Explanation of Structural Equation Model of Value Creation Process in Iranian Cooperation Firms

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Abstract- The aim of this research is to explain Knowledge Management Enablers’ effects on Value Creation Processes in Iranian cooperation firms, using an empirical examination. Innovation aspect of this study is considered in indirect effects of Knowledge Management Enablers’ variables on Value Creation Processes in addition to those direct effects and based on this effect a structural equation model will be presented. To prove the effects of Knowledge Management Enablers on value Creation Processes, a survey questionnaire was conducted on 250 active cooperation firms in Iran.

As a result, the structural equation model showed that what of the variables of knowledge management enablers had more effects on value creation in Iranian firms. Managers can use the structural equations of value Creation Processes to measure the potentials of their cooperation firms for the value creation and to find the ability of their cooperation firms. Then, the statistical method will show a new path for further research.

Keywords- Knowledge Management; Knowledge Management Enablers; Value Creation Process; Iranian Cooperation Firms

I. INTRODUCTION

Cooperation firms play an important role in value creation in Iran but they have faced economical, political and industrial turbulent changes in the past two decades for value creation. Nowadays, Knowledge is recognized as an important weapon for value creation and many companies are beginning to manage organizational knowledge. Various empirical and theoretical evidences have proven knowledge management (KM) to be a key source of competitive advantage and consequently leading to value creation [1]. Value creation can take place through the creation of new knowledge. Knowledge is a commodity to be traded [2] and needs to be managed [3].

Knowledge could be embedded in several ways; in brain; in terms of conceptual skills and cognitive abilities; embodied in terms of being action oriented, situational and only partially explicit, linked to individual’s senses and physical abilities. In culture; in terms of shared understandings achieved in the process of socialization and acculturation; embedded in systemic routines that include relationships between technologies, roles, formal procedures and emergent routines; and encoded in terms of information conveyed by signs and symbols in books, manuals, codes of practice and electronic media. KM is complex because knowledge is intangible and surfaces in a variety of forms [4]. Entails knowledge utilization and application in various environments, which is the ultimate goal of the economic organizations and systems as well as individuals who work for them, which is lead to value creation.

Knowledge management enablers are the overall organizational activities that positively affect value creation process. They include facilitating relationships and conversations as well as sharing local knowledge across an organization or beyond geographic and cultural borders. Knowledge management enablers can stimulate knowledge creation, protect knowledge, and facilitate the sharing of knowledge in an organization [5]. Knowledge facilitators are aspects of an organization incorporated in its culture, structure and infrastructure [6]. Krogh et al identify five knowledge enablers: Instill a knowledge vision, Manage conversations, Mobilization of knowledge activists, create the right context and Globalize local knowledge [7]. In reviewing the literature, one encounters a very broad range of factors, or knowledge management enablers, that possibly influence the success of knowledge management initiatives. They include: culture, leadership, technology, organizational adjustments, and evaluation of knowledge management activities, administering knowledge activities, employee motivation and external factors [8]. Some authors such as Nevis et al used terms such as ‘action’, or activities that facilitate organizational learning and, “facilitate the transfer of knowledge” [9]. These enablers and facilitators include a healthy culture, and support infrastructure; management support and proactive leadership; empowerment of employees [10]; understanding knowledge management as a business strategy; strong communication channels; and a commitment to developing and sustaining a climate for learning within the organization [11].

The emphasis of other studies was on the relationship between enablers and processes [12].

One category of KM studies focuses on the relationship among knowledge enablers. The emphasis is on the examination of the effect of knowledge enablers. To identify this effect, they have investigated various knowledge enablers such as knowledge management methods, structure, and culture. For example, Bennett and Gabriel analyzed a number of knowledge management methods in view of organizational structure, culture, size, and environment [13].

Other studies about KM explore the relationship between knowledge enablers and knowledge processes. A
central proposition is that knowledge enablers should influence knowledge processes. Transfer of organizational capabilities is related to the characteristics of social knowledge; they analyzed the effects of the ease of codifying manufacturing capabilities on its transfer time [14]. Appleyard explored knowledge transfer patterns among various nations and industries [15]. Szulanski investigated the relationship between four origins of stickiness and knowledge transfer [16]. Hansen employed the notion of complex knowledge to explain the role of weak ties in transferring knowledge in a multiunit organization [17]. The focus of this article is the effects of knowledge management enablers on value creation process in Cooperation firms of Iran. As we know, the most effective approach to the theoretical and empirical issues of KM would be an interdisciplinary and a multi-disciplinary one.

While one can argue about the speed of change, there can be little doubt that an industrial value creation process, where firms compete on the basis of Transferring inputs into tangible goods and services, is being supplanted by a Knowledge value creation, where knowledge intensive firms compete on what they know and how it may solve problems, and a network value creation process, where network service firms compete on the number and quality of the Connections in their network.

Are different knowledge management enablers’ contingent variables influencing the value creation process, relevance and choice of knowledge management enablers? This is the central question underlying our research. As a result, how Knowledge management enablers can help Cooperation firms of Iran to decrease problems in value creation process.

KM emerged to deal with issues relating to the conversion of explicit and tacit knowledge and has attracted the attention of academic researchers and business practitioners. Four types of knowledge conversion in KM are socialization (process of tacit knowledge interaction), externalization (articulating tacit knowledge into explicit forms), combination (integrating all related explicit knowledge for concise uses), and internalization (learning from explicit knowledge) [18]. Knowledge power creates and enlarges with continuous cycles of these successful four knowledge conversion within and inter-departments, organizations, and enterprises. Some major studies of KM are outlined in Table I.

<table>
<thead>
<tr>
<th>Issues</th>
<th>Studies</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competitiveness</td>
<td>Knowledge sharing with partners</td>
<td>Dutta (1997), Koskinen et al. (2003) and Mascitelli (2000)</td>
</tr>
<tr>
<td></td>
<td>Inter-organization learning</td>
<td></td>
</tr>
<tr>
<td>Knowledge asset</td>
<td>Knowledge attributes impact on organizations</td>
<td>Wagner and Buko’ (2005), Spender and Grant (1996), Howells (1996), Sweeney (1996) and Teece et al. (1997), El Sawy et al. (2001), Johannessen et al. (2001) and Schulz and Jobe (2001)</td>
</tr>
</tbody>
</table>

A. Linking Knowledge Management Enablers and Value Creation Process

One way to link value creation process to knowledge management enabler is through an activity configuration framework. The role of an activity configuration framework is to articulate the workings of the value creation process. The most famous activity configuration framework is Porter’s Value Chain model and his corresponding Five Forces framework [19]. The former describes what the firm must pay attention to in order to successfully create value, while the latter describes the potential and scope for value capture at the industry level. Whether different value creation logics call for different activity configuration frameworks, what contingencies are relevant for the usage of various knowledge management enablers? Therefore, consideration of this factor as knowledge management enablers is important. Our objective in this paper is to demonstrate the effects of knowledge management enablers on value creation process.

B. Knowledge Value Creation

As value can be defined as “the perception of importance” to the firm’s or knowledge value can be created through successful knowledge communication for organizations to improve performance and reinforce knowledge power, so as to extend innovation capability, business opportunities, and competitiveness [20].

Figure 1 Research model

II. LITERATURE REVIEW
Outstandingly, since organization edge and innovative capacity are developed based on Organization-wide knowledge learning and enhancement, value creation can take through the creation of new knowledge.

C. KM Enablers

A working environment with information technology or a culture that supports its employees’ knowledge activities is called an organizational infrastructure. Enablers that are focused on building an infrastructure that supports KM are called KM enablers. In order to ensure the success of KM implementation, it is important to control key enablers in the initial planning stage. This can therefore efficiently utilize the limited resources available in an organization, saving on human resources, material resources, time, and, ultimately, reaching the expected goal of KM. Ichijo et al note that if an organization intends to avoid arbitrary or unsystematic knowledge development, then it should construct some enablers that can lead the organization to value creation [21]. These enablers form a mechanism that stimulate members to develop knowledge, break the obstacles of knowledge development, and encourage members to share their knowledge and experiences.

In the domain of human resources, leadership and organizational culture are its main enablers. Clear job descriptions, important knowledge, the working morale of the staff, sustainable learning and reformation can all be defined explicitly by leadership and organizational culture; the domain of business, information technology and performance evaluation are its main enablers. As it is known, concrete information technology facilitates business communication, efficient data collection, acquisition, and reutilization.

To conclude the statements above, this study refers to KM enablers as critical factors to achieve value creation. KM closely connects the current operational status between members and information technology in an organization, which is the fundamental driving force that puts KM into practice, making the KM enabler play a crucial role. KM enablers are mentioned in many literatures. Referring to various theories suggested by scholars and leading enterprises, this study draws KM enablers into four categories: organizational culture, organizational structure, strategy and leadership and information technology.

1) Organizational Culture:

Organizational culture is a complex entity of values, beliefs, behavior models, and symbols. It represents a company’s value, and this value can turn into a model for the activities and behaviors of the staff. Many literatures and researches indicate that organizational culture is a critical factor that influences KM or the effectiveness of knowledge sharing [22]. Organizational culture defines the value of knowledge, and also explains the existence of the advantage of knowledge innovation in an organization [23]. This kind of advantage further affects the willingness of employees to share and be involved. Therefore, building a knowledge accessible-friendly culture in a value creation process that embraces KM is very important. Research findings on KM implementations by Alavi and Leidner showed that the knowledge sharing experience in an organization is mostly related to organizational culture [24].

2) Organizational Structure:

Nonaka and Takeuchi and Gold et al both mentioned that organizational structure can either promote or block KM [25, 22]. Davenport suggested good organizational KM that incorporates a standardized system and flexible structure contributes to the implementation of knowledge development [19].

Leonard-Barton pointed out that an organizational incentive system affects the path and the manner of knowledge circulation [26]. If the incentive system is inappropriately designed, this would induce KM problems. Argote et al and O’Dell and Grayson agreed that an incentive system can motivate employees to work on KM in order to get rewards from knowledge creation, knowledge sharing and cross-department cooperation [27, 28]. To conclude the statements mentioned above, an organizational structure should incorporate an incentive system in KM.

3) Strategy and Leadership:

Piers et al pointed out that the prerequisite of KM is strategy, wherein the members of an organization are ready to plan and give their contributions to KM [29]. Zack suggested that the most important factor that promotes KM is organizational strategy [30]. It is very important to understand organizational strategy and KM strategy. He concluded that knowledge strategy relates to organizational strategy.

Companies that show a weak performance in the market should adopt a knowledge aggressive strategy in order to create values. After understanding the important correlation between KM and strategy, it is considerable that strategies determined by leadership.

4) Information Technology:

KM enablers in the domain of information technology are the infrastructures for information technology that supports KM activities, activities such as knowledge databases, knowledge platforms, performance evaluation management systems, and performance integration systems. Alavi and Leidner and Fairuz et al all agreed that information technology plays an important role in supporting the organizational knowledge process [24, 31].

Information technology is tightly connected to KM because it helps to distribute structural knowledge vertically and horizontally, as well as make it easily searched and utilized. As a result, organizations and enterprises all try to implement KM with information technology [24]. Hendriks found that information and communication technology show direct and indirect influences on the motivation of KM sharing [32].
III. EXPLANATION THE HYPOTHESES

A. Organizational Culture

Organizational culture is increasingly recognized as a factor in promoting intellectual values. Culture is defined by Schein as the, “... basic assumptions and beliefs that are shared by members of an organization, that operate unconsciously, and that define in a basic taken-for-granted fashion an organization’s view of itself and its environment” [33]. This “organizational cognition perspective” is probably the most thoroughly developed view of culture [34]. Therefore, an organization’s values, principles, norms, unwritten rules, and procedures comprise its cultural value resource [8].

A culture of confidence and trust is required to encourage the application and development of knowledge within an organization [35]. This study will focus on trust, collaboration, and learning on the basis of the concept of care [36]. Care is a key enabler for organizational relationships [37].

1) Trust:

Lee and Choi identify trust as maintaining reciprocal faith in each other in terms of intentions and behaviors [5]. The presence of a high level of trust can reduce this risk [38]. The lack of trust among employees is one of the key barriers against knowledge exchange [17]. Trust is also critical in a cross-functional or inter-organizational team because by holding information for the lack of trust can be especially harmful to value creation [19]. Regarding the level of trust in the organization as the most important factor, it is affecting the willingness to share knowledge. The level of trust that exists between the organization, its subunits, and its employees greatly influences the amount of knowledge that flows both between individuals and from individuals into the databases, best practices archives, and other records of cooperation’s [40]. Hence, the decision makers feel that they do not have to protect themselves from their partners’ opportunistic behavior. See the expected hypothesis in Table II.

<table>
<thead>
<tr>
<th>Number</th>
<th>Hypotheses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>H_{01}: Trust affects the value creation process positively.</td>
</tr>
<tr>
<td>2</td>
<td>H_{02}: Collaboration affects value creation process positively.</td>
</tr>
<tr>
<td>3</td>
<td>H_{03}: Learning affects value creation process positively.</td>
</tr>
<tr>
<td>4</td>
<td>H_{04}: Centralization affect value creation process negatively.</td>
</tr>
<tr>
<td>5</td>
<td>H_{05}: Formalization affects value creation process negatively.</td>
</tr>
<tr>
<td>6</td>
<td>H_{06}: Leadership affect value creation process positively.</td>
</tr>
<tr>
<td>7</td>
<td>H_{07}: Information technology support affects value creation process positively.</td>
</tr>
</tbody>
</table>

2) Collaboration:

Relationship between the collaborative culture and value creation confirm the significance of collaborative culture in value creation. Collaborative culture affects value creation through increasing knowledge exchange [15]. It can help the organizational members to develop a shared understanding about their organization’s internal as well as external environments through supportive, reflective, and comprehensive communication. External collaboration is also critical for companies that want to stretch the business boundaries and innovate around markets and business models [41]. Mintzberg et al suggested that successful collaboration is neither a cerebral activity that can take place in the abstract, nor an interpersonal process that can focus on affect per se [42]. It needs to occur in context. Therefore, without shared understanding among organizational members, little value is ever created [83]. Hence, the following hypothesis is presented in Table II (H_{0,2}).

3) Learning:

According to Ingelgard et al, several scholars as well as industries have stressed the importance of the ability to create an organization capable of learning, i.e. the ability to create, use the knowledge and disperse it throughout the organization [44]. Bhatt indicated that accumulated prior knowledge increases the ability to accrue more knowledge and learn subsequent concepts more easily [45]. Because of the higher learning capability of people in organizations, people in these organizations usually refine and recombine knowledge from different sources for viewing interesting and novel patterns, leading to break through discoveries [18]. Organizational learning culture can directly affect the process of value creation. Therefore, the following hypothesis (H_{0,3}) is presented in Table II.

B. Organizational Structure

The organizational structure within an organization may encourage or inhibit knowledge management [5]. Organizational structure should foster solid relationships and effective collaboration. Structure acts not only as a channel for knowledge flows among individuals, but also can provide a platform for changing and improving those flows [46]. Organizational structure consists of centralization and formalization for the purpose of this study.

1) Centralization:

A decentralization organizational structure has been found to facilitate an environment where employees participate in knowledge building process more spontaneously [47]. Decentralization demands that each employee learns to behave more responsible with regards to making independent work-related decisions that support the organization’s interests and not only the employee’s [48]. In conjunction with this, Cormican and O’ Sullivan pointed out that decentralization promotes learning and knowledge generation, and enables
faster and more effective decision making in dynamic information rich environments \[49\]. Therefore, decreased centralization in the form of locus of authority can lead to increased creation of value \[5\]. This leads to the following hypothesis in Table II.

2) Formalization:

Germain and Spears, pointed out that written work rules and work policies restrict the free flow of information, limit the discretionary behavior of employees, stifle individual initiative, risk taking behavior, sense of worker empowerment, and restrict the range of new ideas, which in turn, may have an inverse relationship on innovative behavior \[50\]. Formalization may inhibit the flexibility of managers, limiting their time in reading and creatively interpreting the report \[51\]. Flexibility can accommodate better ways of doing things \[52\]. In conjunction with this, Wang and Ahmed claimed that informal structure better depicts actual organizational activities and reflects dynamic interaction that is critical to value creation \[53\]. Past literature has found that players in informal networks play especially important roles in value creation. Therefore, the following hypothesis is presented in the Table II.

C. Strategy and Leadership

Leadership is another critical component we should pay attention to. Some scholars deem that the implementation of a KM project is a kind of reformation. Therefore, the supports provided by senior managers determine the success of KM \[54\]. Greengard advised senior managers to give their support after understanding the value of KM, and play the role of aggressive decision makers \[55\]. It is known that senior managers determined the strategies.

Therefore, strategy and leadership are able to expand their competence across several functional areas, and hence create new value \[56\]. Hence, the researcher adopts the following hypothesis in Table II.

D. Information Technology (IT) Support

The use of IT capabilities in a cyber environment is advocated to enhance the efficiency of the combination mode of value creation \[57\]. Alavi and Leidner stated that information systems designed for support of collaboration, coordination, and communication processes, as a component of the interacting, can facilitate teamwork and thereby increase an individual’s contact with other individuals \[24\]. Pickering and King have been shown Email and group support systems to increase the number of weak ties in organizations \[58\]. IT can support different forms of knowledge transfer, but has mostly been applied to informal, impersonal means (through such venues as Lotus Notes discussion database) and formal, impersonal means, such as knowledge maps or corporate directories \[24\]. Therefore, the researcher claims that IT support plays a critical role in enabling value creation. Hence, the following hypothesis is presented in Table II.

IV. MATERIAL AND METHODS

This study will involve a standard questionnaire-based survey of middle managers from Iranian cooperation firms, in order to examine empirically the effects of the knowledge management enabler on the value creation process. Samples were selected from active cooperation firms of Iran. Then, the unit of analysis in this study is the organization. A questionnaire-based survey was conducted. Questionnaires were distributed among 250 middle managers out of cooperation’s firms. That is, data collected from middle managers of cooperation’s, and all data collection sequences for the survey personnel and data for analyses are summarized in Table III.

<table>
<thead>
<tr>
<th>TABLE III</th>
<th>DESCRIPTIVE DATA FROM SAMPLE OF POPULATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (Year)</td>
<td>Range</td>
</tr>
<tr>
<td>Number</td>
<td>32</td>
</tr>
<tr>
<td>Percent</td>
<td>12.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level of education</th>
<th>Range</th>
<th>Under Diploma</th>
<th>Diploma</th>
<th>Associate</th>
<th>Bachelor</th>
<th>MS</th>
<th>PhD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>18</td>
<td>63</td>
<td>41</td>
<td>69</td>
<td>37</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Percent</td>
<td>7.2</td>
<td>25.2</td>
<td>16.4</td>
<td>27.6</td>
<td>14.8</td>
<td>8.8</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of cooperation</th>
<th>Range</th>
<th>Food</th>
<th>Metal</th>
<th>Loom</th>
<th>Clothing</th>
<th>Chemical</th>
<th>Machine</th>
<th>other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>90</td>
<td>44</td>
<td>51</td>
<td>32</td>
<td>23</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent</td>
<td>36</td>
<td>17.6</td>
<td>20.4</td>
<td>12.8</td>
<td>9.2</td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of employees</th>
<th>Range</th>
<th>[2-10]</th>
<th>[10-20]</th>
<th>[20-30]</th>
<th>[30-40]</th>
<th>[40-50]</th>
<th>[50-60]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>75</td>
<td>44</td>
<td>36</td>
<td>28</td>
<td>18</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Percent</td>
<td>30</td>
<td>17.6</td>
<td>14.4</td>
<td>11.2</td>
<td>7.2</td>
<td>6.8</td>
<td></td>
</tr>
</tbody>
</table>

One middle manager of cooperation firms was surveyed as responding. The majority of studies used the alpha level of 0.05. Middle managers were surveyed because they played key roles in value creation. Middle managers are positioned at the intersection of the vertical and horizontal flows of knowledge. Thus, they can synthesize the tacit knowledge of both top managers and frontline employees, make it explicit, and incorporate it into new products and services.

A multiple-item method was used to construct the questionnaires. Each item was based on a five point Liquored scale, from “very low” to “very high” Liquored scales as generally used tend to underestimate the extreme positions. Respondents are reluctant to express an extreme position even
if they have it. They tend to please the interviewer, appear helpful, or respond in a way they perceive to be socially acceptable.

Research constructs were operationally on the basis of related studies [5]. Most of the research constructs have already been validated and used for other studies on knowledge management, organizational design, learning, or IT management. Therefore, the items of the questionnaire have been validated. The other testes of study are Cronbach α for reliability, T-value test, structural equation modeling (SEM), and focuses on important indexes of Lisrel software similar to Root Mean Square Error of Approximation (RMSEA), Goodness of Fit Index (GFI) as appropriate indexes in statistical analyses [58].

V. DATA ANALYZE

A. Descriptive Data

According to descriptive data 43.6% middle managers (respondents) are 30 to 40 years old. We have categorized cooperation firms in six groups: food industries, metal industries, loom and clothing industries, chemical industries, machinery industries and other industries. Much of survived cooperation firms have been related to food industries and metal industries (more than 50%). Sample surveying has determined that almost cooperation firms in Iran have employees less than 100 persons (more than 99%).

B. Results of Testes

The statistics for reliability tests are shown in Table IV as follows:

TABLE IV - reliability tests of Measures (by Cronbach α)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Number of Items</th>
<th>Reliability (Cronbach α)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge management enablers</td>
<td>5</td>
<td>0.904</td>
</tr>
<tr>
<td>Collaboration</td>
<td>5</td>
<td>0.825</td>
</tr>
<tr>
<td>trust</td>
<td>6</td>
<td>0.814</td>
</tr>
<tr>
<td>Learning</td>
<td>5</td>
<td>0.846</td>
</tr>
<tr>
<td>Centralization</td>
<td>5</td>
<td>0.867</td>
</tr>
<tr>
<td>Formalization</td>
<td>5</td>
<td>0.822</td>
</tr>
<tr>
<td>Leadership</td>
<td>5</td>
<td>0.851</td>
</tr>
<tr>
<td>IT support</td>
<td>5</td>
<td>0.893</td>
</tr>
</tbody>
</table>

For other testes, Lisrel8.50 software is used. The advantage of this software is measuring the direct and indirect effects on depend variable. Therefore, this software is better than other statistical software’s that only compute the direct effects on the dependent variable. In the following figure output of tests are presented:

![Figure 2 T-Value test](image)

**Figure 2 T-Value test**

**Guideline:**

$v_{21}$: Collaboration, $v_{22}$: Trust, $v_{23}$: Learning, $v_{24}$: Centralization, $v_{25}$: Formalization, $v_{26}$: Leadership, $v_{27}$: IT Support

The T-Value showed there is no direct relation between IT support and VCP, because the number of T-Value test between IT support and VCP has red color, i.e. the latest hypothesis ($H_{0,7}$) did not confirm. But, other hypotheses have been confirmed ($H_{0,1}$, $H_{0,2}$, ..., $H_{0,6}$).

The goodness of fit index (GFI) was 0.96 (GFI=0.96>0.90), then the validity of models has confirmed. The Root Mean Square Error of Approximation (RMSEA)=0.031<0.05, then the model have the best-fitting with data of real world.

![Figure 3 Estimates test of path diagram](image)

**Figure 3 Estimates test of path diagram**

**Guideline:**

$v_{21}$: Collaboration, $v_{22}$: Trust, $v_{23}$: Learning, $v_{24}$: Centralization, $v_{25}$: Formalization, $v_{26}$: Leadership, $v_{27}$: IT Support

Considering the indirect effects of knowledge management enablers on them and compute of that is the highlight innovation of this study. As known, the degree of value that created by using knowledge management enablers are latent.
That is, VCP as a dependent variable has characteristics of latent variable. Therefore, structural equation of VCP is equal to direct and indirect effects of knowledge management enablers (VCP= direct effects + indirect effects). The equation of direct and indirect effects will be shown as follows:

\[
VCP = \{ (1.07v_{21} + 1.10v_{22} + 0.33v_{23} + 0.23v_{24} + 0.24v_{25} + 0.67v_{26}) + \\
(0.02v_{23} + 1.07v_{21}) + (0.41v_{22} + 0.33v_{23}) + (0.32v_{22} + 0.23v_{24}) + (0.12v_{22} + 0.24v_{25}) + (0.04v_{22} + 0.67v_{26}) + \\
(0.23v_{25} + 1.07v_{21}) + (0.12v_{25} + 1.10v_{22}) + (0.80v_{25} + 0.30v_{23} + 0.67v_{26}) + \\
(0.04v_{25} + 1.07v_{21}) + (0.32v_{25} + 0.11v_{22}) + (0.73v_{25} + 0.33v_{23}) + (0.41v_{24} + 0.24v_{25}) + (0.56v_{24} + 0.67v_{26}) + \\
(0.54v_{26} + 1.07v_{21}) + (0.04v_{26} + 1.10v_{22}) + (0.30v_{26} + 0.33v_{23}) + (0.56v_{26} + 0.23v_{25}) + (0.57v_{26} + 0.24v_{25}) \}
\]

**Guideline:**
- **v21:** Collaboration, **v22:** Trust, **v23:** Learning, **v24:** Centralization, **v25:** Formalization, **v26:** Leadership, **v27:** IT Support, **VCP:** Value Creation process; **v27 = 0**

**VI. CONCLUSION**

The findings confirm that value creation process is associated with cultural factors such as collaboration, trust, and learning in investigated population. Shaping cultural factors is crucial for the ability of cooperation firms to manage its value creation process effectively. A trust-based culture is the foundation for knowledge management initiative. An organization may face difficulties in building its value creating environment due to the lack of adequate culture. IT support does not affect on value creation in Iranian cooperation firms. It has been shown the gap of IT foundations in these firms. Then, powering in this part, knowledge management enabler for value creation process is important. The measure of informal and decentralization of structure of cooperation firm has relation with VCP.

IT is critical for codifying explicit knowledge; it provides fast feedback for explicit knowledge, but it is not using appropriately in the cooperation firms. The result implies that simply improving the IT infrastructure in cooperation firms providing an advantage for value creation process.

Our study is linked knowledge management enablers with value creation processes. This study is probably the first to establish this view of knowledge management in the cooperation firms. This study also shows that managers will be able to find better which enablers are critical for value creation process. Because the cooperation firms may not manage all modes of value creation, then, they may need robust strategies that involve trade-offs. Appropriate knowledge management strategies may be able to facilitate these enablers. Finding these strategies may be of interest. This study presents a local structural equation model for degree of value creation in the cooperation firms. It tries to help the managers of these cooperation firms to measure VCP of their cooperation firms.

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