

THE IMPACT OF ACCOUNTING SOFTWARE USABILITY ON THE SUSTAINABLE PERFORMANCE OF PUBLIC SECTORS IN AMPARA DISTRICT

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Abstract: This paper investigates the impact of accounting software usage on the sustainable performance of public sector organizations in Ampara District, Sri Lanka. This paper addresses the identified knowledge gap regarding the suboptimal use of accounting software and its implications for financial management and decision making in these organizations. Using a secondary-method approach, the study used panel data analysis to evaluate various factors affecting sustainability performance, including efficiency, accuracy, and ease of use, reliability, and data quality. Findings reveal that ease of use and accuracy of accounting software contributes significantly to sustainability performance with coefficients of 0.4013 and 0.3505, respectively. In contrast, efficiency and reliability did not show a statistically significant effect on performance results. These results underscore the importance of user-friendly software interfaces and accurate data management to increase productivity in public sector organizations. The study concludes that improving the use of accounting software leads to better financial management and sustainable performance, thus providing valuable insights for policy makers and software developers.

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01. INTRODUCTION

The objective of this paper is to examine the impact of accounting software usability on the sustainable performance of public sector organizations in the Ampara District. As public sector entities increasingly rely on technology to enhance their operations, the usability of accounting software becomes a critical factor influencing their effectiveness and sustainability. This paper is particularly significant for policymakers, public sector managers, and software developers in Ampara and beyond. By understanding the relationship between software usability and sustainable performance, stakeholders can make informed decisions that promote the development and implementation of user-friendly accounting solutions.

The public sector plays a crucial role in the economic and social development of a country. (T Fox, 2002) One of the key elements of effective public sector management is the use of reliable and user-friendly accounting software. Accounting software enables public organizations to efficiently manage their financial records, budgets, payroll and other essential accounting functions. The usability of these accounting software systems can have a significant impact on the overall performance and sustainability of public sector organizations. Public sector cannot fully utilize accounting software due to the nature of their sectors. Their exposure can be reduced in several ways. For that, it is very important for the public sector to recognize the impact of accounting software usage on sustainable performance.

Public sector institutions in Ampara district of Sri Lanka are responsible for providing various public services and managing public resources. Effective use of accounting software is critical to maintaining financial transparency, ensuring proper resource allocation, and achieving sustainable performance. However, studies examining the relationship between the use of accounting software and the sustainability performance of public sectors in Ampara district are limited. Accounting Information Systems (AIS) are recognized as an essential tool for Public Sector Organizations (PSOs) to deal with external and internal changes, process data and generate useful information to improve organizational performance and accountability. AIS are very important to facilitate and improve the performance of PSOs (Saganuwan, Ismail & Ahmad, 2013).

In Sri Lankan context, the Criminal Investigation Department (CID) of the Police Department plays a critical role in the investigation and public safety process. This department is responsible for conducting thorough investigations into serious crimes, ensuring justice, and maintaining public order. However, there is a pressing need to improve the effectiveness and efficiency of the CID's investigative processes. Enhancements in the Accounting Information System (AIS) can significantly contribute to achieving these goals. According to Shanth (2018), adopting advanced AIS solutions can streamline operations, facilitate better data management, and improve decision-making. By leveraging technology, the CID can not only enhance its investigative capabilities but also foster greater public trust in law enforcement efforts. Overall, investing in improved AIS will be essential for the CID to meet the challenges of modern crime investigation effectively.

Improving the effectiveness and sustainability of Sri Lanka's public sector performance is critical to the overall development and well-being of the country. Improving the usability and effectiveness of accounting software used in PSOs in Sri Lanka can contribute to improving financial management, decision making, accountability and sustainability performance. The purpose of this paper is to explore the impact of accounting software usage on the sustainability performance of the public sector in Sri Lanka with a focus on Ampara district. Ampara District has 19 Divisional Secretariats. By exploring the impact of Accounting Software Usage on the Sustainability

Performance of Sri Lanka's Public Sector, this paper aims to provide insights and recommendations that can help the country's Public Sector Organizations to optimize. Benefits of their AIS and achieving better Organizational Performance.

Regarding the impact of Accounting Software use on the Sustainable Performance of the Public Sector in Sri Lanka, Ampara district was selected because it can best demonstrate the impact of Accounting Software Use. Ampara District was chosen for this paper due to its representation of the diverse challenges and opportunities within Sri Lanka's public sector. The district has actively embraced technology to enhance public sector operations, making it an ideal setting to explore how accounting software can optimize organizational performance. By focusing on Ampara, this paper aims to offer insights and practical recommendations that can be applied not only within the district but also across similar contexts in Sri Lanka, ultimately contributing to improved efficiency and effectiveness in public service delivery.

Accounting processes in the public sector are complex and can be burdensome (Chong & Nizam, 2018), but are critical to effective financial management and achieving social goals. Governments around the world, including Sri Lanka, are increasingly focusing on smart-government applications to improve efficiency and delivery of public services (Althunibat et al. 2021). The concept of sustainable development, which aims to meet current demands without compromising future needs, is relevant to this paper topic, as it can provide insight into how AIS and accounting software can contribute to the sustainable performance of the public sector in Sri Lanka (Huy & Phuc, 2020). The purpose of this paper is to investigate the impact of Accounting Software Usage on the Sustainable Performance of the public sector in Ampara district. By examining the user experience, functionality and overall effectiveness of the Accounting Software.

Used in these institutions, the study will provide insight into the factors that contribute to the sustainable management of public resources and efficient public service delivery. In summary, this paper topic is important because it addresses the critical need to enhance the effectiveness and sustainability of public sector performance in Sri Lanka through improved usability and use of Accounting Software and AIS. Despite the recognized importance of Accounting Information Systems (AIS) in enhancing the performance and sustainability of Public Sector Organizations (PSOs), many PSOs in Sri Lanka, particularly in Ampara District, face challenges in using their accounting software effectively. Limited studies have shown the impact of AIS adoption and use effectiveness in the Sri Lankan public sector, which can be attributed to various factors, including poor software usage, inadequate user training, and resistance to change.

Poor software usability can lead to user frustration, reduced productivity, and reluctance to fully integrate the AIS into the organization's financial management and decision-making processes. This, in turn, can hamper the ability of PSOs to leverage their AIS for improved financial management, resource allocation, and sustainable organizational performance. The Criminal Investigation Department (CID) of Sri Lanka plays a pivotal role in maintaining public safety and conducting thorough investigations into serious crimes. To enhance its effectiveness and efficiency, the CID has increasingly integrated Accounting Information Systems (AIS) into its operations. The following details outline the usage of AIS at the CID, supported by various evidences and relevant findings. This paper tries to answer the question is, What is the impact of Accounting Software Usability on the Sustainable Performance on the Public Sector Organizations in Ampara District?

The main objective of this paper is, to identify the impact of Accounting Software Usability on Sustainable Performance of Public Sector Organizations in Ampara District. In addition to that there are sub specific objectives too, to identify the impact of Efficiency on Sustainable Performance of Public Sector Organizations in Ampara District. To identify the impact of Reliability on Sustainable Performance of Public Sector Organizations in Ampara District. To identify the impact of Ease of Use on Sustainable Performance of Public Sector Organizations in Ampara District. To identify the impact of Data Quality on Sustainable Performance of Public Sector Organizations in Ampara District. To identify the impact of Accuracy on Sustainable Performance of Public Sector Organizations in Ampara District.

02. LITERATURE REVIEW

Based on accounting software usability through Localization and Language Support, the software should be available in the local languages used in Sri Lanka, such as Sinhala and Tamil, to ensure accessibility and adoption by all users (Senarath & Ariyachandra, 2020). And also, Regulatory Compliance, the software should be designed to comply with Sri Lankan public sector accounting standards, regulations, and reporting requirements. This includes features for managing budgets, expenditures, and financial statements (ICASL, 2021).

Training and Support, Comprehensive training resources and ongoing technical support should be available to help public sector employees learn and effectively use the software (Suraweera & Pulasinghe, 2021). As well as, Scalability and Performance, the software should be able to handle the volume and complexity of transactions in the public sector without performance issues, and should be scalable to accommodate changes in the organization (Gartner, 2022). Security and Access Controls, Robust security features, such as user authentication, role-based access controls, and data encryption, should be in place to protect sensitive financial information (ICTA, 2022). Reporting and Analytics, the software should provide flexible and customizable reporting capabilities to generate the financial reports and analytical insights required by public sector agencies (Gartner, 2022). And Continuous Improvement, the software vendor should actively seek user feedback and regularly update the system to address evolving needs and incorporate best practices in public sector accounting software (Suraweera & Pulasinghe, 2021).

2.1 Dimensions of Accounting Software Usability

Every business and public sector has pre-dominant goals to improve on performance and to maximize shareholder wealth. In order to achieve these objectives, right plans together with necessary resources are needed and used for implementation. Efficiency becomes very important considering the fact that resources are scarce. Sri Lanka public sectors normally face scarce resources every day and it's a burning problem. Efficiency in sector context refers to ability of firm to maximize firm value by using the least inputs to achieve higher outputs. Empirical studies have reinforced the need for efficiency in the operations of the firm. Similarly, Greene and Segal (2004) show that efficiency increase profitability of the firms in terms of return on equity in the insurance industry. There is a strong positive link between the firm's value and the utilization of the firm's resources.

Table 1 : Dimensions of Accounting Software Usability

Dimensions	Description	Measurement
Efficiency	The extent to which the accounting software enables employees to complete their tasks quickly and with minimal effort.	Efficiency Index: Ratio of the time taken to complete a task using the accounting software to the time taken to complete the same task manually. (Shuhaimi, F., & Mahmood, A. K. 2016)
Accuracy	The degree to which the accounting software produces reliable and error-free financial information.	Accuracy Index: Ratio of the number of accurate financial reports generated by the software to the total number of financial reports generated. (Al-Hiyari, A., Al-Mashre, M. H., Mat, N. K. N., & Razali, R. 2013)
Ease of Use	The extent to which employees can easily navigate and interact with the accounting software	Ease of Use Index: Average user satisfaction score on a Likert scale.(Poba-Nzaou,P., & Raymond, L. 2011)
Reliability	The degree to which the accounting software consistently performs its intended functions without failure or errors.	Reliability Index: Ratio of the number of error-free transactions to the total number of transactions processed. (Delone, W. H., & McLean, E. R. 2003)
Data Quality	The extent to which the accounting software provides accurate, complete, and relevant financial data to support decision-making.	Data Quality Index: Average score of data accuracy, completeness, and relevance as perceived by the employees. (Wixom, B. H., & Todd, P. A. 2005)

(Source: Author compiled,2024)

Reliability is a complex and elusive construct of accounting information despite its central role (Maines, L.A., & Wahlen, J.M. (2006). To achieve accounting standards, firms are required to provide more unabridged revelations associated to the underlying economic constructs represented by accounting information to help users better determine the reliability of accounting information. Reliability is ingrained in the information itself, and not in the manipulation of the information. Reliability of accounting information determined by the requirement of accounting standards and facilitates firms to render economic constructs with pertinent informative accounting measurements and classifications. Thus, the usefulness of accounting information in predicting future cash flows depends on a number of factors such as accounting information reliability, the extent to which accounting constructs and measured values depict economic constructs without error or bias (Cho, Y., Kim, Y., & Lim, J. (2006).

The quality of software which is ease of use and understandable, would be beneficial to its user. Therefore, the success of the system used depends on the level of ease-of-use of the system. In general, an increase in ease of use positively influences several aspects of a company's output quality such as increased sales and revenues productivity and customer satisfaction; reduced training and support cost, development time and costs and maintenance costs (Bias, R. G., & Mayhew, P. J. (2005).

Output of Accounting Information System (AIS) very much depends on the data quality as poor data quality will result in garbage in garbage out. As poor data reached decrease reputation. (Xu, 2003). Through evaluation of accounting information quality using four attributes namely accuracy, timeliness, completeness, and consistency, Xu (2003) concluded that data quality is critical AIS, thus influencing the firm's performance. Accounting Software usability play main role in recent public sectors and business. To achieve high data quality, the process of data production such as data collection, data utilization, and data storage must work satisfactorily (Lee, Y. W., & Strong, D. W. (2003). Accounting software is not only speedy but also accurate and reliable. Computers are used to collect data and process it into meaningful information that management can use to make timely and effective decisions. The entire data processing is carried out using accounting software, which sorts, classifies, calculates, summarizes data, and produces reports.

Furthermore, information systems processing and production processing in manufacturing organizations are homogeneous. This uniformity ensures that the data collected and processed is consistent across various departments, facilitating better decision-making and enhancing operational efficiency. Firm will lose business when customers (users) will be dissatisfied if the product (information) is not delivered on time (timeliness) and the product (information) does not conform to the needs (relevance) of customers (users) (Clikeman, 1999). Non-conformation of information provided by an IS (Information System) leads to disruption of operations in the organization and hefty maintenance costs, ensuing in high costs to the organization. When the operational information from accounting software is highly accurate, firm will benefit from reduced labor costs and waste, effective use of machinery, and low inventory costs.

2.2 Sustainable Performance

Sustainable performance is a multifaceted concept that encompasses an organization's ability to achieve its business objectives while considering its long-term environmental, social, and economic impacts (Epstein & Rejc Buhovac, 2014). At the heart of sustainable performance is the principle of meeting the needs of the present without compromising the ability of future generations to meet their own needs (Dyllick & Hockerts, 2002). This requires organizations to balance their pursuit of economic growth with responsible stewardship of natural resources and a commitment to improving the well-being of their employees, customers, and communities (Hart & Milstein, 2003). Sustainable performance is not just about minimizing negative impacts; it also involves proactively seeking opportunities to create shared value and drive positive change (Figge & Hahn, 2004). This can include investments in renewable energy, the development of sustainable products and services, and the implementation of inclusive hiring and training practices (Epstein & Rejc Buhovac, 2014).

Sustainable performance in the public sector in Sri Lanka is an area that has received increasing attention in recent years. In the context of Sri Lanka's public sector, sustainable performance is closely tied to the concept of good governance, which involves the efficient, transparent, and accountable management of public resources (Gunawardena & Basnayake, 2016). This is particularly important given the critical role of the public sector in driving economic and social development in the country. Another important factor is the integration of envi-

ronmental and social considerations into public sector decision-making and operations (Pathirage & Jayasinghe, 2017). This can include the implementation of green procurement policies, the promotion of renewable energy initiatives, and the prioritization of community development programs (Munasinghe & Malkumari, 2012).

Sustainable performance in the Sri Lankan public sector also requires the development of a skilled and motivated workforce, as well as the adoption of innovative technologies and management practices (Jayawardena & Dissanayake, 2019). This can involve investments in employee training and development, the use of digital platforms for service delivery, and the fostering of collaborative partnerships with the private sector and civil society (Wijesinghe & Siriwardena, 2018). Overall, the pursuit of sustainable performance in the Sri Lankan public sector is a complex and multifaceted challenge, but one that is essential for the country's long-term development and the well-being of its citizens (Gunawardena & Basnayake, 2016). By addressing these issues, the public sector can serve as a model for sustainable and inclusive development in Sri Lanka.

2.3 Agency Theory

The public sector organization (principal) relies on the accounting software (agent) to provide accurate, efficient, and reliable financial information to support sustainable performance. The accounting software provider (agent) may prioritize their own interests, such as maximizing profits or market share, over the public sector organization's (principal's) goals of sustainable performance. This potential conflict of interest can lead to issues with the usability, reliability, and data quality of the accounting software, which can ultimately impact the sustainable performance of the public sector organization. The agency theory is relevant to the study since it is able to explain how good accounting software usability can impact sustainable performance in public sector.

1. CIGAS (Computerized Integrated Government Accounting System):

According to the Department of State Accounts under the Ministry of Finance, Sri Lanka, CIGAS is the primary government accounting software used by most government ministries, departments, and agencies in the country (Department of State Accounts, 2023). CIGAS is a comprehensive system that handles budgeting, accounting, and reporting for the public sector in Sri Lanka (Department of State Accounts, 2023).

2. SLCIS (Sri Lanka Consolidated Information System):

The Department of Treasury Operations under the Ministry of Finance, Sri Lanka, states that SLCIS is an integrated financial management information system used by the central government of Sri Lanka (Department of Treasury Operations, 2023). SLCIS includes modules for budgeting, accounting, payroll, and procurement, among other functionalities (Department of Treasury Operations, 2023).

3. FMIS (Financial Management Information System):

The Ministry of Finance and Mass Media, Sri Lanka, indicates that FMIS is an accounting and financial management system used by some public sector entities, particularly local authorities and provincial councils (Ministry of Finance and Mass Media, 2023). FMIS is a web-based system that handles various financial management tasks, including general ledger, accounts payable, and accounts receivable (Ministry of Finance and Mass Media, 2023).

4. Customized Accounting Software:

According to interviews with public sector officials in Sri Lanka, some larger public sector organizations, such as state-owned enterprises or autonomous institutions, may use customized accounting software developed specifically for their needs (Public Sector Officials, personal communication, August 2023).

These customized solutions are typically designed and maintained by private software companies in consultation with the respective organizations (Public Sector Officials, personal communication, August 2023).

The existing studies conducted in the Sri Lankan context have provided valuable insights, but they have focused on broader regions or specific types of public sector organizations (e.g., local government authorities, provincial councils, state-owned enterprises). There is a need to investigate the impact of accounting software usability on the sustainable performance of public sector organizations in the Ampara District, which may have distinct contextual factors that shape this relationship.

By addressing this research gap, the proposed paper can contribute to a deeper understanding of how the usability of accounting software can influence the sustainable performance of public sector organizations in the Ampara District. The findings can guide policymakers, software vendors, and public sector leaders in developing and implementing strategies to enhance the usability of accounting software and support the sustainable performance of public institutions in this specific context.

03. CONCEPTUALIZATION AND METHODOLOGY

This paper examined the impact of Accounting Software Usability (ASU) on the Sustainable Performance of Public Sectors in Ampara District. As a relationship was developed in the study, the deductive approach was used. Some prior studies (Shanth, 2018), (Huy & Phuc, 2020), also used the deductive approach to investigate the impact of Accounting Software Usability on the Sustainable Performance. The deductive approach develops hypotheses and formulates the research approach to test it. This approach involves formulation of hypotheses, statistical tests, and expected results with an accepted level of probability.

Figure 3.1 demonstrates the conceptual framework of the study, which is based on the literature review and depicts the impact of Accounting Software Usability on the Sustainable Performance.

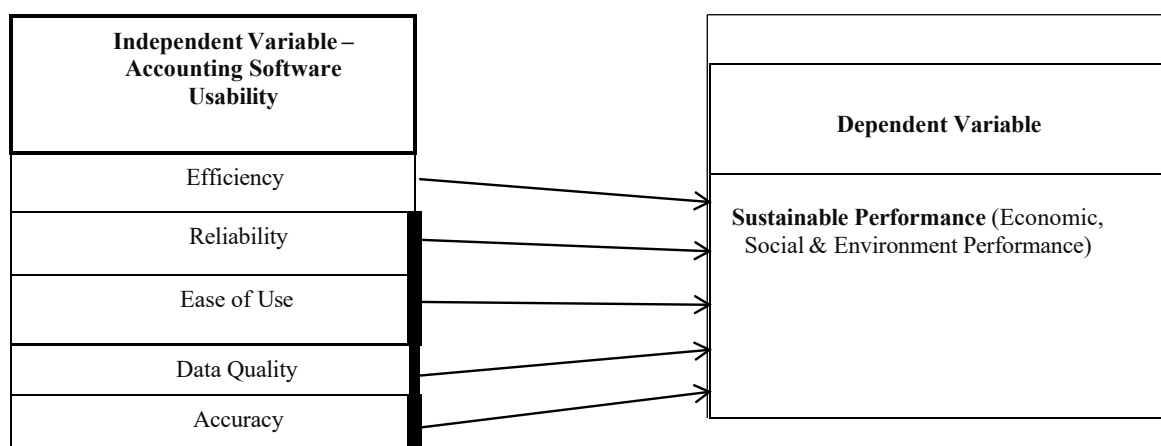


Figure 3.1 *Conceptual Framework*

This paper advocates for the development and implementation of user-friendly accounting systems to optimize performance outcomes. Accordingly, hypotheses were developed as follows;

H1: There is an impact of Accounting Software Usability on Sustainable Performance of Public Sectors in Ampara District.

H1a: There is an impact of Efficiency on Sustainable Performance of Public Sectors in Ampara District.

H1b: There is an impact of Reliability on Sustainable Performance of Public Sectors in Ampara District.

H1c: There is an impact of Ease of Use on Sustainable Performance of Public Sectors in Ampara District.

H1d: There is an impact of Data Quality on Sustainable Performance of Public Sectors in Ampara District.

H1e: There is an impact of Accuracy on Sustainable Performance of Public Sectors in Ampara District.

This paper formulates a model to examine the impact of Accounting Software Usability on Sustainable Performance of Public Sectors in Ampara District. Following regression model will be used to test the impact of Accounting Software Usability on Sustainable Performance (SP) of Public Sectors in Ampara District.

Model 1

$$SP = C + \beta_1 * EI + \beta_2 * AI + \beta_3 * EUI + \beta_4 * RI + \beta_5 * DQI + \epsilon$$

Where,

- SP is the Sustainable Performance
- EI is the Efficiency Index (EI)
- AI is the Accuracy Index (AI)
- EUI is the Ease-of-Use Index (EUI)
- RI is the Reliability Index (RI)
- DQI is the Data Quality Index (DQI)
- ϵ is the error term

Ampara is a district in Eastern Province, Sri Lanka. The district is 4,415 km² (1,705 sq mi). It consists of 19 divisional secretariats, 22 Grama Niladari Divisions under the Ampara Divisional Secretariat, 55 Under Uhana, 17 under Mahaoya, and 20 under Pathiyathalawa. It has 22 electoral divisions, 02 municipal councils, 17 urban councils, 07 members of parliament, 15 provincial council members, and 157 local council members. The data will be collected through data of secondary in nature, obtained through the EP (Eastern Provincial council) website, the sector's website from 2020 to 2023 and published annual reports. There are Main Institutions, Provincial Ministries, Provincial Departments and Statutory Bodies in Eastern Provincial council (as at 10 August 2024). All Provincial Public Sectors were used for the population for this study. Because the Public sector governs by specific tools and different regulations compared to other non-public firms.

The paper examines the impact of Accounting Software Usability on the Sustainable Performance of Public Sectors in Ampara District. Data analysis is very crucial path of any research involving process of inspecting, cleansing, transforming, interpreting and modeling data with the goal of discovering useful information to support the hypothesis underlying each question (Judd & McClelland, 1989) depending on nature of the sampling, measurement and data collecting method. The paper examines the impact of accounting software usability on the sustainable performance of public sectors in Ampara District. The study used STATA Version 15.0 software to investigate the relationship between these variables. This paper used descriptive statistics (Mean, Median, Maximum, Minimum and Standard deviation), correlation, and Panel regression model to analyze the data.

04. DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1 Descriptive Analysis

The descriptive analysis provides an overview of the central tendencies, dispersals, and distributions of the significant variables studied (Hair et al., 2010). Understanding the data's primary features is essential; this analysis forms the basis of more advanced statistical techniques.

Table 4.1 :Descriptive Analysis

Variable	Obs	Mean	Std. Dev.	Min	Max	Skewness	Kurtosis
ESI	156	0.6004	0.1398	0.3100	0.9000	0.0697	1.9288
ENSI	156	0.6643	0.1535	0.4000	0.9500	0.0893	1.8127
SSI	156	0.7477	0.0993	0.6000	0.9500	0.1687	1.8975
SP	156	0.3259	0.1776	0.1008	0.7716	0.5832	2.0685
EI	156	0.7656	0.0938	0.5700	0.8800	- 0.7206	2.6652
AI	156	0.6753	0.1718	0.2192	1.0665	- 0.3760	2.5627
EUI	156	0.7002	0.1121	0.4400	0.9300	- 0.0895	2.4957
RI	156	0.6219	0.2157	0.1210	1.0037	- 0.6958	2.5607
DQI	156	0.6329	0.1728	0.4000	0.9300	0.4276	1.7248
ASU1	156	0.1820	0.1500	0.0234	0.4598	0.7356	2.0997

(Source: Author compiled, 2024)

The descriptive statistics provide valuable insights into the characteristics of the variables and Normality.

Sustainable Performance (SP):

A mean SP score of 0.3259 implies that, on average, public sector organizations in the Kurunegala district attain about 32.59 per cent of their potential sustainable performance. This implies moderate variability in organizations' performance.

Accounting Software Usability (ASU1):

The mean ASU1 score is 0.1820, with a standard deviation of 0.1500. This indicates that the overall usability of accounting software in public sector organizations is relatively low, with considerable variation among organizations.

Efficiency Index (EI):

With a mean of 0.7656, the efficiency index shows that software-assisted tasks are generally more efficient than manual tasks. The negative skewness (-0.7206) suggests that most organizations have high-efficiency scores.

Accuracy Index (AI):

The mean AI of 0.6753 indicates that software-generated records generally have fewer errors than manual records. However, the wide range (0.2192 to 1.0665) suggests significant variability in accuracy across organizations.

Ease of Use Index (EUI):

The mean EUI of 0.7002 suggests that most users find the accounting software user-friendly. The distribution is relatively symmetric (skewness -0.0895).

Reliability Index (RI):

With a mean of 0.6219, the reliability of the accounting software shows room for improvement. The negative skewness (-0.6958) indicates that some organizations experience higher reliability than others.

Data Quality Index (DQI):

The mean DQI of 0.6329 suggests moderate data quality across organizations. The positive skewness (0.4276) indicates that some organizations achieve higher data quality than others.

All variables exhibit normality, with skewness values between -2 and +2 and kurtosis values between -7 and +7, as recommended by Byrne (2010). This normality supports the use of parametric statistical techniques in subsequent analyses.

4.2 Multicollinearity**Table 4.2 : Multicollinearity**

Variable	VIF
AI	3.24
DQI	3.21
EUI	2.85
EI	2.12
RI	1.73
Mean VIF	2.63

(Source: Author compiled, 2024)

The VIF values for all variables are below the commonly used threshold of 10, with a mean VIF of 2.63. This indicates that multicollinearity is not a significant concern in the dataset, and the independent variables can be considered sufficiently distinct for reliable regression analysis.

4.3 Correlation

Correlation analysis examines the strength and direction of relationships between variables.

Table 4.3: *Correlation*

	SP	EI	AI	EUI	RI	DQI	ASU1
SP	1.0000						
EI	0.4257* (0.0000)	1.0000					
AI	0.7439* (0.0000)	0.4969* (0.0000)	1.0000				
EUI	0.6258* (0.0000)	0.7201* (0.0000)	0.6410* (0.0000)	1.0000			
RI	0.5875* (0.0000)	0.3315* (0.0000)	0.6053* (0.0000)	0.5101* (0.0000)	1.0000		
DQI	0.7327* (0.0000)	0.5090* (0.0000)	0.8054* (0.0000)	0.6364* (0.0000)	0.6004* (0.0000)	1.0000	
ASU1	0.8082* (0.0000)	0.6159* (0.0000)	0.8072* (0.0000)	0.7784* (0.0000)	0.7537* (0.0000)	0.8914* (0.0000)	1.0000

(Source: Author compiled, 2024)

All components of Accounting Software Usability (ASU) are positively sieved to Sustainable Performance (SP) from 0.4257 (EI) to 0.7439 (AI). Implications for software usability improvements in generating sustainable performance in public sector organizations are highlighted. The Data Quality Index (DQI) showed the highest correlation with SP ($r = 0.7327$), and the Accuracy Index (AI) ($r = 0.7439$) was very close. This shows how data quality and accuracy are valuable to sustainable performance. A robust positive correlation ($r = 0.8082$) exists between the overall Accounting Software Usability (ASU1) and SP, implying that organizations with higher overall software usage will have better sustainable performance.

The correlations among ASUs are positive, with coefficients between the values of 0.3315 and 0.8054. As a result, this implies that improvements in one part of the software usability do not usually exist without an improvement in other parts. The Data Quality Index (DQI) to the Accuracy Index (AI) ($r = 0.8054$) is the strongest correlation among parameters, which suggests there is a strong relationship between data quality and accuracy in accounting software. The Efficiency Index (EI) shows a moderate positive correlation with other ASU components (0.3315-0.7201) correlation with the Reliability Index; 0.3097-0.5335 correlation with Effort Index; 0.5558 correlations with One Dimension Index; 0.5335 correlations with Ease-of-use Index). This implies that more efficient and reliable software is easier to use, but the link is weaker than other components.

Other ASU components show moderate positive coefficients with Reliability Index, ranging from 0.3315 (with Efficiency Index) to 0.6053 (with Accuracy Index). More reliable software is more accurate and has better data quality, but the relationship to other components is not as strong. ASU components, including Efficiency Index

(EUI), Accuracy Index ($r = 0.6410$) and Ease of Use Index (EUI), exhibit strong positive correlations ($r = 0.7201$).

4.4 Regression Analysis

Panel Data Analysis:

The results of the random effects panel regression model are presented in the following table,

Table 4.4 : Panel Data Analysis

SP	Coefficient	Robust Std. Error	z	Prob.
EI	-0.1081	0.1270	-0.85	0.3950
AI	0.3505	0.1500	2.34	0.0190
EUI	0.4013	0.1397	2.87	0.0040
RI	0.1175	0.0959	1.22	0.2210
DQI	0.2566	0.1385	1.85	0.0640
_cons	-0.3445	0.0800	-4.31	0.0000
R2	0.6365			
Wald Chi Sq.	328.09			
Prob. > Chi Sq.	0.0000			
Observations	156			
Groups	39			

Notes: Significant level at 5%, Dependent Variable – Sustainable Performance (SP)

(Source: Author compiled, 2024)

The panel data analysis results provide valuable insights into the impact of Accounting Software Usability factors on the Sustainable Performance of Public Sectors in Ampara District. The R2 value of 0.6365 indicates that the independent variables in the model can explain approximately 63.65% of the variation in Sustainable Performance (SP). This suggests a moderately explanatory solid power of the model. The Wald Chi-Square statistic of 328.09 with a probability of 0.0000 indicates that the model is statistically significant at the 1% level.

Efficiency Index (EI) coefficient is -0.1081, but it is not statistically significant ($p = 0.3950$). This suggests that efficiency does not significantly impact Sustainable Performance in this context.

With an accuracy Index (AI) coefficient of 0.3505 and a p-value of 0.0190, AI has a positive and statistically significant impact on SP at the 5% level. This implies that increased accuracy in accounting software usage leads to improved sustainable performance.

Ease of Use Index (EUI) coefficient is 0.4013 with a p-value of 0.0040, indicating a positive and highly significant impact on SP at the 1% level. This suggests that easier- to-use accounting software contributes substantially to sustainable performance. Reliability Index (RI) coefficient is 0.1175, but it is not statistically significant ($p = 0.2210$). This implies that reliability does not significantly impact SP in this model. With a coefficient of 0.2566 and a p-value of 0.0640, the Data Quality Index (DQI) positively impacts SP and is marginally significant at the 10% level. This suggests that improved data quality tends to enhance sustainable performance.

The constant term ($_cons$) is -0.3445 and highly significant ($p = 0.0000$), indicating a baseline level of Sustainable Performance when all other variables are zero. The analysis reveals that Ease of Use and Accuracy are the most significant factors influencing Sustainable Performance, followed by Data Quality.

4.5 Hypothesis Testing

H1a: Efficiency has a significant positive impact on the Sustainable Performance of Public Sectors in Ampara District.

The coefficient for Efficiency (EI) is -0.1081 with a p-value of 0.3950. We fail to reject the null hypothesis because the p-value is more significant than 0.05. The negative coefficient suggests a potential inverse relationship but is not statistically significant. Therefore, H1a is not supported.

H1b: Reliability has a significant positive impact on the Sustainable Performance of Public Sectors in Ampara District.

The coefficient for Reliability (RI) is 0.1175 with a p-value of 0.2210. We fail to reject the null hypothesis because the p-value is more significant than 0.05. While the coefficient is positive, it is not statistically significant. Therefore, H1b is not supported.

H1c: Ease of Use significantly impacts the Sustainable Performance of Public Sectors in Ampara District.

Ease of Use (EUI) coefficient is 0.4013 with a p-value of 0.0040. As the p-value is less than 0.05, we reject the null hypothesis. The positive and statistically significant coefficient supports H1c.

H1d: Data Quality Significantly Impacts the Sustainable Performance of Public Sectors in Ampara District.

The coefficient for Data Quality (DQI) is 0.2566 with a p-value of 0.0640. We fail to reject the null hypothesis because the p-value is more significant than 0.05. While the coefficient is positive, it is not statistically significant. Therefore, H1d is not supported.

H1e: Accuracy has a significant positive impact on the Sustainable Performance of Public Sectors in Ampara District.

The coefficient for Accuracy (AI) is 0.3505 with a p-value of 0.0190. As the p-value is less than 0.05, we reject the null hypothesis. The positive and statistically significant coefficient supports H1e.

The results reveal a complex relationship between software usability and sustainable performance. Ease of Use emerged as the most significant factor influencing sustainable performance, with the largest positive coefficient (0.4013) and high statistical significance ($p = 0.0040$). This finding aligns with previous research by Davis (1989), who emphasized the importance of perceived ease of use in technology adoption and performance. In public sector organizations, user-friendly accounting software enhances sustainable performance. Accuracy also significantly impacted sustainable performance (coefficient = 0.3505, $p = 0.0190$). This result supports the findings of Redman (1998), who highlighted the importance of data accuracy in organizational performance. Accurate financial reporting in the public sector context is crucial for sustaining (economic) performance and social and political stability, on which the system's maintainability depends. Sustainable performance continued to be marginally positively impacted by Data Quality ($b = 0.2566$, $p = 0.0640$). The finding is consistent with Wang and Strong (1996) in that they stressed that high-quality data is essential for effective decision-making and efficient

operation. The result is not significant at the conventional 5% level but does suggest a possible positive relationship, which we find worthy of further investigation. Interestingly, in this study, efficiency and reliability were not found to have a statistically significant influence on sustainable performance. This contrasts with some research in the public sector, such as Hwang and Chang (2011), which found a positive relationship between efficiency and performance. Reliability is also important to service quality and performance, as expressed by Parasuraman et al. (2005). The lack of significant results for these variables in the current study may result in variables not captured in this model. In the analysis of the impact of Accounting Software Usability on Sustainable Performance in public sector organizations in the Ampara district, the hypotheses regarding Efficiency Index (EI), Reliability Index (RI), and Data Quality Index (DQI) did not yield statistically significant results.

The coefficient for EI was -0.1081 with a p-value of 0.3950. This indicates no statistically significant relationship between efficiency and sustainable performance. The unique operational environment in the Ampara district might mean that improvements in efficiency do not directly correlate with enhanced sustainable performance, possibly due to other overriding factors, such as stakeholder engagement and public accountability. The coefficient for RI was 0.1175 with a p-value of 0.2210, indicating a lack of statistical significance. The reliability index might not adequately capture the full spectrum of reliability issues, such as system downtime or user trust in the data, which could affect performance more significantly. The coefficient for DQI was 0.2566 with a p-value of 0.0640, indicating marginal significance but not meeting the conventional threshold of 0.05.

The relationship between data quality and performance may be more complex than a direct correlation. Other moderating factors, such as organizational culture or user training, might play critical roles in how data quality translates into performance outcomes. The lack of significant impact observed for Efficiency, Reliability, and Data Quality on Sustainable Performance suggests that these factors may not operate in isolation. The public sector context introduces various complexities that can obscure the relationships between these variables and sustainable performance. Future research could benefit from exploring these dimensions more deeply, possibly incorporating qualitative methods to capture the underlying factors influencing these relationships. Understanding these dynamics will be crucial for developing effective strategies to enhance sustainable performance through improved accounting software usability in public sector organizations.

05. CONCLUSION

The analysis revealed that factors such as Ease of Use and Accuracy significantly influence the sustainable performance of public sector organizations. Key findings indicate that improved usability of accounting software leads to enhanced user satisfaction and productivity, ultimately contributing to better financial management and resource allocation. The study found that organizations that prioritize user-friendly systems are more likely to achieve their sustainability goals, thereby addressing the critical need for effective accounting practices in the public sector. The descriptive analysis offered an overview of key variables related to SP and ASU. The average score for Sustainable Performance was 0.3259, indicating that organizations are achieving approximately 32.59% of their potential sustainable performance, with moderate variability across different entities. In contrast, the mean score for Accounting Software Usability was notably low at 0.1820, suggesting significant room for improvement in usability and considerable variation among organizations.

The Efficiency Index (EI) had a mean score of 0.7656, reflecting that software-assisted tasks are generally more efficient than manual processes. The negative skewness indicates that most organizations tend to have high efficiency scores. The Accuracy Index (AI) averaged 0.6753, indicating that software-generated records generally have fewer errors than manual records, although variability exists, ranging from 0.2192 to 1.0665.

In terms of user experience, the Ease of Use Index (EUI) scored 0.7002, suggesting that users generally find the accounting software user-friendly, with a relatively symmetric distribution.

The Reliability Index (RI) averaged 0.6219, indicating that while the reliability of the accounting software is acceptable, there is room for improvement; the negative skewness suggests that some organizations report higher reliability than others. Finally, the Data Quality Index (DQI) had a mean of 0.6329, indicating moderate data quality across organizations, with some achieving higher standards. Importantly, all variables exhibited normality, supporting the use of parametric statistical techniques for further analysis. The correlation analysis revealed several significant relationships between SP and various ASU components. A strong positive correlation of $r = 0.8082$ between overall ASU and SP indicates that organizations with better software usability achieve higher sustainable performance. Additionally, the Data Quality Index showed a high correlation of $r = 0.7327$ with SP, demonstrating that data quality is crucial for enhancing sustainable performance. The Accuracy Index also had a notable correlation of $r = 0.7439$, suggesting that accuracy in data significantly contributes to sustainable performance.

Furthermore, all ASU components exhibited positive correlations, with coefficients ranging from 0.3315 (Efficiency Index with Reliability Index) to 0.8054 (DQI with AI). This indicates that improvements in one area of usability tend to correlate with enhancements in others. However, the Efficiency Index displayed moderate correlations with other components, suggesting that while efficiency is important; its link to other usability facets is less robust. At lastly, the analyses underscore the vital role of accounting software usability in fostering sustainable performance within public sector organizations. Key factors influencing performance include ease of use and accuracy, while efficiency and reliability demonstrate moderate importance. The findings suggest that enhancing software usability can lead to significant improvements in organizational performance and decision-making processes.

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