Exploring the Factor Affecting Intentions to Knowledge Sharing: the Case of Iran Police Force

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Abstract
This study has discussed the factors related to the knowledge management based on the previous studies as well as the studies knowledge management in police forces. According to a studies carried out in the cycle of knowledge management in government agencies and police forces, knowledge-sharing is the main success of knowledge management in these organizations. Therefore, based on these studies, a questionnaire was completed in Iran police force. The questionnaire was a series of questions based on a Likert scale that covered the dependent variable of intention to share knowledge and independent variables of trust, organizational structure, leadership, rewards, time and information technology and then the data were analyzed to identify factors that influence the success of knowledge management in the police force. The results indicated the effectiveness of leadership, trust, reward and IT factors and indicated that organizational structure and knowledge sharing are not effective factors then these factor were prioritized and in the end the appropriate strategies of knowledge management implementation was discussed.

Keywords: Knowledge Management, Knowledge Sharing, Trust, Police

1. Introduction

Knowledge is the most important source in police investigations and police officers’ success in their investigations depends on the availability of knowledge [1] and [2]. Explicit knowledge can be defined as expressed knowledge. Expressive knowledge can be encoded thus it can be written and easily transmitted. Explicit knowledge is registered as documents such as principles, general police orders and standard operating procedures and it is documented and verified for police officers[3]. Tacit knowledge includes the ability, experience and skills of police officers. Tacit knowledge compared with explicit knowledge is dynamic and rapidly changing [4]. In the domain of knowledge management in police task both tacit and explicit knowledge are considered in the field of knowledge management [1]. Police forces need to manage both their explicit and tacit knowledge. Knowledge and information are in various forms within police organizations ranging from cases of machine utilization to personal experiences of the officers. At this point the knowledge management principles can help to achieve organization knowledge using the principles of knowledge management [5].

Knowledge Management is a field of study that simplifies, promotes the knowledge sharing process, distributes, creates displays and understands knowledge [6]. Knowledge management describes strategies, processes, acquisition, conversion, utilization and protection of knowledge to improve the competitiveness of enterprises [7].

The second part is a summary of previous studies in the field of knowledge management in police forces and factors influencing police knowledge sharing. In the third section, the research design is described. Finally the description of the questionnaire, respondents’ analysis and the result analysis and findings are presented. In the final part some suggestions for the implementation of knowledge management in Iran’s police are presented.

2. Literature review
2.1. Knowledge management in police forces

Nowadays the government sectors have turned into knowledge management. That is because the public sector clients are demanding higher quality services [4]. Knowledge Management is a solution...
for better procedure and increase customer services. Luen and Al-Hawamdeh suggest that the amount of information that the officers use in their field of activity is amazing and the vast knowledge that they use in order to fulfill their responsibility has made them the directors of knowledge who just need to access, absorb and use knowledge effectively to discharge their knowledge [1]. Police investigation department represents an extremely knowledgeable and sensitive to time environment [2].

Knowledge management has been studied in various public and private sectors. Police forces are classified as a part of public sector and in order to examine knowledge sharing in these forces it is necessary to focus on investigations related to knowledge sharing in public sectors. In the public sector strategies and policies are different from the private sector and shareholders. There are official relations between the employee and manager in the public sector [8]. Many employees in the public sector consider knowledge as their power and protect their knowledge to maintain their position [9].

2.2. Knowledge management and sharing

Knowledge sharing is to provide information to help and collaborate with others to solve problems, foster new ideas or implement policies and procedures [10].

Knowledge sharing is a Key process in knowledge related activities including the police investigation [11]. This allows the various sectors to benefit from the accumulated experience of others. The police investigation success is associated with the effective and efficient sharing of knowledge [12]. Knowledge sharing is the main part of successful knowledge management. One of the key features of healthy knowledge sharing culture is that knowledge sharing is embedded within the organization's core activities [13].

In the police investigations they collect officers to combine and analyze information to discover facts. In order to get all pieces of crime together officers must share their knowledge. Thus the more knowledge shared among police forces the better results would be obtained [3].

Studies have shown that sharing knowledge is directly related to lower production costs, faster completion of projects of new product development, team performance, organizational innovation, functionality, efficiency, sales growth, income growth from new products and innovative services [14]. Knowledge sharing among employees and between organizations allows the organizations to invest on their knowledge resources and exploit them [15]. Knowledge sharing in public sector and in particular in the police forces has also been studied. In a survey conducted by Glomseth et al (2007) police investigations are considered as a store of values, including the main activities of problem finding, problem solving, solutions selection, implementation and evaluation. Performance in these 5 key activities leads to the higher performance of the police investigations. The results of this study prove the significant impact of knowledge sharing on the performance of the store of value and police investigation [3].

Achieving knowledge sharing in the public sector faces greater challenges since in the public sector people consider knowledge as their power [16]. Moreover, the bureaucratic structure of the public organizations has a negative impact on knowledge sharing. The bureaucratic culture of the public sector makes employees think of knowledge management as a management task rather than a task that all employees are responsible for it [17]. Luen and Al-Hawamdeh consider providing conditions for the willingness of the police officers to share their knowledge as the most difficult task in knowledge management among police forces [1].

The Importance of knowledge sharing in the knowledge management process is to the extent that many management researchers consider successful knowledge management dependant on organizational culture that facilitates sharing [4] and [13]. Thus finding the underlying factors affecting knowledge sharing among police forces has a decisive role in the success of knowledge management projects in this sector.

2.3. The factors that affect knowledge sharing

Knowledge sharing is considered as a critical component to the success of knowledge management [18]. Knowledge sharing is the basis for creating new ideas and development of
new opportunities [14]. Research shows that knowledge sharing has a significant impact on police investigations [3]. Knowledge transfer occurs at different levels in a police organization: Transfer of knowledge between individuals, from individuals to explicit sources, individuals to groups, between groups, among groups and from groups to the organization [3]. Willingness of employees to share knowledge is influenced by various organizational factors. It is concluded from the studies that team culture has a significant impact on knowledge sharing in the police investigations. Successful police investigations depend on efficient and effective knowledge sharing [3]. Employees share their knowledge if it has benefits for them [9]. Knowledge sharing is influenced by job culture [3]. It has been obtained in studies that in police forces cultural factors, the size of the force and the awareness of the value of knowledge management are among the major issues in knowledge sharing [8].

Employees in the public sector are less confident about their colleagues [19]. It has been observed that when there is enough trust between employees they respond to each other easier [8]. In the private sectors rewards are provided for knowledge sharing but this does not happen in public sector [17]. The focus of studies on the development of knowledge sharing in public sector is based on the development of IT to facilitate knowledge sharing [20]. Luen and Al-Hawamdeh suggest that using more information technology skills and increasing the use of IT systems, police organizations can use Knowledge Management and police officers are better able to evacuate their knowledge. While organizational structure and the ruling culture on the public organizations are the most effective barriers to knowledge management in these organizations [8].

3. Research Design

Since the dominant culture was believed that knowledge is power and now we're looking for ways to strengthen knowledge sharing in the organization some factors must come together for this purpose [21]. Effective factors in knowledge sharing vary according to the type of organization and therefore these factors must be tested in various organizations [18]. There are many models that have tested the factors affecting knowledge sharing in various organizations. In fact there is no consensus on the key variables of knowledge sharing in various studies. Among the various factors influencing knowledge sharing in previous studies 6 key factors seem to have more impact to encourage employees to share their knowledge, especially in the public sector, which are selected for this study. This factors form the model shown in figure1. This model implies that the leadership, organizational structure, trust, reward, time, and information technology factors influence on intention to share knowledge in the police force. Here the research conducted for each factor is discussed.

![Figure1. The research model](image-url)
factors including the time and reward that shape the culture and environment of knowledge sharing [24] and [22]. Gorry (2008) suggests that leaders in public sector need to understand through encouragement and support staff can help each other to do their jobs and provide better services for their customers [25]. According to these studies, leadership can be effective in knowledge sharing. The first hypothesis is formed as follows:

**Hypothesis 1:** Leadership influences employee intent towards knowledge sharing.

Researchers have found evidence of the relationship between organizational structure and employee knowledge sharing initiatives. Some researchers believe that the organizational structure itself does not constitute any barrier to share knowledge but the method of knowledge sharing that is applied in each organization must be in accordance with the terms of the organizational structure and the organization conditions [26] and [27]. Gorry believes that organizational structure can be sharing facilitating or inhibiting according to its type [25]. Saba et al confirmed the role of organizational structure on knowledge sharing behavior in Dubai police [18]. Based on this the following hypothesis is formed:

**Hypothesis 2:** Organizational structure influences employee intent towards knowledge sharing.

Trust is frequently considered as an introductory to knowledge sharing [13], [28] and [29]. Trust has been considered in many studies related to knowledge sharing in public sector [30] and [31]. Through the trust not only the employees are willing to listen to each other but also are able to absorb knowledge from others [32]. It has been observed that when there is enough trust between employees they respond to each other easily [8]. The third hypothesis is presented as follows:

**Hypothesis 3:** The level of trust influences employee intent towards knowledge sharing.

Given the importance of motivation in relation with knowledge sharing behaviors, many studies have been done in this area. Most of the studies focused their analyses according to the classification of motivation into two intrinsic and extrinsic groups. Intrinsic motivation refers to do something due to its being naturally pleasant or attractive. Extrinsic motivation refers to do something due to leading to a result separate from the work itself [33]. Osterloh and Frost (2002) considered both types of motivation crucial for knowledge transfer [34]. There are several studies that have confirmed the impact of intrinsic motivation on knowledge sharing [35], [36] and [34]. However, the results of Minbaeva et al (2008) have not certified the impact of implementing Human Resource Management Practices based on intrinsic motivation on knowledge sharing [37]. Also Bock et al (2005) and Lin (2007) failed to prove the positive impact of extrinsic motivations on knowledge sharing [13] and [38].

A group of researchers have introduced insufficient reward as a barrier to knowledge sharing [22] and [39]. Some argue that if certain incentive systems are not designed to share knowledge, a general reward system will prevent the sharing of knowledge in organizations [35]. Finally it seems that the effect of reward based on the type of reward is also the different in various organizations [18]. The following hypothesis is presented regarding the importance of the motivation in the literature:

**Hypothesis 4:** Reward influences employee intent towards knowledge sharing.

Having time to share knowledge although it has not absorbed the attention of the knowledge sharing literature but in a qualitative study conducted in Dubai police it has been clarified that the issue of time has great importance [8]. Sandhu et al considered the lack of time as an organizational barrier in knowledge sharing in the police forces [22]. Lee and Ahn (2007) believe that time allocation can be a barrier to effective knowledge sharing because the officials of the public sector consider knowledge sharing as a redundant and time consuming task [40]. The following hypothesis arises:

**Hypothesis 5:** Time allocation influences employee intent towards knowledge sharing.

Tools for Information Systems and Information Technology are among the effective factors on knowledge sharing that have been studied in various researches. These systems are applicative programs that are used to support and improve business processes, creation, storage, retrieval, transfer and application of knowledge [41]. In some cases these tools are considered as a partner tool in knowledge sharing and in other cases they are a barrier to it. Luen and Al-Hawamdeh suggest that using more information technology skills and increasing the use of IT systems by police the police organizations could improve the knowledge management system and police officers could evacuate
their knowledge [1]. The focus of studies regarding knowledge sharing in public sector is on the development of IT to facilitate knowledge sharing [2]. Police departments use information technology to fight crime or for strategic purposes. Nowadays the directors of the police units use the IT in various aspects of their work [42]. There might have been some problems in using computer systems including the inability of the system in establishing relationship between various forces or the lack of an integrated computer system [41]. The following research hypothesis is provided based on this literature:

**Hypothesis 6:** IT systems influence employee intent towards knowledge sharing.

### 4. Methodology

This article develops a model of the factors that affect knowledge sharing in the Iranian Police staff, using a questionnaire-based survey. In this study the distribution of the questionnaires was used because this is useful for collecting the data needed to answer the research questions. The questionnaire was selected from Seba et al. (2012) [18] and we revalidated it at it is confirmed. In order to assess the reliability the Cronbach's alpha test was used and the 0.853 Cronbach's alpha coefficient was obtained for it. The attitude of the respondents to the factors under study was measured by the Likert scale (5 = strongly agree, 1 = strongly disagree). To evaluate each of the six elements of the research including: leadership, organizational structure, trust, reward, time, information technology, some questions have been raised.

#### 4.1. Questionnaire distribution and respondents

The population of the research included the Iranian Police staff among which 90 samples answered the posted questionnaire. Based on the descriptive indices the samples responding to the questionnaire are male and the education, age and work experience of whom are represented in Table 1.

<table>
<thead>
<tr>
<th>Demographic characteristics</th>
<th>Number of responses</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>90</td>
<td>100</td>
</tr>
<tr>
<td>Female</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18–25</td>
<td>8</td>
<td>8.88</td>
</tr>
<tr>
<td>26–30</td>
<td>34</td>
<td>37.77</td>
</tr>
<tr>
<td>31–35</td>
<td>22</td>
<td>24.44</td>
</tr>
<tr>
<td>36–40</td>
<td>14</td>
<td>15.55</td>
</tr>
<tr>
<td>41–50</td>
<td>10</td>
<td>11.11</td>
</tr>
<tr>
<td>Over 50</td>
<td>2</td>
<td>2.22</td>
</tr>
<tr>
<td>Education level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diploma</td>
<td>40</td>
<td>44.44</td>
</tr>
<tr>
<td>Associate</td>
<td>22</td>
<td>24.44</td>
</tr>
<tr>
<td>Bachelor</td>
<td>28</td>
<td>31.11</td>
</tr>
<tr>
<td>Work experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0–5 years</td>
<td>6</td>
<td>6.66</td>
</tr>
<tr>
<td>5–10</td>
<td>38</td>
<td>42.22</td>
</tr>
<tr>
<td>10–15</td>
<td>28</td>
<td>31.11</td>
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<tr>
<td>15–20</td>
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<td>8.88</td>
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<tr>
<td>20–25</td>
<td>4</td>
<td>4.44</td>
</tr>
<tr>
<td>Over25</td>
<td>6</td>
<td>6.66</td>
</tr>
</tbody>
</table>
5. Finding

In this section we analyze the results of the research hypotheses analysis with regard to the tests. In the first part Pearson correlation coefficient and significance level of leadership, organizational structure, trust, reward, time, IT are calculated. Table 2 represents the test results.

<table>
<thead>
<tr>
<th>Intention to share knowledge</th>
<th>Leadership</th>
<th>Organizational structure</th>
<th>Trust</th>
<th>Reward</th>
<th>Time</th>
<th>Information technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correlation coefficient</td>
<td>0.214*</td>
<td>0.031</td>
<td>0.264*</td>
<td>0.211*</td>
<td>-0.004</td>
<td>0.280**</td>
</tr>
<tr>
<td>significance</td>
<td>0.043</td>
<td>0.769</td>
<td>0.012</td>
<td>0.046</td>
<td>0.967</td>
<td>0.008</td>
</tr>
</tbody>
</table>

*.Correlation is significant at the 0.05 level
**.Correlation is significant at the 0.01 level

Based on the data presented in Table 2, leadership, trust and reward are at 0.05 significance level and IT is at 0.01 significance level. The correlation coefficients are shown in the table.

Thus, H1, H3, H4 and H6 are confirmed and H2 and H5 are rejected and this indicates that there is no significant relationship between the organizational structures with intention of knowledge sharing and also is no significant relationship between the times with intention of knowledge sharing.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>3.200</td>
<td>0.369</td>
<td>8.666</td>
</tr>
<tr>
<td>Leadership</td>
<td>0.074</td>
<td>0.055</td>
<td>0.142</td>
</tr>
<tr>
<td>Organizational structure</td>
<td>-0.251</td>
<td>0.103</td>
<td>-0.352</td>
</tr>
<tr>
<td>Trust</td>
<td>0.161</td>
<td>0.069</td>
<td>0.302</td>
</tr>
<tr>
<td>Reward</td>
<td>0.109</td>
<td>0.075</td>
<td>0.186</td>
</tr>
<tr>
<td>Time</td>
<td>-0.046</td>
<td>0.059</td>
<td>-0.091</td>
</tr>
<tr>
<td>Information technology</td>
<td>0.206</td>
<td>0.095</td>
<td>0.261</td>
</tr>
</tbody>
</table>

Dependent variable: Intention to share knowledge

In order to answer that which of the dependent variables has the greatest impact on the intention to share knowledge the regression analysis was used. The test results are shown in Table 3.

Based on the beta coefficient it is clear that the trust factor has the most influence on intention to share knowledge. Then information technology, reward and leadership fall in the next places. As was observed by the Pearson correlation coefficient here it is obvious that organizational structure and time are not significantly related to intent to share knowledge. The analysis results are shown in Figure 2.
As can be seen in the figure, trust has the greatest impact on intention to knowledge sharing and leadership, rewards and information technology influence on intention to knowledge sharing as well.

6. Conclusions and Recommendations

6.1. Contribution and recommendations

Based on the data analysis that have been discussed in the above section it was concluded that leadership, trust, reward and information technology has significantly positive effect on the intention to knowledge sharing. Since our focus on this study is on the knowledge sharing stage in the process of knowledge management, thus based on the obtained result in order to improve this stage of knowledge management some suggestions and strategies are provided. It is intended to improve the general process of knowledge management of Iranian police forces trough focusing on the stage of knowledge sharing. The following suggestions and recommendations are provided:

- Building trust between police personnel should be a priority. For this purpose it is necessary to indentify factors that build trust between the police and creating these factors must become a priority in police programs.

- The implementation and employment of appropriate IT systems should be increased. For better communication and a better knowledge sharing among employees using these systems must be increased. Also through using these systems using the knowledge of colleagues on issues is more comfortable.

- Due to the role of reward in increasing knowledge sharing in the management system the knowledge of rewarding must be included in knowledge sharing. Thus, the reward system should be developed.

- Given the indispensable role of leadership in improving all aspects of knowledge management this factor must be considered. It is necessary that the manager take the relevant training courses regarding knowledge management to improve the knowledge management process in different ways, such as the impact on organizational culture and other factors.
6.2. Future research

It is suggested that in future research, other factors in knowledge management cycle in the police force be examined and the related factors be prioritized. It is also recommended that the conducted research provide a wider range. Another study that can be conducted in this field is on the strategies of knowledge management implementation and knowledge sharing in the police force. In order to do this the factors that can improve the identified factors must be investigated.

7. References


