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# Does the Accounting Information Systems (AIS) Influence the Economy?

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ARTICLE INFO

*Article history*

Received: 10 June 2021

Accepted: 14 July 2021

Published Online: 23 July 2021

*Keywords:*

Application of AIS

Benefits of AIS

Chi-square

ANOVA

Developing economy

ABSTRACT

The purpose of this study is to look at the impact of accounting information systems on the economy. The study has been directed based on the analytical and theoretical. It observed a total of 500 respondents. To run the research and to get informative results, this paper used primary data. It uses the Chi square test, ANOVA tests, and Multinomial Logistic tests for analyzing the results. It calculates the data with the help of IBM statistical packages for social science (SPSS). This paper assumes that AIS is beneficial for Bangladeshi organizations, which contributes to the economic development of Bangladesh. However, it finally shows that this system has a gap between what accounting information systems are & what should be. This paper suggests that an organization may get potential benefits through the implementation of AIS in Bangladesh. It also will be benefited stakeholders from implying it. The paper conducts based on the listed financial organizations of Bangladesh. This is the main limitation of this study. It is the first work in Bangladesh based on my knowledge. It provides accurate information to all stakeholders that help them to the right decision. It will also help to improve the economic development of Bangladesh.

## 1. Introduction

AIS is a system for collecting, recording, storing, & processing data to generate information for decision-making purposes. Good financial statement by the AIS process by the applicable reporting standards<sup>[1]</sup>. Accounting information helps outside companies to make the right investments performance appraisal, monitor activity, and control<sup>[16]</sup>. An AIS is a system that processes data to provide users with information to plan, manage, & manage their business<sup>[19]</sup>. The drive of the AIS delivers information to external parties<sup>[19]</sup>. The AIS collects the raw data, then processes it, and then presents the data to

the users in the form of useful accounting information<sup>[28]</sup>. In past, accounting information system emphasizes on the recording, summarizing, and validating of financial transactions data. These functions are associated with managerial accounting, financial accounting, & tax compliance issues<sup>[12]</sup>. An AIS is a set of subsystems that effort together to process the financial information needed by management in interrelated and financial decision-making processes<sup>[38]</sup>. Committed is a contract that is free, visible, and expected by all parties. The people work effectively to attain organizational objectives so that the organization is responsible for the government leaders of the organization in terms of its resources, resources,

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leadership, and control. Management must work through others to achieve goals, where leaders cannot implement the whole strategy of the organization by working alone. Commitment is such a situation where an individual party wants to maintain the organization and the objectives within the organization<sup>[19]</sup>. Management commitment is the confidence and strong support of management to work together to formulate, implement, and implement a policy so that it can achieve the goal<sup>[19]</sup>.

Management information can provide to assist in making decisions regarding the effectiveness of the AIS<sup>[12]</sup>. AIS can assess as an added value to the benefit<sup>[9]</sup>. AIS has effectiveness as a measure of success in achieving established goals<sup>[2]</sup>. Choe states that successful implementation of AIS is not easy to achieve and often creates problems because it is affected by many factors, among others: (I) join users; (II) leadership support; (III) user training and education; (IV) the working groups of the group within the organization, & (V) other organizational factors such as responsibilities, size of the organization, characteristic, & others<sup>[8]</sup>.

Bangladesh is an emerging economic country. The progress of the economy increases day by day. Bangladesh is an overpopulated country where labor remuneration cost is lower from the developing and developed countries. Many developing and developed countries invested in Bangladesh for cheap labor costs that reduce production costs. For investing, investors want to know well transparency for financial statements of companies and organizations. To make the right financial statements, it needs an accurate accounting system.

We identify a research gap that helps to make correct financial statements. This study helps all stakeholders through the right information. This study design research questions that are following:

- (1) Does accounting information systems increase organizational accounting and financial performance?
- (2) Does the quality of AIS influence management commitment?
- (3) Does the quality of AIS influence user competence?
- (4) Does accounting information software improves accounting standards?

To get responses to these questions, this study designs a questionnaire. After collecting respondents' responses, this study analyzed this response through 3 popular methods Chi-square tests, ANOVA tests, and Multinomial logistic tests. The purpose of this study is to look at the impact of accounting information systems on the economy.

This study shows that AIS is beneficial for Bangladeshi organizations. Which contributes to the economic

development of Bangladesh. However, it finally shows that this system has a gap between what accounting information systems are & what should be.

This paper suggests that an organization may get potential benefits through the implementation of AIS in Bangladesh. It also will be benefited stakeholders from implying it. The paper conducts based on listed financial organizations of Bangladesh. This is the main limitation of this study.

This study consists of ten following segments such as 2. Information Systems; 3. Accounting Information System; 4. Literature review & hypotheses development, 5. The benefit of Accounting Information Systems, 6. Quality of Accounting Information Systems, 7. Company Financial Performance, 8. Research Methodology, 9. Analysis and Result Discussion & Robustness Check, & finally, 10. Conclusion and policy implication.

## **2. Information Systems (IS)**

An information system is a system that collects information, storing, accessing, processing, managing, controlling & reporting information so that an organization can achieve its goals<sup>[33]</sup>. Technically an information system is a set of correlative components that take out, process, stock, and allot information for the purpose of decision making and control function of an organization. Besides helping in decision making, control and coordination activities, the information system provides its helping hand to find out complex issues and making new facilities for employees. An information system gathers information related to vital issues like people, places and other things of an organization<sup>[24]</sup>. The following elements include information systems.

### **2.1 Inputs**

Data are the collection of raw facts of events of an organization that are not organized before they are taken into processing stage. Only by the help of data we cannot make any type of decision whatever they are in controlling and productive<sup>[24]</sup>. Data must be gone into the IS to be readied. Information is the realities that are gathered and handled by the data framework. Data are meaningless & useless, which by the process transformed into a meaningful, organized, & useful form which is called information. There are various types of input devices. They are mouse, keyboard, joystick, light pen scanner, microphones, Magnetic Ink Character Reader Recognition (MICR), Optical Character Reader (OCR), optical mark reader (OMR), bar code reader, badge reader, digitizer, and touch screen<sup>[35]</sup>.

## 2.2 Processor

The data must process through a processor to create useful and meaningful information. Processor performing arithmetic functions (multiply, divide, add, subtract etc.) or logical operations (comparisons like less than, equal to, greater than, etc.) on data to convert them into useful information. CPU is thought as the cerebrum or brain of the computer. It performs all types of data processing tasks. It stocks data, interim results, and instructions (program). It checks the operation of all parts of the computer. ALU (Arithmetic Logic Unit), Memory Unit, Control Unit are the parts of the central processing unit (CPU)<sup>1</sup>.

## 2.3 Output

Output disposes the refined or processed data to the people or organization who will use it. Because raw data cannot be used for decision making and controlling functions<sup>[24]</sup>. It is meaningful data that we get after processing the raw data. Output devices include all the hardware that transmit fact, knowledge, or information from the computer's CPU to the computer user. There are various output devices such as printer, plotters, speaker, monitor etc. The device that alters information into visual information is called a monitor. Information and graphics made with the help of computer are printed out as hardcopy with the help of printer<sup>[35]</sup>.

## 2.4 Data Storage

Must have internal stored data and external data for data processing. The place where data is stored after processing is called data storage. The unit occupies the data and instructions needed for processing, interim results of processing etc. The storage devices are divided into two parts such as primary storage and secondary storage. The primary storage is used for holding continuous program instructions, holding data, results. These storage devices are very rapid in operation, being small capacity, expensive and unrestful. The secondary storage devices are used for holding amassed program instructions, data and information of stored jobs. They are very slow in speed but have greater capacity than primary storage devices. They are very cheaper than the primary storage<sup>[35]</sup>.

## 2.5 Procedures & Instruments

An information system generates data through a computerized information system. The software contains

<sup>1</sup> (www.tutorials point.com).

methods and instructions that instruct computers to process data<sup>[35]</sup>.

## 2.6 Users

Users are people who use the information generated by the system and who interact with the system. The current world users are very much dependent on quality information. So, the quality of information should be good enough to make an effective decision and control activities. There are various characteristics of useful information such as unflinching, relevant, full-fledged, timely, understandable, verifiable, accessible etc.<sup>[4]</sup>.

## 2.7 Control Measure

For the IS to produce accurate and error-free information, the information system must take the necessary steps to protect and control. There are various viruses and non-virus related threat in the path of quality information system. Viruses are the self-duplicating program that intervene a computer hardware and operating system. Among the virus some are disturbing, and some are destructive in nature. If the virus is active in the operation, then it affects the overall program of the computer. So, management information system should be alert regarding the virus. In many cases the information is being theft by the third party. In these cases, the company uses the encrypt and decrypt system<sup>[35]</sup>.

## 3. Accounting Information System (AIS)

An AIS is an information system that collecting data, processing data that create the information necessary for its users. Accounting information systems accumulate data accounting as a set of components for future use, & process it for end-users<sup>[6,16]</sup>. An accounting information system consists of hardware, software, databases, brain ware systems, & network communication technology<sup>[39,40]</sup>. Accounting is called the language of business. And information system provides the vehicle of that language intelligently. There are six components of accounting information systems. They include the (a) the system user; (b) process and formula for collecting, processing and storing data; (c) data of institution and activities; (d) usable software; (e) technology infrastructure like computer, peripheral devices and network for communication; (f) and controlling and security measures<sup>[4]</sup>.

## 3.1 Software

Software is a kit of indications, data or programs needed to set into action a computer and execute specific ought. Hardware describes the physical issues of computer

so software is the inverse of it <sup>[35]</sup>. Software is a generic term used to refer to applications, scripts and programs that run on a device. It can be thought of as the variable part of a computer, while hardware is the invariable part. Hardware and software are two main categories of information technology (IT). Software is a set of hardware that performs instructions for specific tasks <sup>[3]</sup>. The software contains all the data collection process instructions <sup>[40]</sup>. Computer software acts like a stuff that will help you do the work. Computer without the software is like a home entertainment system with no tape, CD, or movies. Software is being developed continuously for meeting the time demand of organization. The bigger the version develops, the bigger the version changes. Usually, a big change will result in an entire number upgrade; a tiny change may result in a tenth of a decimal place <sup>[35]</sup>. Mainly there are two types of software such as system software and application software.

### 3.2 Hardware

Computer hardware is a combined term used to describe any physical element of an analog or digital computer. The term hardware separates clear parts of a computing device from software, which contains written instructions that tell the physical elements what to do <sup>2</sup>. Hardware is an assortment of software programs that used to run a computer. The program is a series of computer commands. The operating system works to create and control relationships between components installed on a computer system <sup>[38]</sup>.

### 3.3 Brain-ware

Brain-ware is an essential component of an AIS. Brain-ware is a resource that deals with the creation, accounting, and processing of accounting information systems, distribution, and use of information <sup>[39]</sup>.

### 3.4 Procedure

The process is a repetitive operation based on specific rules for running an information system. The process becomes a guiding agency for deciding what activities can be performed <sup>[39]</sup>. The processes do not usually change and are running in the same order to ensure standardized and consistent results. Guides, training pieces and tutorials are common means to explain the processes to employees so that they can practice them to accomplish the objectives of the organization <sup>3</sup>.

### 3.5 Database

A database is a set of interrelated file collections. It is not just a selection of files. The records in each file must be allowed to relate to the other files. A database management system is a data set controlled by software <sup>[5]</sup>.

### 3.6 Communication Technology

A telecommunications system is a combination of hardware and software that is compatible with any other place for information communication. The telecommunication system permits data transmission on public or private networks and creates a network communication system by joining two or more devices and sets a standard way to communicate <sup>[3]</sup>.

Qualitative features of information systems are reliability, integration, flexibility, accessibility, & timeliness. Accounting information system can evaluate by the efficiency of the transaction processing system, transaction processing cycle criteria, data system integration, adaptability of the data system, and accessibility of the data system <sup>[41]</sup>.

## 4. Literature Review

Soudani (2012) shows effective performance between AIS and organization performance. Unfortunately, they found no connection between AIS and performance management <sup>[36]</sup>. Sari, SE, & Purwanegara (2016) showed that quality of accounting systems is influenced by some factors, these factors are management commitment, information technology, organizational structure, e-commerce, & leadership style <sup>[34]</sup>. Hellström (2006) points out that accounting information has more value relevance than a transitional economy from a developed market economy. They further feel that the relevance of the information increases due to progress in transition <sup>[17]</sup>.

Salehi & Abdipour (2013) point out that the implementation of AIS is being hampered by a number of factors. These factors are moderate managers, human resources, environmental factors, organizational structure, financial problems & organizational culture. They further mention that if employees are rewarded in the new system, this system will lead to more benefits <sup>[32]</sup>.

The quality and effectiveness of real-time financial reporting depend on the efficiency of providing real-time, uninterrupted financial monitoring <sup>[22]</sup>. Real-time financial reporting, accounting, real-time auditing, information systems create the essential for a new breed of professionals who work efficiently in accounting and information technology. Real-time financial reporting delivers benefits to investors & financial analysts. It has raised several concerns in previous discussions about

2 <https://searchnetworking.techtarget.com/definition/hardware>

3 <https://www.myaccountingcourse.com/accounting-dictionary/procedure>

the use of technology that will bring the technology community closer to real-time financial reporting. Corporate management may object to the database tactic because it presents financial independence in a way that best serves their interests. Real-time financial reporting can lead to greater transparency in financial reporting. It enables more efficient monitoring of the choices of management accounting methods. World Wide Web pages show investors that they can access financial information on a real-time basis. It could argue that the cost of publishing in real-time and the fear of sending proprietary information to competitors may discourage companies from disclosing their financial information in a real-time manner. However, these difficulties can be offset by the effect of timely disclosure of capital expenditure<sup>[10]</sup>. Botosan (1997) states that companies that provide timely financial disclosure that are less costly for suppliers. Botosan searches offer some insight into the probable benefits of real-time financial reporting<sup>[7]</sup>.

Dandago & Rufai (2014) show that accounting information technology reduces operational costs & can improve the efficiency of banks by facilitating transactions between customers within the same or different networks<sup>[11]</sup>. Hla & Teru (2015) found that the accounting information system is very important in both business and organization where it helps to simplify management decision making, internal control & quality of financial reporting. They also point out that AIS facilitates transactions & also plays an important role in the economic system<sup>[18]</sup>. Kwarteng & Aveh (2018) refer that accounting information system influences corporate performance. They further refer that there has a significant relationship between organizational culture on accounting information system & corporate performance<sup>[23]</sup>. Accounting information always plays a vital role in managers' decision making regarding financial & economic issues<sup>[29]</sup>. Khaghaany, Kbelah, & Almagtome (2019) show that there has a significant relationship between share price & sustainability reporting<sup>[21]</sup>.

#### **4.1 Hypothesis Development**

The use of IT (information technology) conducts more available & swiftly regained information, including internal information, external information, previously encountered, and thus rises the accessibility of information. Widely funded companies can be competitive advantage by deploying IT to support their business. The ability to align IT strategies and business strategies involves an appropriate level of IT practice. Thus, high level IT expected to be used in developed countries and

lower-level IT in underdeveloped countries. The following assumptions formulate to give the right answers to the researchers according to the application and benefits of the AIS and research problems.

Hypothesis 1: Does Accounting information systems cause to increase accounting & financial performance?

Hypothesis 2: Does Accounting information systems cause more accuracy of financial reporting?

Hypothesis 3: Does AIS cover all financial information needs of the organization?

Hypothesis 4: Does AIS cover all management levels information of Bangladesh?

Hypothesis 5: Does the quality of AIS influence by management commitment?

Hypothesis 6: Does the quality of AIS influence by user competence?

Hypothesis 7: Does accounting information software improves accounting standards in Bangladesh?

### **5. The benefit of Accounting Information Systems (AIS)**

AIS has some advantages in any organizations which as follows:

#### **5.1 Good Cooperation**

Anything that is always associated with a particular environment develops third party logistics initiatives to bridge the existing chain linking. Although third-party logistics businesses exist in the market as separate entities, they & other firms still need to maintain a close relationship. It means that customers must maintain and control the flow and timeliness of the material to ensure the general operation of their products, which allows third-party logistic enterprises to cooperate with AIS in up downstream companies & control the entire supply chain. Conducts integrative activities and truly achieves supply chain competition.

#### **5.2 To Meet the Needs of Multi-users**

As the environment changes, the use of accounting information expands to include all levels of enterprise management, all outside investment firms, government agencies, intermediaries, & accountants and non-accountants. The traditional based AIS can only create affordable financial statements with financially and low accounting information, narrowing the scope of use. Accounting information systems record all resource & economical business activities, allowing users to access their desired information through event-driven buttons in an interactive interface.

### 5.3 To Control Simultaneously

The account contains the work of supervising and regulating the economic activities of the enterprise. "Accounting" can only inspect after the manual and computerized accounting system, but mistakes cannot avoid. The new accounting information system integrates real-time processing, spends standards. It allows control of the approval process, manages budgets, and much more so that employees change from passive to active to manage their activities based on standard and identify problems promptly, correct deviations & correctly after, control in advance and simultaneously.

## 6. Quality of Accounting Information Systems (AIS)

Accounting information system is an interconnected system that integrates manual and computer parts, recording, summarizing, analyzing, and using data management to provide the user with information about the output. An AIS usages a mechanism to transfer inputs to attain the whole objectives of the process<sup>[19]</sup>.

The AIS is a set of software systems that work to record transaction data, process data. It offerings information connected to accounting to internal & external parties. An AIS is a structure that adapts inputs to convert financial data. That used to manage the actions of an entity and to deliver accounting information to those worried<sup>[19]</sup>.

The AIS is a field of information technology & structures. That design is to assist financial institutions in managing and controlling related matters. AIS is a system that identifies data, records, stores, & processes data for decision-makers. However, accounting information systems that will efficiently progress the quality of organizational financial reporting.

The functions of AIS are: 1. to support management operations. Stewardship mentions to the responsibility of managing the resources of an organization properly. 2. Helping managerial decision. 3. Support the day-to-day actions of the company. Information systems offer information to efficient employees to perform their daily responsibilities effectively & efficiently<sup>[19]</sup>. It can provide to assist in management decisions regarding the effectiveness of AIS.

## 7. Company Financial Performance

Performance is a record of the results produced over some time. Performance record in the results generated in a period<sup>[25]</sup>. A set of performance results that typically denotes to the success of the execution of an executed

task<sup>[37]</sup>. The financial performance of a company is the level of success or financial success achieved by an organization over some time. The stage of achievement or financial success is usually related to the level of profit obtained by the corporation. The success of the AIS implication has highlighted the issues that affect the effective implementation of the AIS<sup>[15]</sup>. They have eight-element achievements in the field of AIS, namely: (i) user quality improved applications, (ii) user self-sufficiency, (iii) organizational commitment, (iv) quality of staff, (v) various types of services, (vi) Quality of service, (vii) benefits of end-user computing, & (viii) the definition of the role of AIS<sup>[13]</sup>.

Raymond refers the successful accounting information system divided into two parts, namely: (i) the context of the organization such as- size, time frame, maturity resources (ii) in the context of accounting information systems, such as AIS practice<sup>[30]</sup>. The determinants of the successful implementation of accounting information systems divided into four aspects, namely: (i) technology, (ii) work, (iii) structure, (iv) the people<sup>[20]</sup>. Agung divided the five aspects of determining the success of the accounting information system, namely: (1) AIS facility, (2) AIS competency, (3) AIS integration, (4) user support, & (5) AIS structure<sup>[1]</sup>. They share six critical success elements of the information system, namely: (i) top management support, (ii) favorable conditions, (iii) user experience, (iv) user training, (v) the attitude of the user, & (vi) user participation<sup>[31]</sup>. The amount of profit can be measured using different ratios. The performance measure indicators return on assets (ROA), return on equity (ROE), and profit margin<sup>[26,14,2,27]</sup>.

## 8. Research Methodology

This study has been conducted based on analysis and a theoretical approach. For collecting data, it covers listed organizations of Bangladesh. It observed a total of 500 respondents. To run the research and to get informative results study used only primary data. Chi-Square has been used to analyze basic results. Finally, to test the robustness check, this study uses ANOVA tests and Multinomial logistic tests. It calculates the data with the help of IBM statistical packages for social science (SPSS).

## 9. Analysis and Result Discussion

Table 1 represents the descriptive statistics of all variables. The average values of all indicators are positive. That indicates that the sample indicators have a significant effect on all hypotheses.

Table 2 examines correlation matrix, among the

**Table 1.** Descriptive Statistics

	AIS	QAIS	AISW	H1	H2	H3	H4	H5	H6	H7
Mean	1.6040	1.5260	1.5040	1.8780	1.798	1.828	2.376	2.628	2.306	2.128
Median	1.0000	1.0000	1.0000	2.0000	2.0000	2.0000	3.0000	3.0000	3.0000	2.0000
Std. Deviation	.75917	.74191	.73693	.86754	.833	.841	.758	.618	.798	.886

**Table 2.** Correlations Matrix

	AIS	QAIS	AISW	H1	H2	H3	H4	H5	H6	H7
AIS	1									
QAIS	.225**	1								
AISW	.597**	.156**	1							
H1	.033	-.018	-.063	1						
H2	-.095*	-.055	-.082	.423**	1					
H3	.050	.055	.105*	.111*	.153**	1				
H4	.071	.043	.033	-.046	-.197**	-.109*	1			
H5	.031	.078	-.036	-.122**	-.426**	-.119**	.230**	1		
H6	.022	.029	.075	-.650**	-.509**	-.118**	.074	.146**	1	
H7	-.070	-.054	-.041	.503**	.233**	.180**	-.110*	-.015	-.554**	1

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

Note: AIS indicates Accounting Information Systems. QAIS denotes Quality of Accounting Information Systems. AISW represents Accounting information software. H indicates Hypothesis.

independent variable the correlation values show below 0.70. It indicates that models are free from major multicollinearity problem. Hypothesis 1: Accounting information systems cause to increase accounting & financial performance. Table 3 indications that the mean value is 1.878 and the S.D value is 0.867. The chi-square value is 20.244 and the p-value is 0.000. The value of hypothesis one indicates that we can't accept the null hypothesis. So we accepted the first hypothesis. It means AIS can increase the accounting & financial performance of any organization. It refers that the use of AIS that will enhance the company's accounting and financial performance. This further indicates that accounting information systems will be adopted by Bangladeshi firms to improve accounting and financial performance.

Hypothesis 2: Accounting information systems cause more accuracy of financial reporting. Table 4 displays that the mean value is 1.798 and the S.D value is 0.833. The chi-square value is 17.706 and the p-value is 0.001. The value of hypothesis two indicates that we can't accept the null hypothesis. So we accepted the second hypothesis. It means AIS can collect and provide more accurate information to prepare financial reports. It refers that the

use of AIS that will enhance the company's accuracy of financial reporting. Any company that adopts accounting information systems will create more accurate financial statements & provide reliable information to prepare financial reports. This further indicates that accounting information systems will be adopted by Bangladeshi firms to improve the accuracy of financial reporting.

Hypothesis 3: AIS covers all financial information needs of the organization. Table 5 indicates that the mean value is 1.828 and the S.D value is 0.841. The chi-square value is 8.190 and the p-value is 0.085. The value of hypothesis three indicates that we can't accept the null hypothesis. So we accepted the third hypothesis. It means AIS cover all financial information needs of the organization. It refers that the use of AIS that will cover the company's all types of financial information. This further indicates that AIS will be adopted by Bangladeshi firms to cover all types of financial information.

Hypothesis 4: AIS covers all management levels information of Bangladesh. Table 6 indicates that the mean value is 2.376 and the S.D value is 0.758. The chi-square value is 15.923 and the p-value is 0.003. The value of hypothesis fourth indicates that we can't accept the null

**Table 3.** Relationship between AIS and accounting & financial performance.

Agree Neutral			H1			Total
			Disagree			
AIS	Agree	Count	117	72	93	282
		% of Total	23.4%	14.4%	18.6%	56.4%
	Neutral	Count	76	30	28	134
		% of Total	15.2%	6.0%	5.6%	26.8%
	Disagree	Count	29	15	40	84
		% of Total	5.8%	3.0%	8.0%	16.8%
Total % of Total		Count	222	117	161	500
			44.4%	23.4%	32.2%	100.0%

  

Hypotheses	Mean	S.D	D.F	Chi-Square	Asymp. Sign	Decision
1 <sup>st</sup> Hypothesis	1.878	0.867	4	20.244	0.000	Accepted

**Table 4.** Relationship between AIS and accuracy of financial reporting.

Agree Neutral			H2			Total
			Disagree			
AIS	Agree	Count	115	80	87	282
		% of Total	23.0%	16.0%	17.4%	56.4%
	Neutral	Count	82	25	27	134
		% of Total	16.4%	5.0%	5.4%	26.8%
	Disagree	Count	37	28	19	84
		% of Total	7.4%	5.6%	3.8%	16.8%
Total % of Total		Count	234	133	133	500
			46.8%	26.6%	26.6%	100.0%

  

Hypotheses	Mean	S.D	D.F	Chi-Square	Asymp. Sign	Decision
2 <sup>nd</sup> Hypothesis	1.798	0.833	4	17.706	0.001	Accepted

**Table 5.** Relationship between AIS and financial information needs of the organization.

Agree Neutral			H3			Total
			Disagree			
AIS	Agree	Count	129	72	81	282
		% of Total	25.8%	14.4%	16.2%	56.4%
	Neutral	Count	70	34	30	134
		% of Total	14.0%	6.8%	6.0%	26.8%
	Disagree	Count	28	26	30	84
		% of Total	5.6%	5.2%	6.0%	16.8%
Total % of Total		Count	227	132	141	500
			45.4%	26.4%	28.2%	100.0%

  

Hypotheses	Mean	S.D	D.F	Chi-Square	Asymp. Sign	Decision
3 <sup>rd</sup> Hypothesis	1.828	0.841	4	8.190	0.085	Accepted

**Table 6.** Relationship between AIS and management levels information.

Agree Neutral			H4			Total
			Disagree			
AIS	Agree	Count	43	93	146	282
		% of Total	8.6%	18.6%	29.2%	56.4%
	Neutral	Count	33	32	69	134
		% of Total	6.6%	6.4%	13.8%	26.8%
	Disagree	Count	9	17	58	84
		% of Total	1.8%	3.4%	11.6%	16.8%
Total % of Total		Count	85	142	273	500
			17.0%	28.4%	54.6%	100.0%

  

Hypotheses	Mean	S.D	D.F	Chi-Square	Asymp. Sign	Decision
4 <sup>th</sup> Hypothesis	2.376	0.758	4	15.923	0.003	Accepted



hypothesis. So we accepted the four hypotheses. So, we rejected the null hypothesis. It means AIS can cover and provide all management levels information. It is a strength of Bangladeshi organizations that available AIS can provide management information needs.

Hypothesis 5: The quality of AIS is influenced by management commitment. Table 7 displays that the mean value is 2.628 and the S.D value is 0.618. The chi-square value is 6.231 and the p-value is 0.183. The value of hypothesis fifth indicates that we can't reject the null hypothesis. So we rejected the fifth hypothesis. So, accepted the null hypothesis. It means the quality of the AIS doesn't influence by management commitment. It is a weakness of Bangladeshi organization which quality of the AIS doesn't influence by management commitment.

Hypothesis 6: The quality of AIS is influenced by user competence. Table 8 displays that the mean value is

2.306 and the S.D value is 0.798. The chi-square value is 16.442 and the p-value is 0.132. The value of hypothesis sixth indicates that we can't reject the null hypothesis. We rejected the sixth hypothesis. So, we accepted the null hypothesis. It means the quality of the AIS doesn't influence by user competence. It is another weakness of Bangladeshi organizations in which the quality of the AIS doesn't influence by user competence.

Hypothesis 7: Accounting information software improves accounting standards in Bangladesh. Table 9 displays that the mean value is 2.128 and the S.D value is 0.886. The chi-square value is 12.195 and the p-value is 0.116. The value of hypothesis seventh indicates that we can't reject the null hypothesis. So we rejected the seventh hypothesis. So, we accepted the null hypothesis. It means accounting information software doesn't improve accounting standards in Bangladesh. It is another

**Table 7.** Relationship between quality of AIS and management commitment.

Agree Neutral			H5			Total
			Disagree			
QAIS	Agree	Count	27	76	209	312
		% of Total	5.4%	15.2%	41.8%	62.4%
	Neutral	Count	7	18	88	113
		% of Total	1.4%	3.6%	17.6%	22.6%
	Disagree	Count	3	18	54	75
		% of Total	.6%	3.6%	10.8%	15.0%
Total % of Total		Count	37	112	351	500
		7.4%	22.4%	70.2%	100.0%	

  

Hypotheses	Mean	S.D	D.F	Chi-Square	Asymp. Sign	Decision
5 <sup>th</sup> Hypothesis	2.628	0.618	4	6.231	0.183	Rejected

**Table 8.** Relationship between quality of AIS and user competence.

Agree Neutral			H6			Total
			Disagree			
QAIS	Agree	Count	69	95	148	312
		% of Total	13.8%	19.0%	29.6%	62.4%
	Neutral	Count	18	18	77	113
		% of Total	3.6%	3.6%	15.4%	22.6%
	Disagree	Count	19	22	34	75
		% of Total	3.8%	4.4%	6.8%	15.0%
Total % of Total		Count	106	135	259	500
		21.2%	27.0%	51.8%	100.0%	

  

Hypotheses	Mean	S.D	D.F	Chi-Square	Asymp. Sign	Decision
6 <sup>th</sup> Hypothesis	2.306	0.798	4	16.442	0.132	Rejected

weakness of Bangladeshi organizations that accounting information software doesn't improve accounting standards in Bangladesh. So, accounting information software doesn't harmonize with Bangladeshi accounting standards.

**9.1 Robustness Check**

To examine the robustness results, this study uses the likelihood ratio tests and ANOVA tests. Table 10 shows the likelihood ratio tests which performed by multinomial logistic test. The likelihood ratio tests support the basic results of this study.

Table 10 shows that the significant values of H1, H2, H3, H4 are 0.003, 0.018, 0.034 & 0.002 respectively which represent hypothesis (H1) to hypothesis (H4) is accepted. On the other hand, remaining significant value is 0.589, 0.141, and 0.118 respectively which represent don't accept the hypothesis (H5) to hypothesis (H7). The likelihood ratio test supports the main basic results of this study.

On the other hand, Table 11 shows the result of ANOVA tests. ANOVA tests result accept all hypotheses (H1-0.093 (0.024), H2-0.093 (0.024), H3-0.040 (0.024), and H4-

0.013 (0.024)) except hypothesis H5-0.196 (0.204), H6-0.193 (0.204) and H7-0.364 (0.364). Where our basic results and likelihood ratio tests also provide the same results. ANOVA tests reject the hypothesis H5, and H6 which indicate that the quality of AIS doesn't influence by management commitment and user competence. Rejected H7 indicates that accounting information software doesn't harmonize with Bangladeshi accounting standards.

**10. Conclusions and Policy Implication**

Accounting information systems focused on recording data, summarizing, and validating about business financial transactions. These events performed for a variety of groups concerned with decisions related to financial accounting, managerial accounting, & tax compliance in this account. This paper conducted based on analysis and a theoretical approach. We evaluate the potential application and benefit of accounting and information systems in Bangladesh. Our result showed that if the application of accounting and information systems ensures apply in each organization in Bangladesh. Accounting information systems improve financial statement & reporting of Bangladesh. It also ensures that it covers

**Table 9.** Relationship between Accounting information software and accounting standards

Agree Neutral			H7			Total
AISW	Agree	Count	95	72	154	321
		% of Total	19.0%	14.4%	30.8%	64.2%
	Neutral	Count	50	15	41	106
		% of Total	10.0%	3.0%	8.2%	21.2%
	Disagree	Count	23	13	37	73
		% of Total	4.6%	2.6%	7.4%	14.6%
Total % of Total		Count	168	100	232	500
		% of Total	33.6%	20.0%	46.4%	100.0%

  

Hypotheses	Mean	S.D	D.F	Chi-Square	Asymp. Sign	Decision
7 <sup>th</sup> Hypothesis	2.128	0.886	4	12.195	0.116	Rejected

**Table 10.** Likelihood Ratio Tests

Effect	Model Fitting Criteria	Likelihood Ratio Tests			Goodness-of-Fit	
	-2 Log Likelihood of Reduced Model	Chi-Square	df	Sig.	Pearson Sig.	
Intercept	264.342 <sup>a</sup>	0.000	0			
H1	280.315	15.973	4	0.003	0.105	Accepted
H2	276.236	11.894	4	0.018	0.105	Accepted
H3	274.759	10.417	4	0.034	0.105	Accepted
H4	281.383	17.041	4	0.002	0.105	Accepted
H5	60.198	2.818	4	0.589	0.729	Rejected
H6	70.464	13.085	4	0.141	0.729	Rejected
H7	65.326	11.859	4	0.118	0.183	Rejected

Table 11. ANOVA Tests

B		Unstandardized Coefficients		Beta	t	Sig. Sig.	Reg.	Decision
		Std. Error						
Equation	(Constant)	1.434	.168		8.548	.000		
	H1	.072	.043	.083	1.684	0.093	0.024	Accepted
	H2	-.118	.046	-.129	-2.569	0.011	0.024	Accepted
	H3	.060	.041	.067	1.478	0.040	0.024	Accepted
	H4	.057	.046	.057	1.248	0.013	0.024	Accepted
	H5	.090	.054	.075	1.666	0.196	0.204	Rejected
	H6	.017	.042	.018	.395	0.193	0.204	Rejected
	H7	-.034	.037	-.041	-.909	0.364	0.364	Rejected

all financial information need of the organizations. The major weakness is management levels information which accounting information systems don't cover and provide all management levels information. The quality of AIS doesn't influence by management commitment and user competence. Accounting information software doesn't improve accounting standards in Bangladesh. So, accounting information software doesn't harmonize with Bangladeshi accounting standards. However, the result showed that has a huge gap between what accounting information systems & what should be. However, to handle this situation, a manager should take more aware of AIS benefits and more academic action for reducing such gaps in Bangladeshi corporate sectors. This paper suggests that an organization may get potential benefits through the implementation of AIS in Bangladesh. It also will be benefited stakeholders from implying it. It provides accurate information to all stakeholders that help them to the right decision. It will also help to improve economic development. This paper conduct based on Bangladeshi limited respondents that is the main limitation of this study.

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