



THE INFLUENCE OF UTAUT ON ERP SYSTEMS IN START-UP BUSINESS

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ABSTRACT

The purpose of the study was to determine the effect of Unified Theory of Acceptance and Use of Technology (UTAUT) on the Enterprise Resource Planning (ERP) system on Intention Behavior at start up business. The research method is quantitative with the type of case study research. Based on the results of the analysis, the authors found that of all UTAUT variables studied, only Social Influence was not significant and other variables such as Performance Expectancy, Effort Expectancy, Facilitating Conditions and Significant Use Behavior. It was concluded that the use of the ERP system in startup business supports User needs.

Keywords: UTAUT, ERP, behavioral, intention, use behavior, start up, business

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1. INTRODUCTION

In the digital era as it is today, business development in Indonesia is growing rapidly. This is marked by the mushrooming of new businesses in the field of e-commerce and fin-tech (Finance Technology). So far, the definition of startup has never been formally defined. Startup is only synonymous with small companies that have innovative ideas and are closely associated with the term entrepreneur. One expert in the field of entrepreneurship; defines startup as a temporary organization formed with the aim of finding a repeatable and scalable business model.

The use of information systems in addition to providing many benefits, there are also organizations that fail in its application. Many system development projects have failed to produce useful systems. The failure of the application of information technology systems in organizations can be caused by several factors both internal and external. The decision to adopt an information technology system is in the hands of managers, but the successful use of the technology depends on the acceptance and use of each individual user (Hartono, 2007). System user behavior is formed from the attitudes and perceptions of users of the information system.

The use of a new system is not immune from a variety of haunting risks, unfamiliarity about the use of a new system is the first factor that becomes a barrier for system users so it takes several weeks to get used to it again besides that, there are many other risks that may not seen by management to users, thereby reducing the level of effectiveness of users in the use of a new system.

Because not all systems implemented by the company can run well, therefore the author wants to conduct a study by applying a new method that has been developed by Venkatesh et al, namely the Unified Theory of Acceptance and Use of Technology (UTAUT), this method is a combination of several methods have been developed in such a way as to obtain a useful purpose to find out how well the use of a new system can be accepted by a company.

In contrast to previous research conducted by Bierstaker Janvrin, and Lowe entitled: "What factors influence auditors' use of computer-assisted audit techniques?" In this study the authors only used only core variables without any moderation variables, namely Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions. This is because the use of the UTAUT method is only Partial which means that not all things in this theory are used in this study.

2. LITERATURE REVIEW AND HYPOTHESIS

2.1. Unified Theory of Acceptance and Use of Technology

[6] test the theory about technology acceptance by systems users [6] then use these theories for develops a joint model new integrated. Combined model (unified model) is then called with the name of the combined theory of acceptance and the use of technology (Unified Theory of Acceptance and Use of Technology (UTAUT). The research provides support strong empiricism of the UTAUT model which shows three important determinants towards the interest in using technology. These three important determinants are expectations performance (performance expectancy), expectations effort (effort expectancy), and influence social (social influence). Besides that, also found two determinants to behavior usage (usage behavior), i.e. interests (intention) and facilitating conditions (facilitating conditions). The UTAUT model has been used in research in various countries and different sample characteristics. Some research results using the model UTAUT, including [7], [8], [9], [10], and [3] support the main UTAUT model, though in research that has been done not all results are consistent with previous research. No the consistency of these studies due to differences in sample characteristics and differences in the context of technology systems researched information.

2.2. Enterprise Resources Planning

Understanding Enterprise Resource Planning (ERP) According to [11], ERP systems are the core software used by organizations to integrate and coordinate information in every business area. ERP systems help organizations in managing overall business processes using databases and reporting tools that can be used together.

According to [12], ERP is an inter-functional system of companies that is run by an integrated software module that supports the basic internal business processes of a company. According to [13], ERP systems are a collection of programs that are able to manage the company's business operations that are very important in all places and branches of a company. An ERP system can replace the role of several applications with a collection of integrated programs, making the system easier to use and more effective.

From the opinions above it can be concluded that ERP is an inter-functional system of a company that is run by using a core of software to integrate and coordinate information in every

business area by using the same database, thus enabling companies to manage business operations that are very important in all places and branch companies.

2.3. Performance Expectancy

Performance expectancy is defined as the level at which individuals believe that using this system will help achieve performance gains [14]. The use of Net Suite is expected to bring benefits to the work as it is easier and faster to do and complete the work that is there, because basically employees want to use an ERP system that can help improve performance in performing various tasks that are therefore Fabelio.com provide a system that is highly integrated and coordinated with each other in supporting the KPI of each employee, therefore the above hypothesis is formed.

H1: Performance expectancy influences behavior intention

2.4. Effort Expectancy

Effort expectancy is defined as the level of convenience associated with using the system. The level of ease associated with using the system [15]. Employees at Fabelio.com are expected not to require a lot of effort in learning Net Suite because all work expectations are hypothesized to increase the influence on employees' behavioral intentions in using the new ERP system. In addition, the company chose the new ERP system because the use of the system is relatively easy to use, thus reducing the time of adoption of the system which is usually quite long, so the above hypothesis is formed.

H2: Effort expectancy influences behavior intention

2.5. Social Influence

Social influence is defined as the extent to which a person feels that another important person believes that he must use a new system. The degree to which a person has feels that another important person believes that he must use a new system [16]. The use of this ERP system is first educated to the supervisor after the supervisor has mastered this system and will then teach it to the staff because of the demands of the work that requires using this system, the system of understanding given to employees with higher levels is expected to influence social, then form the above hypothesis by emphasizing how far the effects of social influence

H3: Social influence influences behavior intention

2.6. Facilitating Condition

Facilitating Conditions are UTAUT constructions that are considered to have a direct effect on technology adoption and are defined as the extent to which a person believes that organizational and technical infrastructure exists to support the use of the system. The degree to which a person believes that organizational and technical infrastructure exists to support the use of the system [17]. The use of the new ERP system is a major step made by the company to improve employee performance, with this system the company will modernize the level of facilities in the office in the form of work tools such as laptops and internet network enhancements in order to increase infrastructure evenly, therefore a hypothesis is formed above

H4: Facilitating condition influences behavior intention

2.7. Behavior Intention

Behavior Intention is defined by [18]. As the desire of consumers to behave in certain ways in order to own, dispose of and use products or services. So, employees can form the desire to find information, notify others about their experiences in using the new ERP system to other employees so that other employees want to be able to use this new ERP system, the tendency

that is owned by employees now is because they are afraid in advance to start and ashamed to ask about the use of a new system, but it can be overcome because the existing system already has a question and answer facility and should have an impact and share with fellow peers, therefore the above hypotheses were formed.

H5: Behavior intention influences use behavior

3. RESEARCH METHODOLOGY

3.1. Type of Research

This research is a quantitative research method with case study research. Data sources are primary and secondary data, primary data is entirely obtained from the research object and secondary data is obtained from the company database. Data collection is done by observing (observation), questionnaire and documentation. Determination of the sample is done by the Purposive Sampling method. Purposive Sampling is a sampling technique that uses criteria that have been selected by researchers in selecting sampling. Sample selection criteria are divided into inclusion and exclusion criteria.

3.2. Research Instrument

The research instrument in this study was a questionnaire, the questionnaire was obtained by the author by developing a questionnaire that was made by researchers from previous studies namely [19] and [20] in a work entitled analysis and evaluation of the use of knowledge management systems in the academic part of the university of Jakarta using the UTAUT method. The questionnaire development was carried out because the variables that the writer did more and the objects studied were far different.

The author makes the questionnaire by using the Google form and then filling in all questions in accordance with the existing variables, after the questionnaire is deemed completed the author distributes this questionnaire by sharing the link (site address of the questionnaire) to respondents who have been determined.

3.3. Data Analysis Method

After all the data needed by the author is obtained, then the next author will analyze and process the data so that the data obtained can be more easily understood and useful. We tested the validity of the questionnaire questions, to test whether the questionnaire questions truly represented the variables. Then we also conducted a reliability test to find out whether the answers from respondents were consistent or not. After the data recap, we have passed the two tests. We do hypothesis testing, namely by testing the coefficient of determination, and t test.

3.4. Population and Sample

The population in this study is employees of Fabelio, a start-up company in Indonesia, that in furniture industry. The sample is employees of Fabelio who worked in head office. The entire total of employees in head office is 105 people. We include all the population (census sampling). We address questionnaires to these respondents of 105 people employees.

3.5. Operation of Variables

These are the operation of variables based on and other previous research to measure the variables, presented in Table 1

Table 1 Operation of Variables

Variables	Dimension
Use behavior (Y) [5]	Affect toward use Frequency of use Use continuously
Behavior intention (Z) [9]	Intend to use Attitude belief Normative belief/perceived
Performance Expectancy (X1) [21]	Perceived usefulness Extrinsic motivation Job-fit
Effort Expectancy (X2) [2]	Perceived ease of use Complexity Ease of use
Social Influence (X3) [4]	Subjective norm Social factors Image
Facilitating condition (X4) [20]	Perceived behavioural control Provision of computer support Compatibility productivity

4. RESEARCH AND DISCUSSION

4.1. Identity of Respondent

The questionnaire was distributed to respondents, namely employees at Fabelio.com. The author distributes questionnaires using Google Form as the medium and gets 105 respondents from Fabelio.com employees. Here was the respondent demographic info:

Table 2 Identity of Respondent

Gender:	%	Work Length:	%
Male	72.4	3 months <	21.9
Female	27.6	3 - 6 months	12.4
Age:	%	7 - 12 months	22.9
18 - 22 years	16.1	> 1 year	42.9
23 - 27 years	70.5	Education:	%
28 - 32 years	12.4	High School	6.7
> 32 years	0.9	Bachelor	90.5
		Master	2.8

We can see from above that because of Fabelio is start-up new company; mostly the employees were less than 1 year. Other issues are that male employees are more than female, mostly young people work there (23 – 27 years), and the employees education mostly were bachelor.

4.2. Reliability Test

The reliability test results on each variable are obtained from the calculation using statistical software. With the explanation of the calculation as follows:

1. Cronbach’s alpha value is obtained by entering the value of each variable with a Likert scale and doing the calculations inside statistical software.
2. Reliability is the standard of Cronbach’s alpha results if you want to get reliable results that are worth 0.6.

Table 3 Identity of Respondent

Variables	Cronbach's Alpha
USE	0.722
BI	0.799
PE	0.814
EE	0.835
SI	0.724
FC	0.807

The results of the reliability test on each variable get reliable results because all have met the specified requirements. The results can be seen in the table above.

4.3. Validity test

Validity test results on each variable are obtained from the calculation using SPSS. [22] said that validity refers to the extent of the accuracy of a test or scale in carrying out its measurement function. With the explanation of the calculation as follows:

1. $R \text{ value calculated} > R \text{ table value} = \text{Valid}$
2. Calculation of the calculated R value is obtained by entering the value of each variable with a Likert scale and performing calculations in SPSS.
3. Calculation of the R table value is obtained in the following way: = Total number of Respondents - Number of questions per variable = N. Then look inside the distribution table R with N and $\lambda = 5\%$

Table 4 Identity of Respondent

USE		EE	
USE_1	0.35	EE_1	0.692
USE_2	0.447	EE_2	0.714
USE_3	0.44	EE_3	0.58
BI		SI	
BI_1	0.698	SI_1	0.473
BI_2	0.569	SI_2	0.541
BI_3	0.665	SI_3	0.39
PE		FC	
PE_1	0.507	FC_1	0.464
PE_2	0.57	FC_2	0.688
PE_3	0.627	FC_3	0.518

4.4. Coefficient Determination

The results of the coefficient of determination test on each variable are obtained from the results of calculations using SPSS. With the explanation of the calculation as follows:

1. The calculation of the determination coefficient test uses more than 1 variable; therefore, using the variable used in the table Adjusted R Square.
2. The calculated Adjusted R Square value is obtained by entering the value of each variable with a Likert scale and performing calculations in statistical software. In order to find out the magnitude of the influence of the variables x and y can be used with determinant coefficients.

Test results of coefficient of determination seen in table 4 using the Adjusted R Square value shows the results of 0.509 the value is multiplied by 100% so it produces a percentage of 50.9%. That number means that the variable performance expectancy, effort expectancy, social influence combined have an influence on Behavioral Intention in this study by 50.9% and the remaining 49.1% does not affect Behavioral Intention due to other factors not discussed in this study.

Table 5 Coefficient Determination I

Determination of Coefficient Test I				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.724 ^a	0,524	0,509	1,209

The test results of the coefficient of determination seen in table 5 using the Adjusted R Square value show the results of 0.632 times the value multiplied by 100% so that it produces a percentage of 63.2%. That number means that the Facilitating Conditions and Behavioral Intention variables combined have an effect on the Use Behavior in this study by 63.2% and the remaining 36.8% does not affect the Use Behavior due to other factors not discussed in this study.

Table 5 Coefficient Determination II

Determination of Coefficient Test II				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.800 ^a	0,639	0,632	1,704

4.4. Hypothesis Test

The results of multiple linear tests obtained through calculations, Hypothesis 1 to 3 uses Ordinary Least Square (OLS) I, while hypothesis 4 and 5 uses OLS II. The results are as follows:

X1 get the calculated T value of 4.072 and T table 1.660, and the significance value is below 0.05. This indicates that X1 is significant with Z. Performance Expectancy (X1) has the influence and significant impact on Behavioral Intention (Z) on the ERP system of Fabelio.com.

X2 gets the calculated T value of 2.474 and T table 1.660, and the significance value is below 0.05. This indicates that X2 is significant with Z. Effort Expectancy (X2) has the influence and significant impact on Behavioral Intention (Z) on the ERP system of Fabelio.com.

X3 gets the calculated T value of 1.134 and T table 1.660, and the significance value is above 0.05. This indicates that X3 is not significant with Z. Social Influence (X3) has no

influence and has no significant impact on Behavioral Intention (Z) on the Fabelio.com ERP system.

Table 6 Hypothesis Testing 1

Ordinary Least Square I						
Variable	T	T table	Results	P-Value	Standard P-Value	Result
PE (X1)	4.072	1.660	Significant	0.000093	0.05	Signifikan
EE (X2)	2.474	1.660	Significant	0.015010	0.05	Signifikan
SI (X3)	1.134	1.660	Not significant	0.259441	0.05	Not Signifikan

Dependent: BI

X4 gets the calculated T value of 4.912 and T table 1.660, and the significance value is below 0.05. This indicates that X4 is significant towards Y. Facilitating Conditions (X4) have an influence and have a significant impact on the Use Behavior (Y) on the Fabelio.com ERP System.

Z gets the calculated T value of 5.299 and T table 1.660, and the significance value is below 0.05. This indicates that Z is significant for Y. Behavioral Intention (Z) has an influence and a significant impact on the Use Behavior (Y) on the ERP System Fabelio.com.

Table 7 Hypothesis Testing 1

Ordinary Least Square II						
Variable	T	T table	Results	P-Value	Standard P-Value	Result
FC (X4)	4.072	1.660	Significant	0.000003	0.05	Signifikan
BI (Z)	2.474	1.660	Significant	0.000000	0.05	Signifikan

Dependent: USE

5. CONCLUSION

5.1. Conclusion

In accordance with the results of the discussion through the analysis of the ERP system at Fabelio.com, it can be concluded as follows:

The Performance Expectancy variable shows the significance of Behavioral Intention. It is means that the new ERP system at Fabelio.com, which is Net Suite, can help employees' performance in completing and completing each task more easily and quickly. Our result support [2] and [20].

Variable Effort Expectancy shows the significance of Behavioral Intention. Which means the level of ease in using the new ERP system at Fabelio.com, which is Net Suite, is very easy to use by Fabelio.com employees; this is evidenced by the ease with which employees adapt to the new system running 6 months. This is in line with [5], [20].

Variable Social Influence has no influence and does not have a significant impact on Behavioral Intention. Which means that the system of understanding provided to employees with higher levels is less socially influential, the supervisor who is expected to master this system first is less able to share knowledge with employees below. This result support [10], [17].

Variable Facilitating Conditions have an influence and have a significant impact on the Use Behavior. It is means that Fabelio.com has facilitated all of its employees with a fast internet connection and a capable work device to be able to access the new ERP system, which is Net Suite. This result support [4], [19].

Variable Behavioral Intention (Z) has an influence and has a significant impact on Use Behavior. It means that the features in the new ERP system Net Suite namely Ask Suite are useful because employees can better understand the ERP system by understanding the features themselves and form the intention of user behavior in using this system. Our result support [20], [21]

It can be concluded that the use of a new ERP system which is Net Suite on Fabelio.com supports the needs of Users. So according to the authors of the ERP system used affects the business processes that are running on Fabelio.com.

5.2. SUGGESTION

Based on the results of research conducted by the author of the ERP system on Fabelio.com this system has great potential to be developed for the better. Therefore the writer divides it into 2 suggestions:

Recommended for further research:

The author hopes that there will be a similar follow-up research so that it can compare the results of all the variables, whether there are still not significant ones.

The author hopes that further research will discuss the UTAUT 2 method because applying more variables will produce better evaluation results.

Recommended for Fabelio.com:

The author hopes Fabelio.com can use the results of this study as material for evaluation and consideration in the use of ERP systems.

The author hopes Fabelio.com can develop and improve the ERP system that has been thoroughly examined so that it can help users in running this ERP system for the better future.

The author suggests that Fabelio.com can develop variables that have significant value and stay focused on variables that have insignificant value.

The author recommends Fabelio.com to continue to use this ERP system because with this system Fabelio.com itself can measure the competence and performance of every existing employee so that it can ultimately improve and expand the existing business at Fabelio.com.

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