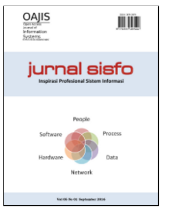
OAJIS
Open Access
Journal of
Information
Systems
www.is.its.ac.id/pubs/oajis/

SISFO
Inspirasi Profesional Sistem Informasi

Jurnal SISFO Vol. 09 No. 03 (2020) 01–10



The Effect of User's Experience, Characteristics, and Satisfaction Toward the Adoption of ERP

Yanuandika Akbar Shidqi[a], Mahendrawathi ER[a,*], Bambang Widjanarko Otok[b]

[a]*Department of Information Systems, Institut Teknologi Sepuluh Nopember, Surabaya 60111, Indonesia*
[b]*Department of Statistics, Institut Teknologi Sepuluh Nopember, Surabaya 60111, Indonesia*

Abstract

ERP is a set of module-based software coordinating various functional units within an organization. Many companies have dedicated significant organizational resources for ERP projects. However, many unexpected challenges in ERP projects can cause failure. Previous studies have investigated the relationships between ERP user's characteristics, experience, and satisfaction independently. This research attempts to investigate the effect of the three factors simultaneously on the success of ERP adoption through a quantitative study. A survey is conducted on ERP users of three state-owned companies in Indonesia. In total, 102 responses are obtained and analyzed. The results showed a significant relation between users' experience and satisfaction, which means that the users' experience had a vital role in increasing user satisfaction. However, users' characteristics have a non-significant relationship with users' satisfaction. None of the user's characteristic indicators provide enough information to measure the users' satisfaction with ERP. There is a positive and significant effect between user satisfaction, measured from content, format, timeliness, and user convenience, and ERP success. The ERP success is measured in three indicators: supports organizational activities, stakeholder satisfaction, and system acceptance. The results indicate that users tend to be satisfied using ERP because ERP provides the required information accurately.

Keywords: User characteristic, user experience, user satisfaction, the success of ERP adoption

Article History : Received 16 April 2020 ; Revised 01 June 2020; Accepted 01 June 2020; Available Online 17 June 2020

1. Introduction

Enterprise Resource Planning is a software that supports various functions in an organization, such as logistics, planning, finance, manufacturing, procurement, human resources, project management, distribution, accounting, and maintenance services. ERP is a module-based software package, which coordinates the functional units within an organization. ERP is defined as a holistic enterprise management solution developed to provide flexible access to information with all departments within the organization [1]. Over the past few years, companies in developing countries have implemented enterprise resource planning (ERP) systems. Despite the various benefits promised by the ERP system, its adoption and applications often face problems [2].

More and more companies have adopted ERP systems [3]. ERP systems are often associated with fundamental changes to organizational processes involving various stakeholders. Companies have to dedicate organizational resources to conduct ERP projects. However, the ERP project often faces unforeseen challenges that lead to failures. The problems that the organization must face relate to changes in the structure, goals, processes, and technology. Although ERP systems have technically been implemented successfully, the success of ERP adoption may depend on the employees who use the system [4].

Several studies on ERP have investigated the user's aspect of ERP implementation. Research by [4] and [5] found that user characteristics relate to user satisfaction. In the ERP system, user satisfaction refers to the feeling of the user

*Corresponding author
Email address: mahendra_w@is.its.ac.id (Mahendrawathi ER)
https://doi.org/10.24089/j.sisfo.2020.05.001 (DOI)

that ERP software can meet their needs. The research by [4] investigates key factors on ERP user satisfaction and finds out whether ERP user satisfaction varies between different user profiles. The results showed that younger ERP users feel more satisfied with the ERP system. Also, ERP users who have more IT experience and more educated have higher satisfaction with ERP software. However, this research did not find differences in satisfaction between male and female users.

Another research discussed user satisfaction with ERP success [6] and [7] explains ERP success. [6] studied the effects of various successful implementation strategies, including training, supportive leadership, and ease of use through the mediating effect of user satisfaction. Research conducted by [6] shows that employees with fewer tenure indicate greater acceptance of the new ERP system than employees with tenure of 11 years or more.

The worker is a factor that influences ERP implementation. Organizations with young employees are easier to implement ERP systems than organizations that have older employees because they have a higher level of ownership. It is found that enthusiasm and interest in new technology tend to diminish during the implementation process because employees obtain more direct experience and information [8].

There are also streams of research that relate the user's experience to user satisfaction. The definition of ISO shows that the user's experience is similar to the user's satisfaction. A survey at Nokia showed that user experience is interpreted similarly to usability, with the addition of hedonic anticipation and response. Some aspects of user experience include user emotions, beliefs, preferences, perceptions, physical and psychological responses, behaviors, and achievements that occur before, during, and after use [7]. The attraction is the impression of the product that consists of pragmatic and hedonic qualities. Pragmatic quality is an aspect of task-oriented quality, such as efficiency, learning ability, etc. Hedonic quality is an aspect of quality that is not task-oriented, such as stimulation and aesthetic impressions. Developers, managers, and feedbacks from users are needed to optimize the product. Besides the underlying quality of the software, usability and user experience are essential properties to improve a product. Usability is well known, and it can be tested by conducting software usage tests or comments from experts. In contrast, user experience illustrates the overall impact of the product on end-users [8].

Experienced users accept new technology easier than inexperienced ones. According to Davis, as quoted by [9], users can tolerate difficulties in interacting with complicated ERP features if they obtain benefits from it. When users have fundamental knowledge about ERP, they can begin to accept it. The knowledge of ERP affects the user's perception that eventually renders the software easy to use. If the user can apply ERP knowledge, they can carry out the task more easily.

Several previous studies conducted by [5], [4], [10] and [11], observed user experience, user characteristics, user satisfaction, and ERP success separately. Research by [12] did not link user satisfaction with ERP success. Meanwhile, [5] and [4] have not explained the relationship between user satisfaction and ERP success. It is necessary to know the relationship between all these variables to get more comprehensive insights into aspects that affect the success of ERP implementation. This research will empirically explain and complement the models and variables of previous studies conducted by [12].

2. Related Work

Dezdar (2012) investigates whether ERP user satisfaction varies between different user profiles [4]. The aim of this research is twofold: 1) to measure ERP user satisfaction using eight items of satisfaction measurement adopted from previous studies, and 2) to test the level of satisfaction among ERP users with four different characteristics, i.e., age, gender, education, and IT experience. The results of this research show that younger ERP users tend to be more satisfied with the ERP system. Besides, ERP users with more experience in IT and also more educated users have more satisfaction with ERP software [4].

Research conducted by Ioannis and Theodoros (2010) aims to connect the user and their characteristics with the success of ERP implementation and operation [5]. This research is also to understand the factors that influence ERP user satisfaction and to validate the proposed framework model. The research uses a pilot survey with 300 questionnaires sent to ERP users, and 250 people responded. The results found that there are no human sociodemographic characteristics that affect ERP user satisfaction. Usefulness and self-efficacy are the main keys to ERP user satisfaction.

Masa'deh and Almajali (2016) studied the effects of successful implementation factors, which consist of training, supportive leadership, and ease of use through the mediating effect of user satisfaction [6]. The questionnaire is distributed to ERP users in Jordanian health organizations, and 175 responses were collected. The results are analyzed using structural equation modeling. It was found that the variables of training, supportive leadership, ease of use, and user satisfaction play an important role in ERP success.

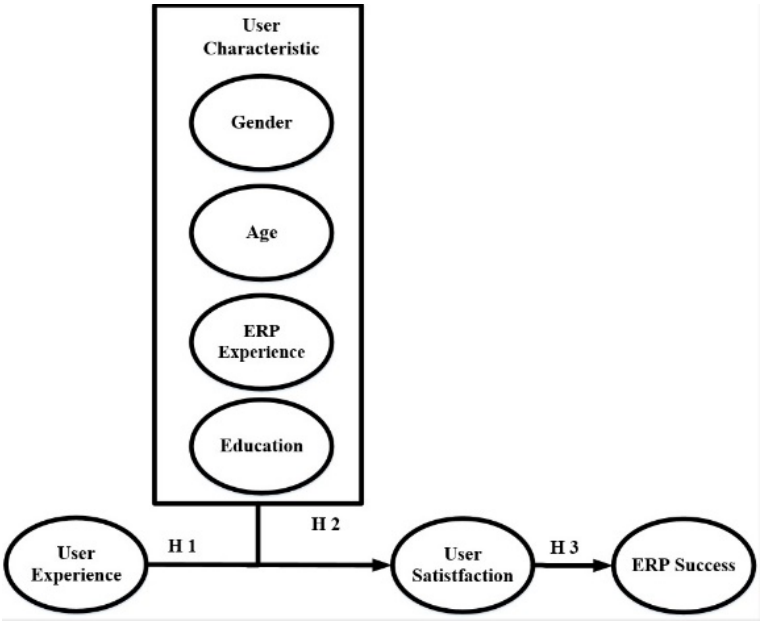


Fig. 1. Conceptual Model

Srite and Jones (2010) aims to observe how the nature of the implementation team influences the success of ERP adoption [7]. This research used a field study and a qualitative approach to investigate the role of implementation team attributes in ERP system adoption. ERP Project success was assessed based on three specific factors: the support of organizational activities, stakeholder satisfaction, and system acceptance.

According to Davis, as quoted by Bevan (2009), users could accept difficulties interacting with complicated features if they benefit from ERP [9]. Having background knowledge about ERP can affect the user's perception, which makes the software easier to use. If the user can apply ERP knowledge, it will be easy to do the task [9].

User characteristics and user experience have a relation toward the user satisfaction variable, which refers to the research conducted by Badran and Al-Haddad (2018) [12]. This study aims to determine the effect of user experience variables (utility, usability, aesthetics, identification, and value) on smartphone customer satisfaction in Jordan. The user experience indicators are developed from Soegaard and Dam's research. The demographic factors with indicators of gender, age, years of experience, education refer to the encyclopedia of human-computer interaction and demographic factors in Venkatesh. The study population consists of Smartphone OS (iOS & Android, etc.) users in carefully selected companies and educational institutions (schools & colleges). Users and customers in Jordan are classified into three categories regarding gender, age, and qualifications and educational experience. Researchers distributed questionnaires in private, and others were contacted via email and social media using Google documents. Questionnaires for each category are distributed separately. Due to time constraints, a sample consisting of (500) questionnaires was distributed to all levels of users. The number of questionnaires returned was 410, and 17 questionnaires are omitted. Thus, 393 questionnaires were analyzed using simple and hierarchical statistical regression analyzes with a response rate of 78.6%.

3. Methodology

3.1. Conceptual Model

The researcher builds a conceptual model from several previous studies to solve the problem. Research conducted by [4] and [5] found that user characteristics have a relationship with user satisfaction. Previous studies have not explained the relationship between user satisfaction and ERP success. [7] [6] research shows that the main variable of user satisfaction is related to ERP success. The development of the research model used refers to [12], and the main variables are user characteristics, user experience variables, and user satisfaction variables. The conceptual model is shown in Fig. 1.

3.2. Conceptual Model

The first hypothesis is about the relation between user experience and user satisfaction. Previous research [4], [5], and [12] argue that user experience influences user satisfaction. The researcher wants to test and prove further the effect of user experience factors (utility, aesthetics, identification, value, and novelty) on user satisfaction.

Hypothesis 1: There is no statistically significant effect on the relation between user experience toward user satisfaction.

The second hypothesis observes the relation between user characteristics toward user satisfaction. Previous research show that user characteristics influence user satisfaction. This research aims to prove the relationship between user characteristics including gender, age, experience, and education [4], [11] and [12] on user satisfaction [4], [5] and [12].

Hypothesis 2: There is no significant change statistically in the relation between user experience and user satisfaction due to differences in user characteristics.

The third hypothesis observes the relation between user satisfaction toward the success of ERP. Previous researchers highlight the relation between user satisfaction on ERP success. This study aims to observe further about user satisfaction content, format, timeliness, accuracy, and ease of use [5] and [12], which can be a factor in ERP success.

Hypothesis 3: There is no significant effect statistically on the relationship between user satisfaction toward ERP success.

3.3. Measure

An instrument is a tool used to collect data in an assessment and research. This instrument is a measurement tool to obtain quantitative and qualitative information about objective variations in the characteristics of research variables. The instrument plays an important role in determining the quality of research and assessment. The function of the instrument is to reveal facts into data.

Data is the depiction of the variables studied and served as a means of proving a hypothesis. The truth of the data depends on the quality of the data collection instruments. Quantitative data is data in the form of numbers [13]. The instrument used in this research is adopted from the literature discussed previously. The questions in the research questionnaire based on latent variables (construct), manifest variables (indicators), and measurement items (sub-indicators) are shown in Table 1.

3.4. Sample and data collection

The objects of this study are three state-owned companies. The criteria for choosing the object of study is the company must have implemented ERP for over a year. that have implemented ERP: PT SIG, PTPN X (Persero), and PT. Y (Persero). The selected respondents were employees in these three companies, more specifically, employees who have used ERP. In this research, the questionnaires were distributed to Processing, Engineering, Accounting and Finance, Plants, Marketing and sales, IT units. In total, 102 responses are obtained.

4. Result and Discussion

4.1. Descriptive analysis

Descriptive analysis was conducted by describing data based on the tendency of respondents' responses to question items related to indicators of the research variables. Despite sending the questionnaire to various functions, we do not compare the results obtained from different functions because it is not the focus of this study. The research consisted of 4 (four) variables, 17 indicators, and 30 statement items. The descriptive analysis is shown in Table 2.

In table 2, the mean value is known as the result of the total data obtained from respondents in each variable, then divided by the number of respondents. While the standard deviation is how far the data varies with the average value. The greater the standard deviation, the more varied the data. Conversely, if the standard deviation is much greater than the mean, then the mean is a poor representation of the aggregate data. Whereas if the standard deviation is very small compared to the mean, the mean value is a good representation that can be used as a representation of the whole data [13].

The descriptive analysis is conducted on 102 respondents. Concerning respondent characteristics, 1 represents males (x2.1) and 2 for females (x2.2). ERP experience and age as a moderating variable were divided into several scales: < 30 years, 31-40 years, 41-50 years, 50 years and above. In the end, the research respondents obtained were mostly under the age of 40 years. This affects the results, which will be described later. Concerning the ERP

Table 1. Question Item

User Characteristic			
Indicator		Measurement Item	Source
Gender	X 2.1	Male	Dezdar, 2012;
		Female	Mitakos, 2010;
Age	X 2.2	<30 years old	(Dezdar et al., 20012);
		31-40 years old	(Mitakos et.al, 2010);
		41-50 years old	(Badran, 2018)
		<50 years old	
ERP Experience	X 2.3	<3 years	
		3-5 years	
		6-10 years	
		>10 years	
Education	X 2.4	High school	
		Bachelor	
		Master	
		Doctor	
User Experience			
Indicator		Measurement Item	Source
Utility	X1.1	Is ERP Reliable?	Mitakos, 2010;
	X1.2	Are users suitable to use ERP?	Dezdar, 2012;
Usability	X1.3	Is it simple to use ERP?	Almaji, 2016
	X1.4	Does the user interface look organized?	
Aesthetics	X1.5	Is it possible to use ERP pleasantly?	
	X1.6	Is it interesting to use ERP?	
Identification	X1.7	Do users feel good about using ERP?	
	X1.8	Do users feel that it is important to use ERP?	
Value	X1.9	Do users often use ERP?	
	X1.10	Can users carry out their work without using ERP?	
User Satisfaction			
Indicator		Measurement Item	Source
Content	Y1	Can ERP provide the right information?	(Mitakos et al., 2010);
	Y2	Can ERP provide enough information?	(Dezdar et al., 20012);
Format	Y3	Is the information presented by ERP easy to understand?	(Almaji, 2016)
	Y4	Is the information provided by ERP clear?	
Timeliness	Y5	Does ERP provide the information you need on time?	
	Y6	Does ERP provide the latest information?	
Accuracy	Y7	Do users feel the information displayed by ERP as appropriate?	
	Y8	Are you satisfied with the accuracy of the ERP?	
Ease of use	Y9	Is the ERP application easy to use?	
	Y10	Is the ERP application user-friendly?	
ERP Success			
Indicator		Measurement Item	Source
Support on Organizational Activities	Z1	ERP conveys what the company needs to support the organization's activities.	(Almaji, 2016);
	Z2	ERP provides the system functionality needed in an organization.	(Mitakos et.al, 2010);
Stakeholder Satisfaction	Z3	ERP implementation runs according to the specified budget and time.	(Rothenberger, 2010)
	Z4	ERP allows the Organization to proceed with the desired reengineering initiatives.	
System acceptance	Z5	ERP user involvement and user participation result in success.	
	Z6	Users who have used ERP find opportunities to use and obtain information to help in decisions that they did not have before.	

Table 2. Descriptive Statistics.

	N	Mean	Std. Deviation
X2.3	102	1.8529	0.91627
X1.1	102	3.8333	0.8335
X1.2	102	3.7549	0.86099
X1.3	102	3.2157	1.04006
X1.4	102	3.4902	0.85301
X1.5	102	3.5098	0.85301
X1.6	102	3.5294	0.9303
X1.7	102	3.6373	0.76804
X1.8	102	3.8137	0.76728
X1.9	102	3.7647	0.82266
X1.10	102	2.9118	1.11784
Y1	102	3.6471	0.77902
Y2	102	3.5882	0.88276
Y3	102	3.3824	0.94444
Y4	102	3.4412	0.88523
Y5	102	3.5098	0.74122
Y6	102	3.6078	0.77276
Y7	102	3.549	0.8038
Y8	102	3.5588	0.80313
Y9	102	3.2353	1.00668
Y10	102	3.2059	1.03731
Z1	102	3.6765	0.78553
Z2	102	3.6569	0.8501
Z3	102	3.3235	0.85783
Z4	102	3.4216	0.83768
Z5	102	3.598	0.79925
Z6	102	3.6569	0.82648

experience, the results obtain an average value of 3.5 and above. The result in terms of usability tends to be neutral, with an average value of 3.5 and below. The average value of user satisfaction is around 3.5 and above, which means the users tend to be satisfied with the ERP. In terms of user convenience, respondents tend to be neutral, with an average value of 3.5 and below. Respondents convey ERP success with an average value of around 3.5, which means success in ERP adoption. Respondents tend to be neutral concerning stakeholder satisfaction with an average value of 3.5 and below.

4.2. PLS Analysis

The first evaluation of the result of Partial Least Square Path Modeling is evaluation toward the measurement model.

1. Outer Model

Measurement model evaluation or outer model includes an examination of convergent validity and discriminant validity for all questionnaire data whose values are obtained from the PLS Algorithm and Bootstrapping on SmartPLS 3.2. The following is a Bootstrapping 1500 Path diagram, as shown in Fig. 2.

As shown in table 3, it can be seen that all indicators are declared valid except X1.10. In addition to the loading factor value X1.10, each indicator in the original sample column is $(O) > 0.5$ while X1.10 original sample value is $(O) < 0.5$. Thus, the indicator is invalid. Also, valid indicators can be seen from validation through t-statistics compared to t-table values. The values in the t-statistics column must be ≥ t-tables. A significance level of 5% is used in this study. For df value is the number of respondents minus the number of variables (independent and dependent). In this research, there were four variables. The number of respondents in this research was 102 ERP users, then df = 102-4 = 98 with a significance level in two-tailed testing (two tails) 0.05. Thus, the t-table is 1.984. All indicators of variable t-statistics are greater than t-tables (t-statistics > 1,984). All variables are valid except for X1.10, which obtain (t statistic < 1.984).

2. Inner Model

Structural model evaluation (Inner model) was used to measure the relationship between independent and dependent variables in the variants or used to show the strength of relationships between variables.

Based on table 4, it is obtained that the path coefficient value of the variable had a significant effect because the value of t-statistics (can be seen in the column t-statistics) ≥ 1.984, namely X1, Y is significant. However, the

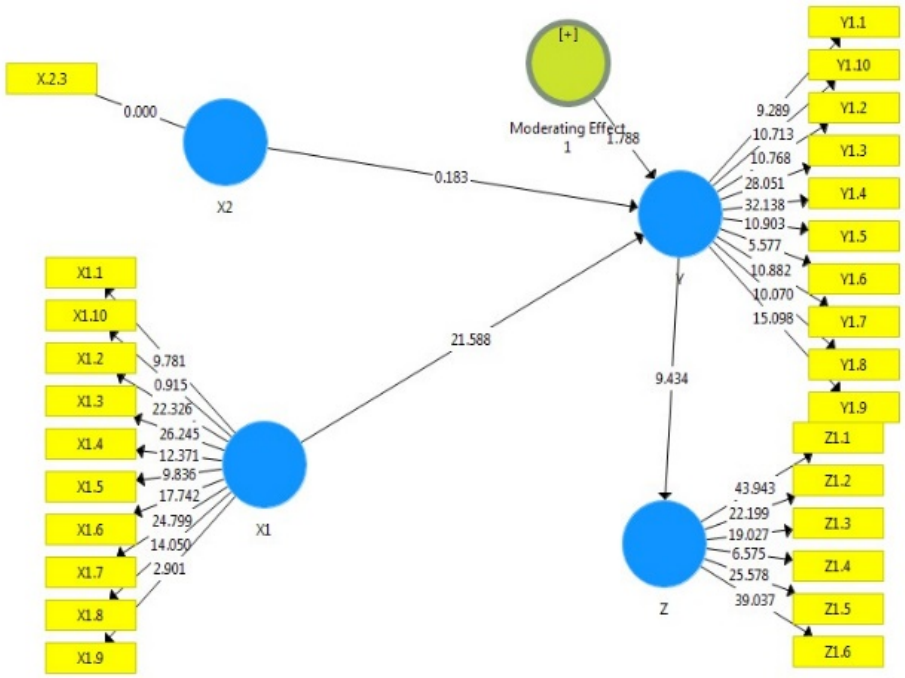


Fig. 2. Path diagram

moderation variables X2 and X2 are not significant because the value of t-statistics ≤ 1.984 and p value > 0.05. Thus, it can be seen that the relationship between user characteristics variables to user experience is not statistically significant. User experience has a significant relation to user satisfaction, and the relation of user satisfaction to ERP success is significant.

4.3. Hypothesis Analysis

Hypothesis 1: there is no significant effect statistically in the relation between user experience toward user satisfaction.

The significance assessment of the path coefficient can be seen from the value of the t-test ≥ t-table (t-statistic ≥ 1.984). When viewed from table 4, it can be seen that the path X1 → Y obtain the t-statistic of 21,588 is greater than t-table (21,588 > 1,984). It can also be seen that the p-value is 0. The magnitude of the relationship between variable X1 to Y can be seen in the original sample value is 0.803. This means that X1 has a positive relationship with variable Y. Based on this result, hypothesis 1 in this research is rejected. It can be concluded that the user experience has a positive and significant effect on user satisfaction.

Hypothesis 2: There is no significant change statistically in the relation between user experience and user satisfaction due to differences in user characteristics.

Significance assessment of the path coefficient can be seen from the value of the t-test ≥ t-table (t-table = 1.984). When viewed from table 4, it can be seen that the path X2 → Y shows a statistical t value of 0.18, which is smaller than the t-table (0.18 < 1.984). This means that the variable X2 of user characteristics does not significantly affect the Y variable of user satisfaction, and it is confirmed by the value of p value > 0.05, which can be seen in the column value of the p-value of 0.855. The magnitude of the relationship of the variable X2 to Y can be seen in the original sample value column of 0.01. This means that X2 has a positive direction toward variable Y. Thus, from the results of this test, it can be concluded that user characteristics have a positive, and there is no significant effect on user satisfaction. Thus, hypothesis 2 in this research is accepted.

Hypothesis 3: there is no significant effect statistically in the relation between user satisfaction and ERP success.

Significance assessment of the path coefficient can be seen from the value of the t-test ≥ t-table (t statistic ≥ 1.984). When viewed from table 4, it can be seen that the path Y → Z shows a statistical the t-table of 9.43 is greater than t-table (9.43 > 1.984). This means that the Y variable of user satisfaction has a significant effect on the Z variable of ERP success, and it is confirmed by the value of p-value < 0,05 can be seen in the column value of the p-value of 0. The magnitude of the relationship of the variable Y → Z can be seen in the column of the original sample value

Table 3. Outer Loading.

Variables	Original Sample (*O*)	Mean	STDEV	T-Statistics	P Values
X.2.3 ← X2	1	1	0		
X1 ∗ X2 ← Moderating Effect X2	0.915	0.913	0.054	16.897	0
X1.1 ← X1	0.695	0.69	0.071	9.781	0
X1.10 ← X1	-0.129	-0.12	0.141	0.915	0.36
X1.2 ← X1	0.843	0.838	0.038	22.326	0
X1.3 ← X1	0.817	0.817	0.031	26.245	0
X1.4 ← X1	0.765	0.76	0.062	12.371	0
X1.5 ← X1	0.692	0.684	0.07	9.836	0
X1.6 ← X1	0.796	0.792	0.045	17.742	0
X1.7 ← X1	0.854	0.851	0.034	24.799	0
X1.8 ← X1	0.766	0.76	0.055	14.05	0
X1.9 ← X1	0.33	0.328	0.114	2.901	0.004
Y1.1 ← Y	0.699	0.694	0.075	9.289	0
Y1.10 ← Y	0.718	0.716	0.067	10.713	0
Y1.2 ← Y	0.698	0.696	0.065	10.768	0
Y1.3 ← Y	0.845	0.844	0.03	28.051	0
Y1.4 ← Y	0.863	0.863	0.027	32.138	0
Y1.5 ← Y	0.732	0.728	0.067	10.903	0
Y1.6 ← Y	0.658	0.653	0.118	5.577	0
Y1.7 ← Y	0.708	0.706	0.065	10.882	0
Y1.8 ← Y	0.779	0.777	0.077	10.07	0
Y1.9 ← Y	0.754	0.752	0.05	15.098	0
Z1.1 ← Z	0.91	0.91	0.021	43.943	0
Z1.2 ← Z	0.875	0.87	0.039	22.199	0
Z1.3 ← Z	0.833	0.832	0.044	19.027	0
Z1.4 ← Z	0.692	0.686	0.105	6.575	0
Z1.5 ← Z	0.873	0.871	0.034	25.578	0
Z1.6 ← Z	0.897	0.896	0.023	39.037	0

Table 4. Path Coefficient.

Variables	Original Sample (*O*)	Mean	STDEV	T-Statistics	P Values
Moderating Effect X2 → Y	-0.143	-0.142	0.08	1.788	0.074
X1 → Y	0.803	0.819	0.037	21.588	0
X2 → Y	0.01	0.007	0.056	0.183	0.855
Y → Z	0.69	0.699	0.073	9.434	0

of 0.69. This means that Y has a positive relationship with the variable Z. Therefore, from the results of this test, it can be concluded that user satisfaction has a positive and significant effect on ERP success. Thus, hypothesis 3 in this research can be accepted.

4.4. Practical Implication

Based on the findings of the research, several points can be made:

1. The effect of user experience and user satisfaction

A positive and significant effect is found between user experience and user satisfaction. It means that respondents tend to be satisfied to use ERP by taking into account indicators of utility, usefulness, aesthetics, identification, and value. From the five indicators above, the aesthetic indicator has the main effect in using ERP that is pleasantly seen from the mean of respondents' responses. This confirms previous research conducted by [12], who explains that aesthetics become an indicator with high results in the relationship of user experience toward ERP success.

2. The effect of user characteristics and User satisfaction

User characteristics have a negative and insignificant effect on user satisfaction, so the user's characteristics do not affect ERP user satisfaction. This is because the results did not provide enough information to see satisfaction with ERP at the 5% level. The work experience variable is still disturbed by the effects of user characteristics. Three indicators are invalid, including gender, age, and last education. This also confirms the previous research conducted by [5], which found no human sociodemographic characteristics influence user satisfaction.

3. The effect of user satisfaction and ERP Success

There is a positive and significant effect between user satisfaction, measured from content, format, timeliness, and user convenience, and ERP success. The results indicate that users tend to be satisfied using ERP because ERP provides the required information accurately. The ERP success is measured in three indicators: supports organizational activities, stakeholder satisfaction, and system acceptance. Indicators of support for organizational activities have a major influence on satisfaction using ERP. This means that ERP can convey what the company needs. The findings are in line with previous research conducted by [7], which explains that the ability of ERP to support organizational activities affect ERP success.

ERP is well-known as complex integrated software. Thus, many research indicate that inexperienced and older users will find it difficult to adopt ERP systems [6]. This is the background for the inclusion of ERP users' age and experience as moderating variables in this research. The age of respondents was divided into < 30 years, 31-40 years, 41-50 years, 50 years and above. However, in the end, the respondents obtained were mostly under the age of 40 years. This affected the results, which show that the moderating effect of age and experience does not affect the user experience. In subsequent research, the distribution of questionnaires needs to be more detailed in the range. The population is a generalization area that consists of objects or subjects which have certain qualities and characteristics determined by researchers to be studied and conclusions drawn. While the sample was part of the number and characteristics possessed by the population. The sample results distributed to 3 companies that have limited results. Future research can be added to the sample with companies from various sectors. Self-efficacy variables and perceived usefulness variables from [5] and training variables from [6] can be included in further research to obtain deeper insights on the factors that influence the success of ERP.

5. Conclusion

From the results of descriptive analysis, respondents are neutral regarding user experience in terms of usability and value, tend to agree in terms of user convenience, and tend to be neutral with ERP adoption. Descriptive analysis regarding the success of ERP adoption are respondents tend to be neutral in terms of stakeholder satisfaction. In the general model, the relationship between user experience and user satisfaction is significant. It means that user experience has a very strong role in increasing ERP satisfaction. The effect of user characteristics with user satisfaction is found to have an insignificant relationship because each indicator does not provide enough information to examine the satisfaction of ERP. The relationship between user satisfaction and ERP success is positive and significant. User satisfaction is measured from content, format, timeliness, and user convenience while the ERP success is measured in three indicators: supports organizational activities, stakeholder satisfaction, and system acceptance. The results indicate that users tend to be satisfied using ERP because ERP provides the required information accurately.

References

[1] E. W. Chan, D. H. Walker, A. Mills, Using a km framework to evaluate an erp system implementation, Journal of Knowledge Management 13 (2) (2009) 93–109. doi:10.1108/13673270910942727.

[2] S. Dezdar, S. Ainin, Examining erp implementation success from a project environment perspective, Business Process Management Journal 17 (6) (2011) 919–939. doi:10.1108/14637151111182693.

[3] M. Mayeh, T. Ramayah, A. Mishra, The role of absorptive capacity, communication and trust in erp adoption, Journal of Systems and Software 119 (1) (2016) 58–69. doi:10.1016/j.jss.2016.05.025.

[4] S. Dezdar, User satisfaction issues in erp projects, International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering 6 (8) (2012) 2277–2280.

[5] T. Mitakos, I. Almaliotis, A. Demerouti, An auditing approach for erp systems examining human factors that influence erp user satisfaction, Informatica Economica 14 (1) (2010) 78–92.

[6] D. A. Almajali, R. Masa'deh, A. Tarhini, Antecedents of erp systems implementation success: a study on jordanian healthcare sector, Journal of Enterprise Information Management 29 (4) (2016) 549–565. doi:10.1108/JEIM-03-2015-0024.

[7] M. A. Rothenberger, M. Srite, K. Jones-Graham, The impact of project team attributes on erp system implementations: A positivist field investigation, Information Technology & People 23 (1) (2010) 80–109. doi:10.1108/09593841011022555.

[8] I. Mahmud, T. Ramayah, S. Kurnia, To use or not to use: Modelling end user grumbling as user resistance in pre-implementation stage of enterprise resource planning system, Information Systems 69 (1) (2017) 164–179. doi:10.1016/j.is.2017.05.005.

[9] N. Bevan, What is the difference between the purpose of usability and user experience evaluation methods?, in: UXEM'09 Workshop, INTERACT 2009, Uppsala, 2009.

[10] M. Rauschenberger, M. Schrepp, M. P. Cota, S. Olschner, J. Thomaschewski, Efficient measurement of the user experience of interactive products. how to use the user experience questionnaire (ueq).example: Spanish language version, International Journal of Interactive Multimedia and Artificial Intelligence 2 (1) (2013) 39–45. doi:10.9781/ijimai.2013.215.

[11] C. A. Rajan, R. Baral, Adoption of erp system: An empirical study of factors influencing the usage of erp and its impact on end user, IIMB Management Review 27 (2) (2015) 105–117. doi:10.1016/j.iimb.2015.04.008.

[12] O. Badran, S. Al-Haddad, The impact of software user experience on customer satisfaction, Journal of Management Information and Decision Sciences 21 (1) (2018) 1–20. doi:10.1109/TKDE.2004.47.

[13] Sugiyono, Metode Penelitian kombinasi (mixed method), Bandung, Indonesia: Alfabeta, 2015.

This page is left intentionally blank