The Role of Intangible Assets on Performance Improvement in Kohgiluye Education Organization

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INTRODUCTION

Intangible assets are assets that potentially exist in the organization and in the normal state may not be paid much attention to them (Seifollahi and Davari, 2009). Identifying and implementing these types of assets may significantly increase the competitiveness of the complex and may be benefited properly from intangible capitals for organizational improvements. Intangible assets include knowledge, communication and acceptability of organization, innovation and creativity of staff and so on (Audit Organization, 2010: 56). The importance of intangible assets (such as skills of labor and organization) in determining future earnings is growing upward. In addition, these assets are more difficult to detect and this difficulty is related to determining their value that has continued from past until today and this is the reason that most companies go unreported (Abudi and Liu, 1998: 77). This has caused that these assets remain invisible for the world outside of the institution, and even sometimes cannot be identified by employees within the organization (Mohseni Tabrizi, 1996). Stewart believes intellectual capital is a set of knowledge, information, intellectual property, experience, competence and organizational learning that can be used to create wealth. Indeed, the intellectual capital involves the whole staff, organizational knowledge and its skills to create value added and leads to sustained competitive advantages (Ghelich Li and Moshabbahi, 1385: 122). Identifying and strengthening of intangible assets in each complex, growing and increasing the strength of competitiveness of the total complex can be observed. To identify suitable assets of organizations including tangible and intangible assets and to use of these assets in the first step, all tangible assets and subsidiaries are required to be fully identified and with a proper planning make maximum use of these assets. And also simultaneously attempted to identify and plan for the use of intangible assets that is very important (Abudi and Liu, 1998: 77). And any organization is required to carry out effective measures by constituting specialized teams and work groups to recognize intangible assets.

Keywords: intangible assets, organizational capital, information capital, human capital, performance

ABSTRACT

Background: Today, much of the organization’s assets are composed of intangible assets that traditional accounting methods are not able to measure them. Intangible assets represent a set of capabilities and potentialities of an organization that are handled as a source of sustainable competitive advantage and economic growth and development. Objective: This study examined the role of intangible assets on improving the financial performance of Kohgiluye education department. Based on investigator’s selected model, human capital, information capital, organizational capital, dimensions of intangible assets and dimensions of financial performance improvement were of the most important and effective factors in this study that were examined. Method: The research method is descriptive - correlitive and statistical population consisted of education department staff of Kohgiluye city. 78 employees were selected as the statistical sample. Survey measurement tools consisted of two questionnaires, one related to intangible assets (self-made) and the other related to financial performance measurement (standard). Content analysis method was used for measuring validity of the first questionnaire and Cronbach’s alpha was calculated to determine its reliability whose amount equal 0.79. Results: The results showed that the first hypothesis with a correlation coefficient of 0.32 was confirmed and it means that there is a relationship between intangible assets and financial performance improvement of education department. Other proposed hypotheses also confirmed and have been discussed in the article. Conclusions and recommendations also have been made and presented.
Intangible assets are assets with a long and untouchable lifetime which are developed by a business enterprise development and are considered as a part of the company's assets (Zomorrodian and Rostami, 2010). In order to succeed in trade or business, organizations must identify intangible assets and their missing value (Christine and Gregory, 1999). Standards that are considered today for developing productivity and performance improvement in organizations are different from those of were discussed during 60s and 70s (Nili, 2006). Today improvement of an organization's performance will not only lead to tangible resources because it its competitive advantage is temporary while competitive value of the intangible resources of any organization would be more permanent. So the question is how and how much intangible assets can be effective in improving the financial performance of an organization which is considered as unknown aspects in this research (Saatchi, 1991). In the era of knowledge-based economy, value creation activities of organizations not only are based on tangible assets, but also the capability of organizations to use intangible assets is the main power of their value creation. According to a study, about 80 percent of assets of major corporations and economic institutions in the world includes of intangible assets and spiritual values (Abudi and Liu, 1998: 77) Therefore, this study attempts to examine the role of intangible assets of education department in improving its financial performance in Kohgiluyeh to be able to identify effective variables on performance.

Hypotheses:
The first hypothesis: there is a relationship between intangible assets and financial performance improvement of education department.
The second hypothesis: there is a relationship between human capital and financial performance improvement of education department.
The third hypothesis: there is a relationship between information capital and financial performance improvement of education department.
The fourth hypothesis: there is a relationship between institutional capital and financial performance improvement of education department.
The fifth hypothesis: there is a relationship between the dimensions of intangible assets and financial performance improvement of education department.
The sixth hypothesis: there is a relationship between the dimensions of financial performance improvement and intangible assets of education department.
The seventh hypothesis: there is a relationship between demographic factors and financial performance improvement of education department.
The eighth hypothesis: there is a relationship between demographic factors and intangible assets of education department.

Methodology:
In this study the method of descriptive - correlation was used.
Statistical population and sample
The statistical population of the study consisted of all education department staff in Kohgiluyeh city. According to statistics provided by the General Directorate of Education, 78 people are serving in this organization.

Statistical sample:
Sample size in this study through using census method was determined 78 people.

Conceptual model:
According to the study of scientific literature, several factors are involved in relation to intangible assets that can affect the success of an organization. One can refer to the study of Hendrickson et al., (2006) in the case of intangible assets, which discuses about items that are often considered as fees of courses, such as research fees and development and advertising expenses, the study of Fakharian (1381) about intangible assets and Companies balance sheet and study of Kaplan and Norton (2004)discusses about intangible assets and strategies, and to other researches whose common aspects mostly have been variables such as organizational capital, human capital and intellectual capital. Therefore, studying the theories of intangible assets, Norton and Kaplan's theory was used as conceptual model in this study.
The first hypothesis: there is a relationship between intangible assets and financial performance improvement of education department.

Table 1: Results of Pearson correlation coefficient. The relationship between intangible assets and financial performance improvement of education department

<table>
<thead>
<tr>
<th>Variables</th>
<th>correlation coefficient</th>
<th>sig</th>
<th>number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intangible assets and financial performance improvement</td>
<td>0.32</td>
<td>0.004</td>
<td>78</td>
</tr>
</tbody>
</table>

The table above indicates Pearson correlation coefficient between intangible assets and financial performance improvement of education department’s employees, correlation coefficient (r = 0.32) is significant at the 0.05 level, p ≤ 0.004. Therefore, the above hypothesis is confirmed and we conclude that there is a meaningful relationship between intangible assets and financial performance improvement of education department’s employees.

The second hypothesis: there is a relationship between human capital and financial performance improvement of education department.

Table 2: Results of Pearson correlation coefficient. The relationship between human capital and financial performance improvement of education department

<table>
<thead>
<tr>
<th>Variables</th>
<th>correlation coefficient</th>
<th>sig</th>
<th>number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human capital and financial performance improvement</td>
<td>0.28</td>
<td>0.011</td>
<td>78</td>
</tr>
</tbody>
</table>

The table above indicates Pearson correlation coefficient between human capital and financial performance improvement of education department’s employees, correlation coefficient (r = 0.28) is significant at the 0.05 level, p ≤ 0.011. Therefore, the above hypothesis is confirmed and we conclude that there is a meaningful relationship between human capital and financial performance improvement of education department’s employees.

The third hypothesis: there is a relationship between information capital and financial performance improvement of education department.

Table 3: Results of Pearson correlation coefficient. The relationship between information capital and financial performance improvement of education department

<table>
<thead>
<tr>
<th>Variables</th>
<th>correlation coefficient</th>
<th>sig</th>
<th>number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human capital and financial performance improvement</td>
<td>0.26</td>
<td>0.018</td>
<td>78</td>
</tr>
</tbody>
</table>

The table above indicates Pearson correlation coefficient between information capital and financial performance improvement of education department’s employees, correlation coefficient (r = 0.26) is significant at the 0.05 level, p ≤ 0.018. Therefore, the above hypothesis is confirmed and we conclude that there is a meaningful relationship between information capital and financial performance improvement of education department’s employees.
The fourth hypothesis: there is a relationship between institutional capital and financial performance improvement of education department.

Table 4: Results of Pearson correlation coefficient. The relationship between organizational capital and financial performance improvement of education department

<table>
<thead>
<tr>
<th>Variables</th>
<th>correlation coefficient</th>
<th>sig</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational capital and financial</td>
<td>0.31</td>
<td>0.004</td>
<td>78</td>
</tr>
<tr>
<td>performance improvement</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table above indicates Pearson correlation coefficient between organizational capital and financial performance improvement of education department’s employees, correlation coefficient \(r = 0.31\) is significant at the 0.05 level, \(P \leq 0.004\). Therefore, the above hypothesis is confirmed and we conclude that there is a meaningful relationship between organizational capital and financial performance improvement of education department’s employees.

The fifth hypothesis: there is a relationship between the dimensions of intangible assets and financial performance improvement of education department.

Table 5: Results of Pearson correlation coefficient. The relationship between the dimensions of intangible assets and financial performance improvement of education department

<table>
<thead>
<tr>
<th>Variables</th>
<th>correlation coefficient</th>
<th>sig</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human capital</td>
<td>0.28</td>
<td>0.011</td>
<td>78</td>
</tr>
<tr>
<td>Information capital</td>
<td>0.26</td>
<td>0.018</td>
<td>78</td>
</tr>
<tr>
<td>Organizational capital</td>
<td>0.31</td>
<td>0.004</td>
<td>78</td>
</tr>
</tbody>
</table>

The table above indicates Pearson correlation coefficient between the dimensions of intangible assets and financial performance improvement of education department’s employees, correlation coefficients of all intangible dimensions are significant at the 0.05 level, \(p \leq 0.000\). Therefore, the above hypothesis is confirmed and we conclude that there is a meaningful relationship between the dimensions of intangible assets and financial performance improvement of education department’s employees.

The sixth hypothesis: there is a relationship between the dimensions of financial performance improvement and intangible assets of education department.

Table 6: Results of Pearson correlation coefficient. The relationship between the dimensions of financial performance improvement and intangible assets of education department

<table>
<thead>
<tr>
<th>Variables</th>
<th>correlation coefficient</th>
<th>sig</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance management</td>
<td>0.20</td>
<td>0.07</td>
<td>78</td>
</tr>
<tr>
<td>Work and time evaluation</td>
<td>0.30</td>
<td>0.006</td>
<td>78</td>
</tr>
<tr>
<td>Electronic activities</td>
<td>0.24</td>
<td>0.03</td>
<td>78</td>
</tr>
<tr>
<td>Budget and resource allocation</td>
<td>0.27</td>
<td>0.01</td>
<td>78</td>
</tr>
<tr>
<td>Physical space and facilities</td>
<td>0.40</td>
<td>0.006</td>
<td>78</td>
</tr>
</tbody>
</table>

The table above indicates Pearson correlation coefficient between the dimensions of financial performance improvement and intangible assets of education department’s employees, correlation coefficients of work and time evaluation, Electronic activities, Budget and resource allocation and Physical space and facilities are significant at the 0.05 level, \(p \leq 0.05\). But it is not significant in maintenance management \(p \leq 0.07\). Therefore, the above hypothesis is confirmed and we conclude that there is a meaningful relationship between the dimensions of financial performance improvement and intangible assets of education department’s employees.

The seventh hypothesis: there is a relationship between demographic factors and financial performance improvement of education department.

Table 7: Results of Pearson correlation coefficient. The relationship between demographic factors and financial performance improvement of education department

<table>
<thead>
<tr>
<th>Variables</th>
<th>correlation coefficient</th>
<th>sig</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.07</td>
<td>0.5</td>
<td>78</td>
</tr>
<tr>
<td>Sex</td>
<td>0.03</td>
<td>0.4</td>
<td>78</td>
</tr>
<tr>
<td>Education</td>
<td>0.18</td>
<td>0.1</td>
<td>78</td>
</tr>
<tr>
<td>Work experience</td>
<td>0.03</td>
<td>0.7</td>
<td>78</td>
</tr>
</tbody>
</table>

The table above indicates Pearson correlation coefficient between demographic factors and financial performance improvement of education department’s employee’s correlation coefficients of age, sex; education and work experience are not significant at the 0.05 level, \(p \leq 0.05\). Therefore, the above hypothesis is rejected and we conclude that there is not a meaningful relationship between demographic factors and financial performance improvement of education department’s employees.

The eighth hypothesis: there is a relationship between demographic factors and intangible assets of education department.
The table above indicates Pearson correlation coefficient between demographic factors and intangible assets of education department’s employees, correlation coefficients of age, sex, education and work experience are not significant at the 0.05 level, p ≤ 0.05. Therefore, the above hypothesis is rejected and we conclude that there is not a meaningful relationship between demographic factors and intangible assets of education department’s employees.

**Conclusions:**

The research aimed at identifying the role of intangible assets on performance of Kohgiluye Education Organization. Based on the proposed scope, 8 hypotheses proposed, 6 hypotheses approved and 2 hypotheses were rejected. What the study results indicate presented as follows:

- All dimensions of financial performance improvement are all influential in increasing the efficiency of the organization under study. So the managers should pay attention to the financial aspects of educational performance and improve these dimensions.
- All dimensions of intangible assets are influential on the financial performance of the organization under study, so the managers should pay attention to such dimensions and try to improve them. Doing so, the organization can be able to cope with highly complex and highly expensive taxes.

**REFERENCES**


Alvani, seyed Mahdi, 1383. "Social capital as development principle", Tadbir, Number 120.


**Table 8:** Results of Pearson correlation coefficient. The relationship between demographic factors and intangible assets of education department

<table>
<thead>
<tr>
<th>Variables</th>
<th>correlation coefficient</th>
<th>Sig</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>age</td>
<td>0.10</td>
<td>0.3</td>
<td>78</td>
</tr>
<tr>
<td>Sex</td>
<td>0.07</td>
<td>0.7</td>
<td>78</td>
</tr>
<tr>
<td>Education</td>
<td>0.15</td>
<td>0.1</td>
<td>78</td>
</tr>
<tr>
<td>Work experience</td>
<td>0.09</td>
<td>0.3</td>
<td>78</td>
</tr>
</tbody>
</table>


