

Using Relative Importance Index Methods to Study Knowledge Sharing Approaches and Barriers in Land Administration

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Abstract

Management knowledge in land administration is currently facing a significant challenge. The paradigm of land administration encourages developed countries to strive for better knowledge management. Yet, knowledge sharing became the significant part of knowledge management strategy in land administration disciplines. The purpose of this paper is to identify the barriers that impede knowledge sharing in land administration. This study aims to determine how practices of knowledge sharing in land administration are implemented and the obstacles that they had to overcome despite the fact that knowledge sharing is a signifying implementation for organizational success. Land administration is how the rules of land tenure are applied and made operational. The processes of land administration include dealings; development of the land - amalgamation, subdivision, partition, and conversion; land taxation; title registration and resolving of conflicts concerning the ownership and the use of land (advisement or enforcement). Land administration in Malaysia is based on the Torrens System introduced by Sir Robert Torrens which was introduced in South Africa in 1858. Under the Torrens System, the Register is everything. Remarkably, the National Land Code (Act 828 of 1965) is the regulating rule for land management in Malaysia. An online survey was distributed to selected officers in the Land Office who are still serving at the Land Office, as well as former officers with good experience in land administration. They were asked to determine the knowledge sharing practices in land administration and to respond the major factors that are challenging or barriers that they are facing when knowledge sharing implemented in land administration. These findings suggest that knowledge sharing practices should be implemented, sustained, and standardized across all Perak Land Offices. As a result, the concept of knowledge sharing is more likely unstructured, which should be considered when designing structured knowledge sharing in land administration.

Keywords: Knowledge Management, Knowledge Sharing, Land Administration, Land Office.

Introduction

Knowledge of land administration is one of the most important factors in gaining practical experience in land administration. It is time for the government to emphasize knowledge management among the public sector to participate in the growing knowledge sharing in land administration. The importance of knowledge is to pay attention to ensure that they are capturing, sharing, and using productive knowledge within their organizations to improve learning and performance. Appropriate knowledge management mechanisms are therefore required to more efficiently harness these different sources of knowledge and facilitate their broader dissemination and application. Knowledge management is concerned with how to represent individual knowledge to others while also assisting in the enhancement of collaborative knowledge.

There are two type of knowledge which is explicit knowledge and tacit knowledge. Explicit knowledge is tangible, visible, public, and accessible to third parties; once shared, it belongs to everyone and can be seen “above the water.” Meanwhile, tacit knowledge strongly described as intangible, invisible, private, can be accessed only by a first-person basis and it was hidden “underwater”. Means that, explicit knowledge is knowledge that has been written down in manuals or guides to be shared or communicated to other employees in the organization, who will then also possess this knowledge without having to have the same experience. Tacit knowledge resides in the minds of the employees and consists of the “know-how” and skills that individuals have acquired on the basis of personal experience (Newell et al.,2009). Thus, clear stated that the explicit knowledge sharing requires less effort of an employee to share than tacit knowledge. Referring to research written by Mohamed, 2014, mentioned that knowledge transfer is an intangible; and that if we share the knowledge, it will not depreciate as opposed to storing it and not sharing with others, thus the knowledge will not grow and become depreciated. It is difference with tangible asset that will depreciate when we used it. The knowledge sharing is the movement of knowledge between different individuals, departments, divisions and units through knowledge management systems. Knowledge sharing is the process by which employees mutually exchange their tacit and explicit knowledge (Nonaka, 2007) to create new knowledge. It shows that, knowledge sharing is important to delegate and transfer information that can be used and benefits others. They believe that through knowledge management platform, experience and knowledge can be shared, transferred from individual to individual without boundaries.

Sharing, transfer, creation, and capacity building are all methodologies of knowledge management. The main purpose of this paper will discuss about knowledge sharing among the public sector in land administration. It will also discuss about the theoretical factors of knowledge sharing in land administration. The research focused on the Office of the Director of Lands and Mines and the District Land Office in Perak State, which are fully implementing and responsible for land administration. The purpose of this research is to determine the knowledge sharing practices in land administration and to identify what is major factors that are challenging or barriers that the respondent facing when knowledge sharing implemented in land administration through distribution of questionnaires.

Finally, the findings will lead to the Public Service Department (JPA) ensuring that those with knowledge and experience in land matters should be placed at Land Office to improve and strengthen the land administration, as well as increase confidence and accountability of the land office.

Factors Influencing Knowledge Sharing

In the literature review that has been reviewed by researchers found that there are various variables or critical factors that influence the success of knowledge management delivery in an organization or department. These factors will be used by the researcher during the questionnaire preparation to determine what are the frequently knowledge sharing practices and also the barriers or critical factors in the Land Office to practice knowledge sharing in land administration. There are several variables or critical factors that always mentioned by preceding researchers such as procedures, process, rules and regulations; organizational; different of task and job description; technology; demographic; training; personality or motivation; individual; leadership skill; human resource or human capital; communication and incentives. For the purposes of this paper, the researcher will concentrate on four major variables that have been widely discussed by previous researchers which are demographic, individual, organizational and technology. However, if all of these variables are efficiently and effectively managed, knowledge can be easily shared and transferred within the organization.

i) Demographic

The components of demographic variables such as age, gender, job position and working experiences are some demographic factors that influence knowledge sharing approaches. These demographic factors indirectly affect the readiness or hesitant of individuals to share knowledge and best practices with others. According to the demographic factors show that's age, gender and job positions are not a high impact variables factors for employees to share knowledge or best practices, but for variable of working experience in land administration it is highly agree that employees are willing to share knowledge if they have a great experience in land administration. For this purpose of study, it is equidistant with the aim of this purpose that need to take action by Human Resource Department (HRD) either through State or Federal administration, to ensure that before posting an employee to the land office, it is necessary to have a background in land matters.

ii) Individual

Second factor that influencing knowledge sharing is individual factor. Under this factor, this paper determines eight main variables which are: the gap between job positions; differences in duties between units; love to share knowledge with others; less opportunities for promotion; lack of trust; worry that information or knowledge not accurate or misused by others; lack of time and lastly, attitude of the individual himself (behavior). Referring to the findings obtained, the gap between job positions, difference of duties, fewer opportunities for promotion, lack of trust, lack of time and their own attitude (behavior) which is rather hoarded knowledge compared to share, has a moderate impact on the implementation of knowledge sharing in land administration. So, behavior is the most significant challenge in shifting behavior from knowledge hoarding to knowledge sharing. However, the majority of the respondents said that they love to share, but at the same time, they worry that information or knowledge that has been shared is not accurate or misused by others is

variables that have a high impact on individual factors. Aside from that, fear of sharing is the only barrier to knowledge sharing that has been identified as a factor that inhibits knowledge sharing behavior. There are various types of fear such as fear of criticism or negative feedback from colleagues, fear of misinterpretation, misleading or misconceive and so forth.



Figure 1. Organizational Factors

iii) *Organizational*

Organizational factors are also one of the factors that were widely discussed by preceding researchers, affect to the employees prevent from sharing knowledge. Regarding Kathiravelu, et. al.,2013, influences within the organization start with the culture that encourages employees to share values, adopt changes and knowledge sharing that leads to innovation, trust and learning. Therefore, there are five variables in the organization figured in Figure 1 which are: the organization has no knowledge sharing strategy planning; fears of losing expertise if transferred to another organization; no incentives and rewards as encouragement; no support from superiors and no space given to share knowledge. The summary as per Figure 1

The findings of organizational factors indicate that granting incentives or rewarding employees who consistently share knowledge or best practices should be taken into account and prioritized. The majority of respondents stated that there is no reward for those who constantly share their thoughts with others. However, those who wish to share best practices in land administration are given the space, opportunity, and platform. Maslow's Hierarchy of Need mentioned that recognition is a human basic need. Regrettably, even though the top management does not grant incentives or rewards, findings from individual factors acknowledge that the majority of the respondents love to share knowledge. It shows that they do not expect incentives or rewards, but it is more of their responsibility. This situation indicates that employees are willing to share their knowledge or thoughts but, from the bottom of one's heart, granting incentives is highly desirable. This is because not everyone has the ability or confidence to share knowledge and, as a souvenir to their commitment and encouragement to others to share knowledge. Indirectly, they will feel their commitment, knowledge and the time that they spent is appreciated by superiors.

It implies that employees try to keep quiet and are hesitant to share or contribute ideas or knowledge with others, which can lead to collective harm. In government sectors, knowledge sharing is considered new and rarely applied compared to private sector. The

awareness or willingness to share with others are still low because of their own perspective. Sometimes, they felt that they are not good enough or lack of trust with their capability in land administration. As a result, knowledge is being hoarded rather than shared. This is the most significant identifying challenge in shifting behaviour from knowledge hoarding to knowledge sharing. The finest organizations will be interested in making knowledge available to all employees in order to improve their work performance by those who have brilliant knowledge shared with others being fully utilized before they begin to retire. In terms of knowledge, when those with knowledge leave the organization, the knowledge follows them, and the organization loses a valuable and experienced resource. As a matter of fact, organizations must develop a clear and well-communicated strategy to promote knowledge sharing. The presence and quality of informal knowledge practices must determine to ensure the outcome from the practices either explicit or tacit knowledge are successfully implemented. If organizations can manage the learning process better through knowledge sharing, then they can become more efficient.

iv) Technology

The last factor that influences knowledge sharing is technology. Integration from manual work to electronic basis has been adopted by the rest of the world. Today's world of technological improvement has changed the way we work to be more systematic and manageable. Hence, the level of preparedness by each employee to accept and use the system should be optimized as the way of working has changed. The development of the system must user friendly and adequate training must be provided to the employees so that technological advancement being used by organizations to promote a positive knowledge sharing culture accordance to their expertise that can be accessible to everyone through the information technology (IT). There are three variables regarding the technological factors that are obstacles to knowledge sharing in land administration, namely; ease of obtaining information through accessing of information technology; existing systems that are difficult to use and understand and also lack of training with existing systems. Findings show that technological improvement has indirectly prevented employees from sharing knowledge or best practices due to the ease of obtaining information and the perception that they do not need to fear being perceived as less competent. In addition, lack of training or knowledge related to the use of existing systems has resulted in employees' reluctance to share knowledge was identified as one of the factors hindering employee knowledge sharing.

Research Methodology

This study was conducted by collecting data at the primary and secondary levels. Several methods have been identified by the authors for that purpose. Systematic planning is a set of planning and activity procedures that need to be referred to the researcher to complete and produce the study in time. The research methodology can be used as a reference to the researcher to achieve the objectives of the study, research problems, scope of the study, the time frame that has been set and the goals of the study that involving land administration in the state of Perak. The approach of this study is a combination between qualitative and quantitative analysis. A qualitative approach is drawn from the constructive paradigm and its purpose is to investigate how respondents interpret their own reality (Bryman & Allen, 2011). Meanwhile, a quantitative approach using the questionnaire method will be used to obtain feedback on critical factors. These methods of data collection have three (3) phases to obtain primary and secondary data including identifying who will be the respondent, what kind of

question that will be ask to the respondent related with the study and the findings from that primary and secondary data for purpose to develop a framework.

i) Formation of Questionnaires

The formation of questionnaires that will be distributed to the selected respondent is divided into three section. First, respondent will be asked about the background of the respondents, length of service in the public sector, and length of service in land administration. In the second section, respondents will be asked about the knowledge practices that are often used in land administration. This method is to see what practices are often used in decision making and in carrying out all matters related to land administration, whether using an explicit knowledge or tacit knowledge. Lastly, the findings from both methods, will examine the extent to know and deepen the importance of management or knowledge sharing in land administration. Furthermore, a propose or advice an appropriate knowledge management practices used in land administration.

ii) Formation of Interviews

The interviews highlight that employees are both intrinsically and extrinsically motivated to share knowledge, among the colleagues. The development of interview questions has involved four main parts, namely the approach to knowledge sharing practices in land administration, methods or practices of knowledge sharing that are often used, barriers or issues that arise when promoting knowledge sharing and improvement measures that can be taken on procedures to strengthen knowledge of employee in Land Office. In this face to face interview method, the researcher will go to each Land Office to obtain information from all Land Administrators who is responsible in land administration. This method does not take into account the length of service because the questions are more focused on the practices of knowledge sharing in organization.

Findings

The objective of this paper is to study knowledge sharing practices in land administration and the barriers that they are facing when implementing knowledge sharing. The method of data collection is through distribution of questionnaire form to selected respondents and face-to-face interviews. Meanwhile, for the purpose of analysis, frequency analysis will be used to identify the common feedback from respondents either quantitative or qualitative methods. The frequency analysis method was referred to the primary data which is referring to the distribution of questionnaires and also obtained from the secondary data such as through preceding researchers theses, journals, presentation paper, books, circular, guideline, government documentation and also feedback from face-to-face interviews. The researcher will polish in detail after gathering all the information and interview session to complete the frequency analysis. The quantitative approach allowed the researcher to understand the critical factors that are influencing knowledge management implementation which might not have surfaced if only the survey was conducted (Busanad, 2016). Furthermore, the quantitative analysis is the result of data obtained from the distribution of questionnaires to selected respondents who are still working in the land office, as well as those who have already transferred to other departments and those who are retired.

For the purpose of this paper, the data sample for quantitative methods contains 42 respondents, regardless of their role or position within the organization, as long as they are in line and have experience in land administration. Meanwhile, for the qualitative method, the respondents comprised of officers in land offices involving 18 districts in Perak, and 36 respondents were involved.

Table 1
Descriptive Statistics of Respondents

Survey Participants		Frequency
Gender	Male	40 (54%)
	Female	34 (46%)
Age	<30	4 (5.4%)
	31-40	43 (58.1%)
	41-49	19 (25.7%)
	>50	8 (10.8%)
Working Experience	<1	6 (8.1%)
	2-5	29 (39.2%)
	6-10	19 (25.7%)
	11-15	8 (10.8%)
	>15	12 (16.2%)
Job Position	Administration and Professional	41(55%)
	Supporting	33 (45%)

As a result, there are 74 respondents in total. The majority of respondents were male 54%, while female respondents contributed only 46% to both methods of qualitative and quantitative data analysis. The respondents ranged in age from less than 30 to more than 50 years old, as shown in Table 1, which summarizes the descriptive statistics of respondents including the working experience in land administration and also job positions either administration and professional level or supporting level. However, in relation to the question of knowledge sharing practices, most of the respondents agreed that the tacit knowledge approach is more significant and the wise solution in land administration while the explicit knowledge approach is more significant and easy to understand. The Relative Importance Index (RII) are used to analyze the best practices of knowledge sharing through tacit knowledge approach and explicit knowledge approach with given the ranking based on the importance and relevancy of the implementation based on the recent data collected by Director of Land and Mines Office and Land Office respondent. The details item that mention in questionnaires and findings the most significant and wise solutions regarding the title registration are shown in Table 2.

Table 2

Relative Importance Index (RII) Analysis (Tacit Knowledge Approach)

Item	5	4	3	2	1	Total	N	A*N	RII	Rank
Refer to Chief Administrative Assistant	110	136	45	6	0	297	74	370	0.803	5
Refer to Administrative Assistant	100	120	63	4	1	288	74	370	0.778	6
Refer to Top Management	160	108	45	0	0	313	74	370	0.846	3
Discussion with colleagues	125	136	39	2	1	303	74	370	0.819	4
Refer to previous cases regarding title registration	180	116	21	4	0	321	74	370	0.868	2
Refer to Legal Advisor	195	92	33	2	0	322	74	370	0.870	1

Regarding the tacit knowledge approach, to identify the best practices or item that significant and wise solution to be implemented in land administration, the highest RII rate and the first ranking was referring to legal advisor (RII=0.870), second rank was refer to previous cases of title registration (RII=0.868) and the third ranking was refer to top management (RII=0.846). These three item shows that it was significant and wise solution that should be implemented in organization. Meanwhile, Table 3 shown that the most three ranking significant and easy to understand using explicit knowledge approach to identify and analyze the best practices that should be implement in organization.

Table 3

Relative Importance Index (RII) Analysis (Explicit Knowledge Approach)

Item	5	4	3	2	1	Total	N	A*N	RII	Rank
Workshop	195	108	12	4	2	321	74	370	0.868	2
Courses	205	92	21	2	2	322	74	370	0.870	1
Briefing	150	124	30	4	1	309	74	370	0.835	3
Reference / Books at Mini Library	50	76	96	14	6	242	74	370	0.654	6
Mentor - Mentee Programme	155	88	45	6	3	297	74	370	0.803	5
Training of Trainer	165	100	30	4	4	303	74	370	0.819	4

Table 3, show that the first ranking should be implemented in organization for explicit knowledge approach was through courses (RII=0.870), second rank was workshop (RII=0.868) and the third ranking was briefing session (RII=0.835). These three item shows that it was the most significant and easy to understand approach for title registration that should be implemented in organization.

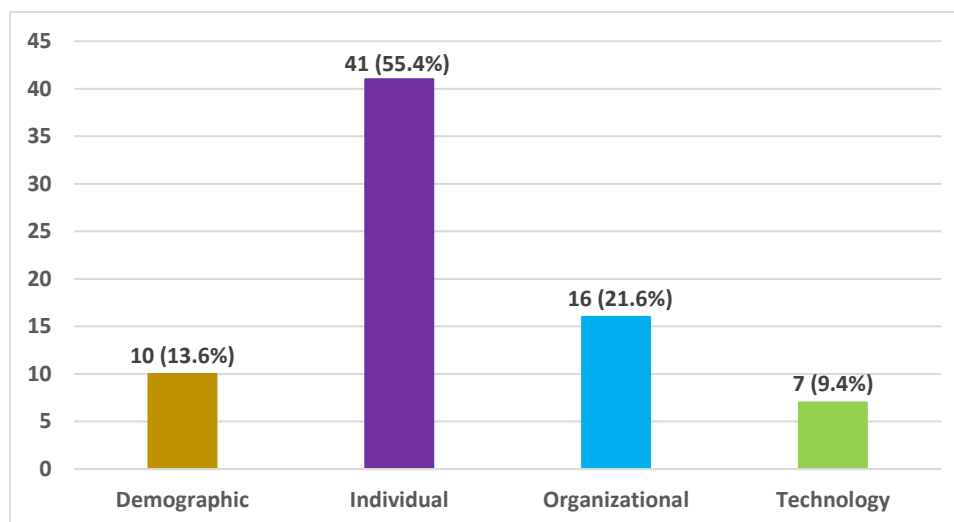


Figure 2: Critical Factors that Influence the Knowledge Sharing

In addition, findings from questionnaires and face-to-face interviews related to barriers in knowledge sharing found that 55.4% said individual factors were the main barriers in knowledge sharing followed by organizational factors 21.6%, demographic 13.6%, and technological only 9.4% as shown on Figure 2. It shows that the great challenge was, shaping and transforming individuals to be more inclined to share knowledge with others. It helps to ensure that knowledge related to land administration can be fully utilized within the organization.

Research Limitation

The study has several limitations. The qualitative data collected through face-to-face interviews was limited to 36 respondents who are still employed in a Land Office in Perak State and are involved in land administration or registration. Further, research should be conducted on other states that use the National Land Code 1965 (Act 828) as the primary reference for land administration. Furthermore, the frequency with which officers were transferred or changed, as well as the number of unfilled positions, made it difficult to obtain data. New employee in land office cannot give a relevant feedback due to lack in time and experience served in land administration. Furthermore, with the pandemic Covid-19 affecting people all over the world, implementing face-to-face interviews becomes more difficult. Until now, limited movement has been extremely difficult due to the need to cross the district for data collection purposes. Despite its current limitations, the study has potentially significant implications for knowledge sharing in land administration and can also provide insight into the importance of knowledge sharing behaviour.

Implications for Research

This study concentrated on individual and organizational factors. Figure 2 shows that there are three main objectives to be met before developing a framework. Integration will take place to examine the relationship between practices and knowledge sharing, as well as critical factors that cause employees to withhold their knowledge and best practices from others. Furthermore, the paper will develop a knowledge sharing strategy framework in land administration and will be presented to the Director of Land and Mines Director Office in

order to implement a focus group discussion (FGD) based on the findings. The majority of respondents strongly agree that sharing knowledge is the best way to share ideas or information about land administration. However, the methods must include both an explicit and tacit approach. As a result, the distribution of circulars, guidelines, order letters, and knowledge sharing is more adequate through seminars, workshops, and dialogue sessions, resulting in better and more effective two-way communication.

Figure 5 depicts a model for knowledge sharing in land administration as an example of research preparation. The scope of the study included all district offices (land offices) in Perak State, which involved 18 districts, and this study included both primary and secondary data when developing the questionnaires. Through literature research, the questionnaires and interview questions for the session were developed to identify the meaning of knowledge sharing and land administration. When it was discovered that there was no further research on knowledge sharing in land administration, the researcher took the approach of selecting this title as the main research.

Conclusion

Sharing knowledge, best practices, information and thoughts from one person to another has become difficult when there are barriers to overcome. Organizations must play a role in encouraging and supporting their employees to share knowledge. One of the tools that can motivate and encourage them to share is rewards and recognition. Instead, organizations should recognize the importance of knowledge sharing, raise awareness about the importance of teamwork, and recognize the contributions made by employees. The reviews from this paper could provide useful information for the management to closely look at the importance of knowledge and experience in land administration regarding negligence and inefficiency in decision making due to the lack of knowledge and experience in land administration. Individual factors such as self-esteem will result in a reluctance to acquire knowledge due to feelings of inferiority or embarrassment when receiving information from others, particularly subordinate employees. Excessive knowledge in related employment will increase public confidence in the quality of services and delivery system.

Thus, changes must be made in order to meet society's demands and expectations. Malaysia's civil service should be on par with that of other developed countries' civil services. This study concludes by revealing that the framework is being approached from various perspectives and methodologies. The findings will confirm that having a great deal of experience and knowledge in land administration is very important and significant in advising and carrying out the role of a land administrator. Hence, National Land Code 1965 (Act 828) must be well worth to those who are serve at Land Office. Furthermore, it will detail discussed of the effectiveness of knowledge sharing where we can eliminate or minimize the barriers that implied in workplace and what is the most great experience commonly use to share or transfer their knowledge or information at once either tacit knowledge or explicit knowledge. As a result, research must be conducted to investigate the impact of knowledge management and to devise strategies to effectively counteract such constraining factors by focusing on the barriers to knowledge management practice.

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