Mediating Effect of Accounting Practices between Accounting Information System in Enterprise Resource Planning System and Firm Performance

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Abstract: This study's main objective is to examine the mediating effect of accounting practices between AIS in ERP environment and firm performance of listed companies in Sri Lanka. AIS has two main dimensions, such as ERP System Quality and Accounting information Quality(ACIQ). The total population of the study consist of 295 companies. A random sampling method was applied, and 217 companies were used as a sample for this study. Amos 23 version was used as an instrument to analyze the data, and the structural equation model was applied to test the path relationship of the constructs. The study shows that ERP system quality and ACIQ have a statistically significant influence with Accounting practices and firm performance, while accounting practices have a significant influence with firm performance. In addition to this, accounting practices have a significant mediating effect between AIS and firm performance. IS managers and accounting professionals can use the finding and also should pay more attention to improve ERP System Quality and ACIQ in order to enhance Accounting Practices which subsequently having implication on firm performance. AIS quality and organizational performance will also be enhanced when new AIS applications and capabilities are brought in, as per the resource-based view.

Keywords: Accounting Information Quality, ERP System Quality, Accounting Practices, Firm Performance

1. Introduction

Accounting Information System (AIS) has become an essential strategic tool to achieve organizational goals. Many organizations are implementing it in order to achieve efficiency, increase productivity and improve performance. For example, the introduction of sophisticated IS like Enterprise Resource Planning (ERP) has transformed the way business people view AIS (Ismail & King, 2007). ERP has broadened the range of information and facilitated the embodiment of the new model by incorporating AIS in ERP (Chenhall, 2003).

According Panorama Consulting Solutions Report on ERP Systems (2016) investigated ERP implementation. Overall ERP project implementation cost has decreased from $ 7.1 Million in 2012 to $ 3.2 Million in 2015, while the percentage of operational cost has increased from 53% in 2012 to 57% in 2014. The duration of the implementation also has increased as it is essentially a good indication as organizations concern for planning for the long term and mean to the realistic perspective of ERP success.

Overall the financial revenue of the ERP enabled organizations had increased from 43% in 2012 to 59% in 2014. Their survey results also reveal that 57% of the respondents are satisfied with their organizational success as they have implemented ERP System (2016). Moreover, the other benefits of the ERP implementation include such as better productivity, better data reliability and improved interaction and integration. The most reasons for implementing ERPs were reported that the organization wanted to replace their old ERP or legacy system (Accounting Software) (17%), to improve business performance (12%). Overall, firms predict the expected outcomes from ERP systems. Moreover, in order to improve firm performance, the integrated system allows toward positioning the organization for growth.

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Recent researches suggest that AIS in ERP environment is a prominent tool to measure the performance of organizations (Daoud & Triki, 2013). Hence, organizations consider that AIS in ERP environment is a new approach to improve performance. Many organizations around the world have been implementing ERP as a strategic tool to achieve their objectives. Companies in Sri Lanka are also inevitably implementing ERP regardless of the huge cost of implementation. Therefore, research studies on AIS in ERP environment are in the growing stage in Sri Lanka and need to be investigated more in this area of study.

1.2 Background of the study

Enterprise applications such as AIS are a popular system in global computer technology. (Bavarsad, Rahimi, & Norozy. 2013). Thus, AIS was coined use of information systems that help make decisions, manage resources and leads to improvement in performance. AIS has two main subcategories: Financial Accounting and Management Accounting: Financial Accounting is connected to provide financial reports to the Management (Mowen et al., 2011), while Management Accounting produces future-oriented information for specific requirements of the Management. At the same time, management accounting is related to accounting techniques and practices considered to provide sufficient information to the Management to take health decisions and maintain the proper control system on origination's operation and resources (Ahmed & Duellman, 2013). Hence, AIS is crucial in a company's operations as well as company performance.

Improvement in ERP system has meant the improvement of accounting information and is a universal term used for an organization-wide integrated enterprise system (Spathis & Constantinides, 2004). They further stated that AIS is concerned as the heart of the ERP application. Moreover, AIS is comprised of the ERP, which includes a functional operation to support the firm (Trigo et al., 2013). Thus, an ERP system is a multifaceted enterprise application developed to integrate all functional areas and operates within the organization, and also It connects all existing through a centralized database, provide the organization to operate its activities systematically (Ismail, 2009).

One of the other aspects of successful implementation and use of ERP is to have quality information. From the point of Sacer (2013), organizational success depends on the information quality which is provided by the information system quality. According to DeLone and McLean, (1992) the information quality denotes that the quality of output is produced by an information system and also the system quality denotes that the system is measured the processing the extent to which the system is technically comprehensive. Hence, System quality and information quality provide a positive impact on firm performance (Alzoubi, 2011). In addition, many previous studies were conducted to examine the impact of the quality of the system and information quality of organizational performance in the ERP environment (Gorla et al., 2010; Daoud & Triki, 2013).

The two dimensions of AIS is the ERP System Quality and accounting information quality in ERP Environment (Daoud & Triki, 2013). It has led the way of the significant increase on the application of Accounting Practices such as ratio analysis, preparation of financial reporting, working capital management, internal auditing and new management techniques (Daoud & Triki, 2013). Hence, quality of system and information are the significant paramount variables that improve Accounting Practices in the organization. Therefore, well-performed Accounting Practices help to achieve organizational goals and improve the performance of the organizations.

In summarizing, AIS in ERP environment exists a multifaceted, inexpressible, yet enormously important to examine firm performance. Hence, there is a direction to study

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the contingency factors and AIS in ERP environment on Firm Performance provide chances for emerging countries like Sri Lanka. This field of investigation requires empirical and statistical work in Sri Lanka.

1.3 Statement of Problem

Traditional AIS is being used by many organizations in Sri Lanka for the last one to two decades. It does not provide sufficient and relevant information to the strategic decision making which in turn does not contribute to the growth and increase the performance of the organizations. Nevertheless, traditional AIS provides only financial information for the top Management and it is one of the factors among the many factors that need to be provided to make effective decisions to improve the outcomes of firms. Meanwhile, in the IT-related environment, the organization is motivated to use the latest technologies to have a competitive advantage (Spathis & Constantinides, 2004).

Hence, ERP is an emergent trend in Sri Lanka in the past few years (Wickramaarachchi &Jayasiri, 2015). However, EPR in use for decades in countries across the world and corporations are enjoying the consequences today from the implementation. As far as Sri Lanka is concerned, a definite necessity arose for many major firms in Sri Lanka to mandatory use the ERP system and worked with the ERP environment. Consequently, the changes in Accounting Practices from traditional to ERP environment would pose many challenges to the Accounting Practices of the organization (Belfo & Trigo, 2013). Thus, a central question here is whether an Accounting Practices with an ERP environment has contributed to the increase of the performance of the organizations in Sri Lanka?

Moreover, previous researchers have studied the influences of AIS on organizational Performance (Esmeray, 2016; Dalayeen, & Al-Dalaien, 2018, Nasar, 2020). However, those researchers have been considered severely in the accounting background research, and they haven't focused on covering theoretical context from the IS studies to study organizational performance. The both IS success models of Delone and McLean (1992, 2003) and Gable et al., (2003) are the utmost comprehensive example of IS study. Many other investigations have suggested that Delone and McLean (D&M) IS success model's main factors include System Quality and Information quality. Furthermore, several attempts have been made that there is a need to study of the AIS in ERP environment, and further studies are needed concerning the IS to improve firm performance (Alzoubi, 2011; Aryani & Krismiji, 2013). Hence, there is a considerable omission in the existing literature that has to be investigated about AIS in ERP on Firm Performance in less developed countries. Supporting this argument, this is mostly aware that theories and practices developed in developing countries need to be restarted in emerging countries to compare and match the context (Hofstede, 1980).

Unfortunately, there were no previous research works that dealt with this topic. Arachi et al., (2015) studied the factors that affect the budget of (ERP) in Sri Lanka. Further, Madurapperuma et al., (2009) focused on ERP Deployment in the manufacturing industry in Sri Lankan Context. This research represents a novel contribution to the existing literature in Sri Lanka and presents data that investigates the relationship between AIS success and firm performance. However, The influence of the AIS (System Quality and Information Quality) on Accounting Practices in the organization on the performance of organizations in ERP environment in public listed companies remain unstudied in developed and developing markets. In order to conceptualize the concept, the following research question was developed. Does the AIS has an impact on Accounting Practices which in turn impact on firm performance in the ERP environment? This research examines the impact of AIS on

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Accounting Practices which effect the performance of enterprises implementing ERP in Sri Lanka.

2. Literature Review

2.1 Theoretical Background

In large Social science research in the area of AIS in ERP, many numbers of scholars in the AIS has been studied. This new area of research is responsible for providing a platform that is suitable for accommodating theories and examining those as they relate to the impact of AIS on Firm Performance. Theories were considered in the field of AIS researches include: IS Success Model, contingency theory, organizational information processing theory (March & Smith, 1995).

The Information System Success theory

Delone and McLean's model (1992)

Delone and Mclean's model is one of the most information system success models. Much of the research into information systems derives from Delone and Mclean's model. However, they had more carefully studied on it and taken six major measures such as system quality, information quality, usage, user satisfaction, individual impact, and organizational impact. Furthermore, these main components are integrated and interdependent, forming information system success models. In their model, they classified the flows for a number of reasons. First, they provided a complete view of IS success. Second, they organized a rich body of research into a more understandable way. Third, they explained the inconsistent finding. Fourth, they pointed out the significant work has been completed, and fifth, they pointed out that much work is still needed in assessing the impact on Firm Performance. In their model, they projected that the success of the information system is determined by the system quality and information quality.

Contingency Theory

Contingency theory was synthesized from sociological-functionalist organization theories like structural approach to organization studies (Chenhall, 2003). The contingency theory of leadership was proposed by (Fiedler, 1964). In an investigation, The Contingency theory indicates that organizations are influenced by the contingent factors such as technology, organizational factors, human factors, culture, and external environment (Fiedler, 1964). In this context, this assumes that no one type of organizational structure is appropriate for all organizations. Hence, organizational effectiveness depends on the connection between technology, environment condition, type of organization, features of organizational structure, human factor and its information systems. Hence, by reviewing the previous research on accounting information systems, it shows that many types of research have studied the alignment between contingency factors and AIS (Mia & Clarke 1999). Contingency theory suggests that firm performance can be improved as a result of the relationship between organizational structure and context.

2.2 Empirical studies

In this study, Two theories have been used to present the research framework such as Is theory and contingency theory. Contingency theory was originally developed to explain observed differences in enterprises (Mitchell et al., 2000), and This is based on two principles (1) there is no best manner to organize, and (2) any way to structure is not equally effective (Galbraith, 1973). Conditions appropriate for an organization are formed by a variety of contingencies. Contingency Theory by researchers has been utilized since 1970s (Ismail & King 2005). Hence, a contingency theory must indicate where and why certain consequences match certain aspects in the AIS.

The main focus of this paper was the IS success theory. A comprehensive study is focused on information system attributes such as system quality and information quality. With the comprehension of the mentioned significance of IS quality attributes, resources respectively can be offered by the Management. This research has adopted DeLone and McLean (2003) IS success model.

Accounting practices are among the desired influential in accounting and IS research (Ifinedo,

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2011; Wang & Chen, 2006). Then, it attempts to examine the impact of AIS through Accounting Practices on Firm Performance in ERP environment. In fact, the literature (e.g. Ifinedo et al., 2010) has expressed that system quality and information quality are significantly intervened to their impacts. Generally, a maximum outcome is produced by IT application when it's as high system quality and information quality (Ifinedo et al., 2010). Ismail (2007) asserts that the match between information requirement and processing capabilities is antecedent to organizational effectiveness. Moreover, the introduction of newer technology in Accounting, namely ERP has altered Accounting Practices (Scapens & Jazaeyri, 2003). Moreover, accounting practice is to identify the cause on Firm Performance.

Previous researches show the need for further studies on AIS and should also include other variables. For this purpose, It was necessary to review IS success and contingency theories in order to develop the given conceptual framework. The researcher performed extensive research and developed a conceptual model.

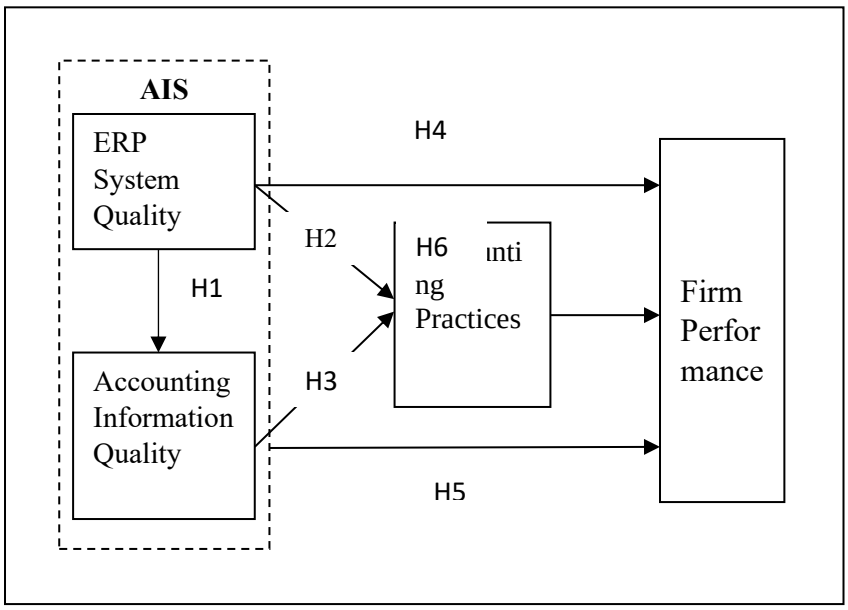

Figure 1: Conceptual Model: AIS Model in Enterprise System (AISES)

2.4 Hypothesis development

2.4.1 ERP System Quality and Accounting Information Quality

System quality is referred to as the technical characteristics of the IS (Guvence, 2005). A study was conducted by Zhang et al., (2005) described that ERP System Quality consists of the system such as flexibility, ease of use, reliability, response time, and useful specific functions. Ifinedo and Nahar (2006) stated that the informational quality of ERP system is vital for the success of the organization. Gorla et al., (2010) tested that there is a positive relationship between system quality and information quality. The finding shows that there is no ACIQ without quality AIS (Susanto, 2015). Similarly, Sajadi et al., (2008) argued that AISs assist and lead to improve the quality of financial reporting and provide quick responses of transaction processing. This view also supported Pornpandejwittaja and Pairat (2012) who stated that the effectiveness of information systems provides a quick financial statement. In the same vein, Salehi et al., (2010) argue that the

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quality of AISs improves the ACIQ. Thus, it is posited:

Hypothesis H1: ERP System Quality has an impact on ACIQ

2.4.2 ERP Systems Quality and Accounting Practices

The information system is able to introduce accounting techniques into the social system (Rom & rohde, 2007). Granlund and Malmi, (2002) explained that modern management accounting approaches to business while in the process of managing an organisation. In the same way, the modern ERP system incorporates new management accounting techniques (Booth et al., 2000). Whereas, Rom and Rohde (2007) considered the technical aspect of ERP to use management Accounting Practices and confirm that the ERP implementation impact on management accounting practices. To improve the business value of the business, ERP system provides an automated and improved business process from finance to non-finance context. Galani et al., (2010) found that ERP System's impact on Accounting Processes and the benefits that have achieved the use of Accounting Practices. In the same vein, Daoud and Triki (2013) investigated ERP System Quality and Accounting Practices and concluded that there is a positive relationship between ERP System Quality and Accounting Practices. Hence, it is proposed:

Hypothesis H2: ERP System Quality has an impact on Accounting Practices

2.4.3 Accounting Information Quality and Accounting Practices

Management information understanding that it can be used as input in the governance process of organizations is the foundation of financial accounting. From the opinion of Bushman and Smith (2003), accounting information is the product of accounting information. A statement such as this may imply that the quality of the financial statements is secured through information that is pertinent and easy to comprehend. Additionally, Kanellou and Spathis (2011) suggested that ERP implementation may provide an accounting benefit.

Accounting techniques linked to ERP implementation were highlighted by (Sangster, et al. ,2009). Gullkvist (2013) confirmed that information quality has a positive effect on management Accounting Practices through improved effectiveness. Daoud and Triki (2013) confirmed that the information quality influences on Accounting Practices used in the ERP environment. Further, Sari (2015) studied to find that Accounting Practices effectiveness significantly affected by the ACIQ. Hence, it is proposed

Hypothesis H3: ACIQ has an impact on the Accounting Practices

2.4.4. ERP System Quality and Firm Performance

Firm Performance refers to the growth or improvement of the firm, which can be measured by some relevant measures such as financial and non-financial measures. Financial Performance covers such as Gross profit, Net profit, return on investment and return on equity etc. Meantime, nonfinancial performance, consequently, consists such as product quality, product innovation, customer service, market expansion, knowledge management and other performance indicators which are consequently affecting the performance of the firm. Thus, performance measures support to bring the organization's performance (Ittner & Larcker, 2003). In general, the ERP system is expected to support and contribute to all functional areas which are finally working together to bring the performance of the firm (Nicolaou, 2004). System quality has an effect on firm performance, according to the findings of (Jiwat & Malcom, 2009). Similarly, Maldonado (2009) stated that the ERP System Quality has a significant effect on improving performance.

Hypothesis H4: ERP System Quality has an impact on Firm Performance

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2.4.5. Accounting Information Quality and Firm Performance

Many research also claims that there is a significant relationship between IT investment against value addition and profitability (Bharawadj, 2000; Ravichandran & Lertwongsatien, 2005; Menachemi et al., 2006). Gorla et al., (2010) carried out a study to understand the relationship between IS quality and Organizational impact. They hypothesized situations where quality aspects of service, information, and system are high having a greater organizational impact. The test was carried out using a structural equation model, and a positive relationship was noted between information quality and system quality. The results of the study illustrated relationships between IS quality to organizational impact and system quality to information quality and, theoretically, contributes to the IS success models.

A study was done by Grande et al., (2011) is crucial to understand the relationship between AIS and financial performance, which discovered a positive relationship between the two factors. Furthermore, many research carried out by (Gande et al., 2011; Gullkvist, 2002) under the context of Malaysia, Spain, Finland, Iran and Pakistan provide evidence to increased operational efficiency, profitability and performance due to the adoption id AIS in organizations. Thus, it is posited:

Hypothesis H5: ACIQ has an impact on Firm Performance

2.4.6. Accounting Practices and Firm Performance

From the accounting perspective, Accounting Practices play a crucial role in producing accounting information and financial reports. During the last decade, rapid growth and changes in advanced ITs have been reasoned as imposing pressures for change in accounting practice (Xiao et al., 1996). The impact of IS on organizations has been measured in many ways in the past studies (Gorla et al., 2010), research with Accounting Practices in assessing performance related to the information system and Accounting Practices. Nicolaou (2000) confirmed that the effectiveness of AIS in accordance with the decision maker's perception of the information provided through transaction processing, budgeting and Management reporting. Similarly, Salehi, and Abdipour (2011) concluded that the sophistication of AIS improves performance. Furthermore, In the same vein, Nupakorn and Phapruke, (2010) also emphasized that there was a positive relationship between Accounting Practices and Firm Performance. Thus, the accounting system must adapt efficiency for accounting practice to changing modern technology.

By drawing on the concept, Sánchez-Rodríguez and Spraakman, (2012) confirmed that Accounting Practices and the task of accountants were influenced by the ERP systems and there was an improvement in the management accounting efficiency and effectiveness, transparency and profit analysis. Furthermore, Rom (2008) studied the technologies influence on the business process and its implication on business performance. It was also confirmed that the business process was embodied by the Accounting Practices used by and after the ERP implementation. Dumitru et al., (2013) confirmed that an ERP system is a management tool to increase Firm Performance in term with the connection of organizational process, accounting and controlling system. In general, an ERP system would influence the adoption approach of Accounting Practices, which could able to improve better Firm Performance.

Accordingly, it is proposed:

Hypothesis H6: Accounting Practices has an Impact on Firm Performance

2.4.7. Accounting Practices Mediates ERP System Quality and Firm Performance

The accounting information-processing information system has undergone a significant

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evolution as a result of the new information system (Rom, 2008). Even so, Granlund and Malmi (2000) identified that changes in accounting practices would be adopted when applying advanced technology in accounting. ERP systems incorporate an entirely new feature known as Accounting Practices (Booth et al., 2000). In a broader perspective, According to Jiwat and Malcom (2009), a System Quality determines its overall performance. Maldonado (2009) also concluded that the ERP System Quality has a significant effect on firm performance. Similarly, Velcu (2007) also stated that the usage of ERP system is important when the ERP system started to improve performance considering the user the perceptions of the system.

Considering the above argument, Daud and Triki (2013) similarly confirmed a significant effect of ERP System Quality on Firm Performance and posited it. Moreover, Daud and Triki established that there is a significant effect of ERP System Quality on Accounting Practices, and consequently, Accounting Practices has an effect on Firm Performance. Then it proposed.

Hypothesis H7: Accounting Practices Mediates between ERP System Quality and Firm Performance

2.4.8. Accounting Practices Mediate Accounting Information Quality and Firm Performance

Previous studies have reported that the efficiency and effectiveness of integrated accounting information should be essential to managing to quickly respond to the changes that happened in the environment and market demand (Al-Eqab & Ismail, 2011). Wang (2003) showed that stated that the extensive information provided by AIS supports Management to work in a competitive environment and use such information to enhance or improve the organization's success. In addition, historical and updated information supports Management to take appropriate decisions and improve firm performance.

In accordance with the information provided by the Information system, managers may use accounting practices. Recent evidence suggests that after the implementation of an ERP system, there is a time reduction in operation and an increased number of different reports are available (Kanellou & Spathis, 2013). Similarly, Salehi et al., (2010) also showed that a refined AIS increases firm performance. Hence, firm performance is improved by the implementation of new accounting practices. Rom (2008) also concluded that ERP systems are vital in information system environments for accounting practices.

Moreover, Daud and Triki (2013) confirmed a direct relationship between Information quality and Firm Performance and hypothesized it. In addition, Daud and Triki concluded that there is a positive relationship between ACIQ and Accounting Practices and Accounting Practices and Firm Performance. Then it proposed

Hypothesis H8: Accounting Practices mediates between Accounting information Quality and Firm Performance

3.Methodology

The developed structured questionnaire is consisting of 36 indicators, fragmented into four main variables measuring ERP system Quality, ACIQ, accounting practices, and firm performance. The indicators were measured using five-point Likert scales starting strongly disagree, disagree, neutral, agree, and strongly agree. The items measuring all variables were adopted from previous literature to establish the content validity of the study. Moreover, a series of demographic characteristics of the samples were included in the questionnaire

Accounting practitioners were chosen for this study as they are playing a major key role in AIS in the ERP environment from the public listed companies in Sri Lanka, and also these companies are the major contributor to the GDP. The sampling frame

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includes all quoted public-listed companies in Sri Lanka. The random sampling method was used to select accounting practitioners who have been working for more than three years in the ERP environment. The reasons for selecting the specified accounting practitioners with ERP experience of more than three years was that they have appropriate and relevel experience and practices in AIS in an ERP environment. The sample size for this study was a total of 295 respondents from the total sample population. The questionnaire was sent to 265 companies and out of which 217 responses filled without any missing data resulting in an 82 percent response rate.

4. Data Analysis and Presentation

The original data was entered and screened in order to ensure the data is without missing data, and normality. Moreover, data screening was done using SPSS-23 to ensure that there is no unsuitable data available for analysis. The missing data can cause many problems. The most common problem is that it will not allow running the analyses. The Exploratory Factor Analysis (EFA) and Confirmatory Factor Analyses (CFA), and Structural Equation Modelling(SEM) require a certain number of data points in order to estimates values. Descriptive statistics methods in SPSS-23 were used to find miscoded data, outliers, and missing data. Finally, it revealed that there was no missing data in each construct of data and the composition of the final sample data remained the same number of 217 respondents.

4.1. Exploratory Factor Analysis (EFA)

EFA was tested based on the sample 217 data set. Initially, data adequacy was checked with Kaiser-Meyer-Olkin (KMO) statistics. The Kaiser-Meyer-Olkin (KMO) test was used to determine to sample. The results accounted that the KMO analysis is well above the recommended acceptable level of 0.5 as all values of construct obtained between 0.7 and 0.8. The Kaiser-Meyer-Olkin (KMO) is accounted 0.930, 0.945, 0.913, and 0.887 for ERP system Quality, ACIQ, Accounting practices, and firm performance, respectively (> 0.5: Hair et al., 2010). Hence, the results confirm that the sample adequacy of this study is good and it is worth for conducting further analysis. Bartlett's test of sphericity test is conducted for the purpose of confirming the variables do relate to one another enough to run a meaningful EFA. As a rule of thumb, a p-value <0.05 indicates that it is suitable to continue with the factor analysis (Hinton et al., 2004). The results confirmed that the constructs in this study accounted p-value is <0.001, which means that there are relationships between the variables and further shows the presence of multicollinearity within variables. Hence, it is considered that Bartlett's test of sphericity test is appropriate to continue with the factor analysis.

Principle component analysis with varimax rotation was used to extract factors. One item from ERP system Quality (ERP7), two items from ACIQ (AIQ4 and AIQ11)and two items from accounting practices (AP6 and AP9) were dropped based on the factor loading and inter-item correlation, respectively. The PCA shows the presence of factors which cumulatively extracted percentages of 64.34,65.54, 65.90, and 60.97for ERP System Quality, ACIQ, Accounting practices, and firm performance, respectively. All the items were loaded to their respective variables. The results of the factor Loaded are shown in Table 1.

Table 1: Factor Extraction Results (Exploratory Factor Analysis)

Items	Factor Loading	Coefficient Alpha	KMO	AVE
ERP System Quality (10)		.929	0.930	0.683
ERP1	.764			
ERP2	.873			
ERP3	.863			

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ERP4	.833			
ERP5	.814			
ERP6	.799			
ERP8	.577			
ERP9	.702			
ERP10	.708			
Accounting Information Quality(12)		.941	0.945	0.618
AIQ1	.754			
AIQ2	.839			
AIQ3	.753			
AIQ5	.809			
AIQ6	.737			
AIQ7	.824			
AIQ8	.815			
AIQ9	.828			
AIQ10	.746			
AIQ12	.743			
Accounting Practices(9)		.914	0.913	0.602
AP1	.843			
AP2	.812			
AP3	.785			
AP4	.738			
AP5	.757			
AP7	.763			
AP8	.729			
Firm Performance(8)		908	0.887	0.595
FP1	.746			
FP2	.755			
FP3	.677			
FP4	.668			
FP5	.745			
FP6	.843			
FP7	.754			
FP8	.755			

Factor loading greater than 0.5 is acceptable (Hair et al., 2010).
Alpha values of 70% or higher are considered acceptable (Nunnally, 1978).
KMO static value above 0.6 being acceptable (Kaiser & Rice, 1974).
* Item deleted on account of low factor loadings (Hair et al., 2006).

4.2 Confirmatory Factor Analysis (CFA)

Expected factor structure is validated by using SEM to perform CFA, and the most important advantage of that approach is that it enables an evaluation of the factor structure using a number of goodness-of-fit indices. Seven fit indices measures were used, Goodness-of-Fit Index CMIN/DF, RMR, GFI, CFI, RMSEA, CR, AVE. Based on these indices, some items were discarded and the model was re-evaluated using residual movement. This process was repeated until to the accepted values for all these indices.

4.3.Reliability of Measurement Items

Cronbach's Alpha is used to assess construct reliability (Cronbach, 1951). Cronbach's alpha meets the criteria level of 0.7 for all constructs (Nunnally, 1978). Then AVE for all constructs measured and showed it is greater than 0.5, which is recommended by (Fornell & Larcker, 1981). Convergent and discriminant validity criteria were

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used to assess the validity of the constructs. Convergent validity: The factor loadings and AVE of the constructs were investigated in order to assess convergent validity (Fornell & Larcker, 1981). Convergent validity is indicated by standardized factor loadings being greater than 0.5 and AVE being above 0.5. Furthermore, all the constructs have an Alpha value greater than 0.70. The methods used to ensure convergent validity have been employed to this end. To recognize the discriminant validity, it was important to follow this move. The inter-construct correlations in the measurement model are greater than the corresponding AVE values. In this way, the requirement for discriminant validity is also fulfilled.

Measurement Model

4.4. Measurement Model: Model Fit

To assess the overall model's fit, the model fit indices of the different structures had to be calculated. Weak model fit was determined by the measuring model, and so the original model was updated to allow a better fit. Error covariances that were interconnected had alteration indices that were high. The updated model showed model fitness as it was planned. As suggested by Bentler (1990): (i) CMIN/df <3, (ii) RMR <0.10 (iii) (iv) CFI > 0.90 (v) RMSEA <0.05 are considered appropriate. The measurement model indicated an acceptable model fit where (CMIN/df =1.592, CFI= 0.956, RMR= 0.030, RMSEA= 0.052, GFI= 0.857). This observation has established that the model fit indices are meeting their respective requirements, as it is shown in Figure 2.

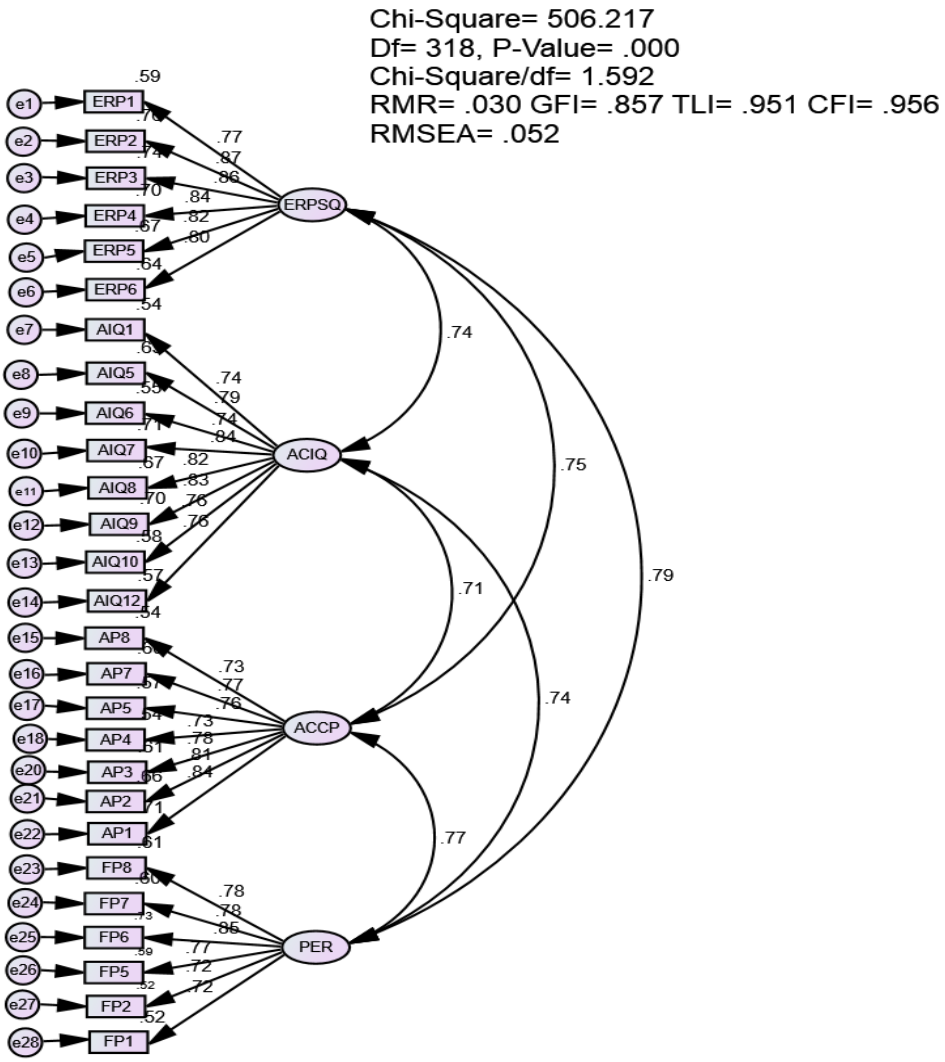

Figure 2: Measurement Model

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Table2: Discriminant Validity

	ERPSQ	ACIQ	ACCP	PER
ERPSQ	0.683			
ACIQ	0.540	0.618		
ACCP	0.561	0.504	0.602	
PER	0.590	0.546	0.584	0.595

4.5. Structural Equation Model

In order to decide whether or not to accept or deny the proposed relationships between latent constructs, a formal equation modeling test was performed. This structured model was intended to help discover the impact of AIS on Firm results through Accounting Practices. Two dimensions of AIS in the ERP environment were specified as exogenous constructs. These two exogenous constructs were related to Firm Performance as endogenous constructs.

The structural model indicated an acceptable model fit where (CMIN/df =1.592, CFI= 0.956, RMR= 0.030, RMSEA= 0.052, GFI= 0.857). This observation has established that the model fit indices are meeting their respective requirements, As it is shown in Figure 3.

To inspect the path coefficients, the consistency of the relationship between independent and dependent variables was evaluated (Beta weights). All hypotheses (paths) were found to be significant: The path from ERP system Quality to ACIQ (β= 0.735, t=10.052, p<0.01), ERP system Quality to Accounting Practices (β= 0.493, t=5.889, p<0.01), ACIQ to Accounting Practices (β = 0.348, t=4.183, p<0.01), ACIQ to Firm Performance (β= 0.231, t= 2.927 p<0.05) , ERP system Quality on Firm Performance (β= 0.368, t= 4.314, p<0.01), Accounting Practices on Firm Performance(β= 0.335, t= 4.051, p<0.01).Therefore, hypothesis H1, H2, H3, H4, H5 and H6 were supported. Thus, it can be said that AIS in an ERP environment significantly influences on Accounting practices and firm performance, while AIS in an ERP environment significant on Accounting Practices. The summary is given in Table 3.

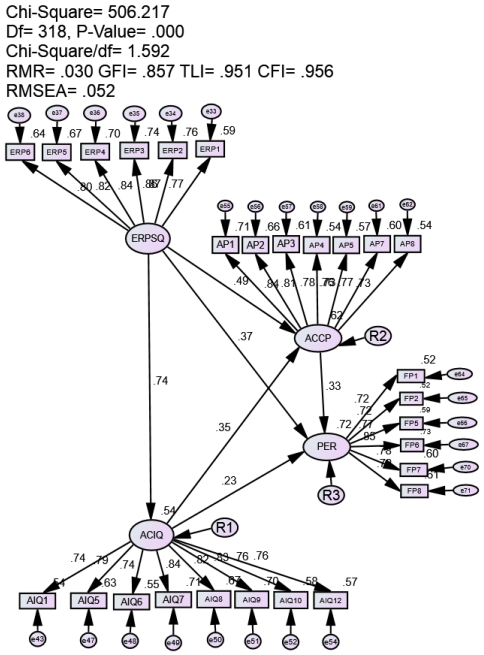

Figure 3: Structural Model

Table 3: Regression Weights: (Group number 1 - Default model)

Path	Std. Estimates	Unstd. Estimate	S.E.	C.R.	P
ACIQ <--- ERPSQ	.735	.664	.066	10.052	***
ACCP <--- ERPSQ	.493	.497	.084	5.889	***
ACCP <--- ACIQ	.348	.388	.093	4.183	***
PER <--- ACIQ	.231	.242	.083	2.927	.003
PER <--- ERPSQ	.368	.350	.081	4.314	***

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Path	Std. Estimates	Unstd. Estimate	S.E.	C.R.	P
PER <--- ACCP	.335	.315	.078	4.051	***

Another estimate of explained variance was calculated, known as the squared multiple correlations. In view of (Hernandez et al., 2008) the expected R^2 may never reach 100 percent if the predictive ability of the proposed model is reduced. Here, in the proposed model, the R^2 is not far from 100 percent. Also, ERP System Quality explains 54.10% of the variance in terms of ACIQ, ERP system Quality, and ACIQ explain 61.6% of the variance in terms of Accounting Practices and ERP system Quality, ACIQ and Accounting practices explain 72% of the variance in terms of firm performance.

To measure the mediating relationship of Accounting Practices between AIS and Firm Performance.

Table 4: Indirect Effects Analysis Using 1000 Bootstrap

	95% Lower Bound				95% Upper Bound				P-value			
	ERPSQ	ACIQ	ACCP	PER	ERPSQ	ACIQ	ACCP	PER	ERPSQ	ACIQ	ACCP	PER
ACIQ	.000	.000	.000	.000	.000	.000	.000	.000				
ACCP	.144	.000	.000	.000	.414	.000	.000	.000	.002			
PER	.279	.047	.000	.000	.518	.224	.000	.000	.002	.006		

The hypothesis was developed that "Accounting Practices Mediates the relationship between ERP System Quality and Firm Performance". Hence, an indirect relationship was found between ERP System Quality and Firm Performance through the mediating effect of Accounting Practices. Meanwhile, the finding shows that the direct path from Accounting Practices to Firm Performance takes a positive standardized regression weight (β) = 0.335 (p=0.000), which is statistically significant at 0.001 (p=0.000) and the direct impact of ERP System Quality of Firm Performance takes positive standardized regression weight (β) = 0.368 which is also statistically significant at 0.001 (up=0.000). The indirect effect of ERP System Quality on Firm Performance through Accounting Practice is statistically significant with the positive unstandardized regression weight (β) =0.279 (P=0.002< 0.05) from 95% lower bound and unstandardized regression weight (β) =0.518 (p=0.002<0.05) from 95% Upper bound respectively. Hence the value of 0 does not fall within this interval and the indirect path from ERPSQ to PER is also significant. It indicates that ERP System Quality positively and significantly effects on Firm Performance through Accounting Practices. In accordance with previous findings, this study's findings are consistent (Daoud & Triki, 2013).

Similarly, H8 was developed that "Accounting Practices Mediates the relationship between ACIQ and Firm Performance. ACIQ has an indirect impact on Firm Performance Through Accounting Practices was statistically significant. While the direct impact of ACIQ on Firm Performance is significantly related with a positive standardized regression weight (β) = 0.231 (P=0.003), and the results indicated that the path from Accounting Practices to Firm Performance takes a positive unstandardised regression weight (β) = 0.047 (P=0.002 <005) from 95% lower bound and unstandardised regression weight (β) = 0.224 (P=0.006 <005) from 95% upper bound respectively. Hence the value of 0 does not fall within this interval and the indirect path from ACIQ to PER is also significant. It Indicates that ACIQ either directly or indirectly impacts on Firm Performance. In accordance with previous

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findings, this study's findings are consistent (Daoud & Triki, 2013).

5. Finding

There is a statistically significant impact of ERP System Quality on Accounting Practices. It was predicted that a positive and significant impact of ERP System Quality on Accounting Practices was found. This finding also indicates that the ERP System Quality supports the use of new Accounting Practices. This finding is further supported by previous researches (Daoud and Triki,2013; Granlund,2001; Rom 2008). There are several possible explanations of this result that ERP System Quality mainly focused on supporting the use of new Accounting Practices in ERP environment. In fact, when an ERP system that actively and quickly responds to the user requests and it has the facility use it easily would support the use of new and advanced accounting practices, such as balanced scorecard, customer-based analysis, Activity Based Costing, budgeting, profitability analysis, etc.

Based on the objective, ACIQ impact on Accounting Practices. The above findings are consistent with the previous finding of (Booth et al., 2000; Granlund & Malmi, 2002; Galani et al., 2010; Kanellou & Spathis, 2011; Daoud & Triki, 2013). There are several possible explanations for this finding that the required information delivered on time by AIS would facilitate the organization to expand the use and application of Accounting Practices. As a result, the organization can further extend its usage on the following: accounting practices, cost accounting, and financial management accounting in response to the new requirements of the AIS. In addition to this, AIS also produces fast, timely, accurate, frequent, analytical, predictive, and forward-thinking company information as required by the Management. The present study also confirmed that AIS in the ERP environment induced the changes to the activities of Accounting Practices that were largely expected with less or minimum of recording and more analysis. This practice, thereby, provides extensive information for managing organizations toward achieving better performance.

An ERP System Quality has an impact on Firm Performance. The findings show that the path from ERP System Quality to Firm Performance is positive and statistically significant. It indicates that ERP System Quality has a statistically significant impact on Firm Performance. The above findings are consistent with (Maldonado 2009; Gorla et al., 2010). Moreover, this study was validated the significant impact of ERP System Quality on Firm Performance in contrast to the finding of the other study (Daoud & Triki, 2013).

Further, ACIQ enhanced by ERP has an impact on Firm Performance. The findings show that the path from ACIQ to Firm Performance takes positive and statistically significant. It indicates that ACIQ has a statistically significant impact on Firm Performance. The above findings are consistent with (Gorla et al., 2010).

The finding is in agreement with Gorla et al., (2010) findings which show that they carried out a similar study to understand the relationship between IS quality and Organizational impact. They hypothesized situations where quality aspects of service, information and system were high, having a greater organizational impact. The test was carried out using a structural equation model, and a positive relationship was noted between information quality and system quality. The finding of his study illustrates the relationships between IS and organizational impact as well as system quality and information quality. These relationships theoretically contribute to IS success models.

Accounting Practices in an ERP environment has an impact on Firm Performance. The finding shows that the path from Accounting Practices to Firm Performance takes a positive and statistically significant. It indicates that Accounting Practices positively and significantly impact on Firm Performance. Similarly, the above finding is consistent with previous findings (Nicolaou, 2000; Salehi et al., 2010; Nupakorn & Phapruke, 2010; Dumitru et al., 2013; Daoud & Triki, 2013). This emphasized that there is a positive impact of Accounting Practices on Firm Performance. Accounting Practices were helpful in term of suitable integration of financial information, customized financial reporting arrangement, financial reporting efficiency, integration of the reporting facility, and dependability of accounting information. Thus, the accounting system must adapt efficiency for accounting practice to respond to the change of modern technology. It was revealed that Accounting Practices in an ERP

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environment is essential to achieving Firm Performance. Respondents stated that Accounting Practices were expanded in terms of budgeting, ratio analysis, etc. Moreover, performance indicators and measures would also expand because more integrated transactions were processed. And also, the new changes adopted in financial and non-financial measures which usually brought to the integrated operation in the ERP system.

Meanwhile, ERP System Quality and ACIQ associated with Firm Performance, its direct positive impact on Firm Performance, whereas it has an indirect impact through Accounting Practices. In previous studies, the extent to which the quality of a system and information quality contributed to other dependent variables was investigated independently. The findings presented in this study support the assertion that the quality of the overall system, in addition to the quality of the information it provides, has a direct influence on the overall system's performance. It would have a direct impact on the investigation of AIS influencing factors.

5.1. Conclusion

The study set out to determine the AIS effect of the Accounting Practices that affect the performance of the organization on the ERP environment of the listed companies which implement an ERP system in Sri Lanka empirically. The hypothesized developed model is subsequently empirically tested using suitable analysis collected from a field survey of public listed companies in Sri Lanka. The main finding suggests both ERP System Quality and ACIQ significantly influence Accounting practices and firm performance. Another important finding has shown that there is a significant direct or indirect effect on Firm Performance through Accounting Practices.

ERP and Accounting Practices have direct and indirect effects on Firm Performance. Management has to pay more attention to ACIQ and ERP Quality. It is recommended that the organization should possess IT infrastructure which is beneficial to system implementation, and especially that the system must be flexible, easy to use, reliable and productive for specific purposes. Such resources will bring improved competitive advantage and as well as Firm Performance. ERP System Quality is mainly vital for the successful running of IS unit and the organization as a whole. There should be a proper mechanism that should be implemented for ERP System Quality improvement. Meantime, ACIQ is highly associated with rapid improvement in Firm Performance, ACIQ can be improved at the organizational level; for example: aligning IT development strategy with business strategy and information output can be designed to provide relevant information that improves the Firm Performance. Hence, this is the one area organization has to consider when they implement ERP systems.

Public listed companies should strive to integrate both the ERP System Quality and ACIQ to improve strategic business success. Similarly, Accounting Practices in connection with Accounting are essentially applying to take the timely, fast, and accurate decision which leads to Firm Performance. Hence, the organization should gradually implement Accounting Practices to improve Firm Performance.

5.2. Implication

The result implies that companies that invested in IS technology and ERP with more sophisticated AIS and therefore it will be able to maintain more capable of sophisticated and up-to-date accounting information. Moreover, the finding of this study affirms that the new ERP System with AIS application permits the use of accounting practices such as: cost accounting, use of non-financial performance indicators, profit analysis at segmental or product level or customer base, and financial Management. Moreover, integrated AIS provides an increased amount of flexibility in providing information, generation of more information, and enhanced quality of financial reporting and timely decision-based solution and reliable accounting information. Hence, the users of AIS must attempt to increase their usage of these kinds of applications to improve firm performance. ACIQ can be enhanced and improved in many directions: for example, aligning IT implementation strategy with organizational

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strategy. In addition, the generated information can be supported to provide quality information that improves organizational performance. ERP System Quality plays a direct relation on Firm Performance, while Accounting Practice exists a mediating role in the relationship between ERP System Quality and Firm Performance. In the same direction, ACIQ and Accounting Practices play a direct and indirect effect on Firm Performance. ERP system commonly enables organizations to achieve its success by increasing productivity, reducing costs and simplifying all tasks, etc. in the same vein, ERP is useful for success and meet organization needs when ERP system is reliable, easy to use, integrate and flexible that provide complete, accurate and well-informed information. Thus, IS managers and accountants should pay more attention to improve ERP System Quality and ACIQ in order to enhance Accounting Practices which subsequently having implications on firm performance. Moreover, Management should pay more attention to improve IS capabilities (IT infrastructure, human IT resources, and the IS unit's relationships with business units), as a result, the ERP System Quality and ACIQ can be improved. AIS quality and organizational performance will also be enhanced when new AIS applications and capabilities are brought in, as per the resource-based view (Ravichandran & Lertwongsatien, 2005).

References

[1]. Ahmed, A. S., & Duellman, S. (2013). Managerial overconfidence and accounting conservatism, *Journal of Accounting Research*, 51(1), 1-30.

[2]. Alzoubi, A. (2011). The effectiveness of the accounting information system under the enterprise resources planning (ERP), *Research Journal of Finance and Accounting*, 2(11), 10-19.

[3]. AMR Research (2005). $17 billion expected future growth in enterprise applications market, http://www.amrresearch.com/Content/View.asp?pmillid=18789.

[4]. Arachchi1,S.M , Chong,S.C, Gunawardana.K.D (2015). Comprehensive Marketplace and Factors Affecting the Budget of Enterprise Resource Planning (ERP) In Sri Lanka, *International Journal of Management Technology,* Vol.3, No.1, pp.1-19

[5]. Aryani, Y. A. (2013). Enterprise Resource Planning Implementation and Accounting Information Quality. In International Conference on Accounting and Finance (AT), Proceedings (p. 66). Global Science and Technology Forum.

[6]. Azhar Susanto. (2015). Influence the Quality of Accounting Information on the Implementation of Good Governance Program Study, *International Journal of Science & Technology Research:* Vol4, Issue: 12, Page: 326-336. ISSN 2277-8616.

[7]. Bavarsad, B., Rahimi, F. & Norozy, P. (2013). Determinants and Consequences of Implementation Enterprise Resource Planning System on Financial Performance, *Interdisciplinary Journal of Contemporary Research in Business* 4 (10): 939–959.

[8]. Belfo, F., & Trigo, A. (2013). Accounting information system: Traditions and future direction, *Procedia Technology* 9, 536 – 546.

[9]. Bentler, P. M. & Chou, C. P. (1987). Practical issues in structural equation modeling, *Sociological Methods and Research*, 16, 78-117.

[10]. Bharadwaj, A. S. (2000). A resource-based perspective on information technology capability and firm performance: an empirical investigation, *MIS quarterly*, 24, 169-196.

[11]. Booth, P., Matolcsy, Z., & Wieder, B. (2000). The impacts of enterprise resource planning systems on accounting practice–the Australian experience, *Australian Accounting Review*, 10(22), 4-18.

[12]. Bushman, R. M., & Smith, A. J. (2003). Transparency, financial accounting information, and corporate governance, *FRBNY Economic Policy Review*, 65-87.

[13]. Chenhall, R. H. (2003). Management control systems design within its organizational context: findings from contingency-based research and directions for the future, *Accounting, organizations and society*, 28(2), 127-168.

[14]. Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests, Psychometrika, 16, 297–334.

[15]. Dalayeen, B.O. & Al-Dalaien, B.O. (2018) The Impact of the Accounting Information System on Performance of Jordanian Commercial Banks, *International Journal for Research in Applied Science & Engineering Technology*, 6 (18) 238–241

[16]. Daoud, H., & Triki, M. (2013). Accounting information systems in an ERP environment and Tunisian firm performance, *The International Journal of Digital Accounting Research*, Vol. 13, pp. 1 – 35

[17]. DeLone, W. H., & McLean, E. R. (1992). Information systems success: the quest for the dependent variable. *Information Systems Research*, 3(1), 60-95.

[18]. Delone, W. H., & McLean, E. R. (2003). The Delone and McLean model of information systems

ISSN (Print): 2204-0595
ISSN (Online): 2203-1731

success: a ten-year update, *Journal of Management Information Systems*, 19(4), 9-30.
[19]. Dumitru, V. F., Albu, N., Albu, C. N., & Dumitru, M. (2013). ERP implementation and organizational performance. A Romanian case study of best practices, *Amfiteatru Economic*, 16(34), 518.
[20]. Esmeray, A.(2016). The Impact of Accounting Information Systems (AIS) on Firm Performance: Empirical Evidence in Turkish Small and Medium Sized Enterprises, *International Review of Management and Marketing*, volume6,233-236.
[21]. Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50. https://doi.org/10.2307/3151312
[22]. Gable, G., Sedera, D., & Chan, T. (2003). Enterprise systems success: a measurement model. ICIS 2003 Proceedings, 48.
[23]. Galani, D., Gravas, E., & Stavropoulos, A. (2010). The impact of ERP systems on accounting processes. World Academy of Science, *Engineering and Technology International Journal of Social, Behavioral, Educational, Economic and Management Engineering*, 4(6), 418-423.
[24]. Galbraith, J.R .(1973). Designing complex organizations. Addison-Wesley Publishing Company
[25]. Gorla, N., Somers, T. M., & Wong, B. (2010). Organizational impact of system quality, information quality, and service quality, *The Journal of Strategic Information Systems*, 19(3), 207-228.
[26]. Grande, E. U., Estebanez, R. P., & Colomina, C. M. (2011). The impact of Accounting Information Systems (AIS) on performance measures: empirical evidence in Spanish SME, *International Journal of Digital Accounting Research*, 11, 25–43.
[27]. Granlund, M., & Malmi, T. (2000, March 29-31). The Liberations and Limitations of ERP-Systems for Management Accounting. Paper presented at the 23rd annual conference of the European Accounting Association, Munich.
[28]. Granlund, M., & Malmi, T. (2002). Moderate impact of ERPS on management accounting: a lag or permanent outcome*?. Management accounting research*, 13(3), 299-321.
[29]. Gullkvist, B. M. (2002). Towards paperless accounting and auditing. Finland: E-Business Research Center, 1-12.
[30]. Gullkvist, B. M. (2013). Drivers of change in management accounting practices in an ERP environment, *International Journal of Business and Economic Sciences Applied Research*, 6(2).
[31]. Guvence, C. (2005). Information systems success and expectations for information technology investment: case study, Memory to obtain the Master of Science, *Information System Department*, Middle East Technical University.
[32]. Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. (2010). Multivariate Data Analysis. Seventh Edition. Prentice Hall, Upper Saddle River, New Jersey.
[33]. Hinton, P. R., Brownlow, C., Mcmurray, I. & Cozens, B. (2004). SPSS explained, East Sussex, England, Routledge Inc.
[34]. Hofstede, G. (1980). Culture's Consequences: International Differences in Work-Related Values. Beverly Hills, CA: Sage
[35]. Ifinedo, P. (2011). An empirical analysis of factors influencing Internet/e-business technologies adoption by SMEs in Canada, *International Journal of Information Technology & Decision Making*, 10(4), 731–766
[36]. Ifinedo, P. E., & Nahar, N. (2007). ERP systems success: an empirical analysis of how two organizational stakeholder groups prioritize and evaluate relevant measures. *Enterprise Information Systems*, 1(1), 25–48.
[37]. Ismail, N. A. (2007). The impact of information technology on performance: The mediating role of management accounting systems, *Jurnal Teknologi*, 46(1), 27-44
[38]. Ismail, N. A. (2009). Factors influencing AIS effectiveness among manufacturing SMES: Evidence from Malaysia. *The Electronic Journal on Information Systems in Developing Countries*, 38(10), 1-19.
[39]. Ismail, N. A., & King, M. (2007). Factors influencing the alignment of accounting information systems in small and medium sized Malaysian manufacturing firms, *Journal of Information Systems and Small Business*, 1(1-2), 1-20.
[40]. Ittner, C.D. & Larcker, D.F. (2003) Coming up Short on Nonfinancial Performance Measurement, *Harvard Business Review.*, 81, 88-95
[41]. Jiwat, R. & Malcom, P. (2009). Exploring antecedents of organizational adoption of ERP and their effect on Firm Performance, paper presented at the 17th European conference on information systems,
[42]. Kanellou, A., & Spathis, C. (2013). Accounting benefits and satisfaction in an ERP environment, *International Journal of Accounting Information Systems*, 14(3), 209-234.
[43]. Madurapperuma, T. S., Thelijjagoda, S., Ramanayaka, R. A. D. K. M., Walpola, D. R. H.,

ISSN (Print): 2204-0595
ISSN (Online): 2203-1731

& Thelijjagoda, S. (2009). ERP Deployment in Manufacturing Industry in Sri Lankan Context. Psrs, 3, 49–53.

[44]. Mahmoud Al-Eqab & Noor Azizi Ismail (2011). Contingency Factors and Accounting Information System Design in Jordanian Companies, *IBIMA Business Review*, Vol. 2011 (2011), Article ID 166128, 13 pages, DOI: 10.5171/2011.166128

[45]. Maldonado, M. (2009): Factors impacting the success of ERP implementations in small and medium enterprises: an empirical assessment from Latin America, ESADE – PhD in Management Sciences Program. http://bit.ly/YnAAf4

[46]. March, S. T., & Smith, G. F. (1995). Design and natural science research on information technology, *Decision support systems*, 15(4), 251-266.

[47]. Menachemi, N., Burkhardt, J., Shewchuk, R., Burke, D., & Brooks, R. G. (2006). Hospital information technology and positive financial performance: a different approach to finding an ROI, *Journal of healthcare management*, 51(1), 40-59.

[48]. Mia, L., & Clarke, B. (1999). Market competition, management accounting systems and business unit performance, *Management Accounting Research*, 10(2), 137-158.

[49]. Mitchell, F., Reid, G., & Smith, J. (2000). Information system development in the small firm: the use of management accounting. CIMA Publishing.

[50]. Mowen, M. M., Hansen, D. R., & Heitger, D. L. (2011). Cornerstones of managerial accounting. Nelson Education.

[51]. Nasar, M.C.A.(2020).Factors Affecting the Effectiveness of Accounting Information Systems in Public Listed Companies in Sri Lanka , International Journal of Advanced Multidisciplinary Research , 7(9):1-6

[52]. Nicolaou, A. I. (2000). A contingency model of perceived effectiveness in accounting information systems: Organizational coordination and control effects, *International Journal of Accounting Information Systems*, 1(2), 91–105.

[53]. Nicolaou, A. I. (2004). Firm Performance Effects in Relation to the Implementation and Use of Enterprise Resource Planning Systems, *Journal of Information Systems*, 18(2), 79-105.

[54]. Nupakorn. H, & Phapruke, U. (2010). Accounting practice effectiveness and financial performance of Thai listed firms: mediating effects of decision making efficiency for tax management, competent resource allocation, and strategic planning success, *International Academy of Business and Economics*, 10(1).

[55]. Ravichandran, T., Lertwongsatien, C., & Lertwongsatien, C. (2005). Effect of information systems resources and capabilities on firm performance: A resource-based perspective, *Journal of management information systems*, 21(4), 237-276.

[56]. Rom, A., & Rohde, C. (2007). Management accounting and integrated information systems: A literature review, *International Journal of Accounting Information Systems*, 8(1), 40-68.

[57]. Sajadi,H. M. Dastgir, & H. Hashem Nejad. (2008).Evaluation of The Effectiveness of Accounting Information Systems, *International Journal Of Information & Techno-Logy Science*, Vol. 6, No. 2.

[58]. Salehi, M. Rostami, V., & Mogadam, A. (2010). Usefulness of accounting information system in emerging economy: empirical evidence of Iran, *International Journal of Economics and Finance*, 2(2), 186–195.

[59]. Salehi, M., & Abdipour, A. (2011). A study of the barriers of implementation of accounting information system: Case of listed companies in Tehran Stock Exchange, *Journal of Economics and Behavioral Studies*, 2(2), 76-85.

[60]. Sánchez-Rodríguez, C., & Spraakman, G. (2012). ERP systems and management accounting: A multiple case study, *Qualitative Research in Accounting & Management*, 9(4), 398-414.

[61]. Sangster, A., Leech, S.A., & Grabski, S. (2009). ERP implementations and their impact upon management accountants, *Journal of Information Systems and Technology Management,* 6(2), 125-42.

[62]. Sari, E. N. (2015). Accounting Practices Effectiveness and Good Governance: Mediating Effects of Accounting Information Quality in Municipal Office of Medan City, *Indonesia Research Journal of Finance and Accounting*, 6(2), 1-10.

[63]. Scapens, R.W. & Jazayeri, M., (2003). ERP Systems and Management Accounting Change: Opportunites or Impact? A Research Note. European Accounting Review,

[64]. Spathis, C., & Constantinides, S. (2004). Enterprise resource planning systems' impact on accounting processes, *Business Process Management Journal*, 10(2), 234-247.

[65]. Trigo, A., Varajão, J., Barroso, J., Soto-Acosta, P., Molina-Castillo, F. J., & Gonzalvez-Gallego, N. (2013). Enterprise information systems adoption in Iberian large companies: Motivations and trends. In Enterprise Resource Planning: Concepts, Methodologies, Tools, and Applications, pp. 1035-1052. IGI Global.

ISSN (Print): 2204-0595
ISSN (Online): 2203-1731

[66]. Velcu, O. (2007). Exploring the effects of ERP systems on organizational performance: evidence from Finnish companies, *Industrial Management & Data Systems*, 107(9), 1316-1334
[67]. Wang, E. T., & Chen, J. H. (2006). Effects of internal support and consultant quality on the consulting process and ERP system quality, *Decision support systems*, 42(2), 1029-1041.
[68]. Wickramaarachchi, W.A.D.S.A., & Jayasiri, N.,(2015). Impact of an Enterprise Resource Planning System (ERPS) on the Accounting Process of a Public Sector Organization in Sri Lanka, *International Academic Research Journal of Business and Management* Vol. no.4 issue no 4, 2015, Page No.12-27
[69]. Xiao, Z. Z., Dyson, J. R., & Powell, P. L. (1996). The impact of information technology on corporate financial reporting: a contingency perspective, *British Accounting Review*, 28, 203-227.
[70]. Zhang, Z., Leeb, M. K. O., Huang, P., Zhang, L., & Huang, X. (2005). A framework of ERP systems implementation success in China: an empirical study, I*nternational Journal of Production Economics*, 98(1), 56–80.

ISSN (Print): 2204-0595
ISSN (Online): 2203-1731