



Impact of XBRL on Internal Audit Performance

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Abstract

The expansion of business activities has made it possible for business managers to use internal audit units to achieve their objectives and ensure optimal resource allocation. One of the ways that achieve and facilitates these goals is the use of extensible business reporting language. The purpose of this study was to investigate the impact of using extensible business reporting language on internal audit performance.

This study included 94 internal auditors and professional managers of companies tested by multiple regression methods using SPSS software.

The results show that among the factors affecting the use of extensible business reporting language, cost-benefit overload, ease of use of the system, and external entity pressure have significant positive impacts on internal auditors' performance. But the successful implementation of the model, training their employees, and adapting to previous systems had no significant impact on internal audit performance.

Keywords: Extensible Business Reporting Language, Performance Improvement, Internal Audit

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1. Introduction

Internal audit and the appropriate organizational plan and procedures are among the key factors needed to establish an internal control system, so relying on internal auditors' work will save money and progress the organization's goals. An optimized internal audit unit can improve the independent auditor's efficiency and effectiveness and increase internal audit value for the client (Vahhed Moghadam and Moeinfar, 2014). Internal audit plays an essential role in the organization's operations. Organizations with an effective audit unit are better at identifying their business risks and business system (Internal Auditors Association, 2010).

However, evaluating internal audit performance is an effective factor in creating added value for internal audit. Evaluating audit performance leads to a continuous effort by internal auditors to improve the quality of their work. The best reference for evaluating internal auditors would be the Audit Committee, and the best advertisement for internal audit is the client's satisfaction with the internal audit function. The more effective the internal audit, the better the organization's managers will introduce the internal audit benefits to other organizations' managers. As a result, they will be encouraged to use internal audit in their organizations (Pourhaidari and Rezai, 2012). As a result, internal auditors report their internal audit performance directly to the audit committee when internal audit performance is pleasant. Most internal audit activities focus on discovering unintentional mistakes and monitoring activities, and always identifying internal control deficiencies. But when internal audit performance is weak, internal auditors report directly to the financial manager, and internal auditors place management consulting activities at the heart of internal audit activity and spend little time finding deficiencies (Dezoot et al., 2001).

It can also improve internal audit performance when internal auditors use Extensible Business Reporting Language (XBRL) (Abdolmohammadi et al., 2017). Business markets and information users require arrangements to improve the clarification of reporting processes. Today, business reporting is plagued with inefficiencies, inadequate analysis, and insufficient dissemination of information among users. Therefore, it is crucial to develop a proper business reporting system to address these issues that the extensible business reporting language can address part of this need (Bozorg Asl et al. 2006). Companies can use this language as a global form of information exchange to increase efficiency, improve reporting within the company, and communicate with business information users. If there is a need to use a unique label for business units, reporting units can create these labels in the XBRL conceptual framework. This flexibility of XBRL enables the application of different accounting standards for financial reporting and can meet the diverse needs of different users (Boritz et al., 2003). Therefore, according to those above, this study aimed to investigate the factors affecting internal audits' performance by applying XBRL.

2. Theoretical bases

In today's business world, the necessity of having a unit called Internal Audit is an inevitable necessity for achieving the organizational goals and ensuring the optimal management of all resources. Internal auditors need the consideration and support of executives to perform their duties properly. In contrast, managers need to focus on the results of their performance in achieving their organizational goals and their usefulness in the relevant department in order to support and engage with internal auditors Van Peursem, 2004).

Internal audit helps improve the organization's performance by forming an audit committee, promoting ethics and values within the organization, clarifying and enhancing the quality of financial statements, and advising management (Narcisa and Elena, 2017).

An internal audit is an independent unit of the company that evaluates that company or organization's internal activities and reviews accounting and financial affairs and other operations. However, internal audit leads to reduced accounting errors, timely organizational communication, information analysis, ethics, increased efficiency and effectiveness of auditing, and overall, it contributes to improving the organization's performance (Ma'Ayan & Carmely, 2016; Gonzalez et al., 2014). As a result, several factors can affect internal auditors' performance, one of which is implementing extensible business reporting language. Extensible Business Reporting Language (XBRL) and auditing are two tools that can facilitate internal and external auditing. Extensible Business Reporting Language is a classification that defines the business and financial information used in a headquarter to incorporate the extensible business reporting language at the level of interaction in the resource planning system (Hassas Yeganeh, 2002). If the corporate business reporting chain has robust systems for extensible business reporting language, the audit needs can be provided with extensible business reporting language (Seyyedi, Pourzahed, Dehdar, and Mashmol, (2016).

This framework's value allows the organization to determine the extensible business reporting language's attachments for financial and business interactions, account balances, and original data files. In addition, the implementation of extensible business reporting language by multinational corporations, on the one hand, enhances the standardization of headquarters and, on the other hand, increases the comparability, which ultimately facilitates internal and external tasks.

Suppose the reporting chain has a robust system of extensible business reporting. In that case, the audit requirements are met with information from the extensible business reporting language, such as auditing annual financial statements. An internal audit is a tool that organizations can use to achieve their goals (Hassas Yeganeh, 2002). The continuous audit is a technology model that audits accounting data in real-time or immediately after recording contracts. Accounts can be integrated directly with the audit module through EPR systems within the company or by transferring data from the company to the auditor database. A company can develop a plan and add accounts to taxonomies that auditors also use, such as extensible business reporting language and GPS taxonomies. This approach has several important advantages; auditors can use standardized tools based on the taxonomy of extensible business reporting language to reduce auditing analysis time and cost. Customizing analytical auditing and testing tools for each client is unnecessary. There is also a high degree of reliability for audit evidence as it is automatically generated from the company's data source. Conventional audit approaches rely heavily on photocopies of company documents and handwritten datasheets. If external stakeholders such as banks and providers have extensible business reporting systems, sharing and transferring data will consistently meet the companies and the parties' audit needs. Therefore, internal auditors' use in the extensible business reporting language improves financial information clarification, reduces information asymmetry, and improves audit quality (Mohammadi and Khuzin 2017).

3. Research Background

Hsieh et al. (2019) examined the impact of XBRL disclosure management solutions on earnings release efficiency and earnings management. The results of their research show that the strategy of implementing XBRL disclosure management solution is inversely associated with delaying the earnings release for companies that publish good news, which demonstrates improved earnings release efficiency. Their research also showed that implementing an XBRL disclosure management solution is inversely related to committed earnings management and directly related to the actual activity-based earnings management.

In a study, Lambert et al. (2019) examined analysts' forecasts of the timing and accuracy of information reporting following the extensible financial reporting language's adoption. Their research results show that analysts significantly report earnings per share forecasts 10 to 15 days earlier with the Extensible Financial Reporting Language adoption. The results also indicate the accuracy of information reporting after the adoption of the extensible financial reporting language.

Liu et al. (2017) examined the impact of using extensible financial reporting language on information asymmetry. The results show that the effective use of extensible financial reporting language has a significant negative impact on reducing information asymmetry. Effective use of extensible financial reporting language reduces information asymmetry.

Abdolmohammadi et al. (2017) show that small firms in customary-law countries and large companies in civil-law countries positively correlate with internal audit performance using XBRL. The results also indicate that companies with stronger management practices positively correlate with internal audit performance using XBRL.

Shan et al. (2016) examined the forced use of the extensible financial reporting language and international financial reporting standards on audit costs. The results show that extensible financial reporting language has a significant negative impact on audit costs. In fact, the use of extensible financial reporting language reduces audit costs. The results also indicate an increase in audit costs when applying international financial reporting standards.

Khuzin and Mohammadi (2018) identified the factors affecting the use of extensible financial reporting language by companies listed on the Tehran Stock Exchange. Their research indicates that organizational environmental factors, corporate governance, and technology factors are among the effective factors in applying the extensible financial reporting language by companies listed on the Tehran Stock Exchange.

Zahmatkesh et al. (2018) investigated the impact of extensible financial reporting language on information asymmetry. Their research shows a significant negative relationship between the use of extensible financial reporting language and the company's information asymmetry. Using extensible financial reporting language reduces information asymmetry.

Khuzin and Mohammadi (2018) investigated the role of ethics in implementing extensible financial reporting language by companies listed on the Tehran Stock Exchange. The results show that organizational environmental factors, corporate governance, and technology factors effectively apply extensible financial reporting language by companies listed on the Tehran Stock Exchange. As a result, ethics is an important factor in using extensible financial reporting language to clarify information.

Soleimani Amiri and Abu Hamza (2017) examined the impact of extensible business language and information value promotion. They show that adopting an extensible reporting language facilitates comparison, communication, and financial statement analysis. It increases clarification and quality, decreases the cost of preparing and producing financial reports, credibility, and reputation of the company technology, communicates with legal and regulatory authorities, and generally promotes company value.

Mohammadi and Khuzin (2017) examined the role of implementing extensible financial reporting language on improving financial reporting quality, enhancing clarification of financial information, and information asymmetry. Their research results show that implementing an extensible financial reporting language improves financial reporting quality, enhances financial information, and reduces information asymmetry.

4. Research hypotheses

4.1. Main hypothesis

The use of extensible business reporting language has an impact on internal audit

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4.2. Sub hypothesis

1. Cost-benefit overload impacts on internal audit performance.
2. The successful implementation pattern has an impact on internal audit performance.
3. Ease of use of the system has an impact on internal audit performance.
4. The external entity pressure has an impact on internal audit performance.
5. Staff training and their knowledge have an impact on internal audit performance.
6. Adapting to the previous system has an impact on internal audit performance.

5. Research methodology

This research is a descriptive-correlation study conducted to investigate the impact of extensible business reporting language on internal audit performance. The sample consists of 94 internal auditors and professional managers of companies who were selected randomly. Data were collected using a questionnaire. The researcher-made questionnaire was designed based on the Likert scale. The questionnaire consists of two parts, the first part of which deals with the use of extensible business reporting language, and the second part deals with internal audit performance. Finally, after collecting the required data, they were analyzed using SPSS software, and Multiple Regression was used to test the research hypothesis. There are also 36 questions related to the research variables, 18 of which are related to the Extensible Business Reporting Language variable, consisting of 6 factors, each containing 3 questions, and the next 18 related to the internal audit performance variable. As a result, Cronbach's alpha was used to measure the reliability of the questionnaire.

5.1. Validity and reliability of the questionnaire

Content validity was used in this study. Experts and experienced professor's viewpoints were used to assessing the validity of the questionnaire. Cronbach's alpha was used to assess the reliability of the questionnaire, which was 0.88. As a result, since the Cronbach's alpha value was greater than 0.70, the research questionnaire's questions had good reliability.

Table 1. validity of the questionnaire information

The Number of questions	Cronbach's alpha
36	0.88

6. Findings

Table 2. Model Summary

model	R	R ²	Adjusted R ²	SE	Durbin-Watson
1	0.769	0.592	0.563	2.731	1.978

The coefficient of determination and the adjusted coefficient are given in Table 2. This model's coefficient of determination shows that what percentage of the dependent variable changes is expressed by independent variables. According to the coefficient of determination results, it is observed that the independent variables explain approximately 0.59% of the dependent variable changes. But on the other hand, this criterion cannot properly express the independent variable's effect on the dependent variable. As a result, we need an adjusted coefficient of determination to solve this problem. The adjusted coefficient adjusts the coefficient of determination according to the independent variables added to the regression line and the new y-intercepts. Therefore, the smaller difference

between the coefficient of determination and the adjusted coefficient indicates that the independent variables added to the model were correctly selected. Therefore, given the value of the adjusted coefficient of determination (56%), which has very little difference from the coefficient of determination, it can be concluded that the selected variables were correctly selected for model estimation.

Also, the Durbin Watson test was used to evaluate the independence of variables and residuals. The meaning of being independent is that one observation does not affect the outcome of the other observations. According to the results, the value of Durbin Watson was 1.97%, which is between 1.5 and 2.5, which indicates a lack of serial correlation in the residuals.

Table 3. Analysis of Variance (ANOVA)

Model	Total squares	df.	Mean squares	F	Sig
Regression	940.776	6	156.776	21.006	0.000
Residual	649.304	87	7.463		
Total	1589.957	93			

Table 3 shows the analysis of variance in the regression model. Given the value of F (21.006) and the significance level of 0.000, which is less than the error level of 0.05, it can be assumed by 95% confidence that this pattern is generally significant. Therefore, we conclude that the regression model used in this study is appropriate. This means that the regression model's contribution to the total changes is much greater than the error level (residuals).

Table 4. Statistical residuals

	Least	Most	Mean	SD	N
Predicted value	74.763	88.315	82.021	3.180	94
Residuals	-7.104	6.554	0.000	2.642	94
Predicted standard value	-2.282	1.979	0.000	1.000	94
Standard Residual	-2.601	2.399	0.000	0.967	94

Table 5. Multiple Coefficients of Internal Audit Performance Based on XBRL Components

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

Finally, a table is presented to investigate the distribution of residuals. According to the OLS regression conditions, the residuals should have a normal distribution with a mean of 0 and variance of 1. Since the mean and variance of the residuals were equal to 0 and 1, this can be another reason for the model's suitability.

As shown in Table 5, the variance inflation factor was calculated to ensure whether the independent variables' linear relationship will adversely affect the results. The values of the variance inflation index value for all variables were less than 10; therefore, it can be concluded that the existence of such linearity will not cause any difficulty to draw conclusions based on this model. So, the variance inflation test results for the model variables concerning the obtained values show no linear correlation. Estimates of the coefficients and characteristics of the research tests are presented in Table 2. In this study, Multiple Regression was used to investigate the impact of extensible business reporting language components on internal audit performance. The results of multiple Regressions in this study show that the variable of Cost-benefit overload with a standard coefficient of 0.346 and significance level of 0.000, which is less than 0.05 has a positive and significant effect on internal audit performance. Successful implementation pattern variable with a standard coefficient of 0.136 and significance level of 0.122, which was more than 0.05, did not affect internal audit performance. The results related to the ease of use of the system show that this variable has a positive and significant effect on internal audit performance with a standard coefficient of 0.223 and a significance level of 0.005, which is less than 0.05. The external entity pressure results show that this variable has a positive and significant effect on internal audit performance with a standard coefficient of 0.178 and a significance level of 0.024, which is less than 0.05. Staff training variable with a standard coefficient of 0.121 and significance level of 0.192, which is more than 0.05, does not affect internal audit performance. Also, the previous system's adaptation shows that this variable with a standard coefficient of 0.136 and a significance level of 0.108, which is more than 0.05 has no significant effect on internal audit performance.

7. Conclusion

In today's business world, to achieve organizational goals and ensure optimal management of all resources, the need for a unit called internal audit is inevitable. Internal auditors need the interaction and support of managers to perform their duties properly. Managers also focus on internal audit performance results in achieving their organizational goals and their usefulness to support and interact with internal auditors. Consequently, according to this study's findings, the impact of extensible business reporting language on internal audit performance is investigated. The results of multiple Regression show that among the factors affecting the use of extensible business reporting language, the cost-benefit overload factor with a coefficient of 0.346 and significance level of 0.000 has the most impact on internal audit performance. The ease of use of the system and external entity pressure, with coefficients of 0.223 and 0.178 and the significance level of 0.005 and 0.04, respectively, positively and significantly affect internal audit performance. This study's results are in line with Nikbakht and Golkar (2011), which showed that these factors could affect the use of extensible business reporting language. According to the results, other factors affecting the use of extensible business reporting language such as successful implementation pattern, staff training, and adapting to previous systems had no significant effect on internal audit performance. These results are not in line with Nikbakht and GolKar's (2011) research. They show that these factors have a significant and positive impact on the use of extensible business reporting language.

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