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The Effects of Organizational Rewards on Client Knowledge Transfer Intention to Consultant during ERP Implementation

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This study is based on an empirical research on analyzing the effects of organizational rewards on client's attitude and intention to transfer knowledge to consultants in ERP implementations. This study aims to clarify and suggest possible solutions that can be considered by organizations in order to enhance employees' knowledge transfer intention to consultants during ERP implementations. An online survey was conducted amongst a number of companies implementing SAP system in Indonesia. The result was analyzed using partial least square technique. Some literature suggest that organizational rewards are significant to employees' willingness to transfer knowledge but recent finding in this study shows that this is not the case. Thus, the findings lead to suggestions that providing organizational rewards during ERP implementations is not fundamental in promoting client's knowledge transfer intention.

Keywords: ERP implementations, knowledge transfer, organizational rewards, partial least square.

1. INTRODUCTION

Identifying the effects of organizational rewards on knowledge transfer behavior within information system studies has become a popular research. Number of researchers have argued that extrinsic motivation such as monetary reward system significantly affects employee's willingness to share their knowledge[9,10]. However this finding is in contrast with some studies[8,11]. Such inconsistency required further explanation especially within ERP implementation because the generalizability of these published researches is problematic since ERP implementations project has its own characteristics. Furthermore, the studies within ERP context have been found not to deal with this specific form of extrinsic motivation[2,3,4]. Thus the findings do not give sufficient consideration to suggest which type of this motivation plays significant role in fostering knowledge transfer activity in ERP implementations.

Moreover, the most common approach in implementing an ERP system involves an external consultant who possesses the ERP package knowledge to assist the implementation[1]. Consequently, ERP implementations require a two-way transfer of knowledge between organizations (clients) to consultants[2,3,4]. Effective knowledge transfer between these parties is important to succeed ERP implementations. The research[3,4] has examined the knowledge transfer from consultant to client. However none of the studies has examined the knowledge transfer from clients who poses business-related knowledge to consultants. It is believed that knowledge of current business processes has been vital during ERP implementations as to describe how processes relate to each other. Hence, the study focuses on knowledge transfer from client to consultants is worth conducting.

The main goal of this study is to investigate how significant is the effect of organizational rewards to improve client's willingness to transfer their knowledge to consultants during ERP Implementation.

2. KNOWLEDGE TRANSFER within ERP CONTEXT

Knowledge Management has been recognized as a critical factor in ERP implementations, which specifically focused on factors relevant to the successful of knowledge transfer during ERP implementations[2,4]. A survey which was distributed to 361 Greek companies[5] indicated that knowledge transfer was an extremely important factor in ensuring the success of ERP Implementation. The positive impact of knowledge transfer in the success of ERP implementations is reasonable because ERP entails businesses to integrate processes throughout an organization. Therefore, a wide range of knowledge must be shared to effectively implement a beneficial ERP system[6].

Historically, knowledge transfer was synonymous simply with knowledge exchange; more recently, knowledge transfer research is based on a "source and recipient" generic model[4]. Knowledge transfer involves both knowledge transfer activities from the knowledge source to recipients and knowledge application by the recipient. Knowledge transfer is a process that involves interaction within individuals, groups, and organization which proposes to utilize and exploit the value of knowledge by transporting it from a group of sources to a group of recipients by employing set of activities or techniques; therefore, the recipients should be able to understand and apply the knowledge[7].

Researchers[4] who examined knowledge transfer between clients and consultants in an ERP implementation project argue that motivation of both recipient and source are required to make sure knowledge transfer can take place such as the recipients willingness to acquire, assimilate, exploit and apply the knowledge, and also the willingness of a source to express and explain their ideas or knowledge to the recipients. Within number of literature, motivation has been classified into extrinsic and intrinsic[4,8]. Intrinsic motivation refers to someone's motivation to engage in an activity because it is found useful, interesting or enjoyable[8]. Extrinsic motivation is opposed to intrinsic motivation where employees are extrinsically motivated when satisfaction does not come from the content of the activity itself[4]. Reward system has been believed to be important to promote knowledge transfer. Organizational rewards can be in monetary and non-monetary such as salary increment, bonus, promotion or job security. The studies[9,10] show IT project's failures are often caused by the absence of incentives between team because they become lack of motivation to engage in knowledge transfer activity. However these findings are still conflicting with other researchers who have argued that monetary reward system has no contribution towards employee knowledge transfer intention[8,10].

Within ERP context, there are number of studies that have examined the motivation factor in knowledge transfer[2,3,4]. Their assessment on motivation has shown a positive influence on knowledge transfer intention. However these studies do not fully identify the specific form of extrinsic motivation that is being examined. The studies[3,4] may be seen to be more detail when involving motivational significance on knowledge transfer intention in type of extrinsic motivation. However none of them recapitulates specific type of intrinsic or extrinsic motivation.

Referring to this condition, this study exists to answer the gap within literature. This study aims to analyze the impact on specific forms of motivational factors, organizational rewards on knowledge transfer intention from client to consultants on ERP implementations. The necessity to undertake this research is very important to enrich the solutions for action to be concerned by organizations to foster knowledge transfer activity especially from their employees to consultants within ERP context. In addition, this study also intends to clarify the uncertainty found in existing researches on the significance of organizational rewards in fostering knowledge transfer intention within information system studies.

3. RESEARCH METHODOLOGY

The research model in this study is a partial method of study about the effects of altruism, knowledge self-eficacy, organizational rewards, and reciprocity in client's willingness to transfer knowledge to consultant during ERP implementation. The research model was derived from a research model which assesses intrinsic and extrinsic motivational factors in information systems study[11]. The research model which is captured in Figure 3.1 associates organizational rewards with attitude based on theory of reasoned action (TRA). According to TRA, an individual's behavioral intention relies on his/her attitude toward the behavior[12].

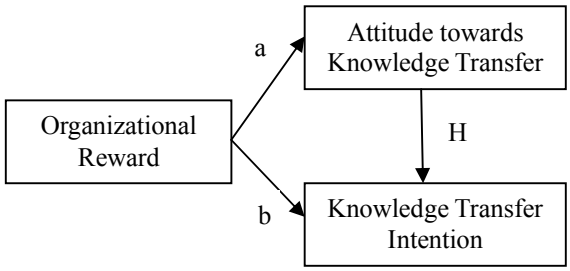

Fig. 3.1. The Research Model

TRA has been adopted within number of management and information systems studies which focus on knowledge transfer assessment[11,13,14]. Results of these studies had shown a significant relationship between attitudes to transfer knowledge. They argue that an individual will have a higher tendency to share their knowledge if he/she perceives knowledge transfer positively. Thus, based on these findings the hypotheses are constructed as follows:

H: Attitude has significant effects on client's intention to transfer knowledge to consultants on ERP implementations.

Ha: Organizational rewards have significant effects on client's attitude towards knowledge transfer intention to consultants in ERP implementations.

Hb: Organizational rewards have significant effects on client's knowledge transfer intention to consultants in ERP implementations

A study[15] argues that the use of Partial Least Square (PLS) in various disciplines such as management information system studies has increased recently as it is believed to have special abilities in behavioral research. PLS allows simultaneous assessment of the structural and measurement model[16]. This means that hypothesized relationships between the constructs can be assessed for empirical validity, and at the same time the measures can be assessed as to how well they relate to each variable. Consequently, PLS is chosen to answer the aim of this study.

PLS requires indicators to measure the constructs[16]. In this study, indicators that are used to measure the constructs were mainly adapted from previous studies suggested by the study[11] and modified for use in the ERP implementations context. The indicators were presented as statements in the questionnaire which were measured using a five-point Likert-type scale as it is the most frequently used types of scales used to measure attitudes[18]. Four indicators are associated to each construct. Organizational rewards were measured by salary increment, bonus, promotion and job security. A pilot study was conducted in order to clear up any confusion with the questioners thus the respondents would be able to complete them thoroughly.

Typically, the sample in this study targets people who work as information technology team, business users, project managers, business analysts or infrastructure team who have interaction with consultants during ERP implementations. SAP system was chosen as the backdrop system to be studied because of the familiarity of that area where the author has involved in.There were in total 55 responses obtained. However 10 responses had missing values, leaving a total of 45 valid responses for analysis purpose.

Furthermore, PLS involves two stages[17]. The first stage is called the measurement model which aims to assess the consistency and the reliability of indicators of each construct in the research model[17]. Each indicator is measured by calculating the indicator loading which must be above 0.70 to be indicated valid to measure the associate construct[17]. It can be seen in Figure.3.2. that initial indicators shows **IN4** is lower than 0.70. However it is suggested that indicators with loading between 0.40 and 0.70 should only be removed from the model if such removal increases the internal consistency reliability and the convergent validity of the variables[17]. Thus the removal for problematic indicators was performed by analyzing the impact on internal consistency reliability and convergent validity.

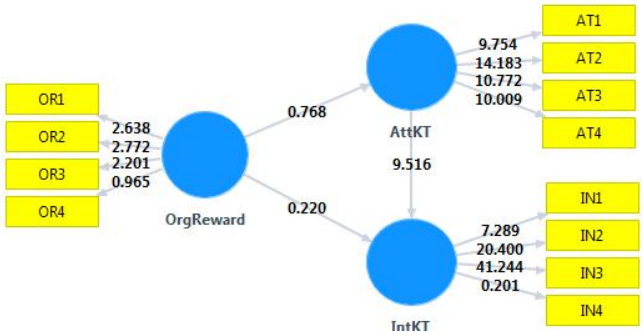

Fig.3.2. Initial Indicators

The internal consistency reliability can be evaluated by using composite reliability and/or Cronbach's Alpha coefficient[17]. In assessing composite reliability and Cronbach's Alpha coefficient, the study[17] argues that values upper than 0.60 to 0.70 are considered acceptable, whilst 0.70 to 0.95 are considered "satisfactory to good". Furthermore, convergent validity is assessed by examining the Average Variance Extracted (AVE). Convergent validity aims to measure to the degree to which the indicators' variance related each other to measure construct validity[16]. The AVE of each construct should be higher than 0.50 to be recognized adequate. The assessment on the measurement model after **IN4** deletion sufficiently increases the composite reliability, Cronbach alpha and AVE of IntKT constructs. The revised model captured in Figure.3.3. indicates that the remaining indicators are consistent and reliable.

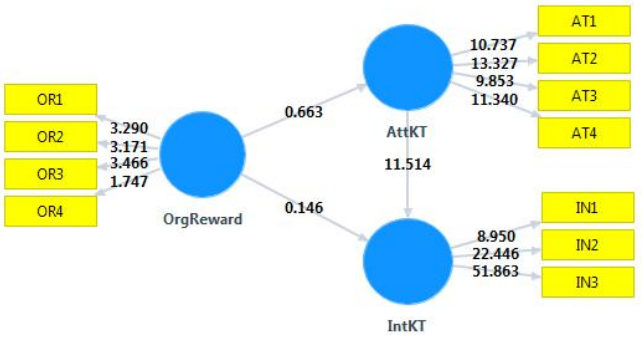

Fig.3.3. Revised Indicators

Thereafter examination on the indicators provides satisfactory results, the researcher moves on to the second stage, the structural model. This involves examining the significant of the exogenous construct on the endogenous construct which will lead to hypothesis testing[17]. To answer this necessity, the path coefficient which represents the hypothesized relationships between the constructs was assessed. The path coefficient assessment required bootstrap procedure to test if the coefficient is statistically significance in observed sample. This resampling technique treats the observed sample as if it

represents the population by drawing a large number of subsamples[16]. There were 500 subsamples used in the Bootstrap test of this study with 45 observed samples.

The structural path between variables is indicated significant if the *t*-value between the exogenous to endogenous construct is higher than 1.96 ($p<0.05$)[16]. Figure 3.4. reflects the result of the bootstraping which shows the *t-value* between constructs.

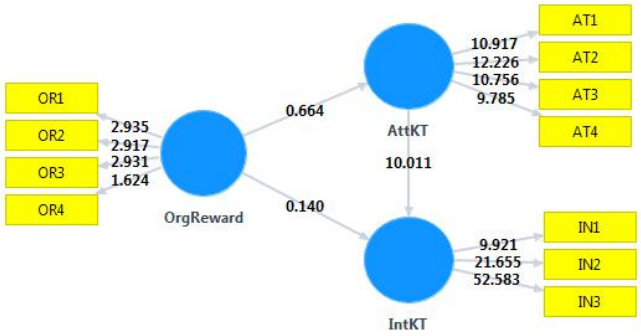

Fig. 3.4. The Path model and PLS estimation on *t-value*.

In addition, this study considers that the assessment of structural model relationships should not be limited to direct effects as shown in the figure above, but also consider the total effects[16]. This is because the total effects allowed for the examination of an exogenous construct's influence on a target construct via all mediating constructs and thus provide a richer picture of the relationships in the structural model. This also relates with the objective of this study which desires to examine the mediation effects of attitude in motivational factors and knowledge transfer intention.

4 EXPERIMENTAL RESULT

The result shown in Table.4.1 represents the significance of direct, indirect, and total effects of the exogenous variables to the endogenous variables which are reflected in path coefficient along with the *t-value*. The explanations towards suggested hypotheses cover the total effects by analyzing both direct and indirect effects between an exogenous and an endogenous construct in the structural model. Discussion of the findings indicated the significance based on *t-value* (p<0.05).

Table.4.1. The significance of the path coefficients for direct, indirect and total effects

Hyp.	Struc. Path	Direct Effect		Indirect Effect		Total Effect	
		t	*p*	*t*	*p*	*t*	*p*
H	AttKT → IntKT	10.7	0	n/a	n/a	10.7	0
Ha	OrgReward →AttKT	0.6	0.9	n/a	n/a	0.6	0.9
Hb	OrgReward →IntKT	0.1	0.8	0.5	0.7	0.1	0.8

The effects of client's attitude on intention to transfer knowledge to consultants were reflected in **AttKT→IntKT** notion (Table 4.1). Attitude is considered having the highest significance on client's intention to transfer knowledge at 10.7 ($p<0.05$). Both the direct and total effects of **AttKT→IntKT** are the same because there is no mediating variable between **AttKT** and **IntKT**. Based on this result, this study supports hypothesis **H** where positive attitude has significant effects on client's intention to transfer knowledge to consultants on ERP implementations. This study has rehighlighted and reconfirmed that attitude plays a significant role on determining knowledge transfer behaviour. The positive relationship between attitude and intention suggested by TRA has been found in many knowledge transfer studies[11,13,14].

Assesment on organizational rewards was measured on both monetary and non-monetary rewards: salary increases, bonuses, promotion and job security. Analyzing the effects of expected organizational rewards on client's attitude and intention to transfer knowledge as reflected in the significance coefficient of **OrgReward→AttKT** and **OrgReward→IntKT** revealed insignificant effects at 0.6 ($p<0.05$) and 0.1 ($p<0.05$) respectively. This finding surprisingly declares that organizational rewards have no effects on client's attitude and intention for transferring knowledge to consultants. Consequently, hypothesis **Ha** and **Hb** are rejected.

Similar to the carried out study, the research model[14] proposes expected organizational rewards positively affect individual's attitude to transfer knowledge in Chinese organizations. However, the result reveals that organizational rewards both in monetary and non-monetary form are not significant to client's attitude to transfer knowledge intention. This result is consistent with other studies[11,13,19,20] which show that providing organizational rewards both in monetary and non-monetary form do not improve employee attitude and intentions to transfer knowledge. This finding indicates that organizational rewards have no impact on client's attitude to transfer knowledge intention to consultants during ERP implementation.

5. CONCLUSIONS

Based on the current study's findings, it is not necessary for company to provide rewards such as salary increment, bonus, promotion or job security during ERP implementations. Thus, organizational rewards both monetary and non-monetary are not fundamental in forming knowledge transfer behavior. Finally the findings lead to the rejection of the suggested proposition that organizational rewards are not significant to client's attitude to transfer knowledge intention. The implication of the research result suggestion that providing organizational rewards for employees during ERP implementation is not fundamental in forming knowledge transfer intention to consultant.

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