THE INFLUENCE OF KNOWLEDGE MANAGEMENT ON
PRODUCTIVITY

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Abstract
The aim of this research was to study the influence of knowledge management on increasing productivity. According to the objectives, this research could be considered as a practical one, and according to the methodology; it could be considered as descriptive – deductive. The statistical society included 540 employees of Lorestan Communication Organization, among whom 222 persons were selected as sample, using Morgan Table and random selection. We used two standard questionnaires, beside library research, according to Likert 5 dimension model and Filiou’s model. The validity and reliability for the knowledge management questionnaire was 0.90 and for the productivity questionnaire was 0.94, which were tested through Alpha Coefficient, and then they were accepted. The results showed that knowledge management influenced productivity positively.

Keywords: Knowledge Management, Knowledge Gaining, Knowledge Establishment, Knowledge Transformation, Knowledge Creation, Knowledge Usage, Productivity

INTRODUCTION
Unlike the organizations in the past, organization in the present time own very modern technologies and need to obtain, manage, and use knowledge and information to improve their productivity. Knowledge as a very important and powerful tool can change the world and create innovation. Nonaka in 1998 in Howard Business Journal stated, “In an economic system that the only confidence is misgiving, the best source that can be prosperous ion competition is knowledge”. In all organization, productivity must be considered as one of the most important framework. This is because of the reason that it is in productivity that we have competition. Moreover, the framework of productivity itself is the individuals who are intellectual and knowledgeable. They can transform thoughts into services and products. Therefore, the framework of all things in organizations is thinking. The successes of organizations are due to the successes of their employees. It means that having a successful organization is related to its employees who are knowledgeable and skilled.

To be so, one of the alternatives is to use knowledge management in organizations. By means of knowledge management, an organization can grow knowledgeable and skilled human resources who can provide stable profits for the organization itself. Therefore, for both public and private organizations, knowledge management can be considered as the preliminary feature and characteristic for productivity and flexibility of organizations (Maria Martinson 1999).

Literature Review
Knowledge Management: It refers to the procedure of creating, establishing, providing, sharing, and using knowledge. It can be also considered as a routine whose aim is to gain and use knowledge and information and also to create a way for employees to access that information without and lack or weakness. But the problem that exists here for defining knowledge management that is there are many definitions depending upon the concept it wants to reveal. Quintas, Lefrere and Jones, for example, define knowledge management as “a process of continually managing knowledge of all kinds to meet existing and emerging needs, to identify and exploit existing and acquired knowledge assets and to develop new opportunities” (1997, pp. 385-391). There are many usages for knowledge management and the most
important of them can be creating competitive situation. There are 5 dimensions for knowledge management including knowledge gaining, knowledge establishment, knowledge transformation, knowledge creation, and knowledge usage.

**Knowledge Gaining:** Knowledge is expanded through learning, innovation, creativity, and activities outside the organization. Knowledge creation refers to the ability of organization in creating ideas and new and useful alternatives. Organizations, by expanding and restructuring past knowledge and manipulating it with new knowledge with different alternatives, create realities and new concepts. Knowledge creation is a very important procedure in which motivation, manipulation, experience, and chance play very important roles. There are many ways by which we can retest experiences.

**Knowledge Establishment:** It refers to “storing, establishing, and keeping knowledge in form of a framework that saves the integration of its parts and therefore finds the ability to be recycled by the organization’s employees” (Gholi Pour 2009). Therefore, establishment as the organizational memory including informational banks, human procedures, and others alike covers the ability of organization to save and keep knowledge.

**Knowledge Transformation:** To be valuable, knowledge must be transformed to others. This transformation can be passive or active. Knowledge can be shared through informational systems or through individual cooperation. Knowledge can be combined in educational and entrepreneurship programs or be engaged in a procedure. It can be simply stored in a storehouse in a way that when it is needed, it can be accessed easily.

**Knowledge Creation:** It refers to “activities that are related to entering new knowledge to system including expanding, discovering and capturing knowledge” (Gholi Pour 2009).

**Knowledge Usage:** The ways of using knowledge and gaining awareness are depending upon culture and also organization’s activities. This is the philosophy of management that forces employees to do their best and use the knowledge obtained to be more effective. Organizations should be “creative” in using procedures and new “technologies” if they want to be “effective” (Kondalkar 2009, p. 23).

**Productivity:** Productivity has got many different meanings which are paid attention from many perspectives. Each of these perspectives has its own instruction and special procedure. Knowledge, experience, and environmental conditions result in creating many definitions and interpretation for productivity. On the whole, if we are going to be equipped with productivity, we should scatter its knowledge in society. Knowledge and expansion have mutual effects on each other. Moreover, in a developed society, knowledge is also expanded.

There are many researches related to the issue mentioned. Mr. Saeed Ebrahimi in his study under the title of “The role of Management in productivity” stated that “to be equipped with thoughts of productivity, we should scatter knowledge in the society. Knowledge is directly related to development. They have mutual effects on each other. Therefore, management has got a very important role in productivity”. In another research, Miss Shams Sadat Zahedi and Mr. Reza Najari in their paper under the title of “Productivity of Human Resource and Knowledge Management” found out that the variables are directly related to each other and they complete each other.

**Materials And Methods**

The present study is descriptive – correlative, and has applied its objective in a practical manner by means of library research. Since, it measures the relationship between two variables; therefore, it can be considered as a correlative one. The statistical society included 540 employees of Lorestan Communication Organization, among whom 222 persons were selected as sample, using Morgan Table and random selection. The aim of this research was to study the influence of knowledge management on increasing productivity. We used two standard questionnaires, beside library research, according to Likert 5 dimension model and Filious’s model. The validity and reliability for the knowledge management questionnaire was 0/90 and for the productivity questionnaire was 0/94, which were tested through Alpha Coefficient, and then they were accepted.
Research Findings

This research contains five alternative hypotheses and one main hypothesis whose variables and results are analyzed.

**The null hypothesis:** There is no relationship between paired variable and impaired variable.

**The alternative hypothesis:** There is a relationship between paired variable and impaired variable.

**The 1st alternative hypothesis test:** The relationship between knowledge gaining and productivity.

**The null hypothesis:** There is no relationship between knowledge gaining and productivity.

**The 1st alternative hypothesis:** There is a relationship between knowledge gaining and productivity.

### Table 1- Regression Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>Non-standard Coefficient</th>
<th>Standard Coefficient</th>
<th>T</th>
<th>Significancy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dependent</td>
<td>Independent</td>
<td>B</td>
<td>Deviation</td>
</tr>
<tr>
<td></td>
<td>Productivity</td>
<td>Constant</td>
<td>1.404</td>
<td>0.111</td>
</tr>
<tr>
<td></td>
<td>Knowledge Gaining</td>
<td>0.514</td>
<td>0.041</td>
<td>0.649</td>
</tr>
</tbody>
</table>

**The result of the 1st alternative hypothesis:** According to table 1, because of the significance and other numbers, the null hypothesis is rejected and the alternative hypothesis is accepted. Consequently, there is a relationship between knowledge gaining and productivity.

**The 2nd alternative hypothesis test:** The relationship between knowledge establishment and productivity.

**The null hypothesis:** There is no relationship between knowledge establishment and productivity.

**The 2nd alternative hypothesis:** There is a relationship between knowledge establishment and productivity.

### Table 2- Regression Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>Non-standard Coefficient</th>
<th>Standard Coefficient</th>
<th>T</th>
<th>Significancy</th>
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<tbody>
<tr>
<td></td>
<td>Dependent</td>
<td>Independent</td>
<td>B</td>
<td>Deviation</td>
</tr>
<tr>
<td></td>
<td>Productivity</td>
<td>Constant</td>
<td>1.154</td>
<td>0.035</td>
</tr>
<tr>
<td></td>
<td>Knowledge Establishment</td>
<td>0.602</td>
<td>0.12</td>
<td>0.957</td>
</tr>
</tbody>
</table>

**The result of the 2nd alternative hypothesis:** According to table 2, because of the significance and other numbers, the null hypothesis is rejected and the alternative hypothesis is accepted. Consequently, there is a relationship between knowledge establishment and productivity.

**The 3rd alternative hypothesis test:** The relationship between knowledge transformation and productivity.

**The null hypothesis:** There is no relationship between knowledge transformation and productivity.

**The 3rd alternative hypothesis:** There is a relationship between knowledge transformation and productivity.
The result of the 3rd alternative hypothesis: According to table 3, because of the significance and other numbers, the null hypothesis is rejected and the alternative hypothesis is accepted. Consequently, there is a relationship between knowledge transformation and productivity.

The 4th alternative hypothesis test: The relationship between knowledge creation and productivity.
The null hypothesis: There is no relationship between knowledge creation and productivity.
The 4th alternative hypothesis: There is a relationship between knowledge creation and productivity.

The result of the 4th alternative hypothesis: According to table 4, because of the significance and other numbers, the null hypothesis is rejected and the alternative hypothesis is accepted. Consequently, there is a relationship between knowledge creation and productivity.

The 5th alternative hypothesis test: The relationship between knowledge usage and productivity.
The null hypothesis: There is no relationship between knowledge usage and productivity.
The 5th alternative hypothesis: There is a relationship between knowledge usage and productivity.

The result of the 5th alternative hypothesis: According to table 5, because of the significance and other numbers, the null hypothesis is rejected and the alternative hypothesis is accepted. Consequently, there is a relationship between knowledge usage and productivity.

The main hypothesis test: The relationship between knowledge management and productivity.
The null hypothesis: There is no relationship between knowledge management and productivity.
The alternative hypothesis: There is a relationship between knowledge management and productivity.
Table 6- Regression Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>Non-standard Coefficient</th>
<th>Standard Coefficient</th>
<th>T</th>
<th>Significance</th>
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<tr>
<td></td>
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<tr>
<td></td>
<td>Dependent Independent B</td>
<td>Deviation Beta</td>
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<tr>
<td></td>
<td>Productivity Constant 0.910 0.063 14.499 0.000</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Knowledge Management 0.719 0.023 0.900 30.684 0.000</td>
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<td></td>
<td></td>
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</tbody>
</table>

**The result of the alternative hypothesis:** According to table 6, because of the significance and other numbers, the null hypothesis is rejected and the alternative hypothesis is accepted. Consequently, there is a relationship between knowledge management and productivity.

**Conclusion**

In this research, we studied the influence of knowledge management on increasing productivity. According to the objectives, this research could be considered as a practical one, and according to the methodology; it could be considered as descriptive – deductive. The statistical society included 540 employees of Lorestan Communication Organization, among whom 222 persons were selected as sample, using Morgan Table and random selection. We used two standard questionnaires, beside library research, according to Likert 5 dimension model and Filiou’s model.

The results showed that knowledge management influenced productivity positively. Moreover, among the variables, respectively knowledge establishment with the coefficient of 0.957, knowledge creation with the coefficient of 0.950, knowledge usage with the coefficient of 0.715, knowledge gaining 0.649, and knowledge transformation with the coefficient of 644 have the most important influence on productivity for employees.

**References**

Abbas Zade, Seyed Mohammad, 1374, work ethics, Orumiye University, Arshia publication
Mobini, Mahdi, 1387, approach to the concept of productivity.
Saatchi, Mahmood, 1382, productivity phycology, fourth edition, Virayesh publication
Satoot, Hossein, 1380, surveying the related elements with work ethics from the view of Tehran University’s employees, Master’s thesis, management university, Tehran University.
Sharifi, Alireza, 1381, designing Tehran educational planning; Mines and Resources Research Institute Torabian Fard, Nima, 1381, determine the contribution of each element in productivity of Education Department’s teachers in Shahin Shahr province, Master’s thesis, education and research institute of planning management.