Determine of the Relationship Between Dimensions of Intellectual Capital and Productivity of Education Organization of Guilan Province

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Abstract: In knowledge economy, against industrial economy, intellectual property and human capital are main property of organization. The potential success of the organization depends to their intellectual capabilities, therefore, type of intellectual capital management in organizations and study of its productivity has important role in development of organizational goals. The purpose of the study is measurement of significance relationship between intellectual capitals with productivity of education of Guilan province. In this descriptive-analytical research, statistical society was 31 department of education in Guilan Province, that researchers collected information with questionnaire. There were information about of human capital, structural, relationship and information of productivity in this questionnaire. Scientific method of questionnaires confirmed with method of content validity. Perpetuity of questionnaires confirmed with over 78% of Cronbach's alphabet. Data analysis was performed with spss software. The results showed that there are significant relationships between dimensions of three intellectual capitals (Human capital, Structural funds and Investor relations) with productivity of education organization of Guilan Province. Less attention to the intellectual capital in education organization, therefore management organization solves many of the problems. Therefore, Organization education of Guilan province should promotor development of human capital, capital structural and investor relations.

Key words: Intellectual Capital, Productivity, Performance, Organization of Education, Guilan Province.

INTRODUCTION

Model of global economic growth is fundamental change with information technology revolution, formation of information society and network and also growth and rapid development of superior technology, in communications, PC and engineering, since 1990s. As a result, knowledge as the most important capital has been replaced with financial and physical capital in the global economy. In knowledge-based economy, organizations live and die with based on knowledge. Among these, organizational is successful that it use better and faster of these facilities. Today, knowledge is more important compared with other factors of production such as land, capital, labor, machinery and etc. In the knowledge economy, knowledge is the most important factor of production and competitive advantage of organizations (Seetharaman, 2002). One of the characteristics of knowledge is being imperceptible and is very hard for measurement and evaluated of it. In the past, organizations were calculated value and quantity of their production factors with using by traditional accounting methods. Today, these accounting methods are not performance. Knowledge is one of the main components intangible properties. In the past, Property of organizations was visible, but today, most organizations property is not visible (Sullivan, 2000). Recent studies showed that against the reduced efficiency of traditional sources (such as money, land, machinery, etc.,) knowledge is source of operating income and work. This is important that market diagnosed the value of knowledge and other non-visible factors in the process of value creation. Recently, rate and ratio of hidden value are Change. For example, in 1986, property of Merck Company was 12.3 percent of its real market value (Bontis, 1999).

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On this basis, present and future success in the competition between organizations, largely depends based on knowledge management and so little based on the physical and financial resources. Therefore, function of an organization's leadership is creating an environment for knowledge management. Obviously, today, challenge of management is prepare a suitable environment for development human mind in the knowledge-based organizations (Bontis and Jacobsen, 1999). Therefore, basic skills for management of knowledge-based organizations are knowledge management (Quinn, 1992). However, because the nature of knowledge is non-obvious, that cannot be measured it by none of the scale of traditional financial accounting. Also, there is risk of forgot's knowledge and other property for managers.

According to the importance of intangible property, this article deals to examine mode of property management in the organization of education of Guilan province and influence of this property on organization's productivity.

**MATERIAL AND METHODS**

Method of this research is descriptive-analytical and research branch of correlation. Statistical society are includes 300 peoples of 31 education and development office in Gilan Province. Researchers collected payment information by using questionnaires. There were information about human, structural, relationship capital and information about productivity in this questionnaire. 263 questionnaires of total questionnaires will be returned (percent responding, 78%). Questionnaire was 44 question about dimensions of intellectual capital and 16 question about productivity that were distributed at between 31 office organization education of Guilan province. For scientific validity of the questionnaire was used of the content validity and review of literature and surveys from faculty and scholars. To scientific confidence questionnaire were obtained ratio of Cronbach's alpha Over 78%. Therefore, stability of questionnaire was approved. Analysis of data collected was performed by statistics of Analytical and descriptive with using SPSS software.

**RESULTS AND DISCUSSION**

According to the graphs and tables, the productivity variable, minimum, maximum, average, standard of deviation and variance are 2.58, 3.44, 2.9686, 0.2583 and 67% respectively. In the intellectual capital variable, minimum, maximum, average, standard of deviation and variance are 2.58, 3.44, 2.9686, 0.2583 and 67% respectively. In the Human capital variable, minimum, maximum, average, standard of deviation and variance are 2.56, 3.45, 3.0654, 0.19676 and 39% respectively. In the relationship capital variable, minimum, maximum, average, standard of deviation and variance are 2.71, 3.52, 3.1079, 0.20448 and 0.042 respectively.

![Histogram of productivity variable.](image)

**Fig. 1:** Histogram of productivity variable.
Fig. 2: Histogram of Intellectual Capital variable.

Table 1: Description of Research Variables.

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Productivity</td>
<td>28</td>
<td>2.58</td>
<td>3.44</td>
<td>2.9686</td>
<td>0.25830</td>
<td>0.067</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>28</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intellectual Capital</td>
<td>28</td>
<td>2.74</td>
<td>3.55</td>
<td>3.0988</td>
<td>0.19877</td>
<td>0.040</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>28</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Capital</td>
<td>28</td>
<td>2.65</td>
<td>3.45</td>
<td>3.0654</td>
<td>0.19676</td>
<td>0.039</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>28</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital of structure</td>
<td>28</td>
<td>2.27</td>
<td>3.71</td>
<td>3.1232</td>
<td>0.29017</td>
<td>0.084</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>28</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital of relationships</td>
<td>28</td>
<td>2.71</td>
<td>3.52</td>
<td>3.1079</td>
<td>0.20448</td>
<td>0.042</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>28</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Discussion:

According to results of this research, there is relation between intellectual capitals and productivity. In fact, if intellectual capital (Human capital, Capital structure, Investor relations) increases in the organization, it has positive impact and meaningful affect on the productivity. Consequently, there is direct relationship between intellectual capital and productivity variables. Therefore, our results of this research are consistent with Bontis and Sernko’s research (2004) in Canada based on the review of influence of intellectual capital on productivity.

There is direct relationship between human capital variables and productivity. Thus, when human capital in organizations increases, also productivity increases. According to findings of this section, this research is consistent with research of Bontis and Sernko (2004) in Canada.

There is direct relationship between variable of structure capital and productivity. Thus, when capital structure increases productivity increases. According to findings of this section, this research is consistent with research of Bontis and Sernko (2004) in Canada.

There is direct relationship between variable of relations capital and productivity. Thus, when capital structure increases, productivity increases. According to findings of this section, this research is consistent with research of Bontis and Sernko (2004) in Canada (Bontis, 2004).
Conclusion and Suggestion:

There is intellectual capital in suitable level in many Iranian organizations but do little attention to subject and use of this method of intellectual capital (intellectual capital management) for effect of
productivity of organizations. Otherwise, it is not practical use of the intellectual capital in implementing of enterprise strategy. So, recommended be resolved many problems with management of intellectual capital level organizations, special education and development of Guilan province. In this regard will be provided the following suggestions to education organization of Guilan province:

1. Design framework of employee’s competence and management includes knowledge, skills and their ability and planning and development based on competencies.
2. Design system of protection and encouragement of the top believe of employees for timely deployment in planning process.
3. Effort for create a supportive culture through by systems designed to encourage and measurement to promote creativity and innovation learning and development of resources human organization.
4. Allocation budget and more time to research and application development and cooperation and close interaction with references and scientific circles and use knowledge and their experiences in the future planning.
5. Planning and planning improving communication with clientele and investors and encouraged them to helping to rebuild schools in the province.
6. Employment, education, motivation and empowering employees so that to provide for good quality Services.

REFERENCES


