



# Knowledge sharing among public sector employees: evidence from Malaysia

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## Abstract

**Purpose** – The main purpose of this paper is to: identify the views of public sector employees towards the importance of Knowledge Sharing (KS); identify the barriers to KS; and identify initiatives that may encourage KS.

**Design/methodology/approach** – The design employed in this research was mainly descriptive in nature. A survey-based methodology employing a research questionnaire was used to elicit the views of public sector employees towards KS. A total of 320 questionnaires were randomly distributed and 170 were successfully collected, giving a response rate of 60 percent.

**Findings** – The results showed that the respondents were very positive in their views towards “importance of KS” and they also strongly felt that knowledge was a source of competitive advantage. However, they were of the view that the importance of knowledge sharing was not clearly communicated and many of them were not sure whether KS strategy existed in their department. The public sector employees also showed self-serving biases when it came to their willingness to share knowledge compared with their perception of their colleagues’ willingness to share knowledge. Respondents perceived organizational barriers as being more critical compared with individual barriers. Main organizational barriers were lacking in IT systems and there was a lack of rewards and recognition. Lack of time, lack of interaction and lack of interpersonal skills were identified as the main individual barriers. The most favoured KS initiatives found in this study was use of e-mail systems; inter-agency activities and use of information and communication technology (ICT) followed by support from top management.

**Research limitations/implications** – The study is confined to the public sector and thus it cannot be generalized to all organizations. The sample for this study is also limited to two public sector departments: ICU (Implementation Coordination Unit) and PWD (Public Works Department) and thus the views are strictly limited to these agencies. The findings from this study can be useful in enhancing public policy towards effective management and implementation of KS programs.

**Originality/value** – Since there is limited research on KS in the public sector from developing and emerging nations such as Malaysia, this empirical contribution will further enhance the theoretical knowledge on KS in the public sector from a developing nation’s perspective. Second, this is one of the few studies that examine views towards knowledge donating and knowledge receiving in the public sector. This area needs the utmost attention, since it was found in this study that employees’ perceived knowledge-sharing willingness (donating) may differ from colleagues’ perceived KS willingness (knowledge receiving).

**Keywords** Knowledge management, Public administration

**Paper type** Research paper



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## Introduction

### *Background to the study*

Knowledge is being considered as one of the most important drivers of the economy today and shall continue to be so in the years to come. Knowledge is continuously generated throughout an organization. To be successful and remain competitive, firms must ensure that knowledge is managed in the most effective manner. According to the resource based view, firms can maintain and achieve sustainable competitive advantage and earn superior profits if it owns and controls its tangible and intangible assets (Wernerfelt, 1984, 1995). The management guru Peter Drucker had also acknowledged knowledge as an important economic resource in an organization (Drucker, 1995). In his viable system model, Beer (1985, 1990, 1995) stated that only those systems survive that are adaptable. To make adaptation possible, organizations need intelligence – a constant flow of knowledge. According to Senge (1990), a leading guru in the area of organizational learning, an organization that facilitates knowledge sharing and learning among its members will continuously transform into a learning organization. Recent empirical research has proven the positive impact of knowledge management (KM) and knowledge sharing (KS) on organizational effectiveness (Gupta and Govindarajan, 2000; Yang, 2007) and innovation capability (Lin, 2007). As organizations focus on leveraging human capital in the face of tightening labor markets, employees are being encouraged to disseminate their knowledge throughout their organizations, thereby abandoning traditional competitive morays. In every organization, there are individuals who are willing to share their knowledge, and there are those who prefer not to. Knowledge creation and information management have become more vital. Thus, research in the area of KM/KS has been growing exponentially over the past few years. A large focus of the research has been in the area of KS behavior.

### *Research problem*

A review of the literature revealed that most research on KS behavior is focused on private organizations. For example, Lin and Lee (2004) examined the attitude of senior managers towards KS in selected private firms in Taiwan. van den Hooff and de Ridder (2004) covered private Dutch organizations. Yang (2004, 2007) focused on KS behavior in the hotel industry in Taiwan. Voelpel and Han (2005) examined KS attitude in private multinational firms in China. Ling *et al.* (2009) covered KS behavior in an MNC in Malaysia. Considerable research has also been done on KS behavior among students (Kwok and Gao, 2005; Connelly and Kelloway, 2003). One area that has not received much attention is the public sector. There is dearth of research that covers KS behavior in the public sector or government organizations (Willem and Buelens, 2007 and Syed-Ikhsan and Rowland, 2004b). The limited studies available are mostly focused on KM and not KS (Syed-Ikhsan, 2004a, b; McAdam and Reid, 2000; Gorry, 2008). Most probably, this lack of interest is due to the non profit nature of public sector firms and therefore there is no motivation to examine this issue. In recent years, public sector has gone through rapid transformation from a traditional bureaucratic system to one which is more market driven (Horton, 2003). To encourage greater autonomy, public sector employees are now more empowered (Horton, 2003). Today, public sector firms are known as knowledge based organizations (Willem and Buelens, 2007; Luen and Al-Hawamdeh, 2001) since knowledge is their most vital asset. Public sector firms emphasize on developing and providing knowledge services (Luen and Al-Hawamdeh,

2001). They play an important role in the development and provision of knowledge services and should be the focal unit of analysis in KM and KS research. As knowledge is a central resource of the government service, effective KS among employees is a significant public management challenge for providing excellent government service to constituencies at all levels. This study is an attempt to provide some insights into KS behavior of public sector employees in an emerging economy such as Malaysia. Specifically, the objectives of this study are to identify the views of public sector employees towards:

- importance of KS;
- knowledge donating and knowledge receiving;
- barriers to KS; and
- initiatives to encourage KS.

### **Literature review**

A review of theories on KM reveals that initial studies were focused on knowledge transfer among subsidiaries of multinational firms and knowledge was seen as a vital proprietary asset (Gupta and Govindarajan, 1991; Davidson, 1980, 1983). There were also old theories that linked knowledge sharing to communication theory where the sharing of knowledge was seen as a form of information exchange between individuals in organizations (Shannon and Weaver, 1949, as cited in Cummings, 2003). In the twenty-first century, knowledge was referred to as a central part of continuous learning in organizations which occurred through interaction among employees. This eventually became known as part of what we today know as Organization Learning Theory (Szulanski, 2000). One of the most important theories in the field of KM was however developed by Nonaka (1994), which he termed as the Dynamic Theory of Knowledge Creation. This theory provided a comprehensive theoretical view on how to conceptualize the entire knowledge creation process which later became known as the SECI model. Within the four modes (Socialization, Externalization, Combination, and Internalization) KS played a vital role for all knowledge conversions to succeed (Nonaka, 1994). Nonaka (1994) argued that the key to the success of knowledge sharing was ultimately individual and organizational commitment. Most research in the 90s also emphasized on the technological aspect of KM where more focus was given on the KM systems (Gray, 2000). However, in the last few years many organizations realized that technology is only an enabler and the main success of KS lies in the hands of people. In other words, the focus of KS should be more on the organizational members who are involved in the sharing of knowledge. This research will focus on the public sector or to be more specific two government agencies under the federal government:

- (1) Public Works Department (PWD) under Ministry of Works; and
- (2) Implementation Coordination Unit (ICU).

### *Knowledge and knowledge sharing*

Knowledge can be classified into tacit and explicit (Nonaka, 1994). Explicit knowledge is defined by Polanyi (1966, 1998) as knowledge that is formal, systematic and can be codified into records, databases. Tacit knowledge on the other hand is defined as knowledge that is personal, intangible and embedded in the cognitive minds of people

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and is obtained through learning and experience (Polanyi, 1966, 1998). Such knowledge can only be transferred by applying it (Choi and Lee, 2003). This knowledge is therefore more difficult to retain since it is intangible and not available in records.

KS can be referred to as the process of capturing knowledge or moving knowledge from a source unit to a recipient unit (Bircham-Connolly *et al.*, 2005). Willem (2003) on the other hand defines KS as exchange of knowledge between two parties in a reciprocal process allowing reshape and sense making of the knowledge in the new context. As researchers we would like to define knowledge sharing as transfer of valuable facts, beliefs, perspectives, concepts learned through study, observation or personal experience from knower to knowee. van den Hooff and de Ridder (2004) further divide KS into:

- *knowledge donating* – one's own view on one's KS willingness; and
- *knowledge receiving* – one's view on colleagues' KS willingness.

This research will explore KS views based on these two dimensions.

Increasing trends in job hopping have made organizations realize the importance of knowledge sharing among organizational members. Strack *et al.* (2008) argue that the work force in most developed economies is steadily ageing and the retirement of this workforce cohort represents the loss of crucial knowledge whose value to the organization extends far beyond the worker's individual position. Past findings on the importance of KS in the public sector tend to be mix. A study conducted on views towards importance of KS in an American manufacturing firm in Malaysia found that 75 percent of the respondents had positive views towards knowledge sharing (Ling *et al.*, 2009). However, more than 20 percent of the respondents indicated their ignorance on the importance of KS. Another study in selected Malaysian universities found that almost all the academic staff showed positive views towards importance of KS (Jain *et al.*, 2007). A comparison between public and private sector employees in Ireland, found that respondents from the public sector were more positive in their views on the importance of KS (McAdam and Reid, 2000). A study conducted in Kuwait on the importance of KS found less satisfactory results. Only about half the respondents were positive in their views on the importance of KS (Al-Athari and Zairi, 2001). With regards to views towards knowledge receiving and knowledge donating previous empirical studies have shown mixed results. Jain *et al.* (2007) in their study covering KS among academic staff in selected Malaysian universities found that self serving biases exist whereby respondents tend to be very positive in their perception towards knowledge donating and give a higher ranking when it comes to their willingness to share knowledge. However, their perception was not that positive and they gave a lower ranking when it came to knowledge receiving. Colleagues were considered to be less willing to share knowledge. A large number of respondents did not express their opinion explicitly.

### *KS barriers*

Riege (2005) has classified KS barriers into three broad categories:

- (1) individual;
- (2) organizational; and
- (3) technological.

Individual barriers refer to personal barriers such as lack of communication skills, lack of social networks, differences in culture, lack of time, lack of trust, lack of motivation, lack of awareness of the benefit of KS, lack of interaction, fear of not receiving recognition (Riege, 2005; Jain *et al.*, 2007; Ling *et al.*, 2009). Senge (1997) argued that “sharing of knowledge is not about giving people something or getting from them but sharing occurs when people are genuinely interested in helping one another develop new capacities for action”. Importance of trust and motivation as an antecedent of KS has been widely highlighted in the literature by a number of authors (Newell and Swan, 2000; McEvily *et al.*, 2003; Riege, 2005; Sondergaard *et al.*, 2007). A survey covering ninety different public sector firms in Belgium found a dominant positive effect of trust on KS intensity and effectiveness (Willem and Buelens, 2007). Organisational barriers are barriers that originate from the firm. Examples of such barriers are lack of rewards, lack of support from top management, ineffective HRM practices, weak organizational structure, inadequate infrastructure, poor organisational culture, office politics, lack of KM/KS strategies, lack of formal and informal avenue to share knowledge, competition between business units, lack of training etc. (Riege, 2005; Jain *et al.*, 2007; Ling *et al.*, 2009).

Among the technology barriers highlighted (Riege, 2005) are lack of integration of IT systems/processes, lack of technical support, lack of maintenance of integrated IT systems, people’s reluctance to use IT systems and lack of training for familiarization of IT systems and processes. Liebowitz and Chen (2003) in their empirical study on KS issues in the public sector found the following barriers to KS: poor organization and management, lack of KS culture, low motivation to share knowledge, bureaucratic structure, and knowledge hoarding culture. Syed-Ikhsan and Rowland (2004b) in their study on KM problems in the Malaysian public sector identified bureaucratic culture and structure, poor communication channels, and political interference as major barriers to knowledge sharing. Lack of technology was a major barrier to KS in the public sector (McAdam and Reid, 2000). Gorry (2008) who conducted two case studies on KS in the public sector in the USA found that inadequate technology and lack of institutional commitment (lack of leadership and top management support) as main barriers to KS. Gorry further found from the case studies that public sector firms are loosely organized and this creates a stumbling block to the creation of KS culture.

#### *KS initiatives*

Some of the popular KS initiatives employed in today’s knowledge based organisations and discussed in the literature are story telling (Snowden, 2000), communities of practice (Lesser and Fontaine, 2004), knowledge networks (Lincoln *et al.*, 1992), reward systems (Lee and Ahn, 2007), intranets (Stoddart, 2001), building trust (Fisman and Khanna, 1999; Cheng *et al.*, 2008). Research conducted in an American multinational in Malaysia found that the most effective method to promote KS is to link it with rewards and performance appraisal followed by top management support (Ling *et al.*, 2009). However, non monetary reward was perceived as less effective in the same survey. Another similar research conducted among academic staff in academic institutions in Malaysia found similar results. The top three strategies advocated were support from top management, linking KS with rewards and performance appraisal and using newsletters to disseminate information (Jain *et al.*, 2007). Research conducted in the public sector in Belgium found that trust, informal systems such as meetings and

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personal network and incentives were important factors that can encourage KS (Willem and Buelens, 2007). Another study covering both the public and private sector in Ireland found that although initiatives such as workshops, discussion forums, training needs analysis and face-to-face communication were used to encourage KS, these were not used effectively (McAdam and Reid, 2000).

### Methodology

The research design employed in this research was mainly descriptive in nature. A survey based methodology was employed through questionnaires to elicit the views of public sector employees towards KS. The sample used for this research comprised of public service executives from Grade 41 and above from the headquarters of both ICU (a non-technical department), Prime Ministers Department at Putrajaya (Administrative city) and PWD, Kuala Lumpur, the technical arm of the Government. ICU is an administrative department while PWD is the largest technical department in the Malaysian civil service.

The questionnaire was divided into four sections. Section A consisted of questions (items) eliciting demographic and personal background information. Section B consisted of 11 questions (items) designed to ascertain general views towards the following:

- importance of KS and awareness of the benefit of KS;
- existence of KS initiatives;
- employees willingness to share knowledge (knowledge donating); and
- colleagues' willingness to share knowledge (knowledge collecting).

Section C consisted of 15 questions (items) eliciting views towards KS barriers. Section D consisted of 17 questions eliciting views of respondents towards type of KS initiatives that should be promoted. The data was collected on a five point Likert scale where 1 represented "strongly disagree" and 5 represented "strongly agree". The measures were mainly adapted from past literature (Riege, 2005; Jain *et al.*, 2007; Ling *et al.*, 2009). The questionnaire was also pre-tested in terms of elucidation, clarity and intents by circulating it to a few members of the Infrastructure Section, ICU in order to ascertain its construal level. The move was also to incorporate changes, amendments and any useful suggestions. Improvement and modification including rephrasing and rewording were done based on the feedback obtained. Therefore, it is well-founded to regard that the data collected was reliable. To reduce social desirability bias, the survey was conducted using the "anonymous self administration" approach whereby personal employment information and job position details were not asked. This is to ensure the person does not feel directly or personally involved in the answers given and to ascertain neutrality, detachment and reassurance. 320 questionnaires were distributed randomly and 170 were successfully collected giving a response rate of 60 percent. The use of random sampling in the survey helped reduce voluntary response biases that are normally inherent when respondents are self selected volunteers. To further reduce bias towards positive responses or answers which may result in common method error variance, we conducted factor analysis as suggested by Podsakoff *et al.* (2003) to find out if items will load only into one factor. Our results of factor analysis showed that there were more than one factor (barriers, initiatives and

general views towards KS) which indicate that common method variance error does not arise in the data.

*Reliability analysis*

To ensure stability and consistency of the data collected, reliability test was conducted. The survey instrument was pre-tested to ensure reliability by distributing it to a few staff members to determine the understandability of the items and to make useful suggestions. Pilot testing was conducted among 30 employees to further fine tune and make adjustments and eliminate questions that were not appropriate. Cronbach alpha reliability coefficient values were then calculated. The results of the Cronbach alpha values are reported in Table I. The Cronbach alpha values for all the sections were more than 0.7 indicating high internal consistency.

**Results**

*Respondents' profile and background information*

The demographic profile of the respondents is given in Table II which is self-explanatory.

*General views towards KS*

General views of respondents on various aspects of KS are given in Table III. It can be observed from this table that a whopping 79.4 percent of respondents (strongly agree) consider that "knowledge is the most important factor to a delivery system". When "agree" and "strongly agree" responses are taken together, we find that almost 97 percent of respondents think that "KS is important for a successful delivery system" and that "KS will enable the department to have a competitive advantage". As

**Table I.**  
Reliability analysis

Description	Number of statements	Cronbach's alpha
Items related to the general views towards knowledge sharing	11	0.885
Statements related to the barriers to knowledge sharing	15	0.870
Statements related to views towards knowledge-sharing initiatives	17	0.873

**Table II.**  
Demographic profiles of respondents

Respondents' profile	Classification	Frequency	%
Gender	Male	107	62.9
	Female	63	37.1
Race	Malay	166	97.6
	Chinese	4	2.40
Age	20-30	35	20.6
	31-40	14	8.20
	41-50	71	41.8
	51-60	50	29.4

**Note:** n = 170

Items	Strongly disagree <i>n</i>	%	Disagree <i>n</i>	%	Neutral <i>n</i>	%	Agree <i>n</i>	%	Strongly agree <i>n</i>	%	Mean	SD
1. I think knowledge is the most important factor for a delivery system	9	5.3	0	0	2	1.2	24	14.1	135	79.4	4.62	0.948
2. I think KS is important for a successful delivery system	4	2.4	0	0	1	0.6	61	35.9	104	61.2	4.54	0.739
3. I think that the importance of KS is clearly communicated	4	2.4	14	8.2	37	21.8	102	60.0	13	7.6	3.62	0.835
4. KS will enable the department to have a competitive advantage	0	0	0	0	3	1.8	91	53.5	76	44.7	4.43	0.531
5. There is growing awareness of the benefit of KS in my organization/department	0	0	2	1.2	40	23.5	126	74.1	2	1.2	3.75	0.484

**Table III.**  
General views towards KS



compared to this the response to “importance of KS is clearly communicated” and “there is growing awareness on the benefits of KS in my organization/department” was much below: 67.6 and 75.3 percent respectively

*Views towards existence of KS strategy and culture*

Respondents were asked to give their views on two statements as given in Table IV. Although most respondents felt that there exists a clear KS strategy in their organization and there prevails KS culture in the organization/department, a large number were also indecisive.

*Views towards knowledge donating and knowledge receiving*

*Views on knowledge donating.* Employees were asked whether they were willing to share knowledge related to their work. Response was very positive where 97 percent stated “agree” and “strongly agree”. To another similar statement whether they were willing to share ideas and knowledge outside their scope of work, the response was again very positive with 96 percent stating “agree” and “strongly agree”. The mean values for these two statements were 4.27 and 4.21 respectively. This shows that employees are willing to share knowledge with others and this bodes well for the department’s KS initiatives.

*Views on knowledge receiving.* The mean value for two statements under this category ‘my colleagues are willing to share information related to work with me’ and “my colleagues are willing to exchange ideas and knowledge outside the scope of work with me” was 3.93 and 3.73 respectively, which is less than mean value of two items under knowledge donating. It seems to be a case of self serving bias. The results on views towards knowledge donating and knowledge receiving are depicted in Table V.

*Views on barriers to KS*

Views on barriers to KS were divided into organizational barriers and individual barriers to enhance its meaningfulness.

*Organisational barriers.* There were seven statements (items) that measured organizational barriers to KS. These barriers are arranged in descending order of their mean value. Highest mean value indicates the strongest barrier to KS as perceived by the respondents. It can be observed that “inadequate IT systems and processes in the department discourage KS” and “lack of reward and recognition system to motivate KS” figure as the two top most barriers under this category. The results on views towards organizational barriers towards KS are depicted in Table VI.

*Individual barriers.* There were eight statements (items) that measured individual barriers to KS. The highest individual barrier was “general lack of time to share knowledge”. The second highest individual barrier was ‘lack of interactions between those who can provide and those who need knowledge’. “Lack of trust among personnel in the department” was not viewed as a strong barrier. Almost 50 percent of the respondents did not agree with the statement that there is general lack of trust among personnel in the department. The second lowest barrier was “difficult to convince colleagues on the values and benefits of the knowledge I may possess”. The results on views towards individual barriers towards KS are shown in Table VII.

Items	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	SD
1. The department has a KS culture	0	10	45	97	18	3.73	0.730
2. There exists a clear KS strategy in my organization/ department	0	12	70	82	6	3.48	0.681

**Table IV.**  
Views towards existence of KS strategy

**Table V.**  
Views towards  
knowledge donating and  
knowledge receiving

Items	Strongly disagree		Disagree		Neutral		Agree		Strongly agree		Mean	SD
	n	%	n	%	n	%	n	%	n	%		
1. I am willing to share knowledge related to work when required by my colleagues	4	2.4	0	0	10	0.6	105	61.8	60	35.3	4.276	0.705
2. I am willing to exchange ideas and knowledge outside the scope of work with my colleagues	4	2.4	0	0	3	1.80	112	65.9	51	30.0	4.212	0.698
3. My colleagues are willing to share information related to work with me	0	0	0	0	31	18.2	119	70.0	20	11.8	3.935	0.546
4. My colleagues are willing to exchange ideas and knowledge outside the scope of work with me	0	0	1	0.60	61	35.9	90	52.9	18	10.6	3.735	0.649

Items	Strongly disagree		Disagree		Neutral		Agree		Strongly agree		Mean	Rank
	n	%	n	%	n	%	n	%	n	%		
<i>Organisational barriers</i>												
1.	0		6	3.5	12	7.1	136	80.0	16	9.4	3.953	1
2.	2	1.2	8	4.7	61	35.9	77	45.3	22	12.9	3.641	2
3.	6	3.5	40	23.5	29	17.1	94	55.3	1	0.6	3.259	3
4.	7	4.1	31	18.2	67	39.4	62	36.5	3	1.8	3.135	4
5.	2	1.2	25	14.7	81	47.6	58	34.1	4	2.4	3.218	5
6.	21	12.4	54	31.8	49	28.8	42	24.7	4	2.4	2.729	6
7.	33	19.4	66	38.8	33	19.4	27	15.9	11	6.5	2.512	7

**Table VI.**  
View towards organizational barriers to knowledge sharing

**Table VII.**  
View towards individual  
barriers to knowledge  
sharing

Items	Strongly disagree		Disagree		Neutral		Agree		Strongly agree		Mean	Rank
	n	%	n	%	n	%	n	%	n	%		
<i>Individual barriers</i>												
1.	2	1.2	27	15.9	48	28.2	71	41.8	22	12.9	3.494	1
2.	15	8.8	46	27.1	32	18.8	70	41.2	7	4.1	3.047	2
3.	7	4.1	43	25.3	57	33.5	49	28.8	14	8.2	3.118	3
4.	0		52	30.6	57	33.5	58	34.1	3	1.8	3.071	4
5.	1	0.6	88	51.8	20	11.8	61	35.9	0		2.828	5
6.	6	3.5	31	18.2	78	45.9	51	30.0	4	2.4	3.094	6
7.	0		72	42.4	45	26.5	53	31.2	0		2.888	7
8.	9	5.3	76	44.7	47	27.6	37	21.8	1	0.6	2.676	8

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### *Views on KS initiatives*

There were 17 statements (items) that measured public sector employee's views towards KS initiatives. These were ranked to ascertain the highest proposed KS initiative. The main KS initiatives proposed were use of email system; inter agency activities, use of ICT, top management support and adoption of KS activities in monthly departmental activities. More than 70 percent of the respondents stated "agree" and "strongly agree" to the statement that KS can be encouraged if it is linked to rewards. Close to 30 percent of respondents were also not supportive of linking KS initiatives to performance appraisal. The results on views towards KS initiatives are depicted in Table VIII.

### **Discussion**

KS is considered to be very important in the public sector as is evident from the survey. Respondents were also very positive when asked whether KS can enhance competitive advantage. It shows consistency in their views. The views of public sector employees were much more positive as compared to similar studies conducted in Malaysia (Jain *et al.*, 2007; Ling *et al.*, 2009) and in Kuwait where only 50 percent were positive (Al-Athari and Zairi, 2001). It was a cause of concern when quite a large number of respondents (more than 30 percent) were not very sure (indecisive and disagreed) that KS culture existed in the department. In fact many (about 50 percent) were also not sure whether KS strategy existed. This reflects that there is a scope for improvement in government policies trying to create KS culture in the public sector..

When it came to views towards knowledge receiving and donating, the public sector employees showed self serving biases. They were very positive (almost all) when asked about their willingness to share knowledge (knowledge donating) within their job scope and outside their job scope. This finding supported a similar study conducted among academic staff in Malaysian universities (Jain *et al.*, 2007). With regards to their perception towards their colleague's willingness to share knowledge, the views were although positive but smaller in percentage (only 80 percent were positive). Eighteen percent were indecisive indicating reservation or lack of trust towards their colleagues. It is interesting to highlight that the respondents perceived that their colleagues are less willing to share knowledge when it came to knowledge that is outside their job scope. Furthermore a large number were also indecisive (36 percent) again indicating lack of trust or "knowledge is power" syndrome.

Regarding barriers to KS, public sector employees perceived organizational barriers as more critical as compared to individual barriers based on the ranking and mean values obtained. The main organizational barriers were lack of IT systems and lack of rewards and recognition. This finding supported similar studies conducted in the public sector where technology was found to be a major obstacle to KS (Gorry, 2008; McAdam and Reid, 2000; Ling *et al.*, 2007; Jain *et al.*, 2007). The main individual barriers were lack of time, lack of interaction and lack of interpersonal skills. Lack of time was also found to be one of the main barriers in the study conducted in an American MNC in Malaysia and among academic staff in Malaysian universities (Ling *et al.*, 2009; Jain *et al.*, 2007). However, it is interesting to note that, lack of trust was not seen as a critical barrier among the public sector employees. It was ranked the lowest among all individual barriers. This clearly contradicts the findings from the study conducted in the American MNC in Malaysia where trust was found to be the major

**Table VIII.**  
Views towards KS  
initiatives

Statements	Strongly disagree		Disagree		Neutral		Agree		Strongly agree		Mean	Rank
	n	%	n	%	n	%	n	%	n	%		
1. The organizational/departamental e-mail system should be used for knowledge of significance to staff	0	0	0	0.6	1	0.6	117	68.8	52	30.6	4.300	1
2. Inter-agencies activities can encourage and enhance KS efforts	0	0	1	0.6	1	0.6	141	82.9	27	15.9	4.141	2
3. Make use of ICT to induce KS activities as monthly or regular programs	0	0	0	0	4	2.4	125	73.5	41	24.1	4.218	3
4. The top management should welcome and consider KS-related suggestions and activities from the staff	4	2.4	0	0	1	0.6	86	50.6	79	46.5	4.388	4
5. The top management should be willing to accept and make changes through KS activities	4	2.4	0	0	1	0.6	97	57.1	68	40.0	4.324	5
6. KS activities should be included in the monthly departamental or organizational activities	0	0	0	0	5	2.9	124	73.5	40	23.5	4.206	6
7. KS activities should be openly supported by the top management	4	2.4	0	0	1	0.6	84	49.4	81	47.6	4.400	7
8. Staff should be encouraged to put forward their suggestions on KS-related activities	0	0	0	0	9	5.3	113	66.5	48	28.2	4.229	8
9. KS culture is possible if the top management openly emphasizes and encourages the importance of knowledge	5	2.9	1	0.6	5	2.9	90	52.9	69	40.6	4.276	9
10. Regular publications and similar tools are useful in KS efforts among the staff	2	1.2	7	4.1	5	2.9	115	67.6	41	24.1	4.094	10
11. KS can be improved if technology is also improved	0	0	8	4.7	13	7.6	122	71.8	27	15.9	3.988	11
12. KS can be encouraged if it is linked with the performance appraisal of the staff	6	3.5	7	4.1	16	9.4	103	60.6	38	22.4	3.941	12
13. Regular KS campaigns should be organized periodically	0	0	1	0.6	29	17.1	101	59.4	39	22.9	4.047	13
14. KS can be successfully implemented if clearly linked with rewards and some forms of remuneration	2	1.2	2	1.2	36	21.2	99	58.2	31	18.2	3.912	14
15. KS can be encouraged if there is a designated knowledge officer in the department	6	3.5	21	12.4	23	13.5	105	61.8	15	8.8	3.600	15
16. Non-monetary rewards, e.g. recognition and appreciations, are more effective in encouraging KS	6	3.5	11	6.5	35	20.6	98	57.6	20	11.8	3.677	16
17. Knowledge repositories (database) must exist in my organization/departement	6	3.5	15	8.8	39	22.9	102	60.0	8	4.7	3.535	17

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barriers among its staff (Ling *et al.*, 2009) and another study among public employees in Belgium (Willem and Buelens, 2007). This auger well for public sector employees and it will be easier to implement policies in the future.

The most favoured KS initiatives found in this study was use of email systems; inter agency activities and use of ICT followed by support from top management. This shows that in the public sector, technological systems are important tools to enhance KS among employees. This is also consistent with their views that lack of IT systems is a major barrier to KS. The most favoured initiative was linking KS to rewards and performance appraisal. This was not surprising since MNCs are more naturally focusing on competitiveness and it is a culture to link work outcomes to rewards and appraisal.

#### *Implication to theory*

This research has a couple of theoretical contributions. First, there is limited research on KS in the public sector from developing and emerging nations such as Malaysia. This empirical contribution will enhance further the theoretical knowledge on KS in the public sector from a developing nation. Second, this is one of the few studies that examine views towards knowledge donating and knowledge receiving in the public sector. This area need utmost attention since it was found in this study that employees' perceived KS willingness (donating) may differ from perceived colleagues' KS willingness (knowledge receiving). This can be attributed to lack of positive environment that enhances KS within departments, teams or organization. The willingness to share knowledge can also be influenced by whether the knowledge is work related and non work related. Employees were more willing to share knowledge when it is work related and are quite reluctant to share knowledge if it is non work related. This conforms to "knowledge is power syndrome". Third, this research has contributed further to the identification of KS barriers and KS initiatives in the public sector from a fast developing nation.

#### *Implication to practice*

The findings from this study can be useful to enhance public policy towards effective management and implementation of KS programs. It is clear from this study that KS initiatives must be clearly communicated in the organization so that all public sector employees are aware on its importance and usefulness.

### **Conclusion**

Most public sector organizations in Malaysia, until few years ago, operated in a highly protected environment. As the process of economic liberalization began it became difficult for these enterprises to compete and sustain with those organizations who operated on efficiency rather than on bureaucracy. A new approach to public management became mandatory. This new public management approach requires increasing teamwork, limiting the number of rules, and obtaining more value-driven management and decentralization in public sector organizations. Being successful only on the basis of "know how" has become difficult. Public sector organizations now need to have knowledge about "know what", "know where", "know if", "know when", and 'know why'. This entire set of knowledge will never be available with one individual. It is only by sharing each other's knowledge that an organization can think of being



successful. It is interesting to discover that the employees in the public sector are aware of this fact. However, a whole range of barriers may exist in the organization that may discourage people to share knowledge. Public sector organizations need to take up studies that may help them identify knowledge sharing barriers that exist in their workplace and take appropriate measures to overcome them. Human resource management can play a key role in an organization's endeavor to achieve this objective. If a company really needs to benefit from knowledge sharing, it needs to align its human resource practices and processes in such a way that knowledge sharing becomes a part of the organizational culture. Corporate education, performance management, reward system, recruitment practices, and career planning can be designed in a way that encourages people to share their knowledge.

#### *Future research direction*

Future research should focus on group related barrier since a large amount of work in the public sector is conducted in teams. There is dearth of research focusing on KS barriers in teams. Future research on KS in the public sector should also examine its impact on work related outcomes such as efficiency, productivity, commitment, performance etc. There is little research that examines impact of KS on organizational outcomes in the public sector.

#### *Research limitations*

This research has its own limitations. First, in spite of every care being taken in designing the survey instrument as per the best research methodology practices, the wording of the questions might have influenced the responses. Second, the study is confined to the public sector and thus it cannot be generalized to all organizations. Third, the sample for this study is also limited to two public sector departments (ICU and PWD) and thus the views are strictly limited to these agencies and cannot be generalized to all public sector staff.

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### Further reading

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