Investigate the information technology relation on internal auditing Characteristics

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ABSTRACT

Background: The present study aimed to investigate the relationship between uses of information technology in internal auditing by internal auditors Characteristics. Objective: The sample of the study consisted of 75 audit managers that accepted in Tehran Stock Exchange. Results: To test hypothesis, Pearson coefficient correlation and ANOVA tests were used. To measure characteristics of the internal auditors, performance, competence and impartiality have been used. The results revealed significant positive relationship between performance and internal auditors' competence with use of information technology on internal auditing. Conclusion: But there was no significant relationship between impartiality of internal auditors with use of information technology, as well as the use of information technology on internal auditing is different on each of the main characteristics of internal audit.

INTRODUCTION

Today’s, using information technologies in three areas of planning, monitoring; documenting in auditing work has found a special place. Conceptual review of the Section 404 law Sarbanes-Oxley (2002) shows a part of the effort to enact this legislation is spend attention to the ability of internal auditors[4], internal auditor's characteristics such as maintaining autonomy, competence and objectivity of their judgment. According to this attitude toward internal auditors and internal auditor's variables new subjects such as acceptance rule and controls, internal audit value and the independence of the internal auditors and characterize technological solutions needed to this field appears [12].

In the new audit process, two major changes have occurred. First, move toward the evaluation of business processes and procedures, and second the emphasis on internal controls (control system)[29]. Given to that internal auditors considered the financial and non-financial issues and handle operations, the internal auditor's performance may also help managers strengthen control of the company through consulting and assurance services to assist independent auditors in this area[7].

Conducted researches on the role of internal auditors indicate that internal auditors have significant role in auditing committees [23]. Also, the internal auditor's roles in transfer pricing management [13], combating computer crimes, and using new technologies lead to reduce the workload and costs of independent auditors [33]. Investigate the effective factors on independence of the internal audit unit [20] and the research done on the role of information technology in internal audit such as increased demand for internal audit and internal IT auditing, the importance of information technology in auditing and the role of internal auditors by 1) improving internal controls, 2) financial tests that internal auditors can rely on it, and 3) general help to auditors and reduce the cost of the audit are discussions in relation to IT in internal audit. There are some researches about internal auditing and information technology. Kelvin (2003) indicates that strong internal audit can increase the effectiveness of the audit committee and in turn the audit committee can strengthen the internal audit work. Marlin (2008) found that the most important factor to increase the independence of the internal auditing department is reporting to the audit committee. Abdolmohammadi & Scott (2010) stated that proportion of time spent on IT auditors were more than 13.4 percent in 2009[1]. There is average of 1% per year increase in demand for internal audit and audit information technology. Hajia and Rafiee (2011) Showed that the impartiality and competence of internal auditors has significant correlation with audit delays but size of internal audit has not significant relationship with audit period[12]. The results of Douglas (2012) study indicate that the
importance of information technology in auditing with growing confidence IT for businesses and new laws in guaranteeing the issue for these activities has grown [9]. Steinbart (2012) found that internal auditing has significant role in relationship between internal auditing and information security [22].

**Method:**
This study is application and the research method is survey and correlational. The questionnaires were used to collect data. The population of this study consisted of 104 enterprises that accepted in Tehran Stock Exchange that 82 manager were selected and finally 75 of them complete the questionnaires. The alpha cronbach of the questionnaire were 0.81. The Pearson coefficient of correlation was used [14].

**Results:**
As the results show 10.7% of respondents have 24 years, 0.8% have 22 year and 6.7% have 23 year work history.

**Table 1:** History of internal auditing unit and IT committee.

<table>
<thead>
<tr>
<th>History of internal auditing unit</th>
<th>Frequency</th>
<th>Percent</th>
<th>Frequency percent</th>
<th>Total frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7</td>
<td>9.3</td>
<td>9.3</td>
<td>9.3</td>
</tr>
<tr>
<td>1-5</td>
<td>39</td>
<td>52</td>
<td>52</td>
<td>61.3</td>
</tr>
<tr>
<td>6-10</td>
<td>19</td>
<td>25.3</td>
<td>25.3</td>
<td>86.7</td>
</tr>
<tr>
<td>11-15</td>
<td>10</td>
<td>13.3</td>
<td>13.3</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>75</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

As the table 1 indicates 52% of respondents have 1-5 year history of work, 25.3% between 6-10years, 13.3% between 11-15 year and 9.3% between 1 year. Also, the history of IT committee was between 1-5 years that 29.3% were 1 year, 2.7% between 6-10 year and 1.3% between 11-15 year.

**Table 2:** Descriptive statistics for each of the four hypotheses.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Average</th>
<th>SD</th>
<th>Error mean deviation</th>
<th>Confidence interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>internal auditing performance</td>
<td>75</td>
<td>3.4378</td>
<td>0.51609</td>
<td>0.5959</td>
<td>3.3190 - 3.5565</td>
</tr>
<tr>
<td>internal auditing Competence</td>
<td>75</td>
<td>2.6133</td>
<td>0.37102</td>
<td>0.4284</td>
<td>2.5280 - 2.6987</td>
</tr>
<tr>
<td>internal auditing impartiality</td>
<td>75</td>
<td>1.6800</td>
<td>0.17223</td>
<td>0.1989</td>
<td>1.6404 - 1.7196</td>
</tr>
<tr>
<td>Total</td>
<td>225</td>
<td>2.5770</td>
<td>0.81314</td>
<td>0.5421</td>
<td>2.4702 - 2.6839</td>
</tr>
</tbody>
</table>

As table 2 shows there were significiant diffrences between averages.

**Table 3:** The results of hypothesis for 75 active enterprises in the exchange.

<table>
<thead>
<tr>
<th>Hypothesis 1</th>
<th>Pearson coefficient of correlation</th>
<th>P-value</th>
<th>Total</th>
<th>Hypothesis 2</th>
<th>Pearson coefficient of correlation</th>
<th>P-value</th>
<th>Total</th>
<th>Hypothesis 3</th>
<th>Pearson coefficient of correlation</th>
<th>P-value</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information technology</td>
<td></td>
<td></td>
<td>75</td>
<td>Information technology</td>
<td></td>
<td></td>
<td>75</td>
<td>Information technology</td>
<td></td>
<td></td>
<td>75</td>
</tr>
<tr>
<td>internal auditing performance</td>
<td>0.344**</td>
<td>0.003</td>
<td>75</td>
<td>internal auditing Competence</td>
<td>0.411**</td>
<td>0.000</td>
<td>75</td>
<td>internal auditing impartiality</td>
<td>-0.63</td>
<td>0.590</td>
<td>75</td>
</tr>
<tr>
<td>P-value</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>P-value</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The correlation between internal auditing performance and information technology was 0.342 and this indicates that there was positive significiant relationship between internal auditing performance and information technology. Therefore it can be said that there was significiant relationship between information technology use and internal auditing performance. The suitable correlation between internal auditing competences in second hypothesis indicates that there was positive significiant relationship between internal auditing competences and information technology. Therefore, there was significant relationship between information technology use and internal auditing competences. In the third hypothesis corelational result indicates that there was no significiant relationship between information technology use and internal auditing impartiality [22].

**Table 4:** ANOVA test to comparison of averages on fourth hypothesis .

<table>
<thead>
<tr>
<th>Averages comparison</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean of squares</th>
<th>F</th>
<th>p- value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>116,015</td>
<td>2</td>
<td>58.008</td>
<td>401.282</td>
<td>0.000</td>
</tr>
<tr>
<td>In group</td>
<td>32.091</td>
<td>222</td>
<td>0.145</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>148,106</td>
<td>224</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
As the results of table 4 shows there were significant differences between averages and therefore according to the respondents' answers the rate of information technology use on each of internal characteristics is different [7].

**Discussion:**

The present study aimed to investigate the relationship between uses of information technology in internal auditing by internal auditors Characteristics. To measure internal auditors Characteristics three indicators such as performance, Competence, impartiality were used. The results of first and second hypothesis were consistent with [9]. As a result the more use and of information technology on internal auditing by auditing organization could cause to increase the efficiency of internal auditing units and decrease of costs. Also, there was no significant relationship between information technology use and impartiality [17]. Therefore, inability of internal auditors to suitable report to board and information technology committees inability to report for auditing managers cause to information technology could not have positive efficient on impartiality [21,14,8]. Therefore, the results of this study have important outcomes to managers that organize the internal auditing performance and help them to increase quality level. This research as a first study about the role of information technology in internal auditing by internal auditors Characteristics have significant role on literature [4].

**REFERENCE**


