THE INFLUENCE OF ANTECEDENT FACTORS OF IS/IT UTILIZATION TOWARDS ORGANIZATIONAL PERFORMANCE A CASE STUDY OF IAIN RADEN FATAH PALEMBANG

RIKA KHARLINA EKAWATI
STMIK MDP
Rajawali Road No.14 Palembang 30113
INDONESIA
rikachan@stmik-mdp.net

ACHMAD NIZAR HIDAYANTO
Information Technology Magister Study Program
Faculty of Computer Science
University of Indonesia
Salemba Road No.4 Jakarta 10430
INDONESIA
nizar@cs.ui.ac.id

Abstract **:** Information technology is one thing that is important in supporting the operational success of an organization. In an uncertain environment, information is needed primarily to support the performance of organization in decision-making. Information Systems is an orderly combination of human, hardware, software and communication network of data resources, which collect, modify, and distribute information within an organization to support organizational decision-making and control. But before the IS/IT is implemented, it is worth considering the antecedent factors that may be used as reference to see the history before the IS/IT is implemented, whether antecedent factors of IS/IT implementation has correlation and influence on organizational performance. Antecedent factors consist of six aspects, which are social factors, attitudes, support conditions, system complexity, long-term consequences and habits. This study aims to find empirical evidence that there is correlation and influence between antecedent factors of IS/IT implementation and organizational performance. Using Pearson correlation analysis and Regression analysis for the testing, the results obtained showed that attitude, facilitating conditions and system complexity have correlation with organizational performance. Among these, only attitude and facilitating condition that influence organizational performance.

Keywords : - Information System, Information Technology, Antecedent Factors, Organizational Performance, Utilization Model.

1. INTRODUCTION

Information technology is one thing that is important in supporting the operational success of an organization, ranging from helping the development of new products to prividing market intelligence as tool of analysis in decision making. It is important for organizations with an increasingly global market that requires the organization to be well informed (Setianingsih, 1997). Hence the decision to invest in information technology becomes an important matter. This investment in aggregate are expected to increase overall organizational performance (Reich and Izak, 1996).

Study about the contribution of information systems on organizational performance and its contribution in achieving competitive advantage has been widely applied (Premkumar and King, 1992; DeLone and McLean, 1992; Raghunathan and Raghunathan, 1990). Utilization of IS/IT in organizations is one of the key to improve organizational performance.

Information technology nowadays has a very important role in several aspects of life in this country, including education. Digital era is blooming, and not just becoming a trend. It can be seen as most of the higher education institutions in Indonesia, both public and private, penetrate the virtual world in efforts to improve the quality of prospective graduates. Formal institutions in Indonesia attempt to utilize information technology in several activities, including learning activities.

College of IAIN or State Islamic Institute Raden Fatah Palembang, is one of educational institutions that try to implement IS/IT to support its activities. This study aimed to find the influence

of antecedent factors of IS/IT utilization on organizational performance.

Through this study we will observe whether IS/IT can improve productivity/employees' work speed. As already known, the process of manual work without the help of the IS/IT usually takes longer time. This study is expected to provide a view and input for IAIN Raden Fatah Palembang in order to see the impact that occurs when utilizing IS/IT for its employees.

2. RELATED WORKS

The user acceptance of new technology is often described as one of the earliest areas of research in the study of contemporary IS/IT. Research in this field has produced several theoretical models which are rooted in the field of IS/IT, psychology and sociology. There are at least nine theoretical models that have been produced so far.

Theory of Reasoned Action (TRA) was developed from social psychology that was introduced by Fishbein and Ajzen (1975). The theory was developed using the basic assumption that humans behave in a way that consciously and consider all available information. In this TRA, Ajzen (1980) states that the intention of someone to perform a behavior will determine whether or not they will perform the behavior.

Technology Acceptance Model (TAM) was designed by Davis (1989) for information systems contexts to predict the acceptance and implementation of information technology. The purpose of TAM is to provide explanation regarding the factors that determine the acceptance of computers (Davis et. Al., 1989).

Motivational Model (MM) was developed by Davis et. Al. (in Venkatesh et. al., 2003) to understand the new technology adoption and usage. MM uses two main constructs, namely Extrinsic Motivation (EM) and Intrinsic Motivation (IM).

Theory of Planned Behavior (TBP) is an extension of TRA by adding a new construct which is Perceived Behavioral Control (PBC). Ajzen (1991) reviewed several studies that successfully used to predict the destination of TBP utilization and behavior in various fields. Another model proposed by Taylor and Todd in 1995 (Venkatesh et. Al., 2003) is a combination of TAM and TBP.

Model of PC Utilization (MPCU) was developed based on the theory of human behavior that was introduced by Triandis (see Figure 1). This model was developed to predict the acceptance and usage of information technology by the user. There are six main constructs that used in this model (see Figure 2).

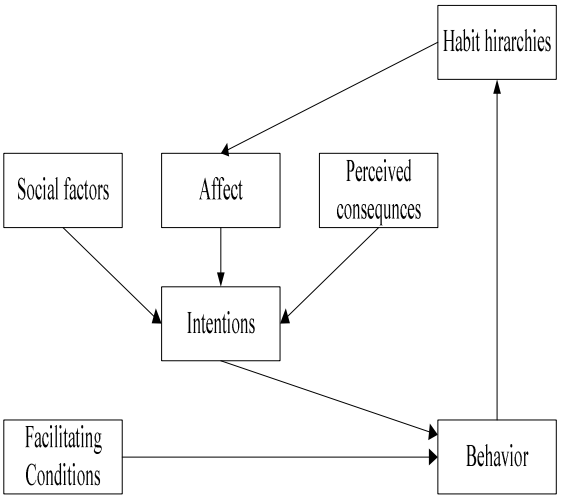

Figure 1 Triandis Model (Thompson et. al., 1991)

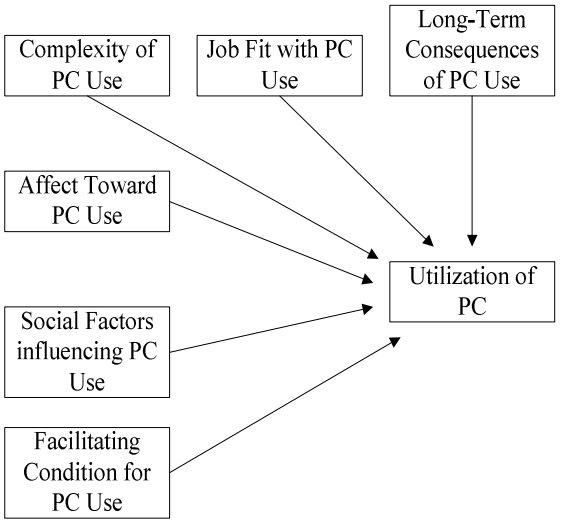

Figure 2 Model of PC Utilization (Thompson et. al., 1991)

Moore and Benbasat (1991) adapt theory of Innovation Diffusion Theory (IDT) to study the acceptance of technology by individuals. This model uses seven main constructs, which are Relative Advantage (RA), Ease of Use (EU), Image, Visibility, Compatibilty, Result Demonstrability, and Voluntariness of Use (Moore and Benbasat, 1991).

Bandura in 1986 (Venkatesh et. Al., 2003) proposed a model named Social Cognitive Theory (SCT). Compeau and Higgins (1995a) use and extend the SCT for the context of computer utilization. This model uses five main constructs, which are Outcome Expectations-Performance, Outcame Expectations-Personal, Self-efficacy, Affect, and Anxiety.

The last model developed by Venkatesh et. al. (2003) named Unified Theory of Acceptance and Use of Technologi (UTAUT). It is a combination of the above eight models.

3. RESEARCH DESIGN

3.1 Research Stages

Our research starts with the formulation of the problem. Second, we survey literature related to the problem to formulate the research construct. The next stage is to collect data obtained from questionnaires and interviews. The research hypotheses are proven through data analysis. Last, we conclude our research. Further data analysis can be done to see if there are any influences of IS/IT on organizational performance.

3.2 Research Variables

The following section presents the variables used for this research and their consideration. We adopt antecendent factors from several models that we consider suitable for our case.

3.2.1 Independent Variable

Independent variables or antecedent factors in this study is divided into six factors, which are social, attitute (affect), facilitating condition, supporting complexity, long-term consequences and habit.

a. **Social Factors**

Lim, et. al. (2002) finds that social factors affect the CEOs in using the NSS (Negotiating Support System). Use of MS-Exchange by hospital staff (Malhotra and Galletta, 1999), and the use of spreadsheets (Yang and Choi, 2001) are also influenced by social factors. Woon and Pee (2004) even found a significant relationship between social factors and the misuse of the Internet (Internet abuse) by the employee. In contrast, Davis et. al. (1989) reported that there was no significant correlation between social factors and usage of information technology. They argue that the use of system mandatorily or voluntary affects the correlation between social factors and usage of information technology.

b. Affect

Affect is *"feelings of joy, elation, or pleasure, or depression, disgust, displeasure, or hate associated by an individual with a particular act"* (Triandis, 1980 in Thompson *et. al.*, 1991). Technological aspects (such as high quality systems) greatly affect the user's attitudes (affect) on the system. User attitudes along with social factors and other situational factors will influence the intensity of the use of technology and ultimately will increase the usage of technology.

c. Facilitating Condition

Triandis (1980) in the Thompson et. al. (1991) states that behavior can not occur if there are no objective conditions that support it. Facilitating condition is defined as "objective factors, 'out there' in the environment, that several judges or observers can agree that it make an act easy to do" (Thompson et. Al., 1991). In the context of the usage of computer, computer is one of the types of facilitating conditions that may affect the usage of computer.

d. Complexity

According to Rogers and Shoemaker (1971) in Thompson et. al. (1991), complexity is defined as the relative level of innovation to understand and use a thing. If the usage of computers is seen in the context of adoption of innovation, so this result shows a negative relationship between complexity and system utilization. Referring to the complexity of these definitions, the term complexity is equal to the perceived ease of use (PEU) in the TAM, ease of use (EU) in the IDT, and effort expectancy (EE) in UTAUT (Venkatesh, 2003).

e. Long-term Consequences

Important factor affecting the behavior is the expected consequences of behavior (Triandis, 1980 in Thompson et. Al, 1991). According to Triandis, every action is perceived as the potential consequences that have value, along with a possibility that other consequences could happen. Long-term consequences are defined as the results obtained in the future, such as increased of flexibility, jobs changes or increase opportunity of meaningful employment.

f. Habit

Habit is important determinant of behavior. According to Triandis (1980) in the Thompson et. al. (1991), habit is the situation of a series of behaviors that happen without personal instruction. Individuals are usually not aware of this series. The previous study has shown that the habit is a strong predictor of behavior (Sugar, 1967 in Thompson et. Al., 1991).

3.2.2 Dependent Variables

Dependent variable in this study is the performance of the organization, which is IAIN Raden Fatah Palembang.

3.3 Population and Sampling

The population in this study is IAIN Raden Fatah Palembang employees who have five (5) Faculties: Shariah, MT, Adab, Da'wah and Usul al-Din. The sampling method of this study is Saturation Sampling. This method is used because the population is relatively small, so that all populations can be included as sample (Sugiono, 1999:61).

3.4 Data Collection

Data in this research is obtained by sending questionnaires to the respondents and conducted qualitative interviews with relevant parties. Interviews were conducted to obtain the correct view about individual perceptions, observe the vision/mission, strengths/weaknesses of the organization, and to know the expectations of individuals on the IS/IT in the future.

3.5 Hypothesis

There are two models of hypothesis that proposed in this study. The first hypothesis model (hypothesis model I) aimed to test whether antecedent factors of IS/IT utilization has a correlation with organizational performance. The formulation of hypothesis model I as follows:

Hypothesis 1_a:
Social factors have positive and significant correlation with organizational performance.

Hypothesis 1_b:
Affect has positive and significant correlation with organization performance.

Hypothesis 1_c:
Facilitating conditions that exist in the organization have positive and significant correlation with organizational performance.

Hypothesis 1_d:
Complexity has negative and significant correlation with organizational performance.

Hypothesis 1_e:
Long-term consequences have positive and significant correlation with organizational performance.

Hypothesis 1_f:
Habit has significant and positive correlation with organizational performance.

While in the hypothesis of the second model (hypothesis model II) we want to find how the antecendent factors of IS/IT utilization influence organizational performance. The formulation of a model II hypothesis as follows:

Hypothesis 2_a:
Social factors have significant influence on organizational performance.

Hypothesis 2_b:
Affect has significant influence on organizational performance.

Hypothesis 2_c:
Facilitating conditions within the company have significant influence on organizational performance.

Hypothesis 2_d:
Complexity has significant influence on organizational performance.

Hypothesis 2_e:
Long-Term consequences have significant influence on organizational performance.

Hypothesis 2_f:
Habit has significant influence on organizational performance.

3.6 Measuring Instrument Test

The quality of data generated from the use of research instruments can be evaluated through reliability and validity test. In validity test, questionnaire used as tool to collect data is being validity tested. Validity is a measure which indicates the level of validity of a research instrument.

Reliability is an index showing the extent to which the measuring instrument can be trusted or reliable. Reliability test was conducted to determine the internal consistency between variables within the instrument.

3.7 Data Analysis Method

Method of analysis used to test the hypothesis of this study is the analysis of Pearson's Correlation and Regression analysis. Pearson's Correlation Analysis is used to test the hypothesis of model I. The formula used to determine correlation (r) value is:

$$r = \frac{\frac{1}{N}\sum(x-\bar{x})(y-\bar{y})}{S_x S_y} \quad \text{.....(1)}$$

with

$$\bar{x} = \frac{\sum x}{N} \quad \text{and} \quad \bar{y} = \frac{\sum y}{N} \quad \text{.....(2),}$$

$$S_x = \sqrt{\frac{\sum(x-\bar{x})^2}{N}} \quad \text{and}$$

$$S_y = \sqrt{\frac{\sum(y-\bar{y})^2}{N}} \quad \text{.....(3)}$$

y = each of antecedent factors
x = organizational performance

Hypothesis II model is tested by using Regression analysis. Antecedent factors of IS/IT utilization as independent variables and organizational performance as dependent variables. General Model of Regression equations used is as follow:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + \varepsilon \quad \text{..(4)}$$

with

- Y : organizational performance
- a : constant
- b : regression slope or regression coefficient of each Xatau koefisien regresi setiap X
- X_1 : social factors
- X_2 : affect
- X_3 : facilitating condition
- X_4 : system complexity
- X_5 : long-term consequences
- X_6 : habit
- □ : *error*

4. ANALYSIS AND DISCUSSIONS

4.1 Research Data

A total of 47 questionnaires distributed during two weeks. The returned questionnaires are 41 units or the repayment rate of 87%. All the returned questionnaires can be treated as research data.

4.2 Validity and Reliability Test

Validity test results indicated that from 67 items of questions on the questionnaire, only 57 items are declared as valid question. With alpha range between 0.7797 and 0.9492, we can conclude that the questionnaire is feasible to use as a measuring tool in the study.

4.3 Classic Assumption Test

Classic assumption test is needed to determine if the results of regression estimation made completely free from any symptoms of heteroscedasticity, multicollinearity symptoms, and autocorrelation symptoms.

4.3.1. Normality Test

Testing for normality in this study carried out by using Kolmogorov-Smirnov approach (KS). With this approach the data will be assumed to be normally distributed when the KS significance Z> 0.05 (asymptotic significance). Test results indicated that all variables are normaly distributed, which is shown by asymptotic significance value for each variable> 0.05.

Table 1. Normality Test Result

Variable	*asymptotic significance*
FS	0,618
AF	0,158
KP	0,140
KS	0,066
KJ	0,101
KB	0,271
KO	0,055

4.3.2. Multicollinearity Test

Multicolinearity test aims to test whether in the regression model appear variance inequality and residual of one observation to the other observation. Multicolinearity test is done by considering the Variance Inflation Factor (VIF). With the approach among the independent variables occurs multicollinearity when the value of VIF> 10. According to Santoso (2000) guidelines for a regression that is free multico is, first had VIF value at around 1, has TOLERANCE number approximately 1. While according to Gujarati

(1995) to be free from multicolinearity, the correlation coefficient between the independent variables must be under 0.8. If there is strong correlation, then multico is happen.

Table 2. Multicolinearity Test Result

Variable	TOLERANCE	VIF
FS	0,725	1,380
AF	0,466	2,145
KP	0,721	1,387
KS	0,486	2,056
KJ	0,892	1,121
KB	0,617	1,620

4.3.3. Autocorrelation Test

Autocorrelation test aims to test whether in a linear regression model there is a correlation between confounding error in period t and error in period t-1 (before). If there is correlation it is called autocorrelation problem. A good regression model should free from autocorrelation. In this study, autocorrelation test is conducted using Durbin-Watson (DW) approach. In general the guidelines that can be used to determine whether there is autocorrelation is as follow (Santoso, 2000):

- DW number is below -2 means that there is positive autocorrelation
- DW number is between -2 to +2 means no autocorrelation
- DW number is +2 DW on top means there is a negative autocorrelation

The test results show the value of 1.907 DW. Thus it can be said that there is no autocorrelation between the independent variables.

4.3.4. Heteroskidastity Test

Heteroscedasticity is a situation where the variance is not in constancy. The aim is to test whether in a regression model appear inequalities of residual variance from one observation to another observation. If the independent variables significantly affect the absolute residual values, then heteroscedasticity is happen.

Table 3. Heteroskidastity Test Result

Variable	t-statistic	Sig.
Konstanta	0,092	0,928
FS	-0,002	0,999
AF	0,154	0,879
KP	-0,016	0,987
KS	-0,289	0,774
KJ	-0,082	0,935
KB	-0,108	0,915

Heteroscedasticity test results showed that there is no independent variables having significant influence (significant values <0.05) towards absolute residuals value. Thus it can be said that there is no heteroscedasticity.

4.4. Hypothesis Testing

Data is analyzed by descriptive quantitative and qualitative. To determine the correlation between antecedent factors with organizational performance, five-point Likert scale is used. Attitudes of participants who strongly disagree represented by point 1 (one), while the attitude of strongly agree is represented by a point 5 (five).

4.4.1. Hypothesis Model I Testing

Hypothesis model I aim to test whether antecendent factors of of information systems utilization have correlation with organizational performance. Hypothesis testing is performed using Pearson correlation analysis. The test results of correlation analysis shown in Table 4.

Table 4. Correlation Analysis Result

No	Variable	Pearson Correlation	Sig.
1	**FS**	0,226	0,155
2	**AF**	0,648**	0,000
3	**KP**	0,599**	0,000
4	**KS**	-0,537**	0,000
5	**KJ**	-0,033	0,836
6	**KB**	0,257	0,104

*significant at 0,05
**significant at 0,01

Based on the above table we can infer:

1. Correlation test results showed that only **affect** variable, **facilitating condition** variable and **system complexity** that have significant correlation with organizational performance.
2. **Affect** factor has positive and significant correlation with **organizational performance**. The relationship is indicated by the correlation value (r) = 0.648, p = 0.000, significant at p <0.05. Based on these results, **hypothesis 1_b is accepted**.
3. **Facilitating condition** factor has positive and significant correlation with **organizational performance**. The relationship is indicated by the correlation value (r) = 0.599, p = 0.000, significant at p <0.05. Based on these results, **hypothesis 1_c is accepted**.

4. **System complexity** has negative and significant correlation with **organizational performance**. The relationship is indicated by the correlation value (r) = -0.537, p = 0.000, significant at p <0.05. Based on these results, **hypothesis 1_d is accepted**.
5. **Social factors**, **long-term consequences** and **habit** factor has no significant correlation with **organizational performance**. Based on these results, **hypothesis 1_a, 1_e** and **hypothesis 1_F is rejected**.

Table 5. Hypothesis Model I Test Result

No	Hypothesis		Result
1	Hypothesis 1_a	Social factors have positive and significant correlation with organizational performance.	Rejected
2	Hypothesis 1_b	Affect has positive positive and significant correlation with organizational performance.	Accepted
3	Hypothesis 1_c	Facilitating Condition has positive and significant correlation with organizational performance.	Accepted
4	Hypothesis 1_d	System complexity has negative and significant correlation with organizational performance.	Accepted
5	Hypothesis 1_e	Long-term consequences have positive and significant correlation with organizational performance.	Rejected
6	Hypothesis 1_f	Habit has positive and significant correlation with organizational performance.	Rejected

Based on summary on Table 5, it shows that Hypothesis 1b, 1c and 1d are accepted. This means hypotheses show that affect, system complexity and supporting condition variable are having significant correlation with organizational performance.

Conversely, hypotheses 1a, 1e and 1F show the rejected results. This means that social factors, long-term consequences and habit do not have correlation with performance at IAIN Raden Fatah Palembang.

4.4.2. Hypothesis Model II Test Result

Hypothesis model II aims to find how antecedent factors of information systems utilization affecting organizational performance. Hypothesis testing is performed using Regression analysis. Regression test result is shown in Table 6.

Table 6. Regression Analysis Result

No	Variable	Beta	T count	Sig.
1	Constant		1,156	0,256
2	**FS**	-0,134	-1,018	0,316
3	**AF**	0,493	2,998**	0,005
4	**KP**	0,357	2,697*	0,011
5	**KS**	-0,195	-1,209	0,235
6	**KJ**	0,040	0,334	0,741
7	**KB**	-0,134	-0,935	0,356
	R^2 = 0,572, F = 7,599 significant at p < 0,01			

*significant at 0,05
**significant at 0,01

Based on the table above, we can infer that:

1. Regression model test result show that **social factors** variable, **affect**, **facilitating condition**, **system complexity**, **long-term consequences**, and **habit** factor as overall significantly influence **organizational performance**. Result shows R^2 = 0,572 (F = 7,599 significant at p < 0,01), which means antecedent variables significantly can explain the variance in dependent variable of organizational performance.
2. Regression analysis result between antecedent factors variables overall to organizational performance show that only **affect** factor and **facilitating condition** factor have significant influence on **organizational performance**.
3. **Affect** factor significantly influence **organizational performance**. The result show t = 2,998, p = 0,005, significant at p < 0,01. Based on the result, ***hypothesis 2_b accepted***.
4. **Facilitating *condition*** significantly influence **organizational performance**. Test result show t = 2,697, p = 0,011, significant at p < 0,05. Based on the result ***hypothesis 2_c accepted***.
5. **Social factors**, **system complexity**, **long-term consequences**, and **habit** factor do not significantly influence **organizational performance**. So that ***hypothesis 2_a, hypothesis 2_d, hypothesis 2_e and hypotesis 2_f rejected***.

Table 7. Hypothesis Model II Test Result

No	Testing		Result
1	Hypothesis 2_a	Social factors have significant influence on organizational performance.	Rejected
2	Hypothesis 2_b	Affect has significant influence on organizational performance.	Accepted
3	Hypothesis 2_c	Facilitating condition has significant influence on organizational performance.	Accepted
4	Hypothesis 2_d	System complexity has significant influence on organizational performance.	Rejected
5	Hypothesis 2_e	Long-term consequences have significant influence on organizational performance.	Rejected
6	Hypothesis 2_f	Habit has significant influence on organizational performance.	Rejected

Based on the summary of table 7, it shows that Hypothesis 2b and 2c is accepted. This means that the hypotheses show that affect variable, and facilitating condition influence organizational performance.

Conversely, hypothesis 2a, 2d, 2e and 2f show the rejected result. This means that the social factors, system complexity, long-term consequences and the habit do not influence the performance of IAIN Raden Fatah Palembang.

4.5. Discussion

4.5.1. Social Factors

Social factors have been a controversial construct in the previous study. Some researchers have found that social factors significantly influence utilization goals (Fishbein and Ajzen, 1975; Triandis, 1980 in Thompson et. Al., 1991; Ajzen, 1991; Thompson et. Al., 1991; Todd and Taylor, 1995). In contrast the results of this study indicate that social factors do not have a correlation and influence on organizational performance. Mathieson (1991) and Davis et. al. (1989) found no significant relationship between social factors and utilization purposes. This result is based on question number 3 of the interviews which showed that employees do not really pay attention to the environmental conditions or the academic atmosphere. Because for any placement of

their works, they remain subordinate who has not been use much of IS/IT. The possibility of differences in the results of this study with several previous studies is due to differences in the dependent variable. Previous studies observe the significance of the correlation between social factors with the aim of utilization (intention to use), whereas this study observe the significance of the correlation and influence of social factors on organizational performance.

Hartwick and Barki (1994) and Venkatesh and Davis (2000) show that if the use of system is mandatory, social factors significantly related to the utilization of the system, instead, social factors have no significant correlation with the usage of voluntary system. These findings may also explain the results of this study. The context of information systems/information technology (IS/IT) in this study is the IS/IT that is used voluntarily.

The result shows that all respondents who were involved can be considered to have had experience in the use of the IS/IT (in the context of this study). Hartwick and Barki (1994) found that the influence of social factors will decrease with the increasing of experience in using the system. They argue that before using the system, the knowledge and belief of users will be vaque and ill-formed, but after the strengths and weaknesses of the system is known through direct experience in using the system, social influence will be reduced. Their opinions are, at least can support the result obtained in this study.

4.5.2 Affect

The result shows that affect has positive correlation as well as influence on organizational performance. This result are consistent with the findings of Triandis (1980) in Thompson et. al (1991), Fishbein and Ajzen (1975), and Davis et. al. (1989). This result is also based on an interview question number 6 which states that the application is only used by certain parties within IAIN Raden Patah Palembang. This can affect the attitudes of the employees there. Thompson et. al. (1991) which made as reference of this study, however found no significant correlation between affect and the utilization rate of the PC.

A possible explanation for this result is due to the voluntary of information systems's context use in this study is. This condition allows the respondents to perceive the IS/IT based on software or hardware that they often used. Someone who often use computer to access the Internet or running computer games, will see the computer as something fun. Affect factors play a role in this condition. On the other hand, when someone uses office applications like Microsoft Office, the utilization of this application is more seen as a need for the task performing. In this condition, affect factor is not really influenceable.

The above explanation is strengthened by Yang and Choi's (2001) research on social influences towards technology which find that the use of spreadsheet is considered to be the purpose of performing the tasks, while the use of the Internet is seen as something that are fun and sympathy. Thus, they argue that difference in the nature of technology will determine the effect generated in the utilization of the technology.

4.5.3 Facilitating Condition

This study found a significant correlation and the influence between facilitating condition factor and organizational performance. This result is consistent with Triandis Theory and TPB (TBP use *perceived behavioral control* term), but it is in contrast with the findings of Thompson et. al. (1991), which is benchmark of this study. They have not concluded their findings. But they argued that the result may be caused by the measurement that carried out on only one aspect of facilitating condition. Similar results were reported by Davis et. al. (1989), that accessibility (this construct is similar to the facilitating condition) has no effect on utilization behavior. But they argued that accessibility is not an issue for respondents in his study.

Through observation and interviews conducted, especially on questions number 4 and 6, it is showed that most employees or lecturers hardly do any activity related to the duties and work when there was interference or a problem on a computer that they used. Because the processes and practices at the IAIN Raden Patah Palembang especially subordinate employees, still use conventional way to organize files and important documents in their activities. Even in some cases

professors cancel the classes due to lack of supporting facilities (data projector or laptop). This phenomenon may be an explanation for the results obtained in this study.

Further, Venkatesh et. al. (2003) found that facilitating condition's effect on the utilization conditions only when the factor are influenced by the age and experience factor as moderate variable. However, this study has not seen the influence mechanism in depth.

4.5.4 System Complexity

The result of this study indicates that system complexity of the system has a negative and significant correlation with organizational performance. These findings are consistent with Davis et. al. (1989) and Thompson et. al. (1991). Venkatesh et. al. (2003) also found correlation between effort expectancy (similar to complexity) with utilization behavior. It is also implicit in the interview questions number 2, 3, 4 and 6 where it was said that IS/IT is only used by high level management but not used by subordinate employees. This is of course raises fears of employees who do not use the existing system. So they think that the system was so complicated and difficult to use. Conclusions that can be drawn is that the more complex an IS/IT, then there is a tendency of organizational performance decrease.

The result that is quite surprising in this study is that the complexity of the system, despite having a significant correlation with organizational performance, however does not affect organizational performance. This result differs from which is find on affect factors and facilitating condition. Both of these factors have influence and significant correlation with organizational performance. For this result, a definite conclusion still can not be made. There is a presumption that this result is caused by the general usage of information systems in the context of this study. This condition may lead to respondentss' bias understanding of information systems. So that the respondent's answer will depends greatly on the computer applications (software) that is often used.

4.5.5 Long-term Consequences and Habit

The test results showed that both long-term consequences and habit factors, do not have significant influence and correlation with organizational performance. As like system complexity, there is no strong enough explanation for the results obtained for these factors. Even from the interviews, it is apparently no correlation and influence between long-term consequences and habit with organizational performance. This is implied in interview question number 4 which says that only very few employees who understand the process of IS/IT so it is difficult to measure the consequences in the future and habit of employees in using the referred IS/IT. Long-term consequences are predicted to have no effect because the respondents regard computer as a simple tool used to accomplish a particular job. So the desire to improve the ability to use computers is not a major concern for the respondents. However, this presumption is somewhat contrary to the allegations affect influence on organizational performance in the context of the utilization of IS/IT which is voluntary. It also may lead to the assumption that computer usage is not a habit for the respondents. Another presumption is that respondents may be difficult to distinguish between experience and habits.

5. CONCLUSIONS AND SUGGESTIONS

Based on the analysis conducted, the conclutions of this study are:

1. Affect factor, facilitating condition and system complexity have significant correlation with organizational performance. While social factors, long-term consequences and habit do not have significant correlation with organizational performance.
2. Only affect and facilitating condition influence organizational performance. While social factors, system complexity, long-term consequences and habit have no influence on organizational performance.

The expected practical implication is that this study can provide input for IAIN Raden Fatah Palembang in terms of easy to use (complexity) and fun (affect aspects) IS/IT are need to be considered in planning the development of IS/IT. Nevertheless, the purpose of IS/IT usage should not be sacrificed for the sake of fulfilling both of these aspects. Availability of facilities that support the use of IS/IT optimally need the attention of the

organization's leaders. However, organizational support to IS/IT usage should be accompanied with a mechanism for adequate oversight and control, so that the utilization of information systems/ information technology is used for their intended purpose and not misused for other purposes.

6. REFERENCES

[1] Ajzen, I., *The Theory of Planned Behavior*. Organizational Behavior and Human Decision Processes, 50:2 (1991), pp. 179-211.

[2] Compeau, D., and Hinggins, C. A, *Computer Self-Efficacy: Development A Measure and Initial Test,* MIS Quarterly, 19:2 (1995a), pp. 189-211.

[3] Davis, F. D.. "Perceives Usefulness, Perceives Ease of Use, and User Acceptance of Information Technology". *MIS Quartely*. 13:3. (1989), pp. 319-339.

[4] Davis, F. D., Bagozzi, R. P., dan Warshaw, P. R.. "User Acceptance of Computer Technology: A Comparison of Two Theoretical Models". *Management Science*. 35:8. (1989) pp. 982-1002.

[5] DeLone W.H., dan McLean, E.R. "Information System Succes: The Quest for The Dependent Variable". *Information System Research*. 3:1. (1992). pp.60-95.

[6] Fishbein, M., dan Ajzen, I. *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research.* Addison-Wesley. Reading, MA. 1975.

[7] Gujarati, D. N. *Basic Econometrics, Third Edition*. McGraw-Hill. 1995.

[8] Hartwick, J. dan Barki, H. "Explaining The Role of User Partisipation in Information System Usage". *Management Science*. 40:4. (1994). pp. 440-465.

[9] Lim, J., Gan, B., dan Ting-Ting Chang. "A Survey on NSS Adoption Intention". *Proceedings of the 35th Hawaii International Conference on System Sciences*. 2002.

[10] Malhotra, Y., dan Galletta, D. F. "Extending Acceptance Model to Account for Social Influence: Theoretical Bases and Empirical Validation*". Proceeding of the 32nd Annual Hawaii International Conference on System Science*. 1999.

[11] Mathieson, R. "Predicting User Intentions: Computing the Technology Acceptance model with the Theory of Planned Behavior". *Information Systems Research*. 2:3. (1991). pp. 173-191.

[12] Moore, G. C., dan Benbasat, I. "Development of A Instrument to Measure The Perceptions of Adopting An Information Technology Innovation". *Information Systems Research*. 2:3. (1991). pp. 192-222.

[13] Premkumar, G., dan King, W. R. "An Empirical Assessment of Information Systems Planning and The Role of Information Systems in Organizations". *Journal of MIS*. 9:2. (1992). pp. 92-126.

[14] Raghunathan, B., dan Raghunathan T.S. "Planning Implications of The Information Systems Strategic Grid: An Empirical Investigation". *Decision Sciences*. 2:2. (1990). pp. 287-300.

[15] Reich, B. H., dan Benbasat, I. "Measuring The Linkage Between Business and Information Technology Objectives". *MIS Quartely*. 20:1. (1996). pp. 55-81.

[16] Santoso, S. *Buku Latihan SPPS Statistik Parametrik*. Elex Media Komputindo. 2000.

[17] Sekaran, U. *Research Methods For Business*, Edisi Terjemahan, Edisi Keempat. Salemba Empat. 2006.

[18] Setianingsih, S. "Pemanfaatan Teknologi Informasi dan Hubungannya Dengan Peningkatan Kinerja Individual", *Telaah*. 1:3. 1997.

[19] Sugiono, *Metoda Penelitian Kuantitatif, Kualitatif dan R&D*. Alfabeta. 2006.

[20] Taylor, S., dan Todd, P. A."Understanding Information Technology Usage: A Test of Competing Models". *Information Systems Research*. 6:4. (1995). pp. 144-176.

[21] Thompson, R.L., Higgins, C.A., dan Howell, J.M. "Personal Computing: Toward of Conceptual Model of Utilization". *MIS Quartely*. 15:1. (1991). pp. 125-143.

[22] Venkatesh, V., dan Davis, F. D. "A Theoretical Extension of Technology Acceptance Model: Four Longitudinal Field Study". *Management Science*. 46:2. (2000). pp. 186-204.

[23] Venkatesh, V., Morris, M. G., Davis, G. B., dan Davis, F. D. "User Acceptance of Information Technology". *MIS Quarterly*. 27:3. (2003). pp. 425-478.

[24] Woon, I. M. Y., dan Pee, L. G. "Behavioral Factors Affecting Internet

Abuse in the Workplace – An Empirical Investigation". *Proceedings of the third annual workshop on HCI Research in MIS*. 2004.

[25] Yang, Hee-Dong dan Choi, In-Young. (2001). "Revisiting Technology Acceptance Model With Social Influence Factors". http://www.pacis-net.org/file/2001/050.pdf.