helpful for customers in purchasing a product. With the help of the Technology Acceptance Model or TAM method, researchers can understand the factors that influence the acceptance of the use of computer technology through 5 factors, namely, Perceived Ease of Use, Perceived Usefulness, Attitude Toward Using, Behavioral Intention Of Use, and Actual System Usage. TAM aims to explain the user's acceptance of an information system as well as with this e-commerce web can help in the selection of rice products quickly and expand the area of product marketing.

## INTRODUCTION

The development of Information Technology which is accompanied by the development of the internet support each other so that it makes a concept of Information Technology, in the business sector, the development of technology plays an important role and gives a very significant impact on the systems that work in that business field, especially in sales, processing data and service improvements provided to customers. With the existence of internet technology all people from many regions can be connected easily and quickly, the use of internet technology is not only limited to the utilization and dissemination of information between people, but can also be

used as a medium or a means to conduct a trade transaction called e-commerce. E-commerce or Electronic Commerce is a form of electronic transactions of sales, purchases and payments using internet network media, according to Munawar (2009), E-commerce is a business process using electronic technology that connects companies, consumers and the public in the form of Electronic transactions, sales of goods, and information electronically. While according to Jony Wong (2010), E-commerce is a business transaction that occurs in electronic networks such as the internet. At UD. Toko Beras Santy, the absence of online marketing makes it difficult for buyers to see directly the

rice products that are available in addition to having to come to the store, and because they have not used online marketing done by UD. Santy's Rice Shop does not yet cover a large area. Based on the background contained above, a study was conducted under the title "Analysis and Implementation of Online-Based Sales (E-commerce) at UD.Toko Beras Santy "using the PHP programming language and using mySql as a database.

## I. METHOD

The method used in this study includes two parts, method of collecting data and testing methods.

### Method of Collecting Data

#### a. Observation

Observation ,which is to make direct observations on the relevant business premises and collect information needed to help design the system

#### b. Interview

After getting the data and information needed in the previous stage, then do a question and answer directly with the parties involved at UD.Toko Beras Santy, with the aim of obtaining data directly from related sources.

#### c. Literature review

Search for information needed to design web-based information systems by reading and studying them from existing books and other sources. In writing this thesis the author collected data that is very useful for the information provided by this application sourced from books in the company and library as a reference

#### d. Questionnaire

Collecting data to customers by giving a questionnaire in the form of questions about rice products. Data collection method by giving questions to 30 customers, to determine how useful applications have been made using the grid on the TAM testing method.

## Testing Method

The testing method used in this e-commerce application is using the Technology acceptance model (TAM) method:

Technology Acceptance Model (TAM) is a model created to analyze and understand the factors that influence the acceptance of a computer technology in an organization or end user. The Technology Acceptance Model (TAM) was first introduced by a scientist named Davis M (1986). The purpose of the Technology Acceptance Model (TAM) itself is to explain and predict user acceptance of an information system technology. There are five attitudes forming that affect a person's behavior in the use of information system technology, namely:

#### a. Perceived Ease Of Use

Convincing the user or end user that information technology is easy to use and operate

#### b. Perceived Usefulness

Convincing the user or end user that the information technology used will provide many beneficial and promising benefits.

#### c. Attitude Toward Using

Convincing the user's attitude to use and operate the information technology that is used.

#### d. Behavioral Intention Of Use

Improve and maximize user behavior to always continue to use the information technology provided.

#### e. Actual system Usage

Stating that the user has used the information technology to the fullest and is based on the benefits to be gained.

Here is a diagram of the Technology Acceptance Model

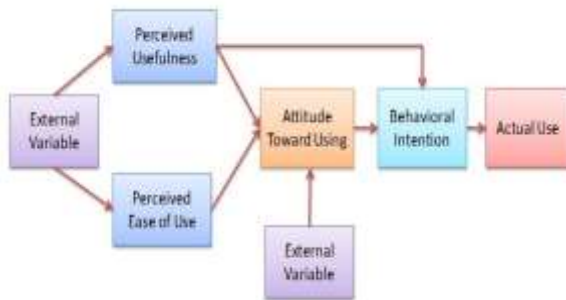


Fig 1. TAM Diagram

## II. RESULTS

After conducting research on UD. Toko Beras Santy, then made a solution in the form of e-commerce selling rice based online using the Technology Acceptance Model testing method, the initial step in this research is to create a questionnaire instrumentation that is made using open question, respondents will fill in the questionnaire answers and directly analyzed using IBM SPSS Statistics. Here are the grids for questions:

**Table 1. Questionnaire grid**

No	Variabel	Indikator	Jumlah
1	CSE	Dapat berhasil memecahkan masalah berkomputer	
		Tahu bagaimana menangani situasi yang tak terduga berkomputer	
		Selalu bersikap tenang dalam menghadapi kesulitan berkomputer	
		Dapat menemukan solusi dalam permasalahan berkomputer	
2	PEOU	Aplikasi Mudah di gunakan	
		Aplikasi mudah untuk di navigasikan	
3	PU	Membantu lebih cepat	
		Membantu lebih akurat	
		Menjadi lebih efektif	
		Menjadi lebih mudah	
4	ATU	Senang	
		Percaya	
		Puas	
		Memilih untuk menggunakan	
5	ITU	Bertujuan untuk digunakan selalu	
		Menggunakan dalam 20 menit sekali pakai	
		Berkomunikasi melalui media <i>website</i>	
		Bergabung dalam forum pengguna	
6	AU	Memahi cara dalam penggunaan	
		Bersedia bertanya atau melakukan diskusi	
		Bersedia menyampaikan kepuasan penggunaan	
		Membantu rekan dan teman dalam menggunakan <i>websitetersebut</i> .	

After obtaining the answers to the questionnaire from the customer and admin UD. Toko Beras Santy, an analysis using IBM SPSS Statistics to find out whether the technology acceptance answers are valid or not, here are some test results:

a. Data Correlation Test Results

Table 2. Data Correlation Test

		Correlations							
		PEOU 1	PEOU 2	PU 1	PU 2	PU 3	ITU 1	ITU 2	ITU 3
PEOU 1	Pearson Correlation	1	.793**	.489**	.338	.311*	.558**	.558**	.636**
	Sig. (1-tailed)		.000	.003	.233	.047	.001	.001	.000
	N	30	30	30	30	30	30	30	30
PEOU 2	Pearson Correlation	.793**	1	.373*	.375	.452**	.592**	.428**	.489**
	Sig. (1-tailed)	.000		.021	.346	.006	.000	.009	.003
	N	30	30	30	30	30	30	30	30
PU 1	Pearson Correlation	.489**	.373*	1	.530**	.177	.309*	.309*	.533**
	Sig. (1-tailed)	.003	.021		.001	.175	.049	.049	.001
	N	30	30	30	30	30	30	30	30
PU 2	Pearson Correlation	.338	.375	.530**	1	.367	.318	.318	.452**
	Sig. (1-tailed)	.233	.346	.001		.189	.123	.123	.006
	N	30	30	30	30	30	30	30	30
PU 3	Pearson Correlation	.311*	.452**	.277	.267	1	.582**	.582**	.452**
	Sig. (1-tailed)	.047	.006	.175	.189		.000	.000	.006
	N	30	30	30	30	30	30	30	30
ITU 1	Pearson Correlation	.558**	.592**	.309*	.318	.582**	1	.683**	.592**
	Sig. (1-tailed)	.001	.000	.049	.123	.000		.000	.000
	N	30	30	30	30	30	30	30	30
ITU 2	Pearson Correlation	.558**	.428**	.309*	.218	.582**	.683**	1	.757**
	Sig. (1-tailed)	.001	.009	.049	.123	.000	.000		.000
	N	30	30	30	30	30	30	30	30
ITU 3	Pearson Correlation	.636**	.489**	.533**	.452**	.452**	.592**	.757**	1
	Sig. (1-tailed)	.000	.003	.001	.006	.006	.000	.000	
	N	30	30	30	30	30	30	30	30

Testing the Quality of Data on questionnaire answers using IBM SPSS Statistics. With a standard coefficient above 0.3. Where there is a correlation coefficient of 0.3 or more, the data is declared valid.

b. Reliability Test Results

Table 3. Reliability Test Results

<b>Item-Total Statistics</b>				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
PEOU 1	22.87	5.016	.706	.841
PEOU 2	22.97	5.275	.643	.849
PU 1	22.90	5.403	.526	.862
PU 2	23.03	5.964	.340	.878
PU 3	23.03	5.620	.529	.861
ITU 1	22.93	5.099	.708	.841
ITU 2	22.93	5.099	.708	.841
ITU 3	22.97	4.999	.798	.831

**Reliability Statistics**

Cronbach's Alpha	N of Items
.867	8

Based on the results of the Reliability Test table contained above, it can be said that this data is all reliable because the Cronbach Alpha value is above 0.4.

c. F Test Results

Table 4. F Test Results

<b>ANOVA<sup>a</sup></b>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.344	2	1.172	7.998	.002 <sup>b</sup>
	Residual	3.956	27	.147		
	Total	6.300	29			

a. Dependent Variable: ITU 1

b. Predictors: (Constant), PEOU 2, PEOU 1

The table above shows that the F value is 7.998 with a significance level of 0.002. With this data it can be shown that the PEOU and PU variables affect the use of the Toko Beras Santy's

web, in the sense that users are easy to use the Toko Beras Santy’s web and it is expected that users will be comfortable using it.

d. T Test Results

Table 5. T Test Results

		Coefficients <sup>a</sup>				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	1.171	.537		2.181	.038
	PEOU 1	.228	.238	.240	.959	.346
	PEOU 2	.417	.259	.402	1.608	.120

a. Dependent Variable: ITU 1

The PEOU variable has a T value of 2.181 with a significance level of 0.038, because a significance value below 0.5 can be interpreted that the PEOU variable influences the web reception of Santy Rice Shop. Users have a perception that the Santy Rice Shop web is easy to operate and the user will be easier to accept the Santy Rice Shop web. It can be said that the PEOU variable greatly affects the Santy Rice Shop website by the user.

III. DISCUSSION

After searching for information through interviews and requirements elicitation, the authors pour the data that has been obtained into an online rice sales application (e-commerce) that makes it easy to market rice products and makes it easy for customers to buy rice easily and quickly.

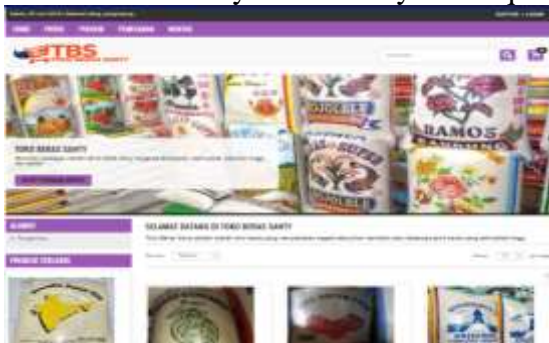


Figure 2 . Home Page

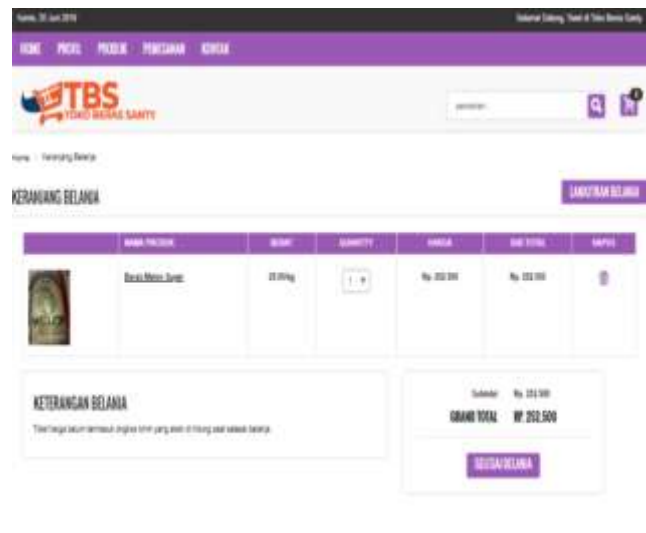


Figure 3. Shopping Cart Page



Figure 4 Transaction Page

On the page above shows the page after making a transaction which also links to the TAM questionnaire to assist in testing the system.

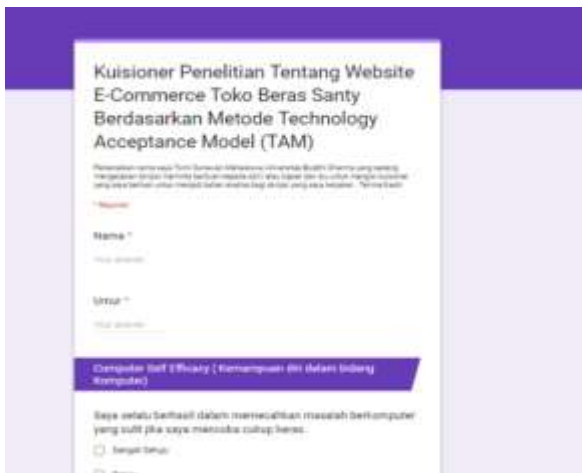


Figure 5. TAM Questionnaire Form

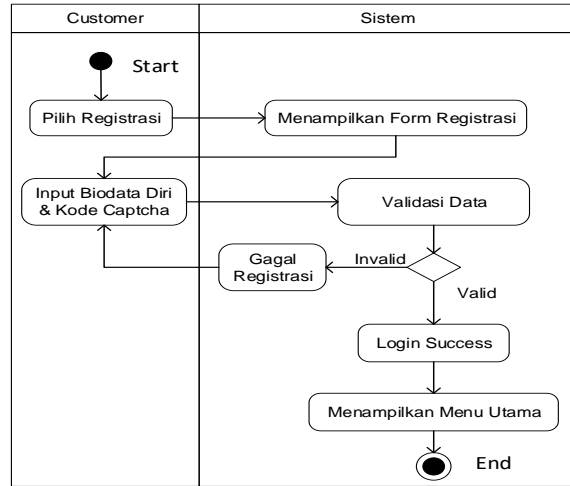


Figure 6. Activity Diagram Register

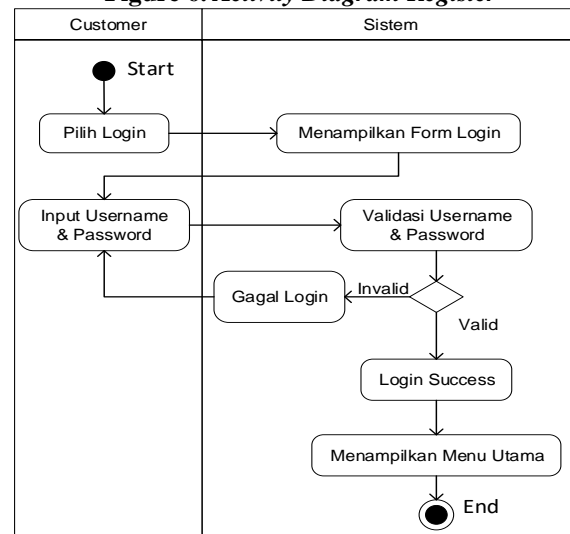
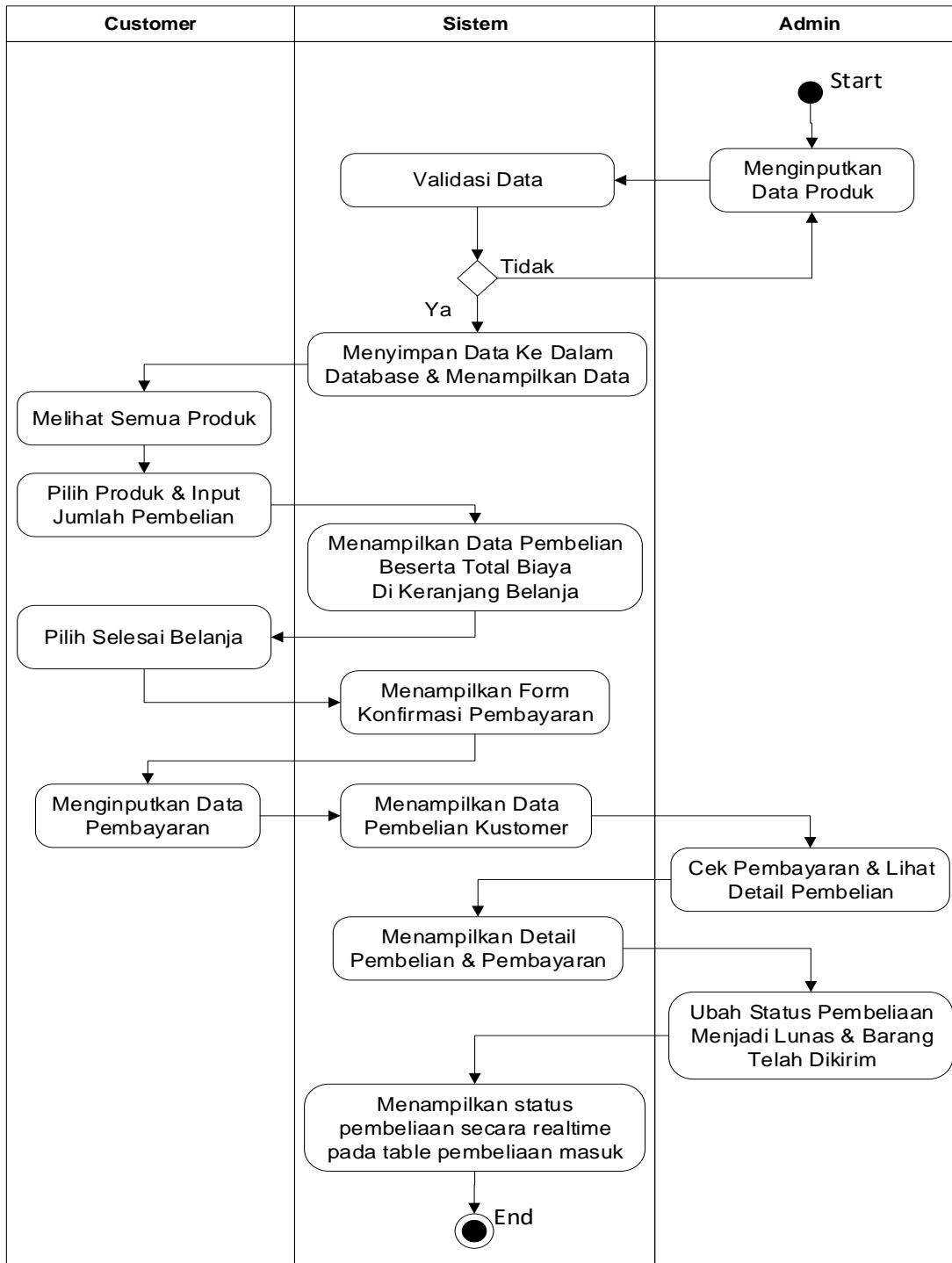


Figure 7. Activity Diagram Login



**Figure 8. Activity Diagram Pembelian**

The picture above is a picture of the activity diagram found in the online rice sales (e-commerce) application for UD. Toko Beras Santy.



#### **IV. CONCLUSION**

From the results of discussions on web-based online sales systems (e-commerce) can be drawn conclusions, namely:

1. With this e-commerce web, it can be used directly by customers to help speed up the selection of rice products according to customer criteria and desires.
2. This online sales web is also very helpful in marketing rice products in a wide range of areas.
3. By using the Technology Acceptance Model (TAM) method, can find out the results in the acceptance of e-commerce technology to customers UD. Toko Beras Santy.

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#### **BIOGRAPHY**

**Dram Renaldi**, was born in the city of Tangerang on January 11, 1990. Completed his undergraduate education (S.Kom.) at STMIK PGRI Tangerang in 2012 and his postgraduate education (M.Kom.) at Budi Luhur University in 2016. Now active as a permanent lecturer and chairman Software Engineering study program at the Dharma Buddhi University.

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