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The Impact of Information System Quality on the Organizational Effectiveness and the Financial Reporting Quality

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Abstract: The purpose of this research is to assess the contribution of information system quality to organizational effectiveness and financial reporting quality prepared by commercial banks in Bangladesh. For this purpose, a survey is conducted to gather information from 240 people by purposefully sampling method about their experiences in information system quality, the effectiveness of their organization, and the financial reporting quality using a five-point Likert scale, where 1 represents strongly disagreeing and 5 represents strongly agreeing. Respondents were chosen from major stakeholders who prepare financial reports, and design Information Systems to collect data on the reports and the users of reports so that the perfect reflection is ensured free from biases. To find the factors and check them with Cronbach's alpha, we create a Principal Component Analysis (PCA) with IBM SPSS Statistics 26. A Structure Equation Model (SEM) is developed as information system quality is selected as an exogenous variable, organizational effectiveness, and financial reporting quality as an endogenous variable with IBM SPSS AMOS 22. Finally, the Average Variance Expected (AVE) to test convergent validity, Maximum Shared Variance (MSV) to test the discriminant validity and model validity is calculated for the selected information system SEM model. The research study observes that information system quality should have a significant contribution to organizational effectiveness. Also, the quality of information systems should make a significant contribution to the quality of financial reporting in Bangladesh. So, the commercial bank's authority may pay attention to creating a quality full information system, which may contribute to making the organization effective. Also, the research findings may be utilized in strategy formation and policymaking in the improvement of quality information systems to prepare the financial report for effective decision-making in commercial banks of Bangladesh.

Keywords: Impact, Quality, Effectiveness, Information, Financial Report

Introduction

The purpose of financial reporting in the business sector is to disseminate useful financial data for the purpose of making choices about investments, credit, and other business-related matters. The financial statements that fall under this category include the income statement, balance sheet, cash flow statement, equity reports, and any notes that may accompany these documents. Accounting for a business's assets, liabilities, income, and expenses, as well as its operational performance and cash flow, is what's known as financial reporting. Companies often include this in their yearly reports. Consequently, investors must exercise great care to make a well-informed investment decision. Knowing where the company is at the moment is just as crucial as knowing where it's going in the future for the organization. So, it's important that the report be standard enough to help the company and investors make the right decisions. Formal records of a business's financial dealings and activities are

made public through financial reporting. These reports should be easy to understand and utilize since they are designed to meet specific criteria or have certain features. A few things to keep an eye out for are Comparability, understandability, reliability, and relevance. Manual procedures inherently have their limitations. These include, but are not limited to, the following: The likelihood of error, the length of time required to prepare the reports, the inability to deliver timely and high-quality service, the reports' reliability, their reusability, and the interruption of their communication with regulatory authorities. Both accounting procedures and the economic environment have been profoundly affected by the advent of new forms of information technology.

Background of the Study

Formal records of a business's financial dealings and activities are made public through financial reporting. These reports should be easy to understand and utilize since they are designed to meet specific criteria or have certain features. Some of the features include being relevant, understandable, reliable, and comparable. Manual procedures inherently have their limitations. These include, but are not limited to, the following: The likelihood of error, the length of time required to prepare the reports, the inability to deliver timely and high-quality service, the reports' reliability, their reusability, and the interruption of their communication with regulatory authorities. Both accounting procedures and the economic environment have been profoundly affected by the IT revolution. A rise in the use of computers and other digital technology has occurred. Accounting systems that were formerly carried out manually can now be carried out with the assistance of computerized systems. As a result of advancements in the field of Information Technology, the usage of accounting processes has become more convenient. Enhanced use of Information Technology (IT) around the world has increased office productivity by allowing for the quick interchange of documents, research, cooperation with far-flung colleagues, and the collecting and analysis of information. AIS made the process of preparing and releasing financial statements easier and less stressful by making it more efficient.

Statement of the Problem

Publication of the official records of a business's financial transactions is known as financial reporting. These days, banks use IT to manage all of their services and meet all of their criteria. The banking sector uses IT for everything from managing foreign exchange to keeping track of everyday transactions. Concerning the safety of their investments, stakeholders want to hear assurances about the report's candor. We have attempted to use IT to improve the dependability of the reports by solving the challenges caused by manual data processing, which causes stakeholders to doubt the findings. The characteristics of the standard FR, which includes the balance sheet, income statement, retained profits, etc., are the primary focus of the stakeholders. These matters provide important insight into the commercial side of the banks, which is vital for the stakeholders. The study's overarching goal is to learn how AIS can help stakeholders understand and trust these problems. The presence of qualities such as understandability, relevance, timeliness, completeness, reliability, and variability elevates financial reporting to a quality level. We will determine if AIS is the best solution for all of these aspects.

Objective of the Study

The objective of the study is to determine (i) The impact of information system quality on organizational effectiveness and (ii) The impact of information system quality on financial reporting quality.

Previous Studies on IT and Reporting Quality

The researcher went through about 200 relevant research works as a literature review. Out of those, the following important reviews are presented.

Owojori (2009) highlighted the positive effects of information Systems on the efficiency and competition in Nigerian financial institutions. He found that because of more competition and innovation, the use of productive resources has become much more efficient thanks to recent advances in information communication and technology. Several factors, including convenience, the elimination of intermediaries, the ability to access remote and faraway areas for new business opportunities, increased speed of financial activities, and overall efficiency, have contributed to substantial cost savings for Nigerian financial institutions as a result of these developments. With a focus on businesses located in the Al Hassan Qualified Industrial Zone (QIZ), Alzoubi (2011) focuses on the efficacy of accounting information systems within the framework of ERP systems. The purpose of this study was to examine the effects on accounting output quality and internal control mechanisms of integrating accounting information systems into enterprise Resource Planning (ERP) frameworks. Ghasemi *et al*. (2011) study from the same year confirmed that Information System has an impact on modern accounting systems, allowing businesses to generate individualized reports for organizational decision-making with ease and speed. Additionally, the research emphasized that computerized accounting systems provide better external reporting, faster processing, more accurate data, and more functionality. At the end of the piece, we looked at the pros and cons of using IS in accounting systems. Computerized accounting

has changed the way industrial companies like Uganda Breweries Limited disclose their finances, according to Kasozi (2014). Information systems provide for the simple posting of transactions in the ledger and minimize mistakes, according to 67.7% of respondents. In their study, Salehi and Elahe (2012) looked at the Iranian scenario to see how IS affected the accuracy of financial reports. They created a survey and used T-evaluate, ANOVA, and Duncan's Test to check their hypotheses. The findings proved that accounting data is more relevant, reliable, and comparable when processed using IT. The use of the Information system improves the quality, usefulness, and accuracy of financial reports produced by Nigerian deposit money banks, as shown by Imeokparia (2013). Also, she proved that the Information system doesn't stand in the way of following global financial reporting requirements. The following year, Bakri (2016) investigated how Information systems and company culture impacted accounting software's overall quality. The purpose of this study was to investigate how Information systems and company culture affect accounting information system adoption, which in turn affects financial statement quality and transaction processing times. However, research on private enterprises' investment efficiency and Financial Reporting Quality (FRQ) in developing countries was carried out by Chen *et al*. (2011). According to their findings, FRQ is typically lower in nations where investor protection is lacking, where financial systems are heavily influenced by banks, and where tax and financial reporting regulations are very uniform. They found empirical evidence that FRQ has a beneficial effect on investment efficiency using data from the World Bank. According to their findings, the correlation between FRQ and investment efficiency is stronger when funding is provided by banks, but it becomes weaker when earnings are reduced by tax incentives. Profits have an instructive role, and there is a correlation between tax-minimization incentives and this, according to the research. Chen and colleagues bolstered their arguments by providing specific evidence to substantiate this link. Accounting information technology is vital for the Nigerian banking industry, according to Dandago and Rufai (2014) report on IS and accounting information systems in the country. Based on their findings, it is crucial for Nigerian banks to improve operational efficiency and customer service by simplifying complicated issues and enabling the distribution of high-quality information to clients. Then, Darmansyah and Fitrijanti (2022) found that CBAIS greatly improves accounting information quality and management performance in Indonesia's sugar business. Managerial performance in the sugar business is also greatly enhanced by this higher-quality accounting information. In addition, Bamidele (2013) discovered a favorable correlation between ICT and bank profitability in Nigeria in their 2013 study on the impacts of ICT on the expansion and improvement of banking operations in the nation. Ismail (2007) conducted yet another study on the topic of management accounting systems' mediating roles and their performance through the use of Information systems. He discovered that the capacity of Management Accounting Systems (MAS) is affected by the complexity of Information systems, which in turn impacts the performance of businesses. In essence, MAS's capacity acts as a go-between for the connection between Information systems sophistication and business performance. The results imply that companies that put money into cutting-edge Information systems have a greater chance of producing useful management accounting data, which in turn boosts their performance. Using the Resource-Based View (RBV) as a framework, Ringim *et al*. (2015) discovered a strong correlation between the Information systems competence and organizational performance in Nigerian banks. The study provides valuable insights for managers and academics in Nigeria, highlighting the influence of information technology capacity on enhancing organizational performance. After a year, Kermani *et al*. (2016) evaluated the effectiveness of computer audit systems on audit quality. They found that auditing software is less effective for small enterprises but significantly improves audit quality and reduces costs for medium and large companies. During this year, another study evaluated the Usage of Computerized Accounting Information Systems at Development Fund Organizations in Zimbabwe by Yose and Choga identified the benefits of computerized accounting information systems. According to their research, these solutions enhanced the presentation of financial reports by reducing operational expenses, saving time, and reducing mistakes. Klovienė and Gimzauskienė (2015) performed a case study that pinpointed the impact of Information systems on the consistency of accounting systems in a corporate setting. Despite the fact that accounting systems do not give decision-makers actionable insights, they proved that Information systems can be a powerful instrument for bringing systems into harmony with organizations' operational needs. At this point in time, Murungi and Kayigamba (2015) investigated how the Rwandan Ministry of Local Government's use of computerized accounting systems affected financial reporting. The majority of those who took the survey agreed that using both cash and accrual-based systems increases openness and accountability. Moorthy *et al*. (2012) investigated the factors that influence the choice to implement Information systems in management accounting. They looked at how management accounting and Information systems work together. According to earlier research, Information systems have the potential to improve management accounting by streamlining computing processes and

offering more visually appealing alternatives to business data. This, in turn, may lead to more informed decision-making. The research also shows that accounting departments may be more productive with the use of Information systems as they provide results that are easy to understand, quick to process, and accurate. However, IT can also have a major impact on expenses because of Information systems workers, software, and hardware. Accountants, according to the survey, should focus on this area in particular. Saeidi (2014) performed a case study of TATA Consultancy Services (TCS) in India in 2014 to see how accounting information systems affected financial performance.

He highlighted the critical role of accounting information systems in any business. These systems provide essential information to managers at various levels within the organization, aiding in planning, resource control, performance assessment, and decision-making, thereby enabling them to perform their tasks effectively and efficiently. Later on, Moujood Mohamed (2015) analyzed the impact of computerized accounting systems on financial reporting among SMEs in Sri Lanka. The study concluded that these systems create accurate and timely financial reports, aiding business decisions. Long, Yose, and Choga (2016) identified that computerized accounting information systems reduce errors, save time, and lower operating costs in Zimbabwean development fund organizations, resulting in improved financial report presentation. To determine the computerized accounting System in Listed Banks on the Ghana Stock Exchange, Sekyere *et al*. (2017) discovered that expertise in computerized accounting positively impacts the quality and accuracy of financial reports in Ghanaian banks.

Research GAP**:** There is a vast array of scientific, commercial, and social domains that have found uses for information technology. The literature on accounting information systems, its uses, and its advantages is extensive, as can be seen from the reviews provided above. Information technology has organized these mundane and administrative tasks. Preparing and disseminating financial reports to stakeholders is a critical and strategic duty of banks. In order to make choices, those who have a stake in the financial reporting of Bangladeshi commercial banks need data that is quick, accurate, detailed, and easy to communicate. There is a lack of research on the part played by IS in the financial report preparation process by commercial banks. Thus, a knowledge vacuum exists. AIS is a special Information System for dealing with financial reports hence organizations like banks where financial reports are vital to make decisions are considered. The major challenge for Bangladeshi Banks is the true reflection of financial status in the financial reports. So if the reports are produced manually rather than automated they would not be free from bias. This area and topic were selected for the researcher's study activity in order to fill a research gap.

Hypothesis

Hypothesis 1: Null Hypothesis H_0: There is no impact of information system quality on organizational effectiveness.

Alternative Hypothesis H_1: There is an impact of information system quality on organizational effectiveness.

Hypothesis 2: Null Hypothesis H_0: There is no impact of information system quality on financial reporting quality hence the effectiveness.

Alternative Hypothesis H_1: There is an impact of information system quality on financial reporting quality hence the effectiveness.

Materials and Methods

In the study, information system quality, organizational effectiveness, and financial reporting quality are identified from literature review and experience of authors, which are measured as follows: (1) Information system quality is measured by (a) Information System (IS) accurately reflects the financial status of our organization (b) Information system is provided in a timely manner for decision-making (c) I feel confident in the security and integrity of data within the IS (d) Information from the IS is convenient and user-friendly and (e) Our IS complies with relevant accounting and regulatory standards. (2) Organizational effectiveness is measured by (a) IS is cost-effective in terms of the benefits it provides (b) IS seamlessly integrates with other organizational systems (c) IS significantly contributes to effective decision-making in our organization (d) IS can adapt well to changes in our organizational environment and (e) Our organization regularly innovates and upgrades the IS to meet changing needs. (3) To determine financial reporting quality, one must ensure that: (a) All of the bank's financial reports are created to a high standard; (b) All income statement components are filled out; (c) All balance sheet requirements are met; (d) The cash flow statement indicates that everything is well-defined; and (e) The statement of retained earnings is provided in a satisfactory manner. In closed-ended surveys, all of the aforementioned answer values are quantified using a five-point Likert scale, where 1 represents a strong disagreement and 5 represents a strong agreement. Prior to administering the survey, it was pilot-tested with ten experienced respondents drawn from diverse backgrounds. Based on their feedback, any required adjustments were implemented. Following the screening and cleaning process, 240 respondents from Chattogram City, Bangladesh were chosen by purposefully sampling method for the survey based on their opinions. They were contacted via E-mail, WhatsApp, and hand-to-hand methods. This selection was based on the received

opinion data, as some respondents gave the same rank to multiple questions or did not answer many questions. The analysis assumes uniform AIS impact across organizations, neglecting potential variations based on organizational characteristics. Data from the surveys that were ultimately chosen are entered into the following programs: MS Excel 2016, IBM SPSS Statistics 26, and IBM SPSS AMOS 22. From the survey data, we derive the descriptive analysis values for each answer variable. The data from the survey's response variables are then tested for normalcy using the Shapiro-Wilk and Kolmogorov-Smirnov tests. As the normality test result shows, data are not normally distributed and as a result, parametric tests (ANOVA, regression, correlation, etc.) are not suitable. So, the factor analysis and structure equation model are most suitable for the analysis. In order to categorize all of the response variables into three groups—"information system quality," "organizational effectiveness," and "financial reporting quality"— we use factor analysis in principal component analysis (PCA) method with Cronbach's Alpha values for each factor and the Kaiser-Meyer-Olkin measure for sampling adequacy. After all the parameters have been finalized, the information system model is depicted in a structure equation model (SEM), shown in Fig. (1), with information system quality as the exogenous variable and organization effectiveness and financial reporting quality as the endogenous variables.

The confirmatory factor analysis (CFA) is developed to identify factors and validate with Cronbach's alpha value.

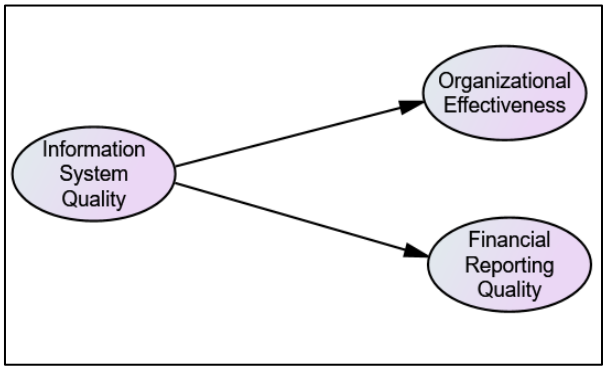

Fig. 1: Information System conceptual model

Finally, the Average Variance Expected (AVE) test convergent validity, maximum shared variance (MSV) to test the discriminant validity and model validity is calculated for the selected information system model. After finalizing the information system Structure Equation Model (SEM) for the answers of different clusters of respondents, the hypothesis is tested in the study.

Results

Descriptive Statistics of Respondents

The descriptive statistics and normality test of the respondent values for information system quality, organizational effectiveness, and financial reporting quality are shown in Table (1).

Table 1: Descriptive statistics and normality test result

Sl. No.	Questionnaire	Variable name	N	Min	Max	Kolmogorov–smirnov test (Sig)	Shapiro–wilk test (Sig)	Median
1.	Information system quality							
1(a)	Information system (IS) accurately reflects the financial status of our organization	ISQuality1	240	1	5	0.248 (0.000)	0.882 (0.000)	3
1(b)	Information system is provided in a timely manner for decision-making	ISQuality2	240	2	5	0.244 (0.000)	0.874 (0.000)	3
1(c)	I feel confident in the security and integrity of data within the IS	ISQuality3	240	1	5	0.239 (0.000)	0.888 (0.000)	3
1(d)	Information from the IS is convenient and user-friendly	ISQuality4	240	2	5	0.256 (0.000)	0.871 (0.000)	3
1(e)	Our IS complies with relevant accounting and regulatory standards	ISQuality5	240	2	5	0.235 (0.000)	0.877 (0.000)	3
2.	Organizational Effectiveness							
2(a)	IS is cost-effective in terms of the benefits it provides	OEffective1	240	1	5	0.380 (0.000)	0.665 (0.000)	5
2(b)	IS seamlessly integrates with other organizational systems	OEffective2	240	3	5	0.378 (0.000)	0.689 (0.000)	5
2(c)	IS significantly contributes to effective decision-making in our organization	OEffective3	240	1	5	0.373 (0.000)	0.672 (0.000)	5

Sl. No.	Questionnaire	Variable name	N	Min	Max	Kolmogorov–smirnov test (Sig)	Shapiro–wilk test (Sig)	Median
2(d)	IS can adapt well to changes in our organizational environment	OEffective4	240	3	5	0.363 (0.000)	0.707 (0.000)	5
2(e)	Our organization regularly innovates and upgrades the IS to meet changing needs	OEffective5	240	1	5	0.365 (0.000)	0.689 (0.000)	5
3.	Financial reporting quality							
3(a)	Create all the financial reports qualities of the bank	FRQuality1	240	2	5	0.253 (0.000)	0.806 (0.000)	4
3(b)	Fulfillment with all the components of income statements	FRQuality2	240	2	5	0.292 (0.000)	0.762 (0.000)	4
3(c)	Provided with all the necessary requirements of balance sheets	FRQuality3	240	2	5	0.246 (0.000)	0.815 (0.000)	4
3(d)	The indication of the cash flow statement is well-defined	FRQuality4	240	2	5	0.280 (0.000)	0.791 (0.000)	4
3(e)	Statement of retained earnings has been furnished quality fully	FRQuality5	240	2	5	0.296 (0.000)	0.769 (0.000)	4

Table 2: Results of the convergent validity, factor analysis, and Cronbach's alpha tests

Rotated Component Matrix[a]							
	Component			Variable	Cronbach's	Convergent Validity	Square Root of
	1	2	3	Name	Alpha	(AVE)	AVE
ISQuality1	0.959			Information system quality	0.960	0.829	0.911
ISQuality5	0.913						
ISQuality2	0.912						
ISQuality4	0.900						
ISQuality3	0.887						
FRQuality2		0.936		Financial reporting quality	0.923	0.700	0.837
FRQuality5		0.901					
FRQuality4		0.887					
FRQuality1		0.831					
FRQuality3		0.776					
OEffective5			0.906	Organizational effectiveness	0.919	0.698	0.836
OEffective1			0.892				
OEffective3			0.886				
OEffective2			0.838				
OEffective4			0.818				

Extraction method: Principal component analysis
Rotation method: Varimax with Kaiser normalization
a. Rotation converged in 5 iterations

Information system quality, organizational effectiveness, and financial reporting quality are all measured on a five-point Likert scale with 1–2 being the minimum values for each answer variable. All of the response variables can take on a maximum value of 5. At the 0.000 level of significance, the Kolmogorov-Smirnov and Shapiro-Wilk test statistics for information system quality range from 0.235-0.256 and 0.871-0.888, for organizational effectiveness from 0.363-0.380 and 0.665 -0.707, and for financial reporting quality from 0.246-0.296 and 0.762-0.815, respectively. Therefore, the non-parametric test takes the median values into account for mean rank comparison when the survey answer values do not follow a normal distribution. Financial reporting quality is 4, organizational effectiveness is 5, and information system quality is 3, according to the median values.

Factor Analysis

A value of 0.881 (p = 0.000) for the Kaiser-Meyer-Olkin Measure of Sampling Adequacy was found in the factor analysis. Consequently, we may use factor analysis to break down the survey's answer values into their component parts (Table 2).

The survey results are divided into three categories based on the factor loadings shown in the factor analysis table. These categories are information system quality (0.887-0.959), financial reporting quality (0.776-0.936), and organization effectiveness (0.818-0.906). Here, all

factor loadings are over 0.400, suggesting that all factor measurements are very reliable.

With Cronbach's Alpha values greater than 0.7, the information system quality variable has a value of 0.960, the financial reporting quality variable has a value of 0.923, and the organizational effectiveness variable has a value of 0.919. Indicating the highest levels of reliability, validity, and consistency in the survey answer variables.

Now from the above factor analysis, the factor variables are defined by (1) Information system quality is identified as (a) Information System (IS) accurately reflects the financial status of our organization (ISQuality1), (b) Information system is provided in a timely manner for decision-making (ISQuality2), (c) I feel confident in the security and integrity of data within the IS (ISQuality3), (d) Information from the IS is convenient and user-friendly (ISQuality4) and (e) Our IS complies with relevant accounting and regulatory standards (ISQuality5). (2) Organizational effectiveness is identified as (a) IS is cost-effective in terms of the benefits it provides (OEffective1), (b) IS seamlessly integrates with other organizational systems (OEffective2), (c) IS significantly contributes to effective decision-making in our organization (OEffective3), (d) IS can adapt well to changes in our organizational environment (OEffective4) and (e) Our organization regularly innovates and upgrades the IS to meet changing needs (OEffective5). (3) Financial reporting quality is identified as (a) Creating all the financial report quality of the bank (FRQuality1), (b) Fulfillment with all the components of income statements (FRQuality2), (c) Providing all the necessary requirements of balance sheets (FRQuality3), (d) Indication of cash flow statement is well defined (FRQuality4) and (e) Statement of retained earnings has been furnished quality fully (FRQuality5).

Based on the above factor analysis result, a structural equation model of information system quality is selected as an exogenous variable, and organizational effectiveness and financial reporting quality as an endogenous variable in the information system model is developed (Fig. 2).

The standardized regression weights for information system quality, organizational effectiveness, and financial reporting quality range from 0.60 to 1.01 (almost -1 to 1), 0.75 to 0.90, and 0.87 to 0.99, respectively, according to the information system structural equation model. All of the factor loadings are exceptionally high and have a statistically significant impact in this scenario ($p<0.05$). In the model, the significant covariance values between e11 and e13 are 0.85 ($p<0.05$).

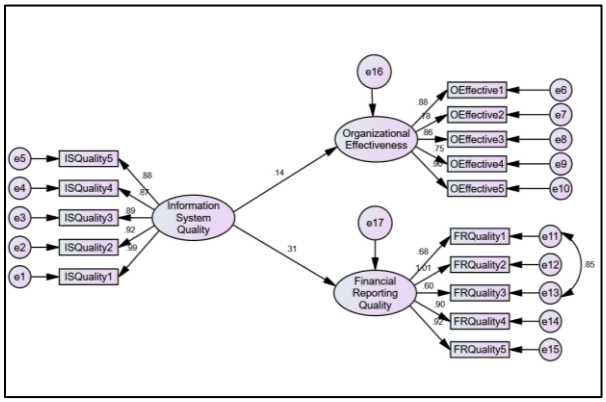

Fig. 2: Information system structure equation model

The chosen information system model has the following index values: $\chi 2/df$ is 1.631 (<3), GFI is 0.927 (>0.09), CFI is 0.986 (>0.9), IFI is 0.986 (>0.9), TLI is 0.983 (>0.9), NFI is 0.964 (>0.9), RFI is 0.957 (>0.9), and RMSI is 0.051 (<0.08). Because the model index values meet all of the survey's standard standards, we can say that the information system model we chose is right.

According to Table (2), the information system quality, organizational effectiveness, and financial reporting quality all had Average Variance Expected (AVE) values of 0.829, 0.698, and 0.700, respectively, when testing convergent validity. Here, every AVE value is higher than 0.5, meaning the model has reached convergent validity. The next step is to determine the discriminant validity by calculating the Maximum Shared Variance (MSV) (Table 3).

The maximum shared variance (MSV) of information system quality and organizational effectiveness is 0.138, which is smaller than the square root of AVE for information system quality (0.911) and organizational effectiveness (0.836), as shown in Table (3), which means that the discriminant validity test is positive. Table (3) shows that the Maximum Shared Variance (MSV) of financial reporting quality (0.837) and information system quality (0.911) is 0.309, which is lower than the square root of the Average Variance (AVE) for both variables. Achieving discriminant validity was therefore accomplished by the chosen model.

Information system quality and organizational effectiveness have a regression weight (path coefficient) of 0.082 ($p = 0.04$), while financial reporting quality and information system quality have a regression weight (path coefficient) of 0.165 ($p = 0.000$).

Table 3: Discriminant validity and path coefficient result

Correlation			Estimate MSV	Regression Path Co-efficient			Estimate	P
ISQuality	<-->	OEffective	0.138	OEffective	<---	ISQuality	0.082	0.04
ISQuality	<-->	FRQuality	0.309	FRQuality	<---	ISQuality	0.165	***

Discussion

In the information system structure equation model (Table 1), the regression weight (path coefficient) for information system quality to organizational effectiveness is 0.082 (p = 0.040). So, the information system quality has a significant positive contribution to organizational effectiveness (as the p-value is less than 0.05) practice. So, the null hypothesis 1 is rejected for information system quality to organizational effectiveness. As a result, information system quality has a significant contribution to organizational effectiveness. So, an excellent quality information system with relevant computer software may create more effective decision-making in commercial banks.

Relative to financial reporting quality, the information system structure equation model (Table 1), has a regression weight (path coefficient) of 0.165 (p = 0.000) for information system quality. Therefore, there is a positive correlation between high-quality information systems and reliable financial reporting (p-value <0.05). Therefore, regarding the impact of information system quality on financial reporting quality, we reject the null hypothesis 2. Consequently, the quality of financial reporting is significantly impacted by the quality of information systems. So, an excellent quality information system with relevant computer software also creates quality financial reports in commercial banks and financial institutions. In the previous studies only, the impact of information system was evaluated rather AIS, but this study reveals the impact of AIS so the results brought a revolutionary change in the field of decision-making process. So, the bank and financial institution authority should take the initiative for appropriate information system policy to create quality financial reports, which helps in decision-making effectively.

Conclusion

A study was conducted the determine the impact of information system quality on organizational effectiveness and financial reporting quality. The study result shows that organizational effectiveness and preparing quality financial reports are significantly dependent on the information system quality. So, an excellent quality information system with relevant computer software may prepare the financial reporting quality, which may be helpful in making decisions effectively in commercial banks. The research findings may be utilized in strategy formation and policymaking in the improvement of quality information systems to prepare the financial report for making effective decisions in commercial banks and financial institutions of Bangladesh.

Limitation and Future Research Direction

The study is conducted only in the Chittagong district, as no fund is allocated for the research study. So, a further research study may be conducted for the whole of Bangladesh, which may provide applicability to the country. This study is limited to the preparation of the Financial reports by the commercial Banks. The future research opportunity is unexplored for other companies. Another limitation was that the capacity of AIS is considered but in recent times Artificial Intelligence is also used for dealing with such topics which can be undertaken in future research.

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Author's Contributions

A. B. M. Yasir Arafat: Developed the concept and theoretical frame-work.

Sultana Akter: Worked with literature review and analysis.

Mohammad Jonaed Kabir: Developed the hypothesizes and did necessary analysis to proof those.

Maruful Islam: Contributed in summarizing the findings and recommendations.

Md. Shahidul Islam: Took responsibility to coordinate to keep the paper coherent.

Md. Shahnur Azad Chowdhury: Worked on English command and grammatical correction.

Ethics

All ethical issues are addressed and there is no conflict of interest among the authors.

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