# EFFECT OF THE QUALITY OF ACCOUNTING INFORMATION SYSTEM ON FINANCIAL PERFORMANCE OF LISTED COMPANIES IN SRI LANKA

R. G. S. S. Madushani<sup>1,\*</sup> and H. M. D. N. Somathilake<sup>2</sup>

<sup>1,2</sup>Department of Accountancy & Finance, Faculty of Management Studies, Rajarata University of Sri Lanka, Mihintale, Sri Lanka

\*Corresponding author (email: sanduni1118@gmail.com)

### INTRODUCTION

The world has seen significant technological advancements in the last ten years, including in the accounting field. As a result, many business organizations worldwide rely on information technology. The use of computer-based information systems has become more prevalent due to the advertising of such an IT-led era (Elsharif, 2019). In accounting and finance, computer software has replaced manual financial reporting to enable prompt reporting, simple processing, and storage of financial information. Accounting software has also made it simpler to prepare and access financial statements and to use accounting procedures. According to studies, a company's financial outcome is always determined by how much it invests and can improve its Accounting Information Systems (AIS) (Ababneh & Alrabei, 2021). AIS adheres to a high-quality level; it can increase the satisfaction of information system users and lead to the generation of more valuable data (Meiryani & Susanto, 2018). Quality measures how well a project's final product satisfies the management's goals. The effectiveness of information system initiatives is typically measured by how well they facilitate decision-making and organizational performance. The accuracy, timeliness, and usability of the new system's information are also reflected in its quality (Fitrios, 2016). The criteria for qualified AIS information must be accurate, relevant, timely, complete, and capable of changing decisionmaking following user objectives and problems (Sari & Purwanegara, 2018). Companies that comply with qualified AIS and can afford to implement certain technological developments have demonstrated a high level of financial performance (Cheruyot et al., 2014). Financial performance is "an organization's financial health, ability and willingness to meet long-term financial responsibilities, and commitment to offer services soon (Ganyam & Ayoor, 2020). Although many research studies have been conducted in the Sri Lankan context on various topics or problems related to AIS used by various organizations in Sri Lanka, most of them limited their scope to the different applications of AIS. As a result, studies on the quality of AIS are desirable to carry out (Nijam & Athambawa, 2018). According to recently reported evidence from Sri Lanka has reviewed the value relevance of AIS (Ababneh & Alrabei, 2021). In Sri Lanka's banking industry, it was looked at how user competence affected the success of the AIS. According to findings, AIS has a favorable impact on the financial performance of Sri Lankan listed companies. Sri Lankan manufacturing has also been looked into (Kariyawasam, 2016). It concluded that there is a significant correlation between financial performance and the quality of the AIS. Naturally, the power of global information technology development is growing, and companies in both the public and private sectors have significantly expanded their investment in AIS. However, most information systems projects fail, and those often have significant failure rates that adversely affect organizations' financial performance, like financial losses and other dangers (Al-okaily et al., 2020). System quality did not significantly impact financial performance in the context of this research. The study

conducted by Pratama et al., (2021) on the other hand, argues that AIS have no impact on enhancing financial performance. By paying particular attention to listed firms in Sri Lanka, the study provides a more in-depth knowledge of the quality of the AIS for financial performance. The study will contribute significantly to understanding how listed firms are run and workers' productivity for owners and stakeholders. There are certain limitations to this study that the researchers have noted. The study was limited to investigating the effect of AIS Quality on the Financial Performance of 165 listed companies out of 296 listed on Colombo Stock Exchange. This research can also be applied to companies not listed on the Colombo Stock Exchange. Further, evaluating the financial performance of 165 companies is not enough as a sample.

# METHODOLOGY

This methodology part describes the conceptual framework, hypotheses, population and sample of the study, data collection, and data analysis methods used in this study.

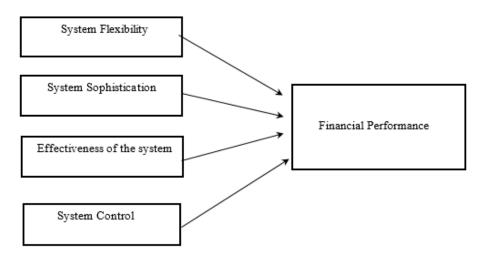


Figure 1 Conceptual Framework

According to Figure 01 conceptual framework, the conceptual model was constructed based on literature and previous studies. Independent variables of this study are System flexibility, System Sophistication, System Effectiveness, and System Control. All of which are AIS quality aspects. The dependent variable of this study is Financial Performance. Financial performance is measured by Changes in sales, Changes in profit, and Changes in cost. This study aims to determine the impact of AIS quality on financial performance.

Based on the previous researcher's literature following hypotheses were developed.

**H**<sub>1</sub>: There is a significant effect of system flexibility of the Accounting Information System on the financial performance of Listed Companies of Sri Lanka.

 $H_2$ : There is a significant effect of system sophistication on the financial performance of listed companies in Sri Lanka.

 $H_3$ : There is a significant effect of the system's effectiveness on the financial performance of Listed Companies of Sri Lanka.

 $H_4$ : There is a significant effect of system control of the Accounting Information System control on financial performance.

Additionally, the researcher has developed the following model to test the hypotheses.  $Y = \alpha + \beta 1 \text{ SF} + \beta 2 \text{ SS} + \beta 3 \text{ ES} + \beta + \epsilon$ 

The researcher intends to conduct this study using primary data. Primary data will be obtained from a structured questionnaire. The researcher collects necessary data and information for the research by speaking directly with the Accounting Head, Manager, Financial Manager, or Financial Head of selected companies and submitting Google Forms to them via email. This study's population identifies all the companies listed on the Colombo Stock Exchange. According to the Colombo Stock Exchange, the Stock Exchange of Sri Lanka has 296 companies' listed under twenty (20) business sectors in the stock exchange of Sri Lanka. The Stratified Random Sampling method was selected as this study's sample. This research study recommends the sample size as 165 companies listed under Colombo Stock Exchange (CSE) under twenty business sectors. This sample represented all the companies that are listed under various business sectors. The minimum sample sizes required from different populations gave 95 percent confidence for margins of error. This study population 296 listed companies according to 95 percent confidence level 165 companies of listed companies can consider as a sample.

## **RESULTS AND DISCUSSION**

In this study, Cronbach's alpha value for all variables is more significant than 0.7. Therefore, all data are reliable and accepted in the stability and consistency of the variables.

|               |                    | Table 1 C         | orrelations  |         |    |
|---------------|--------------------|-------------------|--------------|---------|----|
|               | SF                 | SS                | ES           | SC      | FP |
| SF            | 1                  |                   |              |         |    |
| SS            | 0.325**            | 1                 |              |         |    |
| ES            | $0.405^{**}$       | $0.680^{**}$      | 1            |         |    |
| SC            | $0.378^{**}$       | $0.574^{**}$      | $0.744^{**}$ | 1       |    |
| FP            | 0.303**            | $0.494^{**}$      | 0.553**      | 0.413** | 1  |
| **. Correlati | ion is significant | at the 0.01 level | (2-tailed).  |         |    |

According to Table 1, System flexibility, System Sophistication, and System Control have a moderate positive relationship, and the system's effectiveness has a strong positive relationship with the financial performance at a 0.01 level.

|                                  | Table 2 Re     | esults of Regress | ion Analysis                     |                |              |
|----------------------------------|----------------|-------------------|----------------------------------|----------------|--------------|
| Model                            | Unstandardiz   | ed Coefficients   | Standardize<br>d<br>Coefficients | Т              | Sig.         |
|                                  | В              | Std. Error        | Beta                             | -              |              |
| (Constant)<br>System Flexibility | 0.729<br>0.128 | 0.495<br>0.107    | 0.085                            | 1.472<br>1.202 | .143<br>.231 |

| System                                 | 0.284             | 0.116 | 0.217 | 2.443 | .016  |
|--|-------------------|-------|-------|-------|-------|
| Sophistication<br>Effectiveness of the | 0.484             | 0.131 | 0.404 | 3.685 | 0.000 |
| System<br>System Control               | 0.053             | 0.117 | 0.044 | 0.451 | 0.652 |
| Dependent Variable:                    | Financial Perform | nance |       |       |       |

1st International Research Symposium on Management 2022

|          | Table 3 Regression Analysis: Model Summary |
|----------|--|
| R        | 0.582ª                                     |
| R Square | 0.338                                      |
| F        | 20.462                                     |
| Sig      | $0.000^{\mathrm{b}}$                       |

In the above result, the R-value of 58.2% of the financial performance of the listed companies was described by the independent variables taken, and other factors beyond the study describe the remaining 42.8% of financial performance. R square value is 0.338, implying that 33.8 percent variation in financial performance is explained by the independent variables considered in this study. The f value is 20.462, and the significant value of 0.000 implies that the regression model fits the data. As per the results of multiple regression analysis, coefficient values imply a significant positive effect of System Sophistication and Effectiveness of the System on financial performance at a 0.05 level of significance. The result is similar to those (Nguyen & Nguyen, 2020). Researchers concluded that a more sophisticated system positively influenced the firms' overall performance and quality. Further, Shagari et al., (2017) and Ahmed et al., (2021) noted that an effective AIS positively influences organizations' financial performance and quality reporting. Further, there is no significant effect of system flexibility and system control on the financial performance of listed companies in Sri Lanka at a 0.05 level of insignificant. When comparing previous literature reviews, it is clear that the AIS used in service companies for achieving financial data quality. Further AIS security breach incidents have grown significantly over the past few years. As a consequence, business organizations can suffer enormous financial losses.

# CONCLUSIONS AND IMPLICATIONS

The general objective of this research was to identify what are effects of the quality of the AIS on the financial performance of listed companies in Sri Lanka. The study results show that System sophistication and effectiveness significantly affect the financial performance of listed companies in Sri Lanka, and system flexibility and system control have no significant effect on the financial performance of listed companies in Sri Lanka. Based on the study results, the researcher recommends maintaining the highest levels of AIS quality by keeping pace with the latest developments in the fields, such as System Sophistication and Effectiveness of the System. Therefore, maintaining a high level of AIS quality will be an advantage in raising the financial performance of listed companies in Sri Lanka.

*Keywords*: Financial performance, listed companies, the quality of accounting information system

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