

**Accounting Information System as a Means of Enhancing Financial  
Management in Educational Institutions: A Study on Sylhet Metropolitan  
City**

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### **Abstract**

The objective of this study is to evaluate how Accounting and Information Systems (AIS) enhance financial management practices in educational institutions. This project explores the role of AIS in enhancing the financial management practices of educational institutions. The study is descriptive in nature and employs a quantitative approach. Data were collected and analyzed to explore various factors associated with the performance of the accounting information system in these institutions. To this end, both primary and secondary data were utilized. This study is based on a sample of 60 employees working in different educational institutions within Sylhet Metropolitan City. Convenience sampling, a non-probability sampling method, was used to select the sample size. Collected data were reviewed and analyzed using SPSS 22. A semi-structured questionnaire with 11 variables was administered to collect data from respondents. Responses were measured on a 5 point Likert scale ranging from "strongly disagree" to "strongly agree." The study demonstrates the effectiveness of AIS implementation in optimizing financial processes within the institution. It also identifies integration opportunities within financial management to assess areas for improvement, evaluates challenges in the implementation and utilization of AIS, and reveals positive feedback from respondents. This study contributes to the existing body of knowledge by offering insights and recommendations that can inform future AIS implementation strategies in educational institutions. The ultimate aim of this paper is to improve financial decision-making processes and optimize resource allocation in educational institutions through the effective utilization of AIS.

**Keywords:** Accounting Information System, Financial Management, Financial Transparency, Transaction Processing System, General Ledger.

## **Introduction:**

Educational institutions face a multitude of financial challenges. Tight budgets, complex funding streams, and the need for clear reporting create significant pressure. Traditional manual accounting systems struggle to cope, leading to inefficiencies and inaccurate data. This lack of transparency can erode trust within the institution. Accounting and Information Systems (AIS) offer a crucial lifeline by automating tasks, improving data accuracy, generating insightful reports, and providing real-time financial data (AL-Qatanani, 2024). This research explores how AIS can empower educational institutions with improved financial efficiency, accuracy, transparency, and ultimately, more informed financial decisions. Effective financial management allows institutions to allocate resources efficiently to core functions like teaching, research, and student support services (ALMAGRO, 2023). Educational institutions often face limitations within their current financial systems. These limitations hinder resource allocation, data accuracy, timeliness, transparency, and accountability. Inefficient processes waste valuable resources, inaccurate data leads to poor decisions, and a lack of transparency erodes trust among stakeholders. This research explores the implementation of an Accounting Information System (AIS) to address these shortcomings. AIS can streamline processes, improve data accuracy, generate insightful reports, and provide real-time data, empowering educational institutions to achieve efficient, accurate, and transparent financial management (Indrayani, 2013).

Sound financial practices, including budgeting, cost control, and risk management, contribute to the long-term financial stability of the institution (Sunarta & Astuti, 2023). The significance of this study extends beyond the specific educational institution under investigation. If successful, the findings can serve as valuable criteria for other educational institutions facing similar financial management challenges. By outlining the potential benefits of AIS implementation, this research can pave the way for broader adoption within the educational sector, leading to improved financial well-being across the board. Implementing integrated system software is a promising approach to enhancing better financial decision-making (Granlund, 2007). This study aims to investigate the potential of implementing an Accounting Information System (AIS) at educational institutions.

The primary objective is to assess how AIS can enhance the college's financial management, ultimately providing a clear roadmap for educational institutions to leverage this technology and achieve a more efficient, accurate, and transparent financial management system. The specific objectives are:

- i) To evaluate and improve financial management processes.
- ii) To enhance efficiency, transparency, and accountability for audits and decision-making.

## **Literature Review:**

This research aims to explore opportunities for enhancing financial management within educational institutions through the effective use of Accounting Information Systems (AIS). Many educational institutions currently rely on manual accounting systems, which heavily depend on paper records and

manual calculations. This lack of a unified software platform leads to errors, inconsistencies, and inefficiencies. Manual processes hinder productivity, responsiveness, real-time access to insights, and effective trend tracking. (Louadi, 2009) states that robust AIS practices are essential for achieving transparency, accuracy, and efficiency in financial operations. This literature review explores the significance of financial transparency and Accounting Information Systems (AIS) for standardized financial audits in educational institutions. Integrated system software like AIS offers a promising approach to enhance the performance of the accounts department and facilitate better financial decision-making (Wall & Greiling, 2011). AIS automate tasks; reduce errors, and streamline processes, allowing for faster generation of financial reports (Okour, 2016). AIS provide real-time access to financial data, empowering managers to make informed decisions (Hunton, 2002). AIS facilitate standardized financial reporting, fostering trust with stakeholders like boards, donors, and parents (Ismail, 2009). Standardized financial data from AIS ensures smooth and efficient internal and external audits (Pistoni, Songini, & Bavagnoli, 2018). AIS are an indispensable tool for modern financial management by leveraging the power of technology; businesses can streamline their accounting processes, improve accuracy, and make informed decisions that drive growth and profitability (Akther, 2022). Financial transparency is a cornerstone of good governance in educational institutions. Clear and accessible financial statements allow stakeholders to understand the institution's financial health and resource allocation (Li et.al, 2023). This transparency fosters accountability and helps attract donors, partners, and talented faculty. Standardized financial reporting plays a vital role in ensuring efficient audits and assessing an institution's financial well-being (Saeidi, 2014). It allows internal reviewers and external auditors to quickly assess the educational institution's financial health. AIS serve as a central system for gathering, organizing, and communicating financial data. It utilizes various tools to automate accounting tasks and improve efficiency. This allows for faster generation of reports and identification of potential issues (Sayed, 2019). By implementing and effectively utilizing AIS, educational institutions can streamline their financial operations, improve efficiency, make data-driven decisions, and ultimately enhance their overall financial health (Sunarta & Astuti, 2023). Implementing a robust AIS and ensuring transparent financial reporting practices can significantly enhance an educational institution's financial management and future sustainability (Boateng, 2019). Well-designed AIS with proper controls safeguards the accuracy and security of financial data. By leveraging AIS effectively, educational institutions can achieve efficient, accurate, and transparent financial management. This research suggests educational institution to implement integrated AIS with its existing TPS and GLFRS systems to provide accurate financial data by proper financial management process.

### **Materials and Methods:**

This descriptive study was conducted from May 2024 to July 2024 in educational institutions. To achieve the research objectives, a mixed-methods approach was employed, combining quantitative and qualitative

data. Primary data was collected through a semi-structured questionnaire distributed to administrative employees at various educational institutions: Shahjalal University of Science and Technology, North East University Bangladesh, Sylhet Government College, Sylhet Cadet College, Modon Mohan College, Sylhet Government Pilot High School, Government Agrabami Girls High School and College. Data was collected through face-to-face interviews, with some questionnaires also completed via mail and email. A convenience sampling method was used, resulting in a sample size of 60 participants. Each participant completed a questionnaire with 11 questions related to the research area. Data was analyzed using the Statistical Package for the Social Sciences (SPSS) version 22. A 5-point Likert scale was used for responses, allowing respondents to choose the option that best aligned with their views. Frequency tables and descriptive statistics were employed to analyze the data and achieve the research objectives. Secondary data was collected from reputable journals, books, and reports to gain deeper insights into the research topic.

**Results and Discussion:**

**Table 1: Demographic Profile of the Respondents**

Variables		Frequency	Percentage
Gender	Male	31	91.2
	Female	3	8.8
	Total	34	100.0
Age	20-30 Years	8	23.4
	31-40 Years	20	58.8
	41-50 Years	5	14.6
	Above 50 Years	1	2.9
	Total	34	100.0
Level of Education	Undergraduate	4	11.8
	Graduate	19	55.9
	Postgraduate	11	32.4
	Total	34	100.0
Position in the Organization	Operational	8	23.6
	Executive	14	41.2
	Management	12	35.2
	Total	34	100
Experience	0-5 Years	11	32.4
	6-10 Years	12	35.2

	Above 10 Years	11	32.4
	Total	34	100.0

The Table 1 depict that majority of the participants were male (91.2 percent) and the rest of them were female (8.8 percent). The table also highlighted that the age of the most of the respondents was between 31-40 years (58.8 percent). 23.4 percent participants were for both aged between 20-30 years and only 2.97 percent participants above 40 years respectively.

The data show that the majority of the respondents have graduation level of degree (55.9 percent) and 32.4 percent of respondents have postgraduate degree. Only small portion of participants have undergraduate degree (11.8 percent).

The information also provides that most of the respondents work in the executive level (41.2 percent). 35.2 percent of respondents work in the Management level and only 23.6 percent of participants work in the Operational level.

The data also highlighted the majority of the respondents work tenure was 6-10 years (35.2 percent). The rest amount of the respondent's work tenure percent was 24.7 for each group of 0-5 years and above 10 years respectively.

The results of statement based analysis are shown below in Table 2.

**Table 2: Various Arithmetic Analyses**

		N		Mean	Median	Mode	Range	Std. Deviation	Min	Max
		Valid	Missing							
Q1	Current AIS offers moderate usability with potential for improved efficiency and user experience	60	0	4.32	4.00	4	2	0.535	3	5
Q2	AIS can improve the accuracy and timeliness of financial reporting, increasing transparency	60	0	4.41	4.50	5	4	0.783	1	5
Q3	Implementation of Transaction Processing System (TPS) will improve financial management with real-time processing, accurate tracking, and boosting efficiency and oversight.	60	0	4.41	4.00	4	2	0.557	3	5
Q4	The current system excels in	60	0	2.06	2.00	2	3	0.851	1	4

	financial recording, ensuring accuracy and reliability.									
Q5	Year-end financial statements furnish a comprehensive and timely overview for both internal and external audit processes.	60	0	4.24	4.00	5	3	0.855	2	5
Q6	Prompt transaction recording, timely adjustments, and reconciliation with AIS are crucial for maintaining accurate financial management	60	0	3.97	4.00	4	3	0.937	2	5
Q7	Integrated system benefits institution by streamlining payroll, tuition, budgeting, pensions, provident funds, and capital management.	60	0	4.50	4.50	4	1	0.508	4	5
Q8	Integrated software enhances account section performance, aiding better financial decisions	60	0	4.35	4.00	4	2	0.597	3	5
Q9	Combined training, upgrades, and process optimization improve accounting and employee performance.	60	0	4.26	4.00	4	4	0.828	1	5
Q10	General Ledger and Financial Reporting System (GLFRS) integrates accounting for comprehensive records and insightful reporting, driving informed decisions.	60	0	4.59	5.00	5	1	0.500	4	5
Q11	New system will improves efficiency and effectiveness over the current system	60	0	3.03	3.00	3	4	1.058	1	5

**In terms of statement 1**, the survey conducted in educational institutions suggests a strong potential for enhancing efficiency and user experience through improvements to the Accounting Information System (AIS). Data analysis reveals a positive skew in responses, indicating that a majority of respondents lean towards agreement on the potential benefits of such improvements.

**Statement 2** is supported by a high mean and median, exceeding the "neutral" category. Furthermore, an ideal standard deviation indicates a strong consensus among participants. These findings suggest that stakeholders in educational institutions recognize that AIS can improve the accuracy and timeliness of financial reporting, increasing transparency.

**Statement 3** in this survey of educational institutions revealed strong endorsement for the role of Transaction Processing Systems (TPS) in improving financial management. The high mean and median scores, exceeding the "neutral" category, coupled with an ideal standard deviation, indicate a strong consensus among respondents regarding the value of TPS in ensuring timely and accurate financial transactions. It also revealed that educational institutions expressed dissatisfaction with their current recording systems. This sentiment is supported by low mean and median scores, both falling below the "neutral" category, and a standard deviation indicating a spread of opinions with a bias towards negativity. These findings underscore the critical need for educational institutions to address the limitations of their current recording systems.

**Statement 4** demonstrates strong agreement among respondents regarding the importance of year-end financial statements. While the standard deviation is slightly higher at 0.855, indicating some variability in opinions, the high mean and median values, exceeding the neutral point, suggest overall acceptance of the statement's importance. This finding is further supported by the bar figure, which visually depicts a spread of responses while maintaining a clear trend towards strong agreement.

**Statement 5** indicates strong agreement among respondents on the importance of educational institutions promptly recording transactions, making timely adjustments, and reconciling these with the Accounting Information System (AIS) for accurate financial management. While the standard deviation is slightly higher at 0.937, suggesting some variability in opinions, the high mean and median values, exceeding the neutral point, support the overall acceptance of this statement.

**Statement 6** reveals a strong consensus among respondents in educational institutions regarding the value of a unified Accounting Information System (AIS). Both the mean and mode (50%) fell



within the "agreed" category, indicating a high level of endorsement for a combined platform. Furthermore, the low standard deviation of 0.508 suggests a consistent level of agreement among participants.

**Statement 7** indicates positive perceptions towards integrated AIS. However, it is important to note that the survey results are based on a relatively small sample size of 60 respondents. Further research with a larger sample size could provide a more comprehensive understanding of these perceptions.

**Statement 8** reveals strong agreement among respondents regarding the importance of timely decision-making for effective financial management. The mean and median scores are relatively similar, with a narrow range of 2 and a standard deviation of 0.597, indicating a high level of consensus among participants. Strategic short-term and long-term decision-making requires a clear reflection of the organization's financial condition and the necessary capacity to achieve predetermined goals. Therefore, timely decision-making is a crucial aspect of effective financial management, and Accounting Information Systems (AIS) can significantly facilitate this process.

**Statement 9** indicates strong agreement among respondents regarding the ability of Accounting Information Systems (AIS) to improve employee performance. By leveraging integrated software, institutions can efficiently produce financial statements, allocate budgets, and gain a clear view of operating expenditures and income, facilitating more precise decision-making. Furthermore, integrated AIS enables real-time data access and streamlines processes, reducing the need for separate manual recording tasks. This allows employees to expand their span of control and focus on more strategic aspects of their roles.

**Statement 10** reveals strong support for the effectiveness of the General Ledger and Financial Reporting System (GLFRS). Most of the respondents strongly agreed with the statement. The high mean and median scores, coupled with an ideal standard deviation of 0.500, indicate strong acceptance of the GLFRS system's performance. This high level of agreement across various factors such as reporting, auditing, balancing, user-friendliness, speed, and time-saving capabilities suggests that the GLFRS system effectively enhances the efficiency and effectiveness of financial management operations.

**Statement 11** revealed mixed opinions among educational institutions regarding the implementation of a new Accounting Information System (AIS). The high standard deviation and wide spread of responses suggest that these reservations may stem from concerns about the full

cost of AIS implementation, including initial setup, ongoing maintenance, and potential staff training needs. To make a well-informed decision, educational institutions should conduct a thorough cost-benefit analysis and a feasibility study to assess the potential return on investment and ensure alignment with institutional goals.

### **Conclusion:**

Educational institution's financial management needs an upgrade. Integrated software or customized solutions can automate tasks, enhance efficiency, and deliver real-time data for improved decision-making. This shift promises efficient, accurate, and transparent financial management. This research on AIS has the potential to be a game-changer for educational institutions, and potentially for the entire educational sector. By promoting efficiency, accuracy, data-driven decision-making, and transparency, AIS can empower institutions to make the most of their resources and achieve their educational goals. The statements in this research cover a range of observations and recommendations regarding the financial management system in educational institutions. A strong majority (over 50%) believe that implementing a comprehensive, integrated Accounting Information System (AIS) would significantly enhance their institution's financial management practices and transparency. This research suggests that educational institutions should consider integrating AIS with their existing Transaction Processing Systems (TPS) and General Ledger & Financial Reporting Systems (GLFRS) to create a comprehensive financial management solution for effective record-keeping, insightful reporting, and informed decision-making.

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