Knowledge Sharing Factors: Perception Between Junior And Senior Academicians In Malaysian University

Norazila Mat, Jamsari Alias, Nur Atiqah Abdullah, Zaleha Yazid, Nazri Muslim

Abstract: Healthy competitions between Malaysian University to achieve the higher ranking throughout the globe provide an interesting background for a research to understand how they practices knowledge sharing (KS) among their academicians to gain competitive advantages. Plenty have been discussed on knowledge sharing but comprehensive understanding of knowledge sharing between academicians especially in regards to different seniority has been less mentioned. This study aimed to identify the comparison between junior and senior academicians on three knowledge sharing driver factors; organizational factor, technological factor and individual factor. This study is carried out with a set of survey among academicians in a Research University (RU) in Malaysia. Results from this study shows that top management under organizational factor and knowledge self-efficacy under individual factor are the most important factor that motivate KS for both junior and senior academicians. Senior academicians also agree that system infrastructure under technological factor is also crucial in knowledge sharing. These findings conclude that the strength of knowledge sharing in RU strives from its top management as well as individual factors in academicians but improvements can be made in areas such as organizational rewards and system quality where both junior and senior academicians only moderately agree that they are important factors in knowledge sharing.

Keyword: knowledge sharing, organizational factors, technological factors, individual factors, academicians, Malaysian University, Research University.

1 INTRODUCTION

Malaysian University are increasing in numbers nowadays, and have improved their function by not just providing knowledge to the students, but also act as reservoir of knowledge. It is also a recent trend that knowledge sharing gains its reputation and position in organizations, especially in public sector and learning institutions [1]. For Malaysian University, knowledge sharing represent ways to enhance performance, and is believed to expand customers and employees contentment [2N]. The concept of motivation with regard to knowledge sharing behaviour of employees has been commonly discussed via self-determination theory [3]. There are a number of factors narrowing towards the achievement of knowledge sharing, and among the individual factors are trust, knowledge self-efficacy [4] and reciprocal benefits [5]. Lai and Lee [6] found that self-efficacy, job independence and trust directly subjective to the preference to share knowledge. Organizational factors are one of the factors in an organization that affect the process of knowledge sharing. In order to make knowledge become more powerful in organizations, practising knowledge sharing is believed to be one of the many ways to gain competitive advantages [7]. By having contact and communication of individual colleagues, between project teams or within projects, the individual knowledge can be transferred into organizational knowledge and these knowledge sharing progressions lead towards creating knowledge on a higher level [8]. Traditionally, information technology and technology-driven perspectives have been dominating the field of knowledge management [9] [10]. Organizational culture, structure and information technology provide effects to the employees’ sharing competencies [11].

1. Faculty of Economics and Management, Universiti Kebangsaan Malaysia
2. Pusat Citra Universiti, Universiti Kebangsaan Malaysia

2 BACKGROUND OF KNOWLEDGE SHARING

Knowledge for this study refers to understandings, tenets, circumstantial evidence and expert comprehension is considered among the vital resource for organizational success [14]. Consequently, more organizations, both major and minor, go towards knowledge management tactics to manage and influence their organizational knowledge in total [15] [16]. As knowledge sharing is collaboration based, organizations should ponder the factors that comprise of public, groups, and technology [17]. Business organizations has been dominating the study of knowledge sharing purposely for profit - motivated in the past. However, the issue of knowledge sharing is significant for a learning-based institution, such as a Malaysian University, where knowledge construction, circulation and solicitation are the main activity [18][19][20]. With the improved number of Malaysian University, there are a requirement for them to elevate in order to distinguish themselves to becoming as the reservoir of knowledge (no longer knowledge provider) to students. However, a wide-ranging research in the area of knowledge sharing between university academicians especially in terms of position (senior academicians and junior academicians) has been slightly inadequate.

3 OBJECTIVE OF STUDY

This study is focussed:
1. to determine the comparison of perceptions of junior and senior academicians on individual factors of knowledge sharing in Malaysian University.
2. to determine the comparison of perceptions of junior and senior academicians on organizational factors of knowledge sharing in Malaysian University.
3. to determine the comparison of perceptions of junior and senior academicians on technological factors of knowledge sharing in Malaysian University.

4 LITERATURE REVIEW
The acknowledgement of knowledge as the key resource in organizations affirms the need for processes that facilitate the creation, sharing and leveraging of individual and collective knowledge [21][22]. It is popularly believed nowadays that knowledge sharing practices is one of the ways to make knowledge become more powerful in an organizations [23], in order to place individual knowledge to be on par with organizational knowledge. Organizational knowledge is developed through the link and exchange of views among individual co-workers, within projects and between projects, which would escalate towards higher position in knowledge sharing [24][25]. Knowledge sharing offers chances to maximize organization capacity to meet needs and solutions which provide competitive mileage in business [26][27]. Acquiring, managing, reapplying, and imparting practical knowledge that originally from inside an organization and making that knowledge accessible to others within the business environment is regarded as knowledge sharing [28][29]. Several researched have demonstrated that knowledge sharing is vital because it improve organizations to increase innovation performance and eliminate repeatable learning activities [30]. The more effective knowledge is managed represented in how well knowledge is shared. This means that knowledge sharing an indicator for the success of knowledge management [31]. Sabherwal & Sabherwal [32] pointed out that knowledge sharing also involve transferring of knowledge among individuals or groups to create significant advantage for the company. This is also approved by Lee [33] and Van Den Hooft & De Ridder [34] that emphasized knowledge sharing as a process where individuals mutually share and exchange their knowledge and collectively generate new knowledge. Organizational knowledge on the other hand involves tacit and explicit knowledge Nonaka, Toyama, & Konno [35] which are complementary to one another Jensen, Hass, Hansen, & Led [36] and important for creation of knowledge. Unfortunately, only a small number of organizations handle explicit and tacit knowledge conclusively [37]. Explicit knowledge without tacit could be valueless as it can be easily copied by others which brings the necessity for it to be shared, while tacit knowledge that uncodified throughout the organization also has the possibility to be vanish when the person upholds it leaves the company. We can gather here that new knowledge is nurtured through cross relations among tacit and explicit knowledge [38]. Hence, it is vital to manage and share both kinds of knowledge respectively since different kind of knowledge gives different nutrition [39]. However, knowledge sharing is not easily processed as knowledge in organizations resides within individuals, units and groups (collective forms) that sporadic across the organization and its territories [40]. The major challenge in knowledge management is to improvise knowledge creation as well as knowledge sharing, since the winning or losing of knowledge management is related to it [41][42]. Moreover, knowledge is regarded as socially-complex since it is uphold among people and a personal touch is acquired [43][44]. It is mentioned as sticky as well as causally-ambiguous because it is plated in a complicated formal and informal networks, thus making it hard for organizations to effectively share [45]. The literature appreciates the existence of three main knowledge sharing activities, namely individual, organizational, and technological factor [46]. Among the main individual factors pointing the success of knowledge sharing, within the individual factors are trust, knowledge self-efficacy and reciprocal benefits [47]. Trust has several connotations in social context which basically could bring the meaning of a situation where one body is relying on the actions of another body that can develop and evaluate expectations [48]. Trust is also defined as the act of openness to others, based on the mutual approvals from their action mentioned that, trust is the inner focus of every relationship within organizations [49]. It has been tested by Dyer & Singh [50], that trust is the most successful mechanism which increase knowledge sharing in organization. Along with individuals trust within an organization, follows with higher commitment and cooperation that leads towards knowledge sharing [51]. Self-efficacy is the utmost ability of oneself to finish his or her tasks and achieve the objectives [52]. Comparatively, self-efficacy is a person’s conviction in his or her capability to succeed in a given conditions. Cabrera & Cabrera [53] elaborated that these beliefs orchestrated how people cerebrating, acting, and sensed. Self-efficacy was regarded by a big number of researchers as influencer for employees’ readiness to share knowledge [54][55]. While reciprocal is generally related to relationship in which an act of one party is met or countered with a corresponding act. In social psychology, reciprocity is a social norm that emphasise people should respond or pay back the same way how others have provided them [56]. It is about giving back (reciprocate) the same treatment one has received earlier from the other party. On another instance, Hau, Kim, Lee, & Kim [57] mentioned that organizational culture, organizational structure and information technology significantly related to the knowledge sharing abilities within employees. Supported findings from Gupta & Govindarajan [58] prove that group-based motivations strongly enhance knowledge sharing, while others argue on the tangible (monetary) benefits as well as intangible (non-monetary) benefits play asymmetrical factors to improvise knowledge sharing [59]. Management Support is another key organizational factor leading knowledge sharing. Cabrera & Cabrera [60] and Hislop [61] viewed that recruitment, job specs, rewarding appraisal, compensation schemes, managerial techniques and training are linked to management support of organizational factor in knowledge sharing. Furthermore, supports including top management participative decision making also positively related to knowledge sharing [62]. Organizational Reward is one of other important organizational factor that enhancing knowledge sharing. Roca & Gagné [63] argued that need satisfaction positively related to the sharing of knowledge. This is backed by Bartol & Srivastava [64] that establish multiple rewards systems and styles that instrumental in enhancing knowledge sharing within teams and across
different units in organizations. Organizational culture refers to values, convictions, and procedures that lead towards knowledge creation and sharing within organizations [65][66][67]. There are somehow divided into two dimensions: visible and invisible organizational culture [68]. The visible culture consists of values, philosophy and mission of the organization, while invisible culture more towards the traits and values guiding the employees' behaviours and actions [70]. System Infrastructure or technology is another key organizational factor leading towards better sharing of knowledge. According to Orlikowski [71], the concept of technology consists of two parts, which is scope and function. For scope, there are two categories by Ismail & Yusof [72] namely ‘hardware’ and ‘social technology’. Another referral of technology mentioned as soft determinant which considered as external factor which is controlled by human and organization and always being the main part in organizational theory [73][74]. While System Quality is highly expanded to serve different styles, as also in knowledge sharing [75]. The diversity of information systems range from entertainment of games and social media, up to instrumental mechanisms of e-learning, e-commerce, and systems in knowledge management [76]. Cambridge Dictionary defines “senior” as a person who is high or higher in position or rank; older and more experienced than the other members in an organization, whilst “junior” is a person who is in low rank or low level in a job within an organization. In other words, senior is associated with being a leader in an organization. Seniority and leader supports are among organizational factor that believed impacting to knowledge sharing [77][78][79]. In this paper, the term “senior” is referred to Professor and Associate Professor, while “junior” is referred to Lecturer and Senior Lecturer.

5 METHODOLOGY
This study adapts a descriptive standpoint, on the perceptions of academicians in UKM on the effects of individual, organizational and technological factors on knowledge sharing in Malaysian University. According to Cohen [80] this method is significant to gauge the traits, perception and successfullness of a program. Descriptive study is also a good way to understand in its real phenomenon [81]. Hence, a survey instrument is developed based on the literatures. Based on many researches [82][83][84], a questionnaire is an effective tool to gain data from the respondents. All questions are in positive form and the respondents were obligated to express their perceptions within the Likert scale. This study is orchestrated with a set of survey instrument among academicians in a selected Malaysian Public University. The academicians are selected from various faculties, and to emphasize the adequate number of respondents, “The Sample Size Determination Table” by Krieste & Morgan [85] is used as a benchmark with the sample number of 38. Validity of this study is approved by an expert, while its reliability refers to the harmonious consistency of a concept as marked in the Cronbach Alpha. The reliability points of the Cronbach Alpha are between 0.0 and 1.0. According to Mohd Majid Konting [86], Cronbach Alpha value that more than 0.60 is regarded as reliable. Thus, in this study, researcher has determined the Cronbach Alpha value that is more than 0.60 is reliable with the help of a pilot study. The pilot study was done to identify the loosening and the tightness of the provided questionnaire. The results gathered shows that all 10 academicians understand the questions clearly; Next, by applying the Statistical Package for the Social Science (SPSS) program version 21, it is mutually confirmed that the Cronbach Alpha value for all the items in this questions that Malaysian University obtained are more than 0.6. This signifies the appropriateness of the questionnaire to be used.

6 FINDINGS AND DISCUSSIONS - RESPONDENTS BACKGROUND
Table 1 below explain the respondents’ background. The respondents are majority consist of Senior Lecturers (44.7 %) with 65% of all them have been serving the Malaysian University for more than 11 years. 73.7 percent of them are holding PhD with unique expertise in respective fields, with 34.2 percent of them experienced conducting research between 6 to 10 years of tenure. The respondents are categorized under groups of Professor, Associate Professor, Senior Lecturer and Lecturer. From the data gathered, Senior Lecturers and Associate Professors represent the majority with experience of work between 12 to 20 years of service with 6 to 10 years experiences in research. Thus, this brings up to a total of 31.6% are “seniors” while 68.4% are “juniors”. All the above remarks tell us that these academicians are in the process of lifting up their career path, that make vitally important for them to share knowledge and create networking to enrich their research, publication as well as teaching.

<table>
<thead>
<tr>
<th>Table 1: Background of Respondent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Position in this university</strong></td>
</tr>
<tr>
<td>Professor</td>
</tr>
<tr>
<td>Associate Professor</td>
</tr>
<tr>
<td>“Seniors”</td>
</tr>
<tr>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Lecturer</td>
</tr>
<tr>
<td>“Juniors”</td>
</tr>
<tr>
<td><strong>Working experience</strong></td>
</tr>
<tr>
<td>1-5 years</td>
</tr>
<tr>
<td>6-10 years</td>
</tr>
<tr>
<td>11-20 years</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Achievement of Educational Qualification</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctoral (PhDs)</td>
<td>28</td>
</tr>
<tr>
<td>Master's (MA or MSc or others)</td>
<td>7</td>
</tr>
<tr>
<td>Bachelor Degree (BA or equivalent)</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total years in Research Work</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 year &amp; or below</td>
<td>2</td>
</tr>
<tr>
<td>2 - 5 of years</td>
<td>7</td>
</tr>
<tr>
<td>6 - 10 of years</td>
<td>13</td>
</tr>
<tr>
<td>11 - 15 of years</td>
<td>8</td>
</tr>
<tr>
<td>16 - 20 of years</td>
<td>4</td>
</tr>
<tr>
<td>21 - 25 of years</td>
<td>2</td>
</tr>
<tr>
<td>26 of years &amp; above</td>
<td>2</td>
</tr>
</tbody>
</table>

## RESULTS AND DISCUSSIONS

### 7.1 Individual Factors (Trust, Knowledge Self-Efficacy and Reciprocal Benefits)

**Table 2: Individual Factor Influence Knowledge Sharing Practices**

<table>
<thead>
<tr>
<th>Factors</th>
<th>Position</th>
<th>Low</th>
<th>Moderate</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Factor</td>
<td>Senior</td>
<td>0 (0.0%)</td>
<td>2 (16.7%)</td>
<td>10 (83.3%)</td>
</tr>
<tr>
<td></td>
<td>Junior</td>
<td>0 (0.0%)</td>
<td>8 (30.8%)</td>
<td>18 (69.2%)</td>
</tr>
</tbody>
</table>

Table 3 below also describe several individual factor like trust, knowledge self-efficiency and reciprocal benefits that influence knowledge sharing practices among academicians in Malaysian University.

### 7.2 Organizational Factors (Top Management Support, Organizational Rewards and Organizational Culture)

**Table 4: Organizational Factors Influence Knowledge Sharing Practices**

**Table 2** shows that overall both junior academicians (69.2%) and senior academicians (83.3%) strongly agreed on the individual factors play important role as a driver in knowledge sharing practices.

Result show that Junior (69.2%) and senior (66.7%) academicians believed that trust is an important factor in knowledge sharing while 91.7% senior and 73.1% junior academicians highly agree that knowledge self-efficacy is also a major factor in knowledge sharing. As for reciprocal benefits of knowledge sharing, 75.0% junior and 73.1% senior academicians highly believed that it is an influencing factor in knowledge sharing. From the results above, it shows that knowledge sharing practices among academicians regardless of seniority in Malaysian University are strongly related with the individual factors of “Trust”, “Knowledge Self-efficacy” and “Reciprocal Benefit”. Therefore, every academician should possess all the three aspects of “trust”, “knowledge self-efficacy” and “reciprocal benefit”; to make knowledge sharing practice run smoothly [87].

Table 4 shows that majority of junior academicians (61.5%) moderately agreed on the organizational factors in knowledge sharing application while for senior academicians, half of them strongly agreed while the other half moderately agreed on the organizational factors in knowledge sharing application.
Table 5 below describe several the organizational factors that influence in knowledge sharing practices among academicians in Malaysian University like Top Management Support, Organizational Rewards and Organizational Culture. From the data, both junior (76.9%) and senior (83.3%) academicians agreed that top management support have a high influence on knowledge sharing between academicians. However, junior (57.7%) and senior (41.7%) academicians moderately believe that organizational rewards are not a major factor in knowledge sharing in Malaysian University, but organizational culture in HLI is highly considered as a driving factor of knowledge sharing as believed by junior (65.4%) and senior (83.3%) academicians.

<table>
<thead>
<tr>
<th>Organizational Factors</th>
<th>Position</th>
<th>Low</th>
<th>Moderate</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Management Support</td>
<td>Senior</td>
<td>0 (0.0%)</td>
<td>6 (50.0%)</td>
<td>6 (50.0%)</td>
</tr>
<tr>
<td></td>
<td>Junior</td>
<td>0 (0.0%)</td>
<td>16 (61.5%)</td>
<td>10 (65.4%)</td>
</tr>
<tr>
<td>Organizational Rewards</td>
<td>Senior</td>
<td>4 (33.3%)</td>
<td>5 (41.7%)</td>
<td>3 (25.0%)</td>
</tr>
<tr>
<td></td>
<td>Junior</td>
<td>5 (19.2%)</td>
<td>15 (57.7%)</td>
<td>6 (23.1%)</td>
</tr>
<tr>
<td>Organizational Culture</td>
<td>Senior</td>
<td>0 (0.0%)</td>
<td>2 (16.7%)</td>
<td>10 (83.3%)</td>
</tr>
<tr>
<td></td>
<td>Junior</td>
<td>1 (3.8%)</td>
<td>8 (30.8%)</td>
<td>17 (65.4%)</td>
</tr>
</tbody>
</table>

These findings in general show that both junior and senior academicians highly agree that top management support and organizational culture are important factors in knowledge sharing but it is a different case with organizational rewards. It is an indicator that regardless of seniority, top management in Malaysian University is very much encouraging in knowledge sharing among academicians, provides most of the necessary facilities required, and is satisfied with the sharing practices. It is also the same with the organizational culture in regards to academician’s seniority, which reflects top management’s encouragements for academicians to involve in conferences and stresses the importance of knowledge sharing among academicians [88]. However, lack of belief in organizational rewards as an important factor in knowledge sharing among academicians shows that academicians of different seniority lack of material rewards such as job promotions and receiving higher monetary bonus, but ample and satisfied with the non-material rewards such as acknowledgements and positive reputations. The results are also in line with the awareness towards advancement of sharing of knowledge in science as well as arts and also with the support form sociological and constitutional perspective in Malaysia [89][90].

7.3 Technological Factors (System Infrastructure and System Quality)
Table 6 shows that both junior academicians (57.7%) and senior academicians (66.7%) strongly agreed on the technological factors in knowledge sharing practices.

<table>
<thead>
<tr>
<th>Technological Factors</th>
<th>Position</th>
<th>Low</th>
<th>Moderate</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Infrastructure</td>
<td>Senior</td>
<td>0 (0.0%)</td>
<td>3 (25.0%)</td>
<td>9 (75.0%)</td>
</tr>
</tbody>
</table>

Table 7 shows the technological factor in knowledge sharing applications among academicians in Malaysian University. From the data, 75.0% senior academicians highly believed that system infrastructure is an important factor in knowledge sharing while 11.5% of junior academicians think otherwise. However, only half of junior (50.0%) and senior (50.0%) academicians believed that system quality is major factor in knowledge sharing.

<table>
<thead>
<tr>
<th>Technology Factors</th>
<th>Position</th>
<th>Low</th>
<th>Moderate</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Infrastructure</td>
<td>Senior</td>
<td>0 (0.0%)</td>
<td>3 (25.0%)</td>
<td>9 (75.0%)</td>
</tr>
</tbody>
</table>
These findings in general show us that the system infrastructure in Malaysian University for knowledge sharing is slightly high where there are supportive systems available such as an online system that helps junior and senior academicians to engage in learning and teaching amongst each other. Moderate belief in system quality from junior and senior academicians as a major factor in knowledge sharing shows that it can still be improved in terms of its relevance, accurateness, up to date, dependency and easier access [91]. Hence, Malaysian University need to ensure that the systems developed are more dependable and easy to access to all academicians.

8 CONCLUSIONS
From the data elaborated, this study shows that individual factors are the most influential factors in knowledge sharing application for junior academicians. Aside from that, knowledge sharing for junior academicians is also due to top management support apart from knowledge self-efficacy and reciprocal benefits aspects. As for senior academicians, they believed that the most influential factors are system infrastructure, top management support and knowledge self-efficacy. According to both senior and junior academicians, the factors that are lacking in knowledge sharing application are system quality and organizational rewards. This means that in order for knowledge sharing among academicians to run smoothly, Malaysian Universities have to improve their system quality, organizational rewards and sustain other factors’ level of progress.

ACKNOWLEDGEMENT
This study is sponsored by research grants from Universiti Kebangsaan Malaysia; under Research Code GGP-2018-006 and Research Code EP-2019-034.

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