Knowledge Management in a Public Organisation in Malaysia: Do People Really Share?

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ABSTRACT

In the new millennium, the concern of the Government of Malaysia in developing the nation through the knowledge economy has become very apparent. In 2002, the Government of Malaysia has launched the Knowledge Management Strategic Master Plan aiming to transform Malaysia from a Production-based economy to a knowledge-based economy. This study is an empirical investigation on the sharing/transfer of knowledge in a public organisation. To achieve an in-depth study, the Ministry of Entrepreneur Development of Malaysia was chosen for a case study. The findings are based on replies to a questionnaire survey done from September to December 2001.

Keywords

Knowledge Management, Knowledge Transfer, Knowledge Sharing, Public Organisation, Malaysia

1.0 INTRODUCTION

Knowledge Management (KM) is a growing field that has attracted many private and public organisations all over the world. Both public and private organisations are now considering knowledge as the most important intangible asset that need to be fully managed and utilised.

2.0 MALAYSIA'S ECONOMIC AND DEVELOPMENT PROGRAMME AND KNOWLEDGE MANAGEMENT

Malaysia's development programme started in 1957, immediately after her independence. In the early stage of development, the main source of growth was concentrated in the agriculture and natural resources sectors. In the 1970s, Malaysia changed tremendously by moving from agriculture to import-substitution and export-oriented industrialisation. Assembly-type manufacturing factories have become more prominent. In the 1980s, the country has moved further by concentrating on investment in medium-tech manufacturing and services, and these have become the main source of economic growth. With the

need for higher productivity, Malaysia has upgraded her economy through high-tech manufacturing and services in the 1990s. In the new millennium the nation has reexamined the overall development strategy, and has moved from a productivity-driven growth phase to a knowledge-based and technology-driven phase.

The wave of accepting knowledge as a valuable asset started a few years ago. In the official opening of a K-Economy Conference on October 17, 2000, the former Prime Minister of Malaysia, the Honourable Tun Dr. Mahathir bin Mohamed, emphasised that knowledge is real. He showed on a graph "that productivity growth doubled in knowledge-rich economies" (Mohamed, 2000b). He further stressed:

"Knowledge of course has always played a role in the progress of nations. Knowledge of the stars and the geography of continents had enabled the early civilisations to trade with distant places and exploit distant lands. Knowledge of the sciences had contributed to the industrial age. But today knowledge refers more to the speed of communication and the speed of information and data. Everything that anyone needs to know in order to make decisions is at everyone's fingertips literally. The deciding factor is the skill and the speed with which one uses information in order to decide. And that skill and speed comes from the depth of knowledge that one has of the different elements and technological capacities can be made to work to yield a desired result" (Mohamed, 2000b).

In a speech given at the Second World Knowledge Conference in Kuala Lumpur on March 8, 2000, the former Prime Minister of Malaysia, the Honourable Tun Dr Mahathir bin Mohamed, emphasised that "in our Vision 2020, we set the goal of becoming a fully developed nation by 2020, the end of our second generation as an independent country" (Mohamed, 2000a). He further stressed:

"Vision 2020 noted that there was a time when land was the most fundamental basis of prosperity and wealth. Then came the second wave, the age of industrialisation. Smokestacks rose where fields were once cultivated. Now increasingly knowledge will be not only the basis of power but prosperity".

In the 2001 Budget Speech presented on October 27, 2000, the former Finance Minister of Malaysia, Tun Daim Zainuddin (Zainuddin, 2000), urged Malaysian citizens to be well prepared with the emergence of the K-economy. He further stressed:

"We must accept the realities of the K-economy. We have no other alternative. We shall all become citizens of the K-economy. Survival in a borderless global economy based on knowledge requires everyone to be equipped with new skills and assimilate the culture of high technology and dynamic entrepreneurship" (Zainuddin, 2000).

At the end of the year 2002, the Government of Malaysia published the K-based Economy Strategic Master Plan (KESMP), which aims to propel Malaysia from a Production-based economy (P-economy) to a Knowledge-based economy (K-economy). The KESMP proposed seven strategic thrusts for the transition, which were (K-based Economy Strategic Master Plan, 2002):

- To cultivate and secure the necessary human resources
- To establish the institutions necessary to champion, mobilise and drive the transition to a K-based economy
- To ensure that the incentives, infrastructure and infostructure necessary for the optimal application of knowledge in all sectors of the economy are in place
- To increase the capacity for the acquisition and application of science and technology
- To ensure that the private sector spearheads the development of the K-based economy
- To develop a knowledge-based Civil Service
- To bridge the knowledge and digital divides.

The Master Plan's strategic thrusts complement each other and all thrusts are equally important in enhancing the Malaysian economy in the future.

3.0 BACKGROUND AND LITERATURE REVIEW

The ability to transfer knowledge across an organisation has been found to contribute to organisational performance. Knowledge is transferred in various form and levels. It can be transferred between individuals, from individuals to explicit sources, from individuals to groups, between groups, across groups, and from a group to the organisation (Kayworth and Leidner, 2003). Sveiby (1997) suggests knowledge can be transferred in two ways. "Information transfers knowledge indirectly through media such as lectures and audio-visual presentations; tradition transfers knowledge directly, from person to person, through learning by doing" (Sveiby, 1997).

Knowledge transfer requires the willingness of a group or individual to work with others and share knowledge to their mutual benefit. Without sharing, it is almost impossible for knowledge to be transferred to another person. This shows that knowledge transfer will not occur in an organisation unless its employees and work groups display a high level of co-operative behaviours (Goh, 2002). Although knowledge transfer is very important in an organisation, Jacob and Ebrahimpur (2001) believe that the actual transfer of knowledge within organisations still remains a problematic issue for managers.

One of the most important factors frequently mentioned in the literature is the culture of the organisation. The success of knowledge creation and transfer relies on a culture that supports knowledge sharing and trust among individuals in the organisation. Augier *et al.* (2001) argue that whenever "people solve complex unstructured problems they bring knowledge and experience to the situation and as they interact during the process of problem solving they create, use and share knowledge". Goh (2002) believes that a strong culture of sharing knowledge with high trust and a collaborative and cooperative climate will have a positive influence on knowledge transfer.

To ensure successful knowledge sharing and transfer, organisations need to encourage individuals in the organisation to share not only their explicit knowledge but also the tacit knowledge that they have. Every individual, especially the management, should provide time and resources to take part in learning and sharing exercises. Smith (2001) argues that if management does not make any clear statement, employees are likely to share only explicit knowledge, because it is easier to codify, document and transfer.

A positive attitude toward sharing of knowledge is also important to an organisation. Resistance over this issue is very difficult to overcome, as individuals still view knowledge as a source of power, especially in gaining acknowledgement and personal recognition in an organisation. Individuals tend not to disseminate the knowledge they acquire and are reluctant to share with others. This attitude gives employees a sense of security and political influence within the organisation (Ahmed *et*

al., 2002). Such attitudes that hinder knowledge management must be communicated and understood by managers and employees.

To look into the performance of knowledge transfer in the Ministry of Entrepreneur Development of Malaysia, the authors have drawn out three main questions:

- How fast is knowledge transferred in the Ministry?
- How accurately is the knowledge transferred?
- How reliable is the knowledge?

How fast knowledge can be transferred is the most important key element that needs to be identified. According to Bloodgood and Salisbury (2001) knowledge transfer may "lead to advantage through speedier deployment of knowledge to portions of the organisations that can benefit most by it".

Alavi and Leidner claim that the most important aspect of knowledge management in the organisational setting "is the transfer of knowledge to location where it is needed and can be used" (Alavi and Leidner, 2001). Basically, knowledge assets in the organisation normally do not flow efficiently to the target groups, even in the same organisation.

The third dimension that requires consideration is the reliability of the knowledge in the organisation. Reliability of data, information and knowledge assets in the organisation is very important, since inaccurate knowledge could well cause problems to the Government as a whole.

4.0 METHODOLOGY

The study reported in this paper is part of a larger research project aimed at investigating the performance of knowledge transfer in a public organisation in Malaysia (Syed-Ikhsan and Rowland, 2004a, 2004b). However, this paper only discusses descriptively the performance of knowledge transfer and the sharing of knowledge in a public organisation.

In this study, knowledge in an organisation includes encoded knowledge, habitual knowledge, scientific knowledge, collaboration knowledge, process knowledge and communal knowledge (Whitehill, 1997). The knowledge can be located in people's heads, electronic form or a physical document. Detailed classifications are as follows:

- Encoded knowledge (know what?) which includes written policies and procedures;
- Habitual knowledge (know how?) which includes everyday routine activity;
- Scientific knowledge (know why?) which includes technological and technical knowledge;

- Collaboration knowledge (know who?) which includes interaction and problem solving;
- Process knowledge (know when and where?) which is the cross-functional team; and
- Communal knowledge (care why?) which is the organisational culture.

Since the study was set in a public sector, knowledge management here is defined as a systematic and organised attempt to use the knowledge, described above, within the organisation to provide services to the public and to improve performance.

In term of gathering empirical data, this study used a questionnaire survey as the main instrument. Apart from questions on knowledge transfer and knowledge sharing, questions on educational background, working experience and number of years in the organisation were also included in the questionnaire. These questions were asked in order to assist in the search for a possible association between reported individual attitudes to sharing and transfer of knowledge in the organisation.

The questionnaires were distributed to all officers from Grade 1 to Grade 6 (under the New Numeration Systems) between from September and December 2001, including officers in the headquarters in Kuala Lumpur and officers in both regional and state offices. To ensure full coverage of the respondents, a current list of employees' names obtained from the Human Resources Division was used as a guide when distributing the questionnaire. All respondents in the headquarters were personally given a questionnaire by hand; the respondents in the regional offices and state offices were contacted by telephone, and then questionnaires were subsequently sent by mail. This was to ensure that all respondents understood the needs of the survey. Out of 221 potential respondents, a total of 204 questionnaires were distributed; a total of 17 respondents were unable to be contacted, because the potential respondents were on unpaid leave, maternity leave or attending courses externally. A total of 154 questionnaires (75.49%) were returned.

5.0 RESULTS AND DISCUSSION

This section provides the responses on the perception by respondents on the performance of knowledge transfer and knowledge sharing in the Ministry. A crosstabulation technique was used in analysing the items in this section, focusing on working experience and number of years in the Ministry. These two items are considered very important as more and more knowledge is accumulated by individuals through years of working experience and by number of years in a certain organisation.

Experienced workers are considered to be more knowledgeable, and this will certainly influence the way they overcome particular problems. Davenport and Prusak argue that experience "provides a historical

perspective from which to view and understand new situations and events" (Davenport and Prusak, 2000) and "experience changes ideas about what should happen into knowledge of what does happen" (Davenport and Prusak, 2000). This will certainly allows individuals to create and share their knowledge effectively within their organisation.

5.1 Knowledge Transfer Performance

There were three main areas related to knowledge transfer highlighted in the questionnaire. These were speed, reliability and accuracy. Respondents were asked to indicate whether they strongly agree, agree, neutral, disagree or strongly disagree with the issues in each of the questions.

5.1.1 Speed of Knowledge Transfer

When asked whether knowledge could be accessed very quickly within the divisions/units, 59.1% of respondents either "agree" or "strongly agree" compared to 24% of the respondents who either "disagree" or "strongly disagree" with the statement. When compared with working experience, the results show that more than 52% of respondents from every group of different working experience were confident with regard to the accessibility of information/knowledge within their own division or unit. The highest score was from those who have working experience of 11 to 15 years (69.2%). On the other hand, most respondents who either "disagree" or "strongly disagree" were from the group who have less than six years working experience (25.5%) and between six and ten years (36.9%). When further analysed, it was found that 73.3% of respondents who have been working with the Ministry for more than ten years felt that information/knowledge available in their own division/ unit can be accessed very quickly. In contrast, 25.9% of respondents in the group that have been with the Ministry for less than one year either "disagree" or "strongly disagree" with the statement, compared to only 6.7% of respondents who have been with the Ministry for more than ten years.

The results clearly indicate that the less experienced or new employee in the Ministry still has some difficulty in accessing information and knowledge in the Ministry even in their own divisions/unit. A large number of employees still have difficulties in sharing knowledge/information in their own divisions/unit.

In response to questioning about access to knowledge within other divisions/units, the survey indicates that there were 24.2% of respondents who "agree" or "strongly agree" with the statement. On the other hand, 47.4% of respondents either "disagree" or "strongly disagree" that knowledge can be accessed very fast with other divisions/units. When analysing between the responses and the number of years of working experience, it was found the highest score was from those who have working

experience more than 20 years. A total of 36.6% of respondents in this group cited either "agree" or "strongly agree". On the other hand, more than 48% of respondents in each group with less experience (less than six years, six to ten years, 11 to 15 years and 16 to 20 years) said either "disagree" or "strongly disagree". When analysing the responses with number of years in the Ministry, it was found there were more respondents in each group who either "disagree" or "strongly disagree" compared to those who said either "agree" or "strongly agree".

The results show that most employees still face difficulties when sharing knowledge with other divisions/ units regardless of their working experience or the number of years in the organisation. Employees seem to compete with other divisions and kept knowledge/ information to themselves.

Pertaining to the statement that knowledge is exchanged quickly in the Ministry, the survey shows that 47.7% of respondents cited that they "agree" or "strongly agree" with the statement. However, there were 25.5% of respondents who cited either "disagree" or "strongly agree". An analysis between working experience and exchange of knowledge showed some inconsistency in the responses. The survey shows that respondents with working experience of 11 to 15 years (69.2%), more than 20 years (53.6%) and less than six years (48.9 %) claimed that information and knowledge were exchanged very quickly within the divisions/units. In contrast only 39.4% of respondents with working experience of 16 to 20 years and 31.6% of respondents with working experience of six to ten years agreed with the statement. When analysed using number of years in the Ministry, the results show that 60% of respondents who have been with the Ministry more than 10 years felt that information and knowledge can easily be exchanged in their own divisions/units. On the other hand, respondents who have been with the Ministry less than 10 years agreed less with the statement.

The results clearly show that respondents with more working experience and who have been with the Ministry for more than ten years seem to agree more than those who have less experience. In contrast, respondents with less experience or who have been with the Ministry for less than seven years tend to either "disagree" or "strongly disagree".

When asked whether information/knowledge in the Ministry can be exchanged very quickly with other divisions/units, only 22.9% of respondents either "agree" or "strongly agree" with the statement. Most of the respondents who agreed were from those who have working experience of more than 20 years. In contrast, 45.7% of respondents said they either "disagree" or "strongly disagree" that knowledge/information can be exchanged very fast with other divisions/units. When further analysed, the results show that the group that disagrees most strongly with the statement were those who have working experience of 11 to 15 years (61.5%).

This was followed by those who have 16 to 20 years (54.6%), six to ten years (52.6%) and less than six years (46.8%) working experience. When analysed using number of years in the Ministry, the results show that more than 40% of respondents in each group felt that information and knowledge were not easily exchanged between divisions/units. Surprisingly, 53.4% of respondents in the group that have been with the Ministry for more than 10 years still felt that it was difficult to exchange knowledge or information in the Ministry.

The results show that only those who have more than 20 years working experience felt that knowledge and information could be exchanged very quickly between different divisions/units. However, when referred to number of years in the Ministry, there are no clear differences in responses between groups.

5.1.2 Reliability of Knowledge Transfer

The reliability of knowledge/information that was transferred in the Ministry was one of the important elements addressed in this survey. When asked for their view, 45.5% of respondents either "agree" or "strongly agree" with the statement. In contrast, only 18.8% of respondents said that they "disagree" or "strongly disagree" with the statement. When further analysed between the responses and working experience, it was found that 52.3% of respondents with more than 20 years experience felt that knowledge/information which is transferred was generally very reliable. The lowest responses that either "agree" or "strongly disagree" were from those who have working experience between six to ten years (26.3%). When the issue was analysed with number of years in the Ministry, it showed new officers in the Ministry were less likely to agree, compared to those who have been with the Ministry for a longer period. The study shows that 60% of respondents who have been working for more than ten years claimed knowledge/ information which is transferred in the Ministry was generally very reliable, compared to 33.3% of respondents with less that one year working with the Ministry.

The results shows that employees with more working experience and who have been with the Ministry for a longer period, tend to agree more compared to those who have less experience and who have been with the Ministry for a shorter period.

When asked if the knowledge/information transferred in the Ministry was very up-to-date or not, 33.7% of respondents indicated that they "agree" or "strongly agree" that the information in the Ministry was generally very up-to-date. On the other hand, 27.3% of respondents either "disagree" or "strongly disagree" with the statement. Pertaining to responses from groups with different lengths of working experience, the results seem to be inconsistent; the highest level of agreement was from those who have less than six years and more than 20

years working experience (40.4%). Lower responses came from those who have working experience of 16 to 20 years (21.2%), 6 to 10 years (26.3%) and 11 to 15 years (30.8%). Surprisingly, the number or respondents who either "disagree" or "strongly disagree" were equal to or more than those who agree. When analysed between the transferred knowledge/information and number of years working in the Ministry, the results show the number of responses that either "agree" or "disagree" were almost alike. The results indicate there was no significant difference between the groups.

The results clearly show that knowledge/information that is transferred and shared is still not very up-to-date. Most respondents regardless of their working experience and the length of time in the Ministry were still not satisfied.

With regard to whether or not decisions can be made with confidence, using the available knowledge/information, 50.6% of respondents "agree" or "strongly agree" with the statement, whereas only 11% of respondents "disagree" or "strongly disagree" with it. However, 61.7% and 61.5% of respondents from those who have working experience of less than six years and of 11 to 16 years, respectively, "agree" or "strongly agree" with the statement. On the other hand, only 52.4% of respondents from those who have working experience more than 20 years, and 33.3% from those with 16 to 20 years' experience, agree with it. When analysed with number of years in the Ministry, the results seem to be varied. The highest score was from those who have been working with the Ministry for more than 20 years, where 66.7% of respondents "agree" or "strongly disagree" with the statement. Strangely, the lowest result came from those who have been working between seven and nine years in the Ministry, where only 35.3% of respondents felt confident in making decisions using the available knowledge/information.

Although the previous results indicate that knowledge/information was not very up-to-date, most respondents were still confident in making decisions regardless of their working experience and the number of years in the Ministry.

5.1.3 Accuracy of Knowledge Transfer

Respondents were also asked if knowledge/information can be transferred to the respective person within the divisions/unit without any serious difficulties. The study shows that 61.7% of respondents either "agree" or "strongly agree" with the statement, while only 10.4% of respondents claim that they disagree with it. With regard to work experience, the results show that more than 54% of respondents in every group either "agree" or "strongly agree" that knowledge/information can be transferred to the respective person within the divisions/unit without difficulties. The highest score was from those who have working experience of six to ten years (73.7%) It was followed by those who have working experience of 11 to

15 years (69.2%), 16 to 20 years (63.7%), less than 6 years (59.5%) and more than 20 years (54.8%). On the other hand, the number of respondents who either "disagree" or "strongly disagree" was very small, and there were no respondents from amongst those who have working experience of 11 to 15 years who felt any difficulties. When compared with number of years in the Ministry, the survey shows that most respondents claimed that knowledge/information can be transferred easily within the divisions/units. The results, however, show some inconsistency in responses; the highest response was from those who have been with the Ministry for more than ten years (73.4%), followed by one to three years (67.3%).

Overall, the survey showed that knowledge/information can easily be transferred within a division/unit regardless of their length of working experience and the number of years in the Ministry.

When asked whether there were any difficulties perceived in transferring knowledge/information to the respective person in other divisions/units, 39.6% of respondents "agree" or "strongly agree" with the statement. On the other hand, 22% of respondents "disagree" or "strongly disagree" with the statement. However, 45.3% of respondents with working experience of more than 20 years agree with the statement. The lowest response was from the group who have working experience of 11 to 15 years, where only 23.1% of respondents either "agree" or "strongly agree", while another 46.2% either "disagree" or "strongly disagree". With regard to number of years in the Ministry, the survey revealed that respondents who have been with the Ministry for a longer period of time felt that knowledge/information could be transferred without difficulties to the respective person in other The results indicate that 53.4% of divisions/units. respondents who have been with the Ministry for over 10 years felt this to be an easy task. This was followed by respondents who have been with the Ministry for seven to nine years (47.3%), one to three years (46.1%) and less than one year (37.0%).

The results indicate there was no clear evidence of whether or not more experienced respondents can transfer knowledge/information more accurately, than the less experienced respondents.

5.2 Knowledge Sharing

There were four main areas related to knowledge sharing that were highlighted in the questionnaire, namely sharing of explicit and tacit knowledge, sharing culture and individualism. Respondents were asked to indicate whether they strongly agree, agree, neutral, disagree or strongly disagree with the issues in each of the questions.

5.2.1 Sharing of Explicit Knowledge

Respondents were asked if knowledge/information, created and stored in paper documentation in the organisation, could easily be accessed, shared and transferred; 51% of respondents either "agree" or "strongly agree" with the statement while another 25.5% of respondents "disagree" or "strongly disagree" with it. When compared with working experience, more than 30% of respondents in every group with different working experience either "agree" or "strongly agree" it can be easily accessed, shared and transferred. The highest responses were from those who have working experience of six to ten (63.2%) and less than 6 years (56.5%). However, the results also indicate the percentage of respondents in different working groups who either "disagree" or "strongly disagree" was relatively high - it ranged from 19.1% to 30.8%. When analysed with number of years in the Ministry, the results show that more than 41.4% of respondents in each group either "agree" or "strongly agree" it can be easily accessed, shared and transferred. The highest responses were from those who have been working with the Ministry for one to three years (57.7%), less than one year (55.6%) and more than ten years (53.4%). Surprisingly, the percentages of respondents who either "disagree" or "strongly disagree" were relatively high, especially from respondents who have been with the Ministry for more than four years (range between 26.7% and 31.7%).

Although the results indicate that knowledge/information that is stored in paper documentation can easily be accessed, shared and transferred, there were still a large number of respondents who disagreed. This shows that, there were still quite a number of respondents who have difficulties in accessing paper documentation.

When compared to the paper documentation, the electronic documentation seems to have higher scores. A total of 69.3% of respondents either "agree" or "strongly agree" with the statement that electronic documentation can easily be accessed, shared and transferred. On the other hand, only 11.8% of respondents either "disagree" or "strongly disagree" with it. When analysing the responses with working experience, it is evident that most respondents either "agree" or "strongly agree" with the statement (more than 57.9%). The highest responses were from those who have less than six years of working experience, where 89.1 % either "agree" or "strongly agree", without any respondents who either "disagree" or "strongly disagree". Further analysis shows that more than 60% of respondents who have been working with the Ministry for one to nine years felt that knowledge/ created and stored information in electronic documentation can be easily accessed, shared and transferred. The higher scores were from those who have been with the Ministry for four to six years (70.8%) and seven to nine years (70.3%).

The results show that electronic documentation has become more popular with the respondents regardless of their working experience. However, the survey indicates that younger respondents felt more comfortable using electronic documentation then paper documentation.

5.2.2 Sharing of Tacit Knowledge

With regard to tacit knowledge, 60% of respondents "agree" or "strongly agree" with the statement that knowledge/information from individuals in the Ministry can easily be shared and transferred through formal discussion or meetings. On the other hand, only 13.1% of respondents either "disagree" or "strongly disagree" with When analysing the responses with the statement. different length of working experience, it was found that more than 46% of respondents felt that knowledge/ information from individuals could be shared and transferred through formal discussion/meeting without any difficulties. Further analysis shows that a total of 55.6% to 64.7% of respondents in each group (length of working experience) either "agree" or "strongly agree" with the statement, with the highest responses from those who have been with the Ministry of seven to nine years.

The results revealed that sharing tacit knowledge is not a big problem to the Ministry, and a large number of respondents felt that knowledge/information can easily be shared and transferred.

In an informal discussion/meeting, 59.8% of respondents "agree" or "strongly agree" that knowledge/information from individuals can easily be shared and transferred. In contrast, only 16.3% of respondents either "disagree" or "strongly disagree" with the statement. Compared with the sharing of knowledge through formal discussion/ meeting, it was found that responses to informal ways of sharing knowledge/information were relatively lower. The highest responses were from those who have working experience of less than six years. A total of 67.5% of respondents in this group felt that knowledge could easily be shared and transferred. The highest responses that either "disagree" or "strongly disagree" came from those who have working experience of 11 to 15 years (46.2%). Further analysis indicates that the number of years in the Ministry does not influence sharing of knowledge/ information through informal discussion/meeting. The results show more than 48.8% of respondents either "agree" or "strongly agree" with the statement, with the highest responses from those who have been working in the Ministry for one to three years (69.3%) and more than 20 years (60%).

The overall results indicate that knowledge/information from individuals could be shared and transferred both by formal and by informal discussion/meeting without any difficulties regardless of their working experience an number of years in the Ministry.

5.2.3 Sharing Culture

Pertaining to sharing culture, 42.2% of respondents "agree" or "strongly agree" that the Ministry encourages and provides an opportunity for the communication of ideas, knowledge and experiences among all employees throughout the organisation, with only 24.7% of respondents who either "disagree" or "strongly disagree". When analysing the responses with the respondents' working experience, it was found there were more than 42% of respondents in each group (except those who have working experience of 11 to 15 years) who either "agree" or "strongly agree". However, there were quite a number of respondents who do not agree with the statement. The results show more than 31.6% of respondents who have working experience of less than 15 years either "disagree" or "strongly disagree", and the highest score was from the group that have working experience of 11 to 15 years (38.5%). With regard to the number of years in the Ministry, the survey shows that most respondents who either "agree" or "strongly agree" with the Ministry's current culture were from those who have been with the Ministry for one to three years (48%) and seven to nine years (47.1%).

The result is an extremely good sign of the current culture in the Ministry. New employees can easily accommodate themselves and can communicate with other employees throughout the organisation. On the other hand, there were still quite a number of respondents who "disagree" or "strongly disagree" with this. The result shows that those who disagreed ranged from 20% to 28.6%, no matter how long they had been with the Ministry.

When asked if the officers in the Ministry were ready and willing to give advice and help upon request, 49.6% of respondents either "agree" or "strongly agree" with the statement. On the other hand, 14.4% of respondents either "disagree" or "strongly disagree" with it. Responses between officers' readiness and willingness to give advice and help, and working experience show that more than 42.1% of respondents in each group either "agree" or "strongly agree" with the statement. The highest scores were from those who have working experience of 16 to 20 years (60.6 %), 11 to 16 years (50 %) and more than 20 years (50 %). Further analysis shows that respondents who have been working for over four years in the Ministry "agree" or "strongly agree" that officers in the Ministry were ready and willing to give advice upon request. The highest response was from those who have been with the Ministry for seven to nine years, where 70.6% agree with the statement.

This result indicates that respondents with more working experience felt it was easy to get advice and help from others upon request.

When asked if knowledge available in the Ministry is disseminated to a wide range of people rather than on a "need-to-know" basis, 41% of respondents either "agree" or "strongly agree" with the statement. In contrast, 24.7% of respondents disagree with it. When further analysed,

the result shows that respondents with more working experience seem to agree more. The survey reveals that 54.6% of respondents with working experience of 16 to 20 years and 50% with more than 20 years experience either "agree" or "strongly agree" with the statement. On the other hand, the percentages of respondents who either "disagree" or "strongly disagree" were almost consistent among all the groups. Those who disagree with the statement range from 21.2% to 31.6%. The survey also revealed that 70.6% of respondents who have been with the Ministry for seven to nine years tend to "agree" or "strongly agree" that knowledge has been disseminated to a wide range of people in the Ministry. On the other hand, respondents who either "disagree" or "strongly disagree" were relatively high in all the groups (between 11.1% and Surprisingly, those who have been with the Ministry for less than a year seem to be the group that disagrees least with the statement.

Although the percentage of people who agreed that knowledge was disseminated to a wide range of people was high, the proportion who disagreed was relatively high too. This shows that there are instances when knowledge is not well disseminated, particularly to new officers.

5.2.4 Individualism

With regard to using knowledge as a source of power, only 26% of respondents "agree" or "strongly agree" that individuals within the Ministry use knowledge for personal advantage rather than as an organisational resource. In contrast, there were 32.5% of respondents who "disagree" or "strongly disagree" with the statement. Respondents with less working experience tend to agree more strongly that individuals in the Ministry use knowledge as a source of power. The survey shows that 36.8% and 27.7% of respondents with working experience of six to ten years and less than six years, respectively, either "agree" or "strongly agree" with the statement. However, a total of 40.5% of respondents with working experience of more than 20 years either "disagree" or "strongly disagree" with the statement, followed by those who have working experience of 11 to 16 years (38.5%) and 16 to 20 years (33.3%).

The results clearly indicate that respondents with less experience and who have been with the Ministry for less than three years felt that most employees used knowledge as source of power.

When asked if individuals in the Ministry tend not to disseminate the knowledge they acquire, and appear reluctant to share it with others, 22.7% of respondents "agree" or "strongly agree" with this statement. However, there were 38.3% of respondents who either "disagree" or "strongly disagree" with the statement. When comparison is made between groups with different lengths of working experience, it was found that the number of respondents who disagreed with the statement

was more than those who agreed. The highest responses were from those who have working experience of more than 20 years (47.6% disagreed with the statement). When analysed using the number of years in the Ministry, the results show that the trend was the same as was the case with results related to the respondents' working experience. The results shows there were more respondents who either "disagree" or "strongly disagree" that individuals within the Ministry tend to be reluctant in sharing the knowledge they posses. Surprisingly, the highest disagreement scores were from those who have been with the Ministry of less than a year (44.4%), compared to those who have been working with the Ministry of 10 years (33.4%).

Although the percentages who disagreed were relatively high (in some cases), the result clearly indicates that most respondents in the Ministry tend to disseminate and share their knowledge rather than keeping it to themselves.

6. CONCLUSIONS

The study indicates that the availability of knowledge assets (explicit and tacit knowledge) in an organisation has a direct influence on the performance of knowledge transfer in an organisation. Both tacit knowledge and explicit knowledge have a significant positive relationship with the performance of knowledge transfer (Syed-Ikhsan and Rowland, 2004b). The findings of the study were also consistent with the claim of many authors (e.g. Lee and Kwok, 2000; Lord and Raft, 2000; Teece, 2000; Bloodgood and Salisbury, 2001; Sveiby, 2001) that tacit and explicit knowledge are both very important to an organisation. With reliable collections of knowledge assets, then knowledge can be transferred to the respective person at the right time and at the right place with greater accuracy. The performance of knowledge transfer depends particularly on the availability and the accessibility of the knowledge assets.

The findings also suggest that all public and private organisations need to manage both tacit and explicit knowledge accordingly, especially in ensuring that the organisation can take full advantage of the organisational knowledge. Management should identify where knowledge resides in the organisation and design strategies that can promote the use of knowledge that they have. Management should allow employees to get access to all kind of knowledge, regardless of whether the knowledge is available inside or outside the organisation (Syed-Ikhsan and Rowland, 2004b).

Sharing culture is also fundamental for any organisations that wish to implement a knowledge management strategy. Deciding on what, with whom and how to share knowledge should be a major task, to which an organisation should give priority (Syed-Ikhsan and Rowland, 2004b). The survey results support the claims of many authors (e.g. Parker and Bradley, 2000; Clarke, 2001; Hall, 2001; Levine, 2001; Rubenstein-Montano *et*

al., 2001a and 2001b; Stoddart, 2001; Ahmed et al., 2002) that sharing culture is essential in the success or failure of knowledge management initiatives.

The study also revealed that different lengths of working experience and the number of years in the Ministry seem to have some impact on the transfer and sharing of knowledge. In an organisation aligned far more to social benefits than making profits, it is very important for the employees to be more knowledgeable, and be able to facilitate the needs of the public. However, there is a need for the Ministry to have a comprehensive programme that involves the whole organisation, as the study shows there were some employees who have working experience of more than 20 years, but were still less confident on how knowledge could be managed effectively and efficiently (Syed-Ikhsan and Rowland, 2004a).

Other pertinent issues needing to be addressed are:

- Most respondents felt that it was much easier to access and exchange knowledge/information within their own division/unit as compared with other divisions/units. In order to provide better services to the public, the Ministry needs to address this issue seriously. Competition between divisions/units should be minimised, and if possible be eradicated.
- The more experienced people are, then the less difficult it is for them to access data/information available in the Ministry. The Ministry should review any policies and procedures that hinder officers in accessing data/information. Less experienced officers should be well guided to enable them to access data/information with ease.
- Sharing of knowledge/information between officers is not a big problem to the Ministry, regardless of their length of work experience and the number of years in the Ministry. However, new officers still felt that knowledge is kept by individuals as a source of power.
- Most respondents, regardless of their length of working experience, felt that knowledge/information in the Ministry is generally very reliable and up-todate, and makes them confident in making decisions. The Ministry should acknowledge this strength, and needs to make sure that knowledge/information is updated regularly in the long run.

These results highlighted above should be tackled seriously. Planning a comprehensive programme for different groups of employees is also a necessity for the Ministry, especially in narrowing the information and knowledge gaps, which exist between different groups. In a public organisation, all employees should have adequate knowledge of the core business of the Ministry so as to

enable them to provide services most effectively to the public.

In conclusion, this study shows knowledge management as a practice could be the most influential strategy in managing knowledge in public organisations in Malaysia in the near future. The authors are also confident that Malaysia will be successful in managing knowledge, particularly with the government's commitment in moving toward a K-economy. The K-based Economy Strategic Master Plan (KESMP), introduced at the end of the year 2002, proved that the government is very serious in transforming Malaysia into Knowledge-based economy (K-economy) (Syed-Ikhsan and Rowland, 2004a).

7. REFERENCES

Ahmed, P.K., Lim, K.K. and Loh, A.Y.E. (2002). *Learning Through Knowledge Management*, Oxford: Butterworth-Heinemann

Alavi, M. and Leidner, D.E. (2001). Knowledge Management and Knowledge Management Systems: Conceptual Foundations and Research Issues, MIS Quarterly. 25(1):107-136.

Augier, M., Shariq, S.Z. and Vendelø, M.T. (2001). Understanding Context: Its Emergence, Transformation and Role in Tacit Knowledge Sharing, Journal of Knowledge Management. 5(2): 125-136.

Bloodgood, J.M. and Salisbury, W.D., (2001). Understanding the Influence of Organisational Change Strategies on Information Technology and Knowledge Management Strategies, Decision Support Systems. 31: 55-69.

Clarke, T. (2001). The Knowledge Economy, Education + Training. 43(4/5):189-196.

Davenport, T.H. and Prusak, L. (2000). Working Knowledge: How Organizations Manage What They Know, Boston: Harvard Business School Press.

Goh, S.C. (2002). Managing Effective Knowledge Transfer: An Integrative Framework and Some Practice Implication, Journal of Knowledge Management. 6(1): 23-30.

Hall, B.P. (2001). Values Development and Learning Organisations, Journal of Knowledge Management. 5(1): 19-32.

Jacob, M. and Ebrahimpur, G. (2001). Experience vs Expertise: The Role of Implicit Understanding of Knowledge in Determining the Nature of Knowledge Transfer in Two Companies, Journal of Intellectual Capital. 2(1): 74-88.

- Kayworth, T. and Leidner, D. (2003). *Organisational Culture as a Knowledge Resource*, in Holsapple, C.W., *Handbook on Knowledge Management 1: Knowledge Matters*, Berlin: Springer-Verlag. 235-252.
- Knowledge-based Economy Strategic Master Plan, (2002). http://www. treasury.gov.my, accessed on 30 October 2002.
- Lee, J. and Kwok, R.C. (2000). A Fuzzy GSS Framework for Organisational Knowledge Acquisition, International Journal of Information Management. 20:383-398.
- Levine, L. (2001). Integrating and Processes in a Learning Organisation, Information Systems Management. 18(1):21-32.
- Lord, M. D. and Ranft, A.L. (2000). Organisational Learning About New International Markets: Exploring the Internal Transfer of Local Market Knowledge, Journal of International Business Studies, 31(4): 573-589.
- Mohamed, M., (2000a). Transcending The Devine, Pentadbir, July 2000. 1-7.
- Mohamed, M., (2000b). *E-Migration Rising to the Challenges of the New Economic Frontier, The Official Opening of a K-Economy Conference*, October 17, 2000, http://www.smpke.jpm.my/ucap, accessed on 20 October 2000.
- Parker, R. and Bradley, L. (2000). Organisational Culture in the Public Sector: Evidence form Six Organisation, International Journal of Public Sector Management. 13(2):125-141.
- Rubenstein-Montano, B., Liebowitz, J., Buchwalter, J., McCaw, D., Newman, B. and Rebeck, K.J. (2001a). A Systems Thinking Framework for Knowledge Management, Decision Support Systems. 31:5-16.
- Rubenstein-Montano, B., Liebowitz, J., Buchwalter, J., McGraw, D., Newman, B. and Rebeck, K.J. (2001b). SMARTVision: A Knowledge Management Methodology, Journal of Knowledge Management. 5(4):300-310.
- Smith, E. A. (2001). The Role of Tacit and Explicit Knowledge in the Workplace, Journal of Knowledge Management. 5(4):311-321.
- Stoddart, L. (2001). Managing Intranets to Encourage Knowledge Sharing: Opportunities and Constraints, Online Information Review. 25(1):19-28.
- Sveiby, K. E. (1997). *The New Organisational Wealth: Managing and Measuring Knowledge-Based Assets*, San Francisco: Berrett-Koehler Publishers Inc.

- Sveiby, K.E. (2001). A Knowledge-based Theory of the Firm to Guide in Strategy Formulation, Journal of Intellectual Capital. 2(4):344-358.
- Syed-Ikhsan, S. O. S. and Rowland, F. (2004a). "Benchmarking Knowledge Management in a Public Organisation in Malaysia" (Benchmarking An International Journal, accepted for publication and scheduled to be published in Issue 2, Vol. 11, 2004)
- Syed-Ikhsan, S. O. S. and Rowland, F. (2004b). "Knowledge Management in Public Organisation: A Study on the Relationship between Organisational Elements and the Performance of Knowledge Transfer" (Journal of Knowledge Management, accepted for publication and schedule to be published in Vol 8, 2004).
- Teece, D.J. (2000). Strategies for Managing Knowledge Assets: The Role of Firm Structure and Industrial Context, Long Range Planning. 33:35-54.
- Whitehill, M. (1997). Knowledge-based Strategy to Deliver Sustained Competitive Advantage, Long Range Planning. 30(4):621-627.
- Zainuddin, D., (2000). A New Malaysia From Strategic Vision to Strategic Implementation, The 2001 Budget Speech, October 27, 2000, http://www.treasury.gov.my, accessed on 29 October 2000.