Factors Affecting the Decisions of Using Point of Sales at MSMEs in Jakarta Barat

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Abstract
This study aims to investigate empirically the influence of Perceived Usefulness, Perceived Ease of Use and Quality of Accounting Information to User Satisfaction in the application of ERP in PT. Aggiomultimex. The sample in this research is 35 respondents with sampling technique by purposive sampling that is employees of ERP users of PT. Aggiomultimex that meets the characteristics of the sample consisting of Female and male employees users of ERP applications related to the accounting process, have working experience of at least 6 months working at PT. Aggiomultimex, aged 20-50 years, working on Merchandiser, PPIC, Development, Import, Local Purchasing, Warehouse, and Export Division. Data were collected by distributing questionnaires directly to the respective respondent assisted by a brief interview. The analysis method used in this research is Structural Equation Model (SEM) approach using Partical Least Square (PLS) version 3.00 software. The result of this research reveals that Perceived Usefulness, Perceived Ease of Use, and Quality of Accounting Information have a positive effect on User Satisfaction in ERP implementation in PT. Aggiomultimex

Key words
Perceived usefulness, perceived ease of use, quality of accounting information, user satisfaction, Enterprise Resource Planning

1. Introduction
Small and Medium Enterprises (SMEs) has been one of the most interesting businesses for most people after the economy crisis happened in 1998. One of the impacts of the economy crisis is the huge number of employment termination in large companies. Since then, the development of Small and Medium Enterprise (SMEs) in Indonesia has grown rapidly. Based on the information from the Ministry of Cooperation and Small and Medium Enterprise (SMEs), it shows that the contribution of this MSME sector to the country has been increasing continuously from 57.48 percent to 60.34 percent. The rapid development of SMEs has resulted in the higher level of competition within SMEs. In order to be survived in this competitive condition now and in the future, SMEs must make updates and innovations in terms of information system as an important tool to carry out their businesses and achieve new and existing business opportunities. SMEs could not avoid the development of technology because they are carrying the business in this digital era where everything will be easier when using the role of technology.

In the beginning of 2015 A cash registered application system, named POS (Point of Sales) was innovated. Point of Sales is an Android-based application program that is used to facilitate sales transactions needed by small and medium retail businesses by using cash registered system. The
application has become popular since the launching; more than 2,000 outlets in Indonesia use Point of Sales. There are several conveniences and benefits of using the cash registered system integrated with the internet; they are easy access, giving fast and maximal services to the users, and providing fast and accurate sales and financial reports. This application can also be considered as a problem solver for the SMEs business activities. There are a lot of businesses failed due to financial problems that are not right or sales transactions that are not in accordance with the companies’ financial receivables. Using technology-based sales registered system, SMEs will be more efficient and safer in carrying their business and controlling the cash. If you record sales manually, there will be many inherent risks including the possibility of errors in recording, fraudulent recording, and the risk of losing sales data. The use of software such as POS is an investment for the companies because the system is quite expensive, so it is necessary for the companies to consider whether the investment actually gives more benefits than the costs incurred. The success of the information system of the companies depends on how the system is implemented. The user satisfaction is one factor to measure the success of the development and implementation of the information system. The user satisfaction can be measured from the ease of the services when the system being implemented, whether by using the system can be easier to carry out their work and the quality of information generated by the system can support them to make decision. However, in reality, there are millions of SMEs still use notes in their sales transactions because they think that Point of Sales is still considered difficult to be used.

In previous research Saleh (2012), Ginting (2107), Made (2016), and Suharno (2016) stated that the quality of information does not affect user satisfaction. In other researches conducted by Widodo (2016), Mutiara (2016) and Dwi (2016) said that the quality of information has no effect towards user satisfaction. Meanwhile, Ayu (2107), Irfan (2016) and Nilam (2016) found that benefits and convenience greatly influence user satisfaction. Referring to those reasons above, the writers conduct a study to SMEs in West Jakarta, the writers want to investigate the factors affecting the use of Point of Sales in SMEs. Therefore, the title of this study is “Factors Affecting the Decision of Using Point of Sales in MSMEs (Emphirical Study at MSMEs in Jakarta Barat)“.

2. Methodology of research

Data analysis is a procedure or process of activities in summarizing the data collected from the results of the study so that the data can be processed into a form that is more understood by the reader. This study uses questionnaire analysis using a Likert scale 1-5, using smart PLS3 software (Partial Least Square version 3).

2.1. Descriptive Statistics Analysis

Data used in this study is descriptive statistics. Descriptive statistics is a method to organize and analyze quantitative data so that the regular description of the study obtained (Ghozali, 2006). Descriptive statistics analysis used in this study shown to provide an overview of respondent demography including gender, age, education and length of work disclosed to clarify the description of the respondents.

2.2. Data Quality Test

Data in this study obtained from the distribution of questionnaire, therefore, the instrument of the study needs to be tested to find out the data quality test which includes reliability and validity testing using software smartPLS3 (Partial Least Square).

2.3. Validity Test

Validity test is used to measure the validity of the questionnaire. In this study the testing the validity of the data is by using smartPLS3 software with an Outer Model, namely Convergent

56 Validity which is seen by comparing the value of the root square of average extracted (AVE) of each construct with a correlation between constructs and other constructs in the model where the value must be greater than 0.5. A valid instrument of the study means a measuring instrument used for getting the valid data. A questionnaire is said to be valid if the question in the questionnaire is able to reveal
something that will be measured by the questionnaire. If the square root value of AVE for each construct is greater than the correlation value between the other constructs in the model, then each indicator statement is valid (Ghozali, 2008).

2.4. Reliability Test

Reliability is a tool for measuring a questionnaire that is an indicator of the construct variable. A questionnaire is said to be reliable if respondent's answer to the statement produces the same answer from time to time. The reliability test in this study uses the value of Crobanch alpha. A construct is said to be realistic if it gives an alpha Crobanch value> 0.60 (Ghozali, 2008). Reliability test is intended to measure internal consistency of the questionnaire which is an indicator of variables or constructs; measurement of reliability is done by Composite Reliability test criteria. Indicators can be said to be valid if the number of calculations by data is greater than or equal to 0.70 (Ghozali, 2008: 43).

2.5. Hypothesis Testing Measurement

a. Structural Equation Modelling (SEM) through Partial Least Square (PLS)

Data collection used in this study is using the Structural Equation Model (SEM) approach through Partical Least Square (PLS) software. PLS is a structural equation model (SEM) based on component or variance. According to Ghozali (2008) PLS is an alternative approach that shifts from a covariant-based SEM approach to generally test quality/theory, while PLS is more predictive model.

PLS is a powerful analytical method (Ghozali, 2008) because it is not based on many variations. For example, data doesn’t have to be distributed normal, and the sample doesn’t have to be big. Besides it can be used to confirm the theory, PLS can also be used to explain whether there is a relationship between the latent variables. PLS can simultaneously analyze constructs formed by reflection and formative indicators. This cannot be done by covariant-based SEM because it will become a unidentified model. Structural equation model is a multivariate analysis technique equation that allows researchers to examine the relationship between complex variables, both recursive and non-recursive to obtain a comprehensive picture of the overall model.

Unlike other multivariate model (multiple regression factor analysis), SEM can test simultaneously: structural model, the relationship between independent and dependent constructs.

a. Measurement Model: the relationship (loading value) between indicators and constructs (latent variable).

b. Measuring Outer Model (Measurement Model)

In measuring outer model using PLS3, there are three criteria which are finding out the Convergent Validity, Discriminant Validity in the form of square root of average variance extracted (AVE), and Composite Reliability; those two latest criteria have been previously discussed in the quality data test. Convergent validity of the measurement model with the reflexive indicators is assessed based on the correlation between item score/component score estimated by software PLS. The level of individual reflexive is said to be high if the correlation more than 0.7 with the construct (variable) measured. Although Ghozali (2006) stated that for the initial phase of the research, the measurement scale of loading value 0.5 to 0.6 is considered sufficient.

The hypothesis about Perceived Usefulness will affect User Satisfaction

The results of hypothesis testing indicate that the influence of the Perceived Usefulness (PEU) variable with User Satisfaction (KP) shows the path coefficient value of 0.220 with a t value of 2.239. This value is greater than t table (1.960). This result means that Perceived Usefulness (PEU) has a significant positive effect on ERP User Satisfaction (KP) in PT Aggiomultimex. This means that Hypothesis 1 is accepted. PT Aggiomultimex in its perception of the benefits of using an ERP system in work will increase user productivity. The results of this study are in line with previous research, conducted by Ida Ayu and I Gusti Ayu (2017) that perceived usefulness results have a positive and significant effect on user satisfaction, meaning the better perceived usefulness of GO-JEK service applications, the higher user satisfaction.
Zao and Cao (2012) found that user satisfaction directly influenced by perceived usefulness and user intention to continuously implement the system. The results of the similar study shown by some researchers: Amin et al. (2014), Kim and Hyung (2014), Tananjaya (2012), Budiman and Arza (2013), George and Kumar (2013) and Liebanas-Cabanillas et al. (2013).

**The hypothesis about Perceived Ease of Use will affect User Satisfaction**

The results of testing the second hypothesis indicate that the influence of the Perceived Ease of Use (POE) variable on ERP User Satisfaction (KP) in PT Aggiomultimex shows the path coefficient value of 0.464 with a t value of 3.549. This value is greater than t table (1.960). This result means that Perceived Ease of Use (POE) has a significant positive influence on User Satisfaction (KP). This means that Hypothesis 2 is accepted. PT Aggiomultimex in the Ease Perception states that the implementation of ERP system with very clear and easily understood rules of use can increase user satisfaction. The results of this study are in line with previous research conducted by Ida Ayu and I Gusti Ayu (2017), the better GO-JEK application technology provides convenience felt by users, the higher satisfaction felt by users, thus the positive effect of perceived ease of use for technology users is in line with Tananjaya’s (2012) research which states that the process of implementing accounting software in a travel agency in Surabaya is inseparable from the perceived ease of use role which also influences the success of the accounting software implementation process related to user satisfaction.

**The Hypothesis about the Accounting Quality Information will affect User Satisfaction**

The results of testing the second hypothesis indicate that the effect of the Quality of Accounting Information (KIA) variable on ERP User Satisfaction (KP) in PT Aggiomultimex shows the path coefficient value of 0.274 with a t value of 1.987. This value is greater than t table (1.960). This result means that the Quality of Accounting Information (KIA) has a significant positive influence on User Satisfaction (KP). This means that Hypothesis 3 is accepted. PT Aggiomultimex using an ERP system can provide accurate output results for the needs of ERP users in PT Aggiomultimex, and the timeliness of the ERP system will result in user satisfaction so that the required data is appropriate in this case prioritized in audit needs. The results of this study are in line with previous studies conducted by Fatania Lativa (2011) which proves that information quality has a positive effect on user satisfaction of information systems. The results of the study obtained by McKinney et al. (2002), Rai et.al. (2002), McGill et al. (2003), Almutairi and Subramanian (2005) and Livari (2005) show that the quality of information systems has a positive effect on user satisfaction.

If the end user of the information system believes that the quality of information produced from an information system is good, then the end user will feel satisfied in using the information system. The results of the study (Irma, et.al 2014) Information Quality proved to have a significant positive effect on User Satisfaction and Perceived usefulness proved to have a significant positive effect on User Satisfaction. The results of his research also provide a conclusion that all research instruments that become indicators of user satisfaction have very good validity and reliability.

While the results of Ni Made Sri and I Ketut (2016) research, the better the quality of information systems, information quality, and perceived usefulness; the more increasing the end-user satisfaction of accounting software. Syara Mutiara and Dudi Pratomo (2016) have the results of research based on partial hypothesis testing; there is a significant influence between the qualities of information systems on user satisfaction of accounting information systems, and based on other partial hypothesis testing, information quality does not significantly influence user satisfaction of accounting information systems.

**Theory of Reasoned Action (TRA)**

*Theory of Reasoned Action* (TRA) is a theory created by Martin Fishbein and Icek Ajzen 1975. TRA is a theory that relates to the attitudes and behavior of individuals in carrying out activities. *Theory of Reasoned Action* (TRA) is a theory which states that decisions to conduct certain behaviors are the result of a rational process in which behavioral choices are considered, the consequences and results of each behavior are
evaluated, and a decision is made, whether to behave in a certain way or not. Then, this decision is reflected in the behavioral goals, which greatly affect the behavior that appears (Baron and Byrne).

*Figure 1. Theory of Reason Action (TRA)*

**Technology Acceptance Model (TAM)**

Technology Acceptance Model (TAM) developed by Davis (1989) is a successful and very acceptable model for predicting acceptance of a newly applied technology. The TAM model is actually adopted from the TRA model that is the theory of reasoned action with a premise that a person’s reaction and perception of something will determine the attitude and behavior of that person. The reactions and perceptions of users of Information Technology (IT) will influence their attitude towards their acceptance of these technologies. In TAM, Davis (1986) found that perceptions of the benefits of IT also influenced the perception of the ease of the use of IT, but it did not apply otherwise. Thus, as long as the individual feels that IT is useful in his duties, the individual will intend to use it regardless of whether IT is easy or difficult to be used. To reveal more about the interrelationships between the perceptions of the benefits and the perceptions of the ease of using this IT, Davis (1989) conducted a study by linking between Perception of Use and Perception of Ease in Use as in the table below:

<table>
<thead>
<tr>
<th>Usefulness</th>
<th>Ease of Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work faster</td>
<td>Easier to learn</td>
</tr>
<tr>
<td>Performance</td>
<td>Controllable</td>
</tr>
<tr>
<td>Increase in productivity</td>
<td>Clarity and Understandable</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>Flexible</td>
</tr>
<tr>
<td>Simplify the task</td>
<td>Easy to know</td>
</tr>
<tr>
<td>Usefulness</td>
<td>Easy to use</td>
</tr>
</tbody>
</table>

According to Davis (1989), there are five forms of attitude that influence an individual’s behavior in using information technology:

1. **Perceived Ease of Use** (PEOU) Convince that the information technology will be easy to be used.
2. **Perceived Usefulness** (PU) Convince that the information technology used will give great benefits.
3. **Attitude toward Using** (ATU) Convince the attitude of the users in using the information technology.
4. **Behavioral Intention of Use** (BIOU) Improve users’ behavior to continuously using the information technology.
5. **Actual System Usage** Confirm that the users have greatly used the information technology based on the benefits obtained.

**Micro, Small and Medium Enterprises (MSMEs)**

Based on Law Number 20 of 2008 concerning Micro, Small and Medium Enterprises (MSMEs), Small-scale business is a productive economic enterprise that is independent, carried out by individuals or business entities that are not subsidiaries or not branches of companies that are owned, controlled, or become part of either directly or indirectly from medium-sized businesses or large businesses that meet the criteria of Small Businesses as referred to in this Act.

The characteristics of MSMEs are a stand-alone management, capital provided by itself, local marketing areas, and small company assets, and limited number of employees. The principle of
implementing MSMEs is togetherness, democratic economy, independence, balance of progress, sustainability, efficiency of justice, and the unity of the national economy.

![Technology Acceptance Model (TAM)](image-url)

**Figure 2. Technology Acceptance Model (TAM)**

To differentiate a business whether it includes in micro-businesses, small businesses, or medium-sized businesses, the government is given a limit based on the law in accordance with the criteria of each type of business based on the business circulation and/or the number of assets owned as follows:

1. **Criteria for Micro Enterprises**
   - Micro businesses have a net worth of at most Rp. 50,000,000.00 - fifty million rupiah, excluding land and buildings for businesses; or have annual sales of at most Rp. 300,000,000 - three hundred million rupiah

2. **Criteria for Small Businesses**
   - Small businesses have a net worth of more than Rp. 50,000,000.00 - fifty million rupiah up to a maximum of Rp. 500,000,000.00 - five hundred million rupiah excluding land and buildings of business premises; or have annual sales of more than Rp. 300,000,000.00 - three hundred million rupiah up to a maximum of Rp. 2,500,000,000.00 - two and a half billion rupiah

3. **Criteria for Medium Business**
   - Medium-sized businesses have a net worth of more than Rp. 500,000,000.00 (five hundred million rupiahs) up to a maximum of Rp. 10,000,000,000.00 (ten billion rupiahs) excluding land and buildings of business premises; or have annual sales of more than Rp. 2,500,000,000.00 (two billion five hundred million rupiahs) up to a maximum of Rp. 50,000,000,000.00 (fifty billion rupiahs)

**User Satisfaction**

Refering to Jogiyanto (2007) "User satisfaction is the user’s response to the use of information system output". In addition, Doll and Torkzadeh in Somers et al. (2005) defines "End-User Satisfaction (EUS) as an affective attitude towards certain application software by someone who interacts directly with a computer". This means that satisfaction arises because the system can be used optimally by direct interaction between the person who operates the system and the computer.

Based on the opinion above, it can be concluded that user satisfaction is related to the response or attitude of the users to the system interaction and the use of system output so that it can be used optimally. Satisfaction measurements used in this study used indicators from Somers et al. (2003) who adopted Xiao and Dasgupta (2002). Somers et al. (2003) revealed that there are five dimensions of user satisfaction measurement, including: content, accuracy, format, timeliness, and ease of use (easy to use).

**Information Quality**

According to Jogiyanto (2005) the quality of information depends on three things, namely:

1. **Accurateness**, Information must be free from errors and cannot or be misleading, must clearly reflect the intent.

2. **Timeliness**, Information that comes to the recipient may not be too late.
3. Relevance, This information has benefits for the wearer.

DeLone and McLean (2003) state that the quality of information measures the quality of the output of information systems which is the quality produced by information systems, especially in the form of reports. In this study, the information quality variable is represented by X2. The following are indicators of information quality:

1) Accuracy

Bailey and Pearson in Smith (2007) stated that accuracy is the truth of the information produced by information systems. Information produced by the information systems must be accurate because it plays a role for decision making (DeLone and McLean, 1992). Accurate information means having to error free and free of bias.

2) Completeness

Bailey and Pearson in Smith (2007) stated that the completeness of the quality of the information is the completeness of the content of the information produced by information systems. Complete information is information that includes all information needed by the users of the information systems.

3) Format (Shape)

The format of presentation of the information produced by the information system describe the quality of information system information. If the presentation of the information in the right form, the information produced is considered as high quality so that it is easier for the users to understand the information produced.

4) Timeliness

The quality of the information from the information systems can be said to be good if the information produced is on time, if the information needed is too late, then this will affect the speed of decision making, and if decision making is too late, it will have fatal consequences for the users and organizations.

5) Relevance

The quality of the information of the information system is said to be good if it is relevant to the needs of the users, if the information produced is relevant, then the information will be useful. The relevance of the information for each user is different.

Point of Sales

Point of sales or abbreviated as POS in general can be interpreted as a system that allows the holding of the transaction process. POS can be used in all sales transactions such as restaurants, supermarkets, hotels, and retail stores. Therefore, POS can also be interpreted as a transaction service process in a retail store. Of all the definitions explained, it can be concluded that the point of sales can be interpreted as a system that allows the holding of transactions which include the use of the cash register.

According to Rokhman (2012), point of sales (POS) software is a software that is widely used in retail businesses such as supermarkets, mini markets, pharmacies, cafes, and others. In general the processes that are usually used at each point of sales system found in companies are as follows:

1) Point of sales (sales transaction)
2) Inventory control (Control of inventory)
3) Barcode reading
4) Store management
5) Sales Returns
6) Reporting

Framework and Preliminary Studies

In the study of Dahlia (2017), it found that convenience has an effect on user satisfaction. The ease of using an application is very helpful to users so that they feel satisfied in using the system. Because of the use and easy operation, users can maximize the use of an application and feel the benefits without the need for more effort. Point of sales applications make it easier for users to process sales transactions and encourage users to use these facilities because they are considered very helpful in completing work. This is
reinforced by the research conducted by Nilam (2016) that there is a relationship between ease of use and user satisfaction.

In the research of Ida Ayu (2017) shown that benefits have an effect on user satisfaction. Benefit perception is a level where someone believes that the use of a system will be able to improve performance, increase the level of productivity and effectiveness. Therefore, the level of perceived benefit of the application point of sales will affect the satisfaction of users to use the application. This is strengthened by the research conducted by Nilam (2016) that there is a relationship between convenience and user satisfaction.

In Taufik’s (2012) research found that the quality of information produced resulted in customer satisfaction. So much information is available now. With the highly developed information technology, it makes easier for people to find the information they need. The information produced is complete, relevant, accurate, timely and clearly presented, so users will feel satisfied. The quality of information influences satisfaction of use and will then have an impact on individual performance. Someone will use the system if they believe that the system is useful, and the quality will help them to complete their work. This is reinforced by the research conducted by Ni Made (2016) that there is a relationship between the quality of information and user satisfaction.

Based on the framework above, the hypothesis can be formulated as:

H1: There is a beneficial effect on user satisfaction of Point of sales for MSMEs in carrying out their business
H2: There is a positive influence on the user satisfaction of point of sales for MSMEs in carrying out their business
H3: There is an influence on the quality of information on the user satisfaction of point of sales for MSMEs in carrying out their business

3. Hypothesis

Type of Research

In this study the type of research used is a quantitative descriptive approach that will test information about the perception of MSMEs in the use of point of sales in carrying out their business activities.

Definition and Operationalization of Variables

This study is a causal research which is to find out the influence of one or more independent variables on dependent variables. For independent variables namely XI = Perceived Ease of Use, X2 = Perceived Usefulness (Benefits), X3 = Information Quality, while the dependent variable is Y = Point of Sales user satisfaction.
Population and Research Samples

The populations in this study are all MSMEs in the West Jakarta region based on PP 46/2013 as recently amended by PP 23/2018, criteria for MSMEs having a turnover of 4.8 billion a year and MSMEs in the form of bodies or companies. Based on tax data from West Jakarta Regional Office 2016, the number of West Jakarta Agency MSMEs is 79,888 MSMEs.

The samples are some of the members of the population selected using certain processes so that they can represent the population. The sample selection method used in this study is the accidental sampling method which is the type of sample selection incidentally the researcher encountered if it is seen the subject that happened to be found is suitable for the data source. The sample that will be taken by the researcher is the user of point of sales in SMEs engaged in food, amounting to 100 respondents.

4. Conclusions

Based on the phenomenon, statements of the problem, research hypothesis and the result of study, the conclusion can be formulated as follows:

1. The results of the first hypothesis testing indicate that perceived usefulness has a significant positive effect on ERP user satisfaction in PT Aggiomultimex. ERP User Satisfaction in PT Aggiomultimex shows the higher the perceived usefulness of ERP users, the more satisfaction in using the ERP. It is because when the system is considered useful, the intensity in terms of use will increase so that PT Aggiomultimex's productivity and performance will be good.

2. The results of the second hypothesis testing show that perceived ease of use has a significant positive effect on ERP user satisfaction in PT Aggiomultimex. ERP user satisfaction is not only caused by an increase in perceptions of its benefits, but also in relation to the increased perception of ease of use of the system, so that the easier the system is used, the more satisfied the ERP user is. Because when the users find it easy to access the system, it is easier for them to carry out their work.

3. The results of the third hypothesis testing show that the Quality of Accounting Information (KIA) has a significant positive effect on ERP user satisfaction in PT Aggiomultimex. In this case, when the quality of accounting information at PT Aggiomultimex is produced as needed, and it can be used as a source of information in decision making in ERP implementation, the user will be satisfied in carrying out his business activities.

5. Suggestion

Based on the conclusions of the study that perceived usefulness, perceived ease of use, and the quality of information have significant influences to the ERP user satisfaction in PT Aggiomultimex, the following number of things are suggested as considerations that can improve the ERP user satisfaction:

1. The company should conduct trainings to encourage employees' innovation in their work so that it is more detailed in the use of ERP. Then, the company should also carry out regular evaluation for each unit work related to ERP users in the company, so ERP will be considered easy and useful in business activities at PT Aggiomultimex.

2. The company should maintain the quality of the accounting information system that helps in presenting accounting information and finding solutions to inefficiencies in PT Aggiomultimex; and also in making easier for leaders to make decisions and policies, so that the quality of the accounting information is acceptable.

3. The company should consider administrative business, such as correspondence, HR, finance, production, HRD, and other divisions, because after all a system is well built, when the administration is good, and it can be a backup, and it can provide high information value when needed.

References


