

The Performance Of Knowledge Transfers In University

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Abstract *This study aims to answer the research problem of improving the performance of knowledge transfer in the public sector. The sampling technique used in this study is the purposive sampling method. This takes 100 samples with a specific set of criteria education staff with a bachelor's degree in five colleges located in Kebumen District, Center Java, Indonesia. The result of the data processing with SPSS 25 shows that partially the quality of human resource management and information technology competence had a positive effect on the quality of knowledge assets. The result showed that the quality of knowledge assets had positive effects on the performance of knowledge transfer. Finally, quality of knowledge assets roles as an intervening role in this research*

Keywords:

Knowledge transfer quality, knowledge asset quality, information technology competence

Introduction

The transfer of knowledge within an organization can have a considerable influence on the development of an organization. Every approach taken to solve a problem or operational skills requires proper knowledge. Knowledge transfer is essential for the progress of the organization. (Argote et al., 2003) says that knowledge transfer is the communication of knowledge from the source so that it is learned and applied by the recipient. Sources and recipients can be individuals, groups, teams, organizational units, or the entire organization. Knowledge sharing is a process where individual exchanges knowledge and ideas through discussions to create new knowledge or ideas (Van Den Hooff & De Ridder, 2004). Knowledge sharing could help employees to understand their jobs better and bring personal recognition within the department (Cheng et al., 2009)

The knowledge transfer stage can be the most challenging stage carried out in the knowledge management process. Sometimes individuals who have competence or knowledge are reluctant to transfer their knowledge for fear of losing their competitive value in the organization. In addition to transferring knowledge, knowledge of communication is needed, making it difficult for individuals who are willing to transfer the knowledge they have but do not understand how to communicate that knowledge effectively. Managers also find it challenging to design an organization that can share knowledge efficiently (Cohen & Levinthal, 1990)

Perri (2006) states that transferring knowledge in organizations must involve transfers at the individual level because individuals contribute a lot to the organization. It is necessary to understand how knowledge can be transferred between individuals and recognize methods of knowledge transfer. It is essential for effective knowledge management activity for the organization. The transfer of knowledge developed in organizations strengthens the relationship between knowledge transfer and business strategy, following the organization's culture as a whole, following leadership, humans with social networks, and institutionalizing

the discipline of learning (Von Krogh et al., 2000). Espinosa and Dobon (2011) suggest a positive effect of employee management on knowledge transfer

Effective knowledge transfer can be achieved through formal systems and transfers through human behavior in the organizational environment. (Narasimha, 2000) states that human resources and information technology influence the quality of knowledge assets. Resource-based perspectives increasingly emphasize that organizational knowledge plays a role in maintaining a company's competitive advantage. This research is an initial effort to develop a framework that will assist in conducting a systematic study into the role of organizational knowledge that can play a role in ensuring the maintenance of competitive advantage

The problem of knowledge transfer in public organizations such as universities faces unusual challenges. A public organization is an organization with a type that has a hierarchy and bureaucracy that makes it difficult to share knowledge. Some people are reluctant to share knowledge because they maintain knowledge for themselves, for example, when they experience promotions, which is a paradigm of power (Liebowitz & Yan, 2004). Based on the research gap, this is the main reason researchers examine the components that affect knowledge transfer performance at the university.

Literature Review and Hypotheses Development

The quality of human resource management (HRM) and the quality of knowledge assets (QKA)

QHRM shows employee perceptions about human resource management activities (Syed-Ikhsan & Rowland, 2004) (Swart & Kinnie, 2003) examines how human resource practices are used to manage knowledge assets. Human resource management is implemented to develop knowledge assets with unique characteristics, for example, human capital. (McCuiston & Jamrog, 2005) states that the successful implementation of a knowledge management system ultimately depends on designs that produce responsive and adaptive organizations through a responsive and flexible knowledge management system, an organizational culture that encourages, engages, and shares knowledge, and provides open access to knowledge throughout the organization and collaboration. Human resource management must play a strategic role in competitive advantage in a context where organizations depend on individuals and collective knowledge assets. Based on the description above, the hypothesis is formulated as follows:

H1: The higher the quality of HRM in university, the higher the quality of knowledge asset

Information technology competency (ITC) and quality of knowledge assets (QKA)

Mastery of information technology is the employee's perception of the benefits and use of information technology (Syed-Ikhsan & Rowland, 2004). Knowledge transfer has interactions between experts supported by technology (Wilkesmann & Wilkesmann, 2011)). Alavi et al. (2001) state that knowledge management systems that utilize various information technology tools can support knowledge management in organizations. Sveiby (1996; Bender et al. (2000) state that information technology must be seen as a necessary tool, but technology and its use will not necessarily support knowledge management or knowledge assets. Other studies by Syed-Ihsan and Rowland (2004) conclude that information technology has a significant influence on knowledge assets Information technology has been widely used in the effective management of knowledge assets by facilitating knowledge sharing and learning among workers (Zhang, 2005). Syed-Ihsan and Rowland (2004) produce the conclusion that information technology has a significant effect on knowledge assets. Based on the description above, the hypothesis is formulated as follows:

H2: The higher the competency of information technology in university, the higher the quality of knowledge assets

Quality of HRM (QHRM) and knowledge transfer performance (KTP)

Espinosa and Dobo'n (2011) suggest the positive influence of employees on the transfer of knowledge. Psarras (2006) revealed that knowledge management could contribute to the development of education and training in the context of a new era of the knowledge-based economy. HRM practices consisting of staffing, training, promotion, compensation, and rewards have a significant and positive effect on knowledge transfer (Minbaeva, 2005). Recruitment and selection, teamwork, training and development, and performance appraisal show a positive relationship with knowledge sharing (Yang Fong et al., 2011). Based on the description above, the hypothesis is formulated as follows:

H3: The higher the quality of human resource management in university, the higher the performance of knowledge transfer

Information technology competence (ITC) and knowledge transfer performance (KTP)

Knowledge transfer has interactions between experts supported by technology (Wilkesmann and Wilkesmann 2011). Alavi et al. (2001) state that knowledge management systems that utilize various information technology tools can support the knowledge management process in organizations. Technology can increase the efficiency of knowledge transfer by increasing the speed of transfer and reducing costs, in this case, time and distance (Albino et al., 2004). (Syed-Ikhsan & Rowland, 2004) concluded that the infrastructure of information technology increases the performance of individual knowledge transfer. There is a positive relationship between the infrastructure of information and communication technology and the transfer of knowledge. Research (Rhodes et al., 2008) concluded that information technology systems significantly impact knowledge transfer. Centralized storage and retrieval of information are crucial for knowledge management (Ray, 2008). Zhang (2005) states that the degree of satisfaction of the organization achieved through the technology used increases profits and affects the transfer of knowledge. Based on the description above, the hypothesis is formulated as follows:

H4: The higher the competency of information technology in university, the higher the performance of knowledge transfer

Quality of knowledge assets (QKA) and knowledge transfer performance (KTP)

Quality of knowledge assets is the employee's perception of explicitly managed knowledge assets that support organizational decision making and action Knowledge assets allow knowledge to be transferred to the right people and at the right time (Bloodgood & Salisbury, 2001). The performance of knowledge transfer depends on the availability and accessibility of knowledge assets. (Syed-Ikhsan & Rowland, 2004) concluded that the availability of knowledge assets in organizations directly influences knowledge transfer performance in organizations. (McGill 2006) states qualitatively and quantitatively the relationship between types of intellectual capital and effective knowledge mechanisms to transfer knowledge. (Seleim & Khalil, 2011) concluded that intellectual capital influences knowledge acquisition and knowledge transfer. Based on the description above, the hypothesis is formulated as follows:

H5: The higher the quality of knowledge assets in university, the higher the performance of knowledge transfer.

Based on the hypothesis, the research model is as follows:

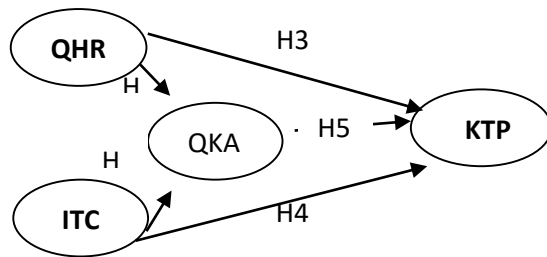


Figure 1. The conceptual model

QHR: Quality of human resources management

ITC: Information technology competency

QKA: Quality of knowledge assets

KTP: Knowledge transfer performance

Research Methods

The population in this study was employees in five colleges located in Kebumen district, Central Java, Indonesia. This study applied a purposive sampling technique for educational staff with a minimum bachelor's education. This survey was conducted for approximately 2 months during October-November 2020. Some 115 questionnaires were distributed, 100 were completed and adequately filled. Thus, the response rate for this study is 87%. The respondent characteristics were as follows: mostly females, i.e., as many as 67 of the sample (67%), aged less than 40 years (85 people, i.e., 85%), married (87 people, i.e., 87%), finished a master degree (99 people, i.e., 99%) and with tenure of fewer than five years (87 people, i.e., 87%).

The purpose of this study was to examine the effect of quality in HRM and information technology competence on knowledge transfer performance through knowledge asset quality as a mediator. The instrument is a 5-point Likert scale (1 = strongly bad; 5 = strongly good). The quality of human resource management will be measured by four items, namely recruitment and selection, employee placement, and employee training and development and cooperation (Syed-Ikhsan & Rowland, 2004). Information technology competence is measured using five items adapted from the research of (Syed-Ikhsan & Rowland, 2004), namely the ability to control information technology, the ease of using information technology, the speed in using information technology, the ability to process data, and the ability to process information. Asset knowledge quality is measured using five-term: increase employee competency, increase understanding of work procedures, increase understanding of how to do work and increase the use of relevant documents, understand communication flow. Knowledge transfer performance is measured using five indicators: the speed of knowledge transfer, the reliability of knowledge transfer, the accuracy of the content of knowledge transfer, the timeliness of knowledge transfer, and the relevance of knowledge transfer (Zhang, 2005). The reliability coefficient of the original overall scale was 0.7

Result And Discussion

The internal consistency reliability was determined by using the Cronbach-alpha analysis. In this study, a reliability coefficient ranging from .07 and above was used as a standard to accept the items used in the questionnaire. The Cronbach-alpha coefficients were computed based on the total number of subjects involved in the study (Table 1). the scale for quality of HRM has 0.79 Cronbach-alpha values, 0.82 for information technology competency, 0.88 for knowledge asset, and 0.82 for transfer knowledge performance

Table 1. Reliability test

Item	Cronbach-alpha values
Quality Of HRM	0.79
Information Technology Competency	0.82
Knowledge Asset	0.88
Transfer Knowledge Performance	0.82

Validity was computed the Pearson correlation showed all item has a significant value; correlation is significant at the 0.05 level (table 2)

Table 2. Validity test

Item		Pearson correlation	sig
Quality HRM	The quality of recruitment and selection	0,578	0.000
	The quality of placement	0.684	0.000
	The quality of training and development	0.813	0.000
	The quality of cooperation	0.678	0.000
information technology competency	The ability to control information technology	0.580	0.000
	the ease of using information technology in an organization	0.690	0.000
	speed in using information technology	0.800	0.000
	the ability to process data	0.75	0.000
	the ability to process information	0.70	0.000
Quality of Knowledge Assets	increased employee competency	0.690	0.000
	understanding of work procedures	0.750	0.000
	increased understanding of how to do work	0.718	0.000
	increased use of relevant documents	0.708	0.000
	Understanding of communication flow	0.614	0.000
Knowledge transfer performance	the speed of knowledge transfer	0.640	0.000
	the reliability of knowledge transfer	0.757	0.000
	the accuracy of the content of knowledge transfer	0.650	0.000
	the timeliness of knowledge transfer	0.757	0.000
	the relevance of knowledge transfer	0.705	0.000

Hypothesis 1 and 2 testing on structure 1 showed (Table 3) the assets knowledge management is influenced by the variable QHRM (t count 6.685 sig 0.000: H1 accepted) and ITC (t count 2.177 sig 0.000; H2 accepted)

Table 3. Regression test structure 1

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
(Constant)	3.979	1.010		3.939	.000
X1 (QHRM)	.731	.109	.603	6.685	.000
X2 (ITC)	.181	.083	.196	2.177	.032

a. Dependent Variable: asset knowledge management

The result of this study support Cheng et al. (2009) on studies conducted at universities in Malaysia. The quality of recruitment and training carried out by universities affects the performance of knowledge transfer. Using information technology in an organization and controlling information technology enables universities to improve their performance.

The results of this study are reinforced by the opinion that the practice of human resource management consisting of staffing, training, promotion, compensation, and rewards has a significant and positive effect on knowledge transfer (Minbaeva et al., 2003). Human resource management must be able to play a strategic role in competitive advantage in a context where organizations depend on individuals and collective knowledge assets (Swart & Kinnie, 2003)

Table 4. Regression test structure 2

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
Constant	6.107	1.362		4.483	.000
ITC	.230	.089	.269	2.586	.011
QHRM	.275	.120	.312	2.868	.045
QAK	.304	.116	.398	3.768	.030

a. Dependent Variable: KTP

Hypothesis testing on structure 2 (table 4) the transfer knowledge performance is influenced by the variable quality of human resource management (t count 2.868 sig 0.045 H3 accepted). The variable of information technology competence affected transfer knowledge performance (t count 2.586 sig 0.000 H4 accepted). The quality knowledge assets significantly affect transfer knowledge performance (t count 3.768 sig 0.030 H5 accepted).

Implication and Conclusion

The result of this study support Joanne (2000 on studies conducted at a multinational organization. Increased employee competency and understanding of how to do work will increase the accuracy of knowledge transfer content in the university.

Information technology competencies also have a positive and significant effect on the quality of knowledge assets. According to Zhang (2005), information technology has been widely used in the effective management of knowledge assets by facilitating the sharing of knowledge and learning among staff

Knowledge transfer is essential because every approach to solving a problem or operating skills will be re-created and requires proper knowledge. Knowledge transfer is the main focus of learning that is very important for the progress together with an organization. Knowledge transfer is a communication of knowledge from the source so that it is learned and applied by the recipient (Darr & Kurtzberg, 2000)

The limitations of the study can be possible new contributions to future research. First, one of the limitations of the cross-section method is that it cannot prove a causal relationship. A longitudinal design is needed, although this will not completely resolve the difficulty of proving a cause-and-effect relationship (Carmeli & Spreitzer, 2009). Second, universities in this study came from different clusters, and each cluster has a different level. The results may be different for employees working in various cultural, economic, and environmental conditions.

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