Analysis of knowledge sharing in banking industry

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Abstract
The aim of this paper is to analyze factors that influenced on knowledge and experience in organization. By widely reviewing knowledge management literature, author identified several main factors that can impact on knowledge flow between employees and different units on organization. These factors include trust, attitude, IT and IS infrastructure, organizational culture, and reward system. The research findings provide useful information and help deepen the understanding of banks in motivating their employees’ tendencies to engage in knowledge sharing practices.

Keywords: Banks, Knowledge Sharing, trust, organizational culture.

1. Introduction
In the contemporary knowledge-intensive economy, knowledge is recognized as a critical strategic resource for the individual, and is considered to be a source of sustainable competitive advantage (Drucker, 2001). According to Alavi and Leidner (2001, p. 109), knowledge is the information processing that takes place in human minds, as well as personalized information related to facts, procedures, concepts, interpretations, ideas, observations, and judgments. Many researchers have argued that knowledge sharing, the process by which an individual imparts his or her expertise, insight, or understanding to another individual so that the recipient may potentially acquire and use the knowledge to perform his or her task(s) better, is an essential part of effective knowledge management

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(Bock & Kim, 2002; Markus, 2001). Knowledge sharing lies at the core of continuous improvement processes and is quintessential in terms of transforming an individual’s process improvements into actual learning. Davenport and Prusak (1998) defined knowledge sharing as processes that involve exchanging knowledge between individuals and groups.

Knowledge sharing is a critical step in the knowledge management (Wasko & Faraj, 2005), as it can enable organizations to leverage their most valuable asset of employees sharing their knowledge with others. Without effective knowledge sharing, organizations might not integrate experts’ critical knowledge, skills and abilities (KSAs) to accomplish the complex and innovation work (Breu & Hemingway, 2004). Thus, how to encourage employees’ knowledge sharing behavior is the important research issue in the knowledge management (KM) field.

As aggressive businesses of today move forward in grasping the lucrative returns that is offered by the ever-growing knowledge-based economy, knowledge, which is seen as a crucial asset had therefore predominantly become an essential core driver and a significant reliable resource pursued by multiple industries including the banking sectors of today (Tan et al, 2010). Banks are starting to understand the relevance and importance of sharing knowledge and are beginning to appreciate knowledge as the most significant and valued asset that leads to organisational performance. As a result, it has been anticipated that promising factors would help in encouraging the need for employees to share not only crucial knowledge but new knowledge to further ensure that the banking industry possess the competitive edge that they are looking for.

In distinguishing the competitive and rapid changing environment, KS does play an important role not only because it enables intellectual reuse but also the renewal of knowledge in banks that is possessed by employees (Tan et al, 2010). Therefore, Barachini (2009) supported that it is imperative that these organisations continuously motivate their employees to share
valuable information so that their intellectual capital (IC) can be leveraged. In recent years, numerous researchers and scholars had placed a great deal of emphasis on the need to create a KS culture in organisations and to implement business strategies that are more knowledge friendly. At the same time, organisations worldwide have been trying to undertake initiatives in introducing effective KM by embedding KS practices in their daily work process in achieving organisational performance (Ali & Ahmad, 2006).

This paper investigates and thoroughly examines the factors which covers including trust, organisation culture, reward system, IT and IS infrastructure, and attitude that encourages the widespread sharing of knowledge among bank employees especially in the dynamic and ever-growing banking sector in Iran.

2. Literature review

2.1. Knowledge

Nonaka’s research (Nonaka, 1994; Nonaka and Takeuchi, 1995) represents the main theoretical underpinning for understanding how organizational knowledge is created, shared, converted and transferred in present-day organizations. Scholars generally categorize “knowledge” into two types – tacit and explicit knowledge (Nonaka, 1994; Nonaka and Takeuchi, 1995). Nonaka’s research (1994) builds on the difference between explicit and tacit knowledge (Polanyi, 1966). Tacit knowledge, also known as embedded and sticky knowledge, is subjective and experience based knowledge, which cannot be expressed in works, sentences, number or formulas, etc. This also includes cognitive skills such as beliefs, images, intuition, and mental models as well as technical skills such as craft and know-how (Polanyi, 1966). Tacit knowledge is deeply embedded in an individual’s actions and experience as well as in his/her ideals, values, or emotions (Nonaka and Konno, 1998).
Explicit knowledge, also sometimes called leaky knowledge, is objective and rational, which can be documented and distributed to others, which include guidelines, procedures, white papers, reports, strategies and others (Kakabadse et al., 2001). Although both types of knowledge have distinguishing features between them, they complement each other so far as knowledge creation and conversion in organizations is concerned. Explicit knowledge without the tacit insight quickly loses its meaning (Rai, 2011).

2.2. Knowledge sharing in organization

Members in the organization capture, store, use, and modify the knowledge that they use in their daily activities at work (Lam, 2000). Thus, knowledge is created and shared through interaction between individuals at various levels in the organization. In other words, organizations cannot create knowledge without individuals and a group, and the knowledge is likely to have a limited impact on organizational effectiveness unless individual knowledge is shared with other individuals and the group. Ackerman, Pipek, and Wulf (2003) considered the following three types of knowledge sharing within organizations; knowledge retrieval, knowledge exchange and knowledge creation. Knowledge retrieval means that the main feature of knowledge sharing between organizations and individuals is the means to retrieve existing organizational knowledge. Knowledge exchange explains that the purpose of knowledge sharing between individuals is to exchange existing personal knowledge. Finally, knowledge creation explains that the main goal of knowledge sharing between individuals is to generate new knowledge, resulting in new combinations of existing individual, shared or organizational knowledge. Knowledge sharing is basically the act of making knowledge available to others within the organization. Knowledge sharing between individuals is the process by which knowledge held by an individual is converted into a form that can be understood, absorbed and used by other individuals. Knowledge flow is concerned with the
development of channels or networks between knowledge providers and seekers (Shin, Holden, & Schmidt, 2001). Knowledge flow in an organization is fundamentally driven by communication processes and information flows. Knowledge sharing between individuals is also a process that contributes to both individual and organizational learning (Nidumolu et al, 2001). Huber (1991) identified four further knowledge concepts that contribute to organizational learning: knowledge acquisition, information distribution, information interpretation and organizational memory. The concept of knowledge sharing presented in this article is linked to both knowledge distribution and knowledge acquisition. The voluntary act of sharing knowledge by an individual contributes to knowledge distribution. The process of sharing may also result in knowledge acquisition by other individuals within the organization. Knowledge sharing between individuals thus results in individuals learning, which in turn may contribute to organizational learning.

2.3. Factors influenced on knowledge sharing

IT and IS infrastructure

The term information systems is used to refer to an arrangement of people, data and processes that interact to support daily operations, problem solving and decision making in organizations (Whitten et al., 2001). Organizations use different information systems to facilitate knowledge sharing through creating or acquiring knowledge repositories, where employees share expertise electronically and access to shared experience becomes possible to other staff (Connelly and Kelloway, 2003). Information systems are widely regarded as a beneficial tool in knowledge sharing, and technologies such as intranets, decision support systems, knowledge repositories, and social networking all provide opportunities for communication and knowledge sharing (Seba et al, 2012).

H1: IT and IS infrastructure has a positive and significant impact on knowledge sharing.
Trust

Trust in the workplace has been shown to have a strong and robust influence on a variety of organizational phenomena, including job satisfaction, stress, organizational commitment, productivity, and, most relevant to the current research, knowledge sharing (e.g., Levin & Cross, 2004; Kramer, 1999). Abrams et al. (2003, p. 65) suggest that “trust leads to increased overall knowledge exchange, makes knowledge exchanges less costly, and increases the likelihood that knowledge acquired from a colleague is sufficiently understood and absorbed that a person can put it to use”. In terms of knowledge sharing, a trusting person is more willing to give useful knowledge to others. Trust is regarded as a facilitator of effective knowledge sharing. In the sociological literature, it is emphasized that trust comprises not only individuals’ beliefs about others, but also their behavior and their willingness to use knowledge to influence future action (e.g., Luhmann, 1979; Lewis & Weigert, 1985), and for the social-psychological context, see Rempel et al, 1985).

H2: trust has a positive and significant impact on knowledge sharing.

Attitude

Hislop (2003) says that the most imperative factor in practicing KS is the question of employee attitude, not the motivation leading employees to share. From the aspect of an employee’s attitude and behavior, Szulanski (1996), O’Dell and Grayson (1998), and Yang (2008) reveal that people ignore the importance of sharing and transferring knowledge. Also, some individuals possess an ‘unwillingness to share’ attitude, because of their insecure feelings, such as the fear of being impeded from moving up (or lost career opportunities) and the notion of ‘knowledge is power’ (Szulanski, 1996; Hendriks, 1999; Grandori and Kogut,
2002) That is, employees feel fear from the loss of superiority and knowledge ownership after sharing their unique knowledge (Szulanski, 1996; Bartol and Srivastava, 2002).

\( H3: \text{attitude has a positive and significant impact on knowledge sharing.} \)

**Organisation culture**

Organisation culture plays a vital role in the success of a KS process in banks. KS process will not occur unless they are supported by the culture of the banking institution itself. Organisation culture drives the banks formal and informal expectations of individuals, defined the types of people who will fit into the organisation, and affected how people interacted with others both inside and outside the organisation. Consequently, an effective culture in banks is crucial in achieving effective KS process (Govindarajan & Gupta, 2000; Gummer, 1998).

\( H4: \text{organizational culture has a positive and significant impact on knowledge sharing.} \)

**Reward system**

The reward system is important to motivate employee performance which is consistent with the bank’s strategy; that is to attract and retain the right people with the right knowledge, skills and abilities required to achieve the targeted bank’s strategic goals, and create a supportive organisational culture and structure (Galbraith, 1973; Kilmann, 1989). Leonard-Barton (1998) had thus argued that reward system can determine how knowledge is accessed and flowed in the organisation. Rewards help to recognize excellent KS abilities of bank employees. Hence, fair and objective performance-based reward system may help to promote bank employees’ motivation in rejuvenating new knowledge, therefore increasing the need to share knowledge amongst its workers (Argote & Epple, 1990).

\( H5: \text{reward system has a positive and significant impact on knowledge sharing.} \)
3. Methodology

In this study, we choose region 5 of Tehran's state and private bank branches for population. For sampling, we used of cluster method and selected ten branches from both state and private banks random. After, 6 employees were selected in each branch random including chief, assistant, cashier and so on. Therefore, survey sample obtained 120 people. A questionnaire (see table 1) was developed with 25 items for measuring 5 variables. A 5-point Likert scale (1 = totally disagree, 5 = totally agree) was used to measure the variables. The Cronbach alpha is close to 0.79 for all the variables, which confirms the scale reliability. For more confidence, 130 questionnaires were distributed in sample and came back 102 of them.

4. Results

More than 70% of respondents were male. Table 1 demonstrates the characteristics of the respondents.

Table 1: Demographic results

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>76</td>
<td>74.5</td>
</tr>
<tr>
<td>Female</td>
<td>26</td>
<td>25.5</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school</td>
<td>28</td>
<td>27.5</td>
</tr>
<tr>
<td>Graduate</td>
<td>31</td>
<td>30.04</td>
</tr>
<tr>
<td>Undergraduate</td>
<td>41</td>
<td>40.2</td>
</tr>
<tr>
<td>Master</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Ph.D.</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

One sample T-test results

To examine the significance of the variables, a t-test has been used. In order to assess the significance of the research variables, an introductory test was used. This test examined H0 and H1 in the following way:

1) H0: μ≤3
2) H1: μ≠3
As shown in table 2, all of variables have significant level (sig < 0.5). For analyzing hypotheses, we must take into account mean of each variable. Between research variables, only organizational culture mean (2.8343) didn't obtained desired minimum (3). Therefore, H4 is rejected (t= -1.899). Based on research findings, managers of organizations can enhance their employees' knowledge sharing activities through improve culture between employees and units.

Table 2: One-sample t test for each hypothesis (test value=3)

<table>
<thead>
<tr>
<th>Test Value= 3</th>
<th>df.</th>
<th>Sig. (2-tailed)</th>
<th>Mean difference</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower</td>
</tr>
<tr>
<td>IT &amp; IS</td>
<td>2.343</td>
<td>102</td>
<td>0.004</td>
<td>0.08421</td>
</tr>
<tr>
<td>trust</td>
<td>3.110</td>
<td>102</td>
<td>0.000</td>
<td>0.22807</td>
</tr>
<tr>
<td>Attitude</td>
<td>8.059</td>
<td>101</td>
<td>0.001</td>
<td>0.46118</td>
</tr>
<tr>
<td>Organizational culture</td>
<td>-1.899</td>
<td>102</td>
<td>0.039</td>
<td>-0.16569</td>
</tr>
<tr>
<td>Reward system</td>
<td>1.970</td>
<td>102</td>
<td>0.005</td>
<td>0.10175</td>
</tr>
<tr>
<td>Knowledge sharing</td>
<td>4.243</td>
<td>101</td>
<td>0.001</td>
<td>0.53824</td>
</tr>
</tbody>
</table>

5. Conclusion

As obtained from literature review, Knowledge can be defined as a combination of experience, values, contextual information and expert insight that help evaluate and incorporate new experience and information (Gammelgaard and Ritter, 2000). Knowledge not only exists in documents and repositories, but it becomes embedded in people’s minds overtime and it is demonstrated through their actions and behaviours.

This research focused on the role of certain factors in organizational in the success of knowledge sharing between staff. The study was conducted in three different phases: the first phase was concerned with identifying the major aspects of knowledge sharing in organizations and the fundamental organizational factors that impacted knowledge sharing.
During the second phase, the researchers used the knowledge extracted from the literature to formulate the research instruments: surveys questionnaire. The instruments were exploited to gather necessary data, which was analyzed to reach the research findings. In the third phase, the findings were discussed to arrive at relevant implications concerning knowledge sharing in organizations.

Trust, organizational culture, reward system and IT & IS infrastructure, all received strong literature support. Within research variables, only organizational culture (H4) is rejected. Regard to this finding, it is better that managers attempted to improve culture indicators between staffs.
References


