The effect of extensible business reporting language on the performance of the internal audit

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**ABSTRACT**

This study aimed to examine the effect of applying extensible business reporting language on the performance of the internal audit. A questionnaire was used to collect the data from 115 of the top managers of firms and internal auditors. Multiple regression methods were employed through SPSS software to test the hypotheses. The results of the study show that the external entity pressure, ease of use of the system, and cost-benefit overload positively and significantly affect the performance of the internal audit. While adapting to previous systems, training their employees, and the successful implementation of the model did not affect the performance of the internal audit.

1. Introduction

One of the main considerations required to set up an internal control system is internal audit as well as the necessary firm procedures and plan, so focusing on the work of internal audit function would save costs and improve the objectives of the firm. An optimized internal audit department will boost the performance and effectiveness of the independent auditor and enhance the client's internal audit benefit (Vahhed Moghadam & Moeinfar, 2014). Internal auditing plays an important part throughout the activities of the firm. Companies with an efficient audit team are preferably positioned to understand their firm risks and the organization system (Internal Auditors Association, 2010).

Conversely, an essential element in generating additional benefit for internal audit is the assessment of internal audit results. Assessing audit efficiency refers to a continuing attempt among internal audit functions to enhance the performance for an audit job. The Audit Committee will be the best source to assess internal auditors, and the best advertising for internal audit is the satisfaction of the customer mostly with internal audit features. For more success in an internal audit, the more the managers of the firm can bring to managers of other firms the internal audit advantages. As a result, internal auditing of their firms would be encouraged to use (Pourhaidari & Rezai, 2012). Therefore, where internal audit performance is great, internal auditors report their internal audit quality audit committee members. Many of the activities of the internal audit concentrate on the prevention of unexpected errors and compliance activities, and the identification of organizational management weaknesses at all levels. Dezoort et al. (2001) added also, where the quality of the internal audit is poor, internal auditors directly report to the financial
manager, although internal auditors put management advisory tasks at the center of the activities of internal audit and spend no time detecting weaknesses.

Moreover, Abdolmohammadi et al. (2017) mentioned that it also may enhance the performance of the internal audit when auditors internally use Extensible Business Reporting Language (XBRL). To increase the consistency of reporting procedures, information users and business markets need arrangements. Business nowadays is afflicted by insufficient distribution, inadequate analysis, and inefficiencies by users of information. It is also important to establish an appropriate business reporting framework to solve those challenges, so that part of this requirement can be solved by the extensible business reporting language. (Bozorg Asl et al., 2006). To improve effectiveness, enhance reporting within the firm, and connect with users of business information, firms should use this language as an international form of information sharing. In the conceptual framework of the XBRL, reporting units will build these identities if there is a need to use a specific mark for business units. This XBRL flexibility requires various standards of accounting for financial information in the annual reports to be implemented and to fulfil the various demands of different consumers (Boritz et al., 2003). According to the above, this research was therefore focused on analyzing the relationship impacting the performance of internal audits by using XBRL.

2. Literature Review

The need to provide a department named Internal Audit in nowadays world of business is an unavoidable need for achieving operational targets and ensuring efficient control of all resources. Internal auditors ought to recognize and motivate management to conduct their duties effectively. Besides, to help and communicate with internal auditors, administrators need to reflect on the effects of their success in achieving their operational targets and their usefulness in the specific units. (Karen, 2004). The internal audit aims to enhance the efficiency of the firm by establishing an audit committee, fostering corporate clarifying values, ethics, and improving the financial reporting quality, and guiding managers. (Narcisa & Elena, 2017).

An internal audit is a separate department of the firm that assesses the administrative activities of that firm and audits accounting and financial reports and other procedures. However, internal audit leads to increased efficiency, ethics, information analysis, timely communication of the timely organizational communication, reduced accounting errors, and overall, it helps in enhancing the firm's performance (Gonzalez et al., 2014; Ma’Ayan & Carmely, 2016). Consequently, various factors may influence the performance of internal auditors, one of which is the introduction of XBRL. The XBRL and auditing are considered as a tool that can facilitate external and internal auditing. XBRL is a framework that describes the business and financial data applied at the main center to integrate the XBRL in the resource planning framework at the level of engagement (Jamei, Ranjouri, & Mohammadi 2019). Unless the reporting chain of the firm has robust XBRL structures, the XBRL will be supporting the audit needs (Seyyedi et al., 2016).

The importance of this framework helps the company to evaluate the attachments for financial and corporate activities, account balances, and actual data files in the XBRL. Additionally, the introduction by international companies of an XBRL, from a perspective, strengthens main centre standardization, while from another perspective, enhances comparison, which essentially promotes external and internal activities.

Suppose the reporting chain has XBRL as a robust framework. In that situation, details from the XBRL, such as the audit of annual financial reports, is compiled mostly with audit requirements. An internal assessment is a mechanism that could be used by companies to meet their goals. (Jamei, Ranjouri, & Mohammadi 2019). An ongoing audit is a model of technology that audits financial information in exact-time or directly after contracts have been signed. Accounts could be merged with the audit unit through the firm's EPR frameworks or via transfer from company data to the database of the auditor. The firm should create a strategy to apply accounts, such as XBRL and GPS categories, to categories that auditors already use. This method has some significant benefits; auditors could use structured XBRL classification techniques to minimize the expense of and time of analysis of audit. It's not necessary to modify analytical auditing and monitoring instruments for each customer. Also, there is a high level of reliability of evidence for audit since it is created automatically from the data source of the firm. Traditional audit methods primarily rely on paper copies and handwriting datasheets of documents of the firm. Since the external stakeholders such as suppliers and banks, have XBRL the audit needs of firms and parties could be continuously met by the transfer and sharing of data. Thus, the use of internal auditors in the XBRL enhances the clarity of financial reports, decreases the imbalance of details, and increases the quality of audit (Mohammadi & Khuzin 2017; Doyle et al., 2007).

3. Prior studies on XBRL

The role of implementing extensible financial reporting language on improving financial reporting quality was examined by Mohammadi and Khuzin (2017). Their research results show that applying an XBRL improves the financial reporting quality, reduces information asymmetry and enhances financial information.
Moreover, Soleimani Amiri and Abu Hamza (2017) tested the impact of XBRL and information value promotion. They found that adopting an XBRL facilitates comparison, communication, and financial statement analysis. Decreases the cost of preparing. It increases the reputation of the company technology, credibility, communicates with legal, producing financial reports, clarification, and quality, and generally promotes company value. Khuzin and Mohammadi (2018) also analyze the role of ethics in implementing XBRL in the Tehran Stock Exchange (TSE) firms. The outcome of the study shows that technology factors, corporate governance, and corporate environmental factors effectively enforce XBRL by firms listed on the TSE. As a result, ethics is a necessary factor in applying XBRL to explain information. The effect of the XBRL on information asymmetry investigated by Zahmatkhesh et al. (2018). Their study found a negative and significant relation between the XBRL and information asymmetry of the firms. Also, they found that XBRL minimizes information asymmetry. Furthermore, the compulsory of applying the international financial reporting standards and XBRL on audit costs examined via Shan et al. (2016). Their findings have shown the XBRL negative effect on audit costs. And they added, applying XBRL to minimize audit costs. Similarly, the effect of using XBRL on information asymmetry also tested by Liu et al. (2017). And they found that effective XBRL has a negative effect on minimizing information asymmetry. Also, internal audit performance using XBRL correlates positively with large firms in civil-law countries and small companies in customary-law countries, in the study conducted by Abdolmohammadi et al. (2017) and Abdolmohammadi and Boss (2010). The outcome of the study shows that XBRL positively correlates with stronger management of the firms.

The study conducted by Lambert et al. (2019) found that the accuracy of information reporting after the adoption of the XBRL, analysts significantly report earnings per share when they tested the analysts’ forecasts of the timing and accuracy of information reporting following the XBRL. Finally, Hsieh et al. (2019) tested the effect of the XBRL disclosure management solutions on earnings management and earnings release efficiency. The research finds that the strategy of investigation XBRL disclosure management solution is inversely related with delaying the earnings release for firms that disclosed good information.

4. The Hypothesis of the Study

H1: There is a positive and significant effect of the Extensible Business Reporting Language on the performance of the internal audit.

And Based on the main hypothesis the following sub-hypothesis as follows:

H1a: There is a positive and significant effect of the Cost-benefit overload on the performance of the internal audit.

H1b: There is a positive and significant effect of the successful implementation pattern on the performance of the internal audit.

H1c: There is a positive and significant effect of the Ease of use of the system on the performance of the internal audit.

H1d: There is a positive and significant effect of the external entity pressure on the performance of the internal audit.

H1e: There is a positive and significant effect of the Staff training and their knowledge on the performance of the internal audit.

H1f: There is a positive and significant effect of Adapting to the previous system on the performance of the internal audit.

5. Research methodology

The current paper conducted to investigate a descriptive correlation to test the effect of XBRL on the performance of the internal audit. The questionnaire used to collect the data. The sample consists of 115 of top managers and internal auditors of firms who were randomly selected. The questionnaire contains two parts, firstly which deals with the use of XBRL, and a second section about the performance of the internal audit. Finally, SPSS software was used to analyze the data that collected, also, the Multiple Regression employed to examine the hypothesis of the study. The questionnaire contains 38 questions, 19 of them related to XBRL, including 6 variables, and 3 questions each, and the other 19 questions connected to the performance of the internal audit variable. Consequently, Cronbach's alpha was applied to test the questionnaire reliability.

5.1. Validity and reliability of the questionnaire

A number of experienced and experts' professors were manipulated to evaluating the content validity of the questionnaires. Also, the Cronbach's alpha test applied to evaluate the questionnaire reliability, that was 0.90. Consequently, the questions of the questionnaire reliable since the result of the Cronbach's alpha higher than 0.70.

<table>
<thead>
<tr>
<th>The Number of questions</th>
<th>Cronbach's alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>38</td>
<td>0.90</td>
</tr>
</tbody>
</table>
6. Findings

Table 2 describes the determination coefficient as well as the adjusted coefficient. The coefficient of determination of this model illustrates that independent variables express what percent of the dependent variable changes. Based on the results of the coefficient of determination, it is found that only 0.60 % of the dependent variable shifts are described by the independent variables. But this criterion, and from the other side, cannot adequately describe the impact of the independent variable on the dependent variable. So, an adjusted determination coefficient needs to address this issue. The smaller difference between the adjusted coefficient and determination coefficient also means that the independent variables applied to the model have been correctly chosen. Consequently, because of the value of the adjusted coefficient value (55 per cent), which varies quite a few from the determination coefficient, it could be established that the chosen variables were correctly selected for the measurement model.

In addition, to assess the residuals and variables independence the test of Durbin Watson was employed. The purpose to be independent would be that the result of the other observations is not impacted by other observations. Based on the outcomes of the Durbin Watson test, the value was 1.89%, which is amidst 1.5 to 2.5, and that indicates the residuals a lack of serial correlation.

Table 2
The summary of the model

<table>
<thead>
<tr>
<th>model</th>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>SE</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.758</td>
<td>0.601</td>
<td>0.554</td>
<td>2.801</td>
<td>1.899</td>
</tr>
</tbody>
</table>

The variance analysis in the regression model as seen in Table 3. Provided the significance level of 0.000, and F (20.102) value, which would be lower than the level of error of 0.05, and that mean 95% confidence could be concluded that this effect is usually significant. That concludes, therefore, that the regression model used in this research is acceptable. This implies that the contribution of the regression model to the overall improvements is much higher than the level of error (residuals).

Table 3
The results of Analysis of Variance

<table>
<thead>
<tr>
<th>Model</th>
<th>Total squares</th>
<th>df.</th>
<th>Mean squares</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>939.875</td>
<td>7</td>
<td>160.786</td>
<td>20.102</td>
<td>0.000</td>
</tr>
<tr>
<td>Residual</td>
<td>751.205</td>
<td>86</td>
<td>8.463</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1690.957</td>
<td>93</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4
The results of statistical residuals

<table>
<thead>
<tr>
<th></th>
<th>Least</th>
<th>Most</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predicted value</td>
<td>75.029</td>
<td>89.523</td>
<td>83.201</td>
<td>2.990</td>
<td>115</td>
</tr>
<tr>
<td>Residuals</td>
<td>-6.985</td>
<td>5.994</td>
<td>0.000</td>
<td>3.002</td>
<td>115</td>
</tr>
<tr>
<td>Predicted standard value</td>
<td>-2.163</td>
<td>2.009</td>
<td>0.000</td>
<td>1.560</td>
<td>115</td>
</tr>
<tr>
<td>Standard Residual</td>
<td>-2.522</td>
<td>2.421</td>
<td>0.000</td>
<td>1.198</td>
<td>115</td>
</tr>
</tbody>
</table>

Finally, to analyze the distribution of residuals, table 4 is presented. The residuals should have a normal distribution with the variance of 1 and a mean of 0, based on the OLS regression requirements. While the variance and the mean of the residuals are the same to 0 and 1, that may also be an explanation for the suitability of the model.

The factor of variance inflation was determined, as presented in Table 5, to verify whether the linear relation of the independent variables will negatively influence the outcome. All the results for all variables were lower than 10 for the variance inflation indicator. It can also be argued that the presence of such linearity does not make it impossible to conclusions based on the research model. Thus, the findings of testing the variance inflation for the variables of the research model relating the values collected indicates no linear correlation. Table 2 provides characteristics of the testing research and estimates of a coefficient. The current research used a Multiple Regression to investigate the effect of XBRL elements on the performance of the internal audit. The findings of multiple regressions throughout this analysis indicate that the cost-benefit overload variable along with a significance level of 0.000 and standard coefficient of 0.346, which is lower than 0.05 has a significant and positive impact on the performance of the internal audit. While the variable of "Successful implementation pattern" found did not impact the
performance of the internal audit, which significance level was more than 0.05, and 0.122 and the standard coefficient of 0.136. The findings of impact ease of use of the system on the performance of the internal audit are significant and positive, with a significance level of 0.005 and the standard coefficient of 0.223. Moreover, the significance level found lower than 0.05 for the impact of the external entity pressure results on the performance of the internal audit, with a positive effect as well, through 0.024 for the significance level. And by contrast, both outcome of the impact of Staff training and Adapting to the previous system on the performance of the internal audit insignificant, which is more than 0.05, with significance level 0.192, 0.108 respectively, and with standard coefficient 0.121, 0.136, respectively.

### Table 5

<table>
<thead>
<tr>
<th>variables</th>
<th>Partial correlation</th>
<th>SE</th>
<th>Standard Partial Correlation</th>
<th>Sig</th>
<th>Variance inflation factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost-benefit overload</td>
<td>1.415</td>
<td>0.320</td>
<td>0.346</td>
<td>0.000</td>
<td>1.310</td>
</tr>
<tr>
<td>Successful implementation pattern</td>
<td>0.542</td>
<td>0.348</td>
<td>0.136</td>
<td>0.122</td>
<td>1.629</td>
</tr>
<tr>
<td>Ease of use of the system</td>
<td>0.825</td>
<td>0.285</td>
<td>0.234</td>
<td>0.005</td>
<td>1.401</td>
</tr>
<tr>
<td>External entity pressure</td>
<td>0.707</td>
<td>0.308</td>
<td>0.178</td>
<td>0.024</td>
<td>1.277</td>
</tr>
<tr>
<td>Staff training</td>
<td>0.525</td>
<td>0.399</td>
<td>0.121</td>
<td>0.192</td>
<td>1.787</td>
</tr>
<tr>
<td>Adapting to previous system</td>
<td>0.503</td>
<td>0.310</td>
<td>0.136</td>
<td>0.108</td>
<td>1.487</td>
</tr>
<tr>
<td>Constant value</td>
<td>20.559</td>
<td>5.582</td>
<td></td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>

### 7. Conclusion

The need for a department named internal audit is necessary in the business world these days to ensure effective control and realize the strategic goals of the firms. To conduct their roles appropriately, internal auditors need the support and interaction and encouragement of the top management of the firm. Managers often concentrate on the results of the performance of the internal audit in meeting their usefulness and goals of the firm to encourage and collaborate with internal auditors. The impact of XBRL on the performance of internal audit has been investigated, based on the results of this research. The multiple Regression findings have revealed that through the variables impacting the usage of XBRL, the cost-benefit overload, the ease of use of the system and external entity pressure had a significant and a positive impact, and the cost-benefit overload had the strongest effect on the performance of the internal audit. The findings of the current research consistent with a number of prior studies (Ashok & MS, 2020; Jamei, Ranjouri, & Kelareh, 2019; Nikbakht & Golkar, 2011; Du & Roohani, 2007) which clarified that these variables will influence the usage of XBRL. While various variables have no influence the XBRL such as adapting to previous systems, staff training, and successful implementation pattern on the performance of the internal audit, and these findings inconsistent with the findings of the study of Nikbakht and Golkar (2011) which they found that these findings have significant impact effect. In addition, the XBRL will ensure smoother internal controls, automatic verification, and continuous auditing. This is consistent also with the results of Ashok and MS, (2020) and Du and Roohani, (2007) and they also clarified that XBRL enables the auditors in conducting donations audit and internal controls.

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### References


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