

ACCOUNTING INFORMATION SYSTEMS OF MOBILE TELECOMMUNICATION COMPANIES IN BANGLADESH



**Thesis Submitted to the University of Rajshahi, Rajshahi in Partial
Fulfillment of the Requirements for the Award of the Degree of
Doctor of Philosophy in Accounting and Information Systems**

PH. D THESIS

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CERTIFICATE

This is to certify that the thesis entitled “**Accounting Information Systems of Mobile Telecommunication Companies in Bangladesh**” is an original research work done by Taposh Kumar Neogy, Department of Accounting and Information Systems (AIS), University of Rajshahi, Rajshahi under my supervision. This thesis is submitted to the University of Rajshahi, Rajshahi for the award of the degree of Doctor of Philosophy in Accounting and Information Systems. To the best of my knowledge, this thesis or any part of it has not been submitted previously to any other University for any Degree or Diploma.

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DECLARATION

I declare that the thesis entitled “**Accounting Information Systems of Mobile Telecommunication Companies in Bangladesh**” submitted to the University of Rajshahi, Rajshahi in partial fulfillment of the requirements for the award of the Degree of Doctor of Philosophy in Accounting and Information Systems, is a research work carried out by me under the supervision of Professor Dr. Abhinaya Chandra Saha, Director, Institute of Business Administration (IBA), University of Rajshahi, Rajshahi and has not been previously submitted to any other University for the award of any Degree or Diploma.

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ACKNOWLEDGEMENT

It is a matter of great satisfaction to me that I have been able to complete the research work. It was indeed a long process and I always pray to the God to give me sufficient patience and courage to complete the work. So, first and foremost I would like to offer my gratitude to God from the deepest core of my heart.

I would like to place my fervent feelings of gratitude to my honourable supervisor Professor Dr. Abhinaya Chandra Saha, Director, Institute of Business Administration (IBA), University of Rajshahi, Rajshahi for his sincere guidance, untiring cooperation, valuable advice and endless inspiration that enabled me to prepare this thesis paper. In preparing this thesis, I was fortunate enough to receive intellectual suggestions and guidelines from my supervisor, who encouraged me and helped me to complete my work. His guidance and encouragement has paved the way for me to write the thesis.

I am very much indebted to Professor Dr. M. Humayun Kabir, Chairman, Department of Accounting and Information Systems for his enthusiastic cooperation. I am also grateful to the teachers and staffs of the same department for their valuable assistance, advice and encouragement.

I would like to express my thanks and earnest gratitude to Professor Md. Abaydur Rahman Pramanik, Professor Dr. Madan Mohan Dey and Professor Dr. Subhash Chandra Sil who had to bear a lot of trouble for me. I got astounding and constant support, advice and inspiration from them that encouraged me to complete the work and without their help doing the research work would be impossible for me.

I am thankful to Professor Md. Manzur Murshedul Abedin, Professor Dr. Md. Sayaduzzaman, Professor Dr. Md. Tazul Islam and Dr. M. Ahsan Habib for their constant help, encouragement and suggestive advice. I am also thankful to Raj Kumar Moulick for his sincere cooperation.

I am grateful to Professor Dr. Salma Banu, Professor Mst. Fahima Khatun and Dr. Rukshana Begum for their support and cooperation.

I express my gratitude to Dr. Arabinda Chandra Saha, Professor and Chairman, Department of Accounting and Information Systems, Islamic University, Kushtia for his kind assistance and advice.

I acknowledge indebtedness to Ashraf Ul Huda, Director of Accounts, University of Rajshahi, Rajshahi for his assistance and inspiration. His fatherly affection supported me a lot throughout my research work. I am also grateful to Rasha Shamin, my little sister for her help and cooperation.

I am sincerely and truly grateful to all company executives, professional accountants, academicians and security consultants for their sincere cooperation during the questionnaire survey. They provided me all the related information with great fervour and their interest in my topic really encouraged me.

I express my infinite gratitude and indebtedness to my respected parents who showered their continuous support and encouragement on me throughout the research work. My wife was a constant support during my research work and I acknowledge her help giving due respect to her patience and sacrifice. I am wholeheartedly thankful to my little daughter Tanusree Eshani Puja who supported me innocently throughout the work but I cannot ignore the fact that she was deprived of my fatherly affection during my research work. I am also thankful to my all well-wishers for their worthy and important cooperation.

Finally, I am grateful to a number of persons who helped me in different ways for completing the research work.

Rajshahi
June 2014

Taposh Kumar Neogy

ABSTRACT

Mobile telecommunication companies have emerged as a important economic sector in present time and it is adding a lot in boosting up the economy of Bangladesh. The mobile telecommunication companies in Bangladesh are aiming at providing cost effective and quality services to the customer as customer satisfaction is most important for the survival and success of any company. For this purpose, the mobile telecommunication companies need an efficient AIS for providing necessary information to its various users. The user group includes creditors, investors, lenders, regulators, trade union and management and many one who take their necessary decisions based on the information by the annual reports of the companies. Appropriate and efficient AIS is needed by the companies to provide relevant and reliable information to the interested users in time. The appropriate AIS depends on the relevant accounting policies, principles and most importantly the standards set by both national and international bodies. Legal framework of a country gives clues to framing appropriate AIS for an organization. At present AIS bears significance as it helps the management evaluate the past operations, control the present actions and through them to decide the future activities of any organization. The objectives of the study are to know the major characteristics of AIS, analyze the opinions of the respondents regarding the application of legal framework and compliance with accounting standards, judge the efficiency of AIS through selected indicators, identify the factors influencing the efficiency of AIS and analyze the opinions of the respondents regarding the qualitative characteristics of accounting information produced by AIS. There are six mobile telecommunication companies in Bangladesh and researcher has selected two mobile telecommunication companies viz Grameenphone Ltd. and Teletalk Bangladesh Limited for five years starting from 2008 to 2012. Three sets of close - ended questionnaires were used in the light of objectives and hypotheses of the study for the selected respondents. First set is for company executives, second set is

for experts in accounting (chartered accountants, cost and management accountants and teachers in accounting) and third set is for security consultants. The present study is based on both primary and secondary data. The secondary data have been collected from the audited annual reports of the selected companies and primary data for the purpose of the present research study have been collected from 195 respondents consisting of 60 chartered accountants (CA), 50 cost and management accountants (CMA), 30 teachers in accounting (Acad.) and 55 security consultants (SC). Likert five point rating scales are used in two sets of questionnaire for measuring the opinions of the respondents. For judging the reliability of data the reliability test is done through Chronbach Alpha test and Split-half test. After obtaining the data from the different sources, various statistical tools like mean values, standard deviation, coefficient of variation, t-test, Chi-square test and ANOVA test have been used to analyze the collected data.

The AIS of the selected companies is fully computerized and accounting software is used for recording transactions, processing of transactions and preparing the financial statements to the interested users. The financial statements are prepared on going concern basis under the historical cost convention using Generally Accepted Accounting Principles (GAAP) in accordance with accounting standards, the Companies Act 1994, the Securities and Exchange Rules 1987 and other applicable laws in Bangladesh. The selected companies follow the provisions of IAS/BAS 1, 2, 7, 8, 12, 16, 17, 18, 21, 23, 24, 32, 34, 37 and 38 respectively and also follow the provisions of International Financial Reporting Standards (IFRSs)/Bangladesh Financial Reporting Standards (BFRSs) for preparing and presenting the financial statements. In the evaluation of the operating results of the selected companies, it is evident that the Company # 1 could earn good profit during the study period but the performance of Company # 2 is not satisfactory because it has been continuously facing loss for the last several years with the exception of 2011. The operating performance of Company # 1 is better than that of Company # 2 during the study

period. Some hypotheses have been developed regarding the operating results of the selected companies and all hypotheses are rejected which means that there is significant difference between the operating results of the selected companies.

In the analysis of the opinions of the respondents, it is evident that the 50.00% of the respondents think that the selected companies moderately apply legal framework for preparing the financial statements and the null hypothesis is accepted which means that there is no significant difference of opinions among the respondents regarding the application of legal framework for preparing the financial statements of the selected companies. It is also evident that 65.00% of the respondents think that the selected companies moderately comply with accounting standards for preparing the financial statement and the null hypothesis is rejected which indicates that there is significant difference of opinions among the respondents regarding the degree of compliance with accounting standards for preparing the financial statements of the selected companies.

To evaluate the efficiency of AIS of the selected companies, some indicators have been identified. It is evident that the 91.43% of the respondents opine that the effective internal control system, 62.86% of the respondents think that the proper security measure, 65.71% of the respondents think that good documentation, 60.00% of the respondents opine that the separation of operation from accounting, 80.71% of the respondents think that the extent of disclosure, 63.57% of the respondents opine that the cost effectiveness, 56.43% of the respondents think that the flexibility to meet future needs, 47.14% of the respondents reveal that the processing power of accountants and 79.29% of the respondents reveal that the independent internal and external audit are important way to judge the efficiency of AIS. It is also evident that the 40.71% of the respondents think that the all indicators are important to judge the efficiency of AIS of the selected companies. In addition, the 56.92% of the respondents opine that accounting information produced by AIS is moderately adequate and the null hypothesis is accepted, 60.00% of the

respondents think that the accounting information produced by AIS is moderately informative and the null hypothesis is rejected and 57.95% of the respondents state that the accounting information produced by AIS is moderately concise and the null hypothesis is accepted. It is found that there is no significant difference of opinions among the respondents regarding adequacy and conciseness of accounting information produced by AIS and there is significant difference of opinions among the respondents regarding the informativeness of accounting information produced by AIS of the selected companies.

The study shows that 57.14% of the respondents opine that the size of the company, 44.29% of the respondents think that the earning of the company, 78.57% of the respondents reveal that the availability of trained accountant, 80.00% of the respondent state that the internal control system, 52.86% of the respondents think that the internal audit, 47.14% of the respondents opine that the internal check, 72.86% of the respondents reveal that the attitude of management, 51.43% of the respondents think that the organizational structure, 45.72% of the respondents think that the resources of the company and 69.29% of the respondents opine that the good use of information technology greatly influences the efficiency of AIS and the hypotheses are accepted which means that there is no significant difference of opinions among the respondents regarding these various influencing factors of the efficiency of AIS of the selected companies. It is found that 36.43% of the respondents think that the age of company moderately influences the efficiency of AIS and the null hypothesis is accepted which indicates that there is no significant difference of opinions among the respondent regarding the age of company as an influencing factor of the efficiency of AIS. It is also found that 42.14% of the respondents opine that the rank of responsible executive moderately influences the efficiency of AIS and the null hypothesis is rejected which means that there is significant difference of opinions among the respondent regarding the rank of

responsible executive as an influencing factor of the efficiency of AIS of the selected companies.

The study also shows that 54.36% of the respondents think that the accounting information produced by AIS of the selected companies is moderately relevant, 55.39% of the respondents opine that the accounting information is moderately reliable, 42.05% of the respondent state that the accounting information is moderately useful, 50.25% of the respondents think that the accounting information is moderately understandable, 51.79% of the respondents reveal that the accounting information is moderately comparable and 53.85% of the respondents think that the accounting information is moderately consistent and the null hypotheses are accepted which indicate that there is no significant difference of opinions among the respondents regarding the various qualitative characteristics of accounting information produced by AIS and disseminated in the annual reports of the selected companies.

Based on the study findings, researcher suggests that the transparency of financial statements shown in the annual reports issued by the selected companies should be ensured. The preparation of the financial statements must ensure the various qualitative characteristics of accounting information. The strict compliance with the accounting standards, the Companies Act, 1994, the Securities and Exchange Rules 1987, the Income Tax Ordinance 1984 etc. should be monitored by BSEC. The accountants who are responsible for performing the various activities of AIS should be trained properly so that AIS can deliver relevant information for all concerned. Accounting information should be more timely and well structured for various interested users so that they can make effective, dynamic decisions. Internal control activities, functions of audit committee, management control activities and corporate governance etc. should be coordinated. ICAB and ICMAB may try to organize more seminars for developing AIS, MIS, Decision Support Systems, Executive Information System and Expert System etc. for our business organizations.

LIST OF ABBREVIATIONS

AAA	American Accounting Association
ABC	Activity Based Costing
AGM	Annual General Meeting
AICPA	American Institute of Certified Public Accountants
AIS	Accounting Information System
ANOVA	Analysis of Variance
APB	Accounting Principles Board
BAPS	Bangladesh Auditing Practice Statements
BAS	Bangladesh Accounting Standards
BAS	Bangladesh Standards on Auditing
BFRS	Bangladesh Financial Reporting Standards
BSEC	Bangladesh Securities and Exchange Commission's
BTCL	Bangladesh Telecommunication Company Limited
BTRC	Bangladesh Telecommunication Regulatory Commission
BTTB	Bangladesh Telegraph & Telephone Board
CAPA	Confederation of Asian and Pacific Accountants
CSE	Chittagong Stock Exchange
CSR	Corporate Social Responsibilities
DSE	Dhaka Stock Exchange
DSS	Decision Support Systems
EGM	Extra-Ordinary General Meeting
EIS	Executive Information Systems
EOQ	Economic Order Quantity
EPS	Earnings Per Share
ERP	Enterprise Resource Planning
ES	Expert Systems
EUS	End-User Systems

FASB	Financial Accounting Standards Board
FIFO	First In First Out
GAAP	Generally Accepted Accounting Principles
GCS	Group Coding System
GPL	Grameenphone Limited
GSM	Global System for Mobile Communication
IAS	International Accounting Standards
IASB	International Accounting Standards Board
IASC	International Accounting Standards Committee
ICAB	Institute of Chartered Accountants of Bangladesh
ICMAB	Institute of Cost and Management Accountants of Bangladesh
ICS	Internal Control System
IFRS	International Financial Reporting Standards
LIFO	Last In First Out
MCS	Mnemonic Coding System
MIS	Management Information Systems
MOPT	Ministry of Post and Telecommunication
NPAT	Net Profit After Tax
OAS	Office Automation Systems
RJSC	Registrar of Joint Stock Companies
SDLC	Systems Development Life Cycle
SER	Securities and Exchange Rules
SFAC	Statements of Financial Accounting Concepts
SPSS	Statistical Package for Social Sciences
TBL	Teletalk Bangladesh Limited
TSA	Total System Approach
VAS	Value Added Service
WA	Weighted Average

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CHAPTER ONE

Introduction

1.1 Prelude

Economic development depends on some basic elements and telecommunication is one of them. The role of telecommunication sector in stirring up economic growth is a matter that is beyond doubt. At the same time, it is exerting a great influence over our outlook and life style. Its contribution is full of significance and quite apparent to us and considering its importance in national economic development high priority must be given to facilitate this sector. Telecommunication is the most useful media of communication. This particular telecommunication system can transfer information without much traveling and it saves both our valuable time and money. Telecommunication as a strategy of development has emerged in the modern world. Telecommunication has added a new dimension in modern life. Today nothing can be imagined without this new dimension. Modern telecommunication technology has developed different forms of phones and mobile telecommunication is one of them. Mobile telecommunication means any effective communication process that enables to exchange information around the world within a short time and it has changed and enriched our communication system. Mobile telecommunication plays a vital role in sending and receiving necessary information in the national and international level. Mobile telecommunication has become an important tool for modern life. Our Government has granted permission to Bangladesh Telecom Private Limited to introduce the mobile telecommunication operation and other wireless communication networks for the first time in 1989 to spur private investment in this sector (Bangladesh Economic Review, 2006). Since then, mobile telecommunication companies in Bangladesh have been playing a vital role in the economic development and life style of the people.

Communication is an integral part of human life. From the very beginning of human civilization people tried to communicate with each other to fulfill the social needs.

Over the passing of time though the tools of communication changed but still they exist in the society. Currently mobile telecommunication has brought a revolution in the field of communication. Telecommunication had made the whole world a small village and by using this service, life has become more comfortable and easy. Telecommunication sector plays a vital role in the economy of Bangladesh by creating employment opportunities, generating revenues and contributing to different types of social programmes. The telecommunication sector also plays important role by contributing to health, education, environment, sports and all other social sectors as corporate social responsibility (Zamil and Hossen, 2012). In Bangladesh, the growing rate of using mobile telecommunication is very high and it has significant effect on the socio-economic sector of the country. Mobile telecommunication exercises great power in developing countries having good impact but the lack of technology and communication makes it difficult for developing countries to participate in the global scenarios and their benefits. As one of the fastest growing sectors of the economy, mobile telecommunication companies have taken steps to promote social responsibility (Bairagi, Roy and Polin, 2011). Innovation is a widely used strategy across industries in many countries. It is now at the top of the agenda of the mobile telecommunication industry in Bangladesh. The contribution of services sector towards the economic activities is increasing gradually. Mobile telecommunication sector is one of the major contributors in terms of revenues, employments and infrastructure development (Ratan, Alam and Sohel-Uz-Zaman, 2007).

Accounting is related with the recording of economic events, the preparation of financial reports based on the recorded data and providing meaningful information to the interested users. Modern world is the world of information and every business organization makes it imperative to obtain proper information both for internal and external users for taking appropriate decisions. Accounting Information System is actually one very important component of Management Information System and it performs the crucial functions of properly identifying, classifying, processing,

analyzing, accumulating and providing economic information through different financial statements in making informed judgments and decisions for all interested users. AIS is an important part of information system that collects, records, stores, and processes data to produce information for decision makers and it incorporates controls to ensure the safety and availability of the organization's data because controls are necessary to ensure that the information produced from that data is both reliable and accurate (Romney and Steinbart, 2006). AIS is a system of recording process that produce reliable and relevant information for preparing the financial statements and other accounting reports for the satisfaction of the different users of every business organization to take proper decision making. Accounting Information Systems of the mobile telecommunication companies is computerized and it is an integral part of the internal control structure of the company and the Computerized Accounting Information System generates accurate information and reports for the interested users. Management can design various plans and their implementations properly for achieving organizational goals with the help of information generated by the AIS because it accumulates data and provide information for the decision makers. Therefore, it can be said undoubtedly that AIS is an authentic and reliable process of generating, getting and gathering crucial and usable accounting information for the interested users that provides the users with a sense of safety and certainty which are important for having a successful transaction. Actually, the management is greatly strengthened with sound AIS by helping the management to know about the kind of debts that are outstanding, the former cash inflows and outflows, about the nature and amount of available assets etc. Moreover, it assists the management to compare the operating results of two different periods which in turn focuses on the profits made on different financial periods and provides the interested users with a clear understanding of profit and loss, expansion of dividends to stockholders, the rate of return on net assts etc. So, it is a must for the mobile telecommunication companies to maintain a sound and reliable AIS (Kieso, Weygandt and Warfield, 2004).

1.2 A Profile of the Telecommunication Sector in Bangladesh

Technology has made the world a global village. Today, it is easy to reach out and touch someone, no matter where in the world that person lives. Information is being produced at such a rate that it can be accessed and delivered, usually within a few seconds, between any two points on the planet. Human ingenuity and the development of computer technology have made telecommunication one of the most powerful technologies of our time. Telecommunication is similar to human face-to-face communication in that there is a sender, a receiver, a message, and a medium through which the message is transmitted (Gupta, 2004). Telecommunication is the exchange of information in any form over computer based networks. Major trends occurring in the field of telecommunication have a significant impact on management decision in this area. The competitive arena for telecommunications service has changed dramatically in many countries in recent years. The telecommunication industry has changed from government-regulated monopolies to a deregulated market with fiercely competitive suppliers of telecommunication services. The changes in telecommunication industries and technologies just mentioned are creating a significant change in the business use of telecommunications. Information technology, especially in telecommunication based business applications, helps a company overcome geographic, time, cost, and structural barriers and achieve business success (O'Brien, 2004).

Telecommunication is very important for the development of socio-economic condition of the country. The Telegraph branch under the Post and Telegraph Department was created in 1853 in the then British India and was regulated afterward under the Telegraph act of 1885. Modern Telecommunication services in our country have developed through a step by step process. At first telegraph services was introduced through bare wire telegraph lines based on Morse code during the initial stage of British colonial rule, and the first telephone exchange was in operation in 1920 in Dhaka which was manual magneto type. After the emergence of the People's Republic of Bangladesh in 1971, Bangladesh Telegraph

and Telephone Department was set up under the Ministry of Posts and Telecommunications with a view to running the telecommunication services on common basis. This was converted into a corporate body named Telegraph and Telephone Board by promulgation of Telegraph and Telephone Board Ordinance, 1975. In Pursuance of Ordinance No. XII of 1979 promulgated on 24th February, 1979; Telegraph and Telephone Board was converted to Bangladesh Telegraph and Telephone Board (BTTB) as a Government Board. This Board was converted to a public company namely Bangladesh Telecommunications Company Limited (BTCL) from July 01, 2008 (Khabiruzzaman, 2009). In the present world of globalization, the telecommunication system is necessary to develop the effective communication systems and the mobile telecommunication has been playing an important role in this regard. Mobile telecommunication sector has dramatically changed the communication process in our country. Life has become fast, easy and comfortable in terms of business and society. By using the mobile telecommunication system we can communicate all over the world within a short time. At present time there are six mobile telecommunication companies working in our country such as Grameenphone Limited (GP), Banglalink Digital Communications Limited, Robi Axiata Limited (Robi), Airtel Bangladesh Limited (Airtel), Pacific Bangladesh Telecom Limited (Citycell), and Teletalk Bangladesh Limited (Teletalk). Two of the above companies named Grameenphone Ltd. and Teletalk Bangladesh Limited have been selected here to be studied and both of them have been discussed below:

1.2.1 An Overview of Grameenphone Ltd.

Grameenphone Ltd. is a public limited company and incorporated in Bangladesh in 1996 under the Companies Act, 1994. Grameenphone Ltd. has obtained its operating licence from the Ministry of Posts and Telecommunication, Government of Bangladesh on 11 November 1996 and started its various activities on March 26, 1997. From the starting point of operation the company has obtained a lot of success. The operating license is subject to renewal upon fulfillment of terms and

conditions specified in the license agreement. Grameenphone Ltd. is the leading mobile telecommunication service provider company in Bangladesh and it has always been a pioneer in introducing new products and services in the context of customers demand. Grameenphone Ltd. is the company which introduced first time GSM technology in Bangladesh at affordable prices and it is the first operator to introduce the pre-paid service for the customer in September 1999. Grameenphone Ltd. is the largest mobile phone service provider company in Bangladesh and produced different services for their customers. The company also provides international roaming services through international roaming agreements with various operators of different countries across the world. Grameenphone Ltd. provides services to rural and urban customers across Bangladesh, where mobile telephone is acknowledged as a significant driver of socio-economic development, both for individuals and the nation. Grameenphone Ltd. covers their network all places of the country and earns good profit during the period under study. According to the number of subscribers and earning profit the Grameenphone Ltd. hold the top position among six mobile telecommunication service operator companies. Grameenphone Ltd. always stands beside the community and the environment through various sustainable programs. To bring dermatology care to rural communities, GPL partnered with the Telemedicine working group of Bangladesh. Grameenphone Ltd. was initially registered as a private limited company and subsequently was converted into a public limited company on 25 June 2007. During November 2009, Grameenphone Ltd. listed its shares with both Dhaka and Chittagong stock exchanges. The company was initially registered with ordinary shares of Tk. 43.00 each. These shares were subsequently converted into Tk. 10 shares through a 43:1 split at the 16th EGM (held on 15 July, 2008) and 1:10 reverse split at the 19th EGM (held on 2 July 2009). The authorized capital is 4,000,000,000 ordinary shares of Tk. 10 each and the issued, subscribed, called up and paid up capital are 1,350,300,022 ordinary shares of Tk. 10 each. The shareholding structure of the companies are mainly two sponsor shareholders

namely Telenor Mobile Communication AS (55.80%) and Grameen Telecom (34.20%). The rest 10.00% shareholding includes General Public and other institutions (Annual Report of GPL, 2012).

1.2.2 An overview of Teletalk Bangladesh Limited

Teletalk Bangladesh Limited was incorporated as a public limited company on 26 December 2004 with an authorized capital of BDT 20,000,000,000 divided into 20,000,000 ordinary shares of BDT 1,000 each and the issued and paid up share capital are 6,438,661 ordinary shares of Taka. 1,000 each fully paid up. The Company obtained the certificate of Commencement of Business from the Registrar of Joint Stock Companies and Firms on the same day. The company is wholly owned by the Government of the Peoples' Republic of Bangladesh and is represented by various ministries and Bangladesh Telegraph & Telephone Board (BTTB) presently called BTCL. Teletalk Bangladesh Limited started commercial launching of operation on 31 March, 2005. When Teletalk Bangladesh Limited emerged into the market with a view to providing dynamic and versatile mobile facilities with some exclusive offer, the overall scenario of the telephone sector of the country started to change rapidly. Strong competition developed among the mobile telecommunication service providers. It brought a revolutionary change in the information technology sector of the country. The number of subscribers started rising on a cumulative basis. Government of the Peoples Republic of Bangladesh also responded to this revolution in mobile communication sector very positively. Government is putting a lot of emphasis on digitalization but in real terms only a few incentives were given to boost the ever increasing growth of mobile industry. Bangladesh has the lowest mobile tariff while having the highest tax regime in the region. A rationalization of the tax structures and elimination of SIM tax, which proved to be the key barrier to further growth particularly for Teletalk, might stimulate industry growth and might enable the mobile industry to make even greater contribution to the national exchequer and thereby to the economy. Teletalk has been trying to provide quality services for the customers and in order to enhance

the service; Teletalk has developed its network in every place in Bangladesh. Teletalk Bangladesh Limited continues facing losses with the exception of year 2011 during the period under study. Teletalk Bangladesh Limited continues to grow and engage the customers through their clear commitment to offer high quality products and services. Teletalk continues to be a part of the revolution that is connecting millions of Bangladeshi people around the world. Teletalk Bangladesh limited was established keeping a specific role in mind. Teletalk has forged ahead and strengthened its path over years and achieved some feats truly to be proud of, as the only Bangladeshi mobile operator and the only operator with 100% state owned resource base. Teletalk thrives to become the true people's phone – “Amader Phone”. The principle activities of the Company are to promote and develop telecommunication services, to promote and undertake programs to extend wireless and mobile telecommunication services, to enable the people to resell telephone services on a commercial basis and also to develop a network that would meet the telecommunication needs of the subscribers and to provide access to similar services at a most competitive price (Annual Report of TBL, 2012).

1.2.3 Bangladesh Telecommunication Regulatory Commission (BTRC)

The government adopted the National Telecom Policy 1998 and under its guideline formulated the Telecommunication Act 2001. In order to ensure development of telecommunication services in Bangladesh and to regulate the activities of telecom sector all over the country, Bangladesh Telecommunication Regulatory Commission (BTRC) was formed in 2002 as an independent statutory body. The Commission operates within the broad framework of the Telecommunication Policy adopted by the Government. The telecommunication sector is recognized as the fastest growing sector in Bangladesh. The commission has been vested all relevant powers, responsibilities and pertinent matters related to telecommunication sector. The objectives of the commission include broadening the efforts for improvement of the sector through better regulation, providing the people with easy access to the telecommunication services for economic development, ensuring a modern

dependable telecommunication and internet service to the people at a reasonable cost, ensuring the efficiency of the telecommunication system and enhancing its capability to compete at both the national and international sphere, preventing and abolishing discrimination in providing telecommunication services. The aim of commission is to progressively rely on competitive market oriented system. In keeping with this objective, the commission is to ensure effective control on telecommunication and to introduce new services and to create a favorable atmosphere for the local and foreign investors who intend to invest in the telecommunication sector in Bangladesh (Bangladesh Economic Review, 2006).

1.3 Statement of the Problem

Telecommunication sector is one of the most dynamic service industries in Bangladesh. Mobile communication is one of the important wonders of modern science and the standard of living in today's world has been changed dramatically with the advent of this technology. So, information on the activities of mobile telecommunication companies becomes very essential to different policy makers and to economic development of the country. One of the major goals of mobile companies is to provide cost effective and quality services to their customers in Bangladesh. For the purpose of providing necessary information to its various users companies need to have an efficient AIS in place. The user group includes creditors, investors, lenders, regulators, trade union and management who take most of their decisions based on the information they receive from the companies in the form of annual reports. For providing relevant and reliable information to the interested users in time, the mobile companies need to be equipped with appropriate and effective AIS. AIS employed in a company works to process the financial data and helps provide economic information through financial statements to various users. The users of accounting information who have different interest always expect credible financial information from companies. Providing information that is reliable, relevant and transparent to the potential users results in an enhanced investor' confidence. Preparation and presentation of credible financial reports are

only possible when there is an efficiently working AIS. Developing an efficient AIS in an organization depends on the relevant accounting policies, principles and most importantly the standards set by both national and international bodies. Legal framework of a country gives clues to framing appropriate AIS for an organization. We know that the financial statements are prepared on going concern basis under the historical cost convention on Generally Accepted Accounting Principles in accordance with International Accounting Standards/Bangladesh Accounting Standards, International Financial Reporting Standards/Bangladesh Financial Reporting Standards, the Companies Act 1994, the Securities and Exchange Rules 1987 and other applicable laws and regulations in Bangladesh. An effective Accounting Information System ensures efficient utilization of scarce resources. If there is no appropriate AIS in companies in line with international best practice and based on international standards, providing information would be impossible.

Poor quality information can have significant social and business impacts (Strong, Lee and Wang, 1997). Most organizations have experienced the adverse effects of decisions based on information of inferior quality (Huang, Lee and Wang, 1999). If a business firm wants to perform well, attain competitive advantage and survive for long then it must have an excellent AIS. AIS helps in producing meaningful information which also helps promoting transparency and accountability. Disclosure of adequate accounting information is the most important thing for taking sound decision making process (Akter and Hoque, 1993). Disclosure practice of mobile telecommunication sector is not clear cut due to lack of mandatory accounting standards. As a result users' expectation for fair disclosure remains unsatisfied. Efficient AIS of the mobile companies are essential because it ensures that the management of the companies gets sufficient information for their decision making purposes. In absence of adequate accounting systems, the management may not be able to take sound decisions. The main object of AIS, however, is to produce useful accounting information to all interested parties. Qualitative characteristics of accounting information produced by AIS ensure the meaningful financial

statements. The users, both internal and external, are benefited in decision making process since quality information helps users take correct and improved decisions. In order to have an impact on the decision making process, accounting information required to be relevant, contributory and timely (Siddiqui and Chowdhury, 2003). Information produced by an AIS is said to be timely when it provides relevant information in time to decision makers. Most of the mobile companies do not publish their information for the users timely. AIS of the mobile companies is such that the generated information is based on historical data and there is no current cost information. The absence of current cost information in the annual reports of mobile companies affects the quality of decision making prediction about the future and the quality of accounting information (Kam, 1986). The major limitations of Accounting Information Systems are related to non-financial measurements, forward looking information, soft assets measurements and timeliness. AIS is a tool in the hands of management. It is an unbiased tool for an effective administration. Poor accounting information jeopardizes administrative effectiveness, which makes managers malnourished administratively. In the absence of proper information, management cannot take any administrative action. So, administrative effectiveness is dependent on the existence of sound AIS. Accounting Information System has also an impact on administrative performance (Onaolapo and Odetayo, 2012). In view of the above, there are sufficient reasons to believe that the AIS of the mobile companies deserve to be examined in detail. With that view in mind, we have tried to examine and evaluate the AIS in place of the mobile companies in Bangladesh.

1.4 Justification of the Study

AIS is considered as an important subsystem by all organizations to perform their day to day business operations properly, to support taking decision by internal decision makers and to fulfill obligations to management. Every business organization has different users both internal and external. Internal users consist of managers and employees in different level of management and external users consist of creditors, customers, suppliers, trade unions, stock holders and

government agencies. Every business organization has system for providing information to the interested users for taking effective decisions. Effective AIS is essential for ensuring reliability of accounting information as expected by the users which help take sound decision for specific purpose. The information produced by the AIS of the selected mobile telecommunication companies should be available to all users so that they can use the information for necessary decision making effectively. Decision makers generally use some information which helps them to arrive at a correct decision and different information is used by different decision makers to achieve their specific goals. Business risk as well as financial risk of telecommunication sector has become acute due to such differences in earning between the selected mobile telecommunication companies working in similar environment. In this situation, they should emphasize on proper handling of Accounting Information Systems.

At present AIS bears significance because of the fact that it provides historical accounting information and to help management in evaluating the past operations, in controlling the present operations and in deciding the future operations of any business organization. The aim of AIS of the selected mobile telecommunication companies is to provide financial information which help to take decisions of management and making logical choice among alternatives about a business entity. The importance of AIS is increasing day by day and it is used widely in every business organization. The AIS is also a subject on demand in the context of cost control and increasing revenues in market economy and globalization. Many researchers have researched in AIS in details, but they have not conducted such study on Accounting Information Systems of mobile telecommunication sector yet. Different studies done earlier by Haider, and Akhter, (2006), Siddiqui, and Chowdhury, (2003), Shaikh (2001), Chowdhury and Chowdhury, (1996), Ahmed, (1996), Dey, (2007), Jahan, (1999), Fowzia and Nasrin (2011), Akter, Tareq and Hoque, (2007), Sori, (2009), Gopiseti and Srinivas, (2012) and Onaolapo and Odetayo, (2012) in different fields of AIS have been reviewed in literature review section. Since, the above topic is very important and such study has not yet been

done this topic has therefore been selected. This study will benefit the selected mobile telecommunication companies as well as the researcher and policy makers of the Government. This study will be helpful to the users of accounting information also.

1. 5 Objectives of the Study

The main objective of the study is to analyze the AIS and to evaluate the application of legal framework and compliance with accounting standards for providing accounting information through preparing the different financial statements of the selected mobile telecommunication companies in Bangladesh. The specific objectives of the study are as follows:

1. To know the major characteristics of AIS of the selected mobile telecommunication companies in Bangladesh.
2. To analyze the opinions of the respondents regarding the application of legal framework and compliance with accounting standards for preparing the financial statements of the selected mobile telecommunication companies.
3. To judge the efficiency of AIS through selected indicators like effective internal control system, proper security measure, good documentation, separation of operation from accounting, extent of disclosure, cost effectiveness, flexibility to meet future needs, processing power of accountants and independent internal and external audit of the selected mobile telecommunication companies through opinion survey on the respondents.
4. To identify the factors influencing the efficiency of AIS of the selected mobile telecommunication companies through opinion survey.
5. To examine the opinions of the respondents regarding the qualitative characteristics of accounting information generated by AIS of the selected mobile telecommunication companies.
6. To provide suggestions for increasing the efficiency of existing AIS of the selected mobile telecommunication companies on the basis of the findings of the research study.

1.6 Hypotheses of the Study

Hypothesis means some assumptions which have to be tested. Based on the objectives of the present research study, the following null hypotheses have been developed and tested:

Main Hypotheses

Ho₁: There is no significant difference regarding the operational results of the selected mobile telecommunication companies.

Ho₂: There is no significant difference of opinions among the respondents regarding the degree of application of legal framework for preparing the financial statement of the selected mobile telecommunication companies.

Ho₃: There is no significant difference of opinions among the respondents regarding the degree of compliance with accounting standards for preparing the financial statement of the selected mobile telecommunication companies.

Ho₄: There is no significant difference of opinions among the respondents regarding the adequacy of accounting information produced by AIS of the selected mobile telecommunication companies.

Ho₅: There is no significant difference of opinions among the respondents regarding the informativeness of accounting information produced by AIS of the selected mobile telecommunication companies.

Ho₆: There is no significant difference of opinions among the respondents regarding the conciseness of accounting information produced by AIS of the selected mobile telecommunication companies.

Ho₇: There is no significant difference of opinions among the respondents regarding the various influencing factors the efficiency of AIS of the selected mobile telecommunication companies.

Ho₈: There is no significant difference of opinions among the respondents regarding the qualitative characteristics of accounting information produced by AIS of the selected mobile telecommunication companies.

Sub Hypotheses (One)

Ho_{1.1}: There is no significant difference in total revenue of the selected companies.

Ho_{1.2}: There is no significant difference in gross profit of the selected companies.

Ho_{1.3}: There is no significant difference in operating profit of the selected companies.

Ho_{1.4}: There is no significant difference in profit before tax of the selected companies.

Ho_{1.5}: There is no significant difference in profit after tax of the selected companies.

Sub Hypotheses (Seven)

Ho_{7.1}: There is no significant difference of opinions among the respondents regarding the size of the company as an influencing factor of the efficiency of AIS of the selected companies.

Ho_{7.2}: There is no significant difference of opinions among the respondents regarding the age of the company as an influencing factor of the efficiency of AIS of the selected companies.

Ho_{7.3}: There is no significant difference of opinions among the respondents regarding the earning of the company as an influencing factor of the efficiency of AIS of the selected companies.

Ho_{7.4}: There is no significant difference of opinions among the respondents regarding the availability of trained accountant as an influencing factor of the efficiency of AIS of the selected companies.

Ho_{7.5}: There is no significant difference of opinions among the respondents regarding the internal control system as an influencing factor of the efficiency of AIS of the selected companies.

Ho_{7.6}: There is no significant difference of opinions among the respondents regarding the internal audit as an influencing factor of the efficiency of AIS of the selected companies.

Ho_{7.7}: There is no significant difference of opinions among the respondents regarding the internal check as an influencing factor of the efficiency of AIS of the selected companies.

Ho_{7.8}: There is no significant difference of opinions among the respondents regarding the attitude of management as an influencing factor of the efficiency of AIS of the selected companies.

Ho_{7.9}: There is no significant difference of opinions among the respondents regarding the organizational structure as an influencing factor of the efficiency of AIS of the selected companies.

Ho_{7.10}: There is no significant difference of opinions among the respondents regarding the resource of the company as an influencing factor of the efficiency of AIS of the selected companies.

Ho_{7.11}: There is no significant difference of opinions among the respondents regarding the rank of responsible executive as an influencing factor of the efficiency of AIS of the selected companies.

Ho_{7.12}: There is no significant difference of opinions among the respondents regarding the good use of information technology as an influencing factor of the efficiency of AIS of the selected companies.

Sub Hypotheses (Eight)

Ho_{8.1}: There is no significant difference of opinions among the respondents regarding the relevance of accounting information produced by AIS of the selected companies.

Ho_{8.2}: There is no significant difference of opinions among the respondents regarding the reliability of accounting information produced by AIS of the selected companies.

Ho_{8.3}: There is no significant difference of opinions among the respondents regarding the usefulness of accounting information produced by AIS of the selected companies.

Ho_{8.4}: There is no significant difference of opinions among the respondents regarding the understandability of accounting information produced by AIS of the selected companies.

Ho_{8.5}: There is no significant difference of opinions among the respondents regarding the comparability of accounting information produced by AIS of the selected companies.

Ho_{8.6}: There is no significant difference of opinions among the respondents regarding the consistency of accounting information produced by AIS of the selected companies.

1.7 The Review of Related Literature

In conducting a research work sufficient relevant research works should be reviewed to determine the area of research gap. Accordingly sufficient research works have been reviewed here.

Haider and Akhter (2006) have written an article entitled "Accounting Information Quality: An Area of Extended Thinking". The authors tried to identify the difference between accounting point of view with that of quality researchers. The quality of accounting information as has been viewed by the accountants is based on FASB'S hierarchy of accounting information quality while that of quality researcher is based on multidimensional concept with varying attributed characteristics depending of an author's philosophical view point. The authors found in their study that: (i) some of the qualitative characteristics of accounting information are also qualitative such as reliability and timeliness; (ii) the authors also found that the Information Quality (IQ) researcher's view of consistency is broader and encompasses both of these; (iii) the Information Quality (IQ) researcher's idea about how information can be relevant is not clear. In this study the authors did not conduct any survey to examine the opinion of the users for judging the quality of accounting information.

Siddiqui and Chowdhury (2003) have written a paper entitled “Relevance of Accounting Information in Bangladesh: An Empirical Study”. The main objectives of the study were to determine the degree of relevance of published accounting information in Bangladesh. They examined the factors affecting the relevance of accounting information. They sampled 13 companies operating in Bangladesh. The authors found that information provided in the company annual report in Bangladesh is only 36 percent to 68 percent relevant. The accounting information also has low feed back value. They also found that on an average information is made available to the decision makers in around seven to ten months after the closure of the accounting period. The limitations of the study are: (i) the sample is too small; (ii) the authors did not mention the sampling technique; and (iii) since the sample is too small the reliability and validity of the results of the study may be questionable.

Akter, Tareq and Hoque (2007) have written an article on “The Effect of the Phases of System Development Life Cycle (SDLC) on the Performance of Accounting Information System (AIS) Development: the Bangladesh Scenario”. The objectives of the study are (i) to identify whether adherence to the different phases of SDLC increases the system development performance of AIS development firms of Bangladesh, (ii) to investigate whether budget size influences the software development performance, (iii) to identify whether system development performance is influenced by motivational level of the employees of the systems development team and (iv) to find out the overall picture of the AIS development firms of Bangladesh i.e., their system development manpower condition, their budget size, their logistics support for AIS development etc. The authors surveyed on thirty three Accounting Information Systems development firms of Bangladesh to examine the effect of the different phases of system development life cycle on the performance of accounting information system development. The authors found that the performance of system development may also be influenced by such factors like system development budget size and

motivational level of the system development teams. The authors also found that there is a significant difference in performance if system development life cycle phases are strictly followed and not followed. The firms following the phases strictly have performed significantly better than those not following strictly. The motivation of the employees of the system development team and the system development performance is not associated significantly. There is no significant difference in performance of high budget and small budget system development projects. The study lacks clear aspects of methodology.

Hasan (2000) has written an article on “Information Useful to Investors”. The author has concluded that: (i) because of changes in economy, it has become difficult for investors to get all the information they need to evaluate companies with the rapid growth of business, technology and communication media, value of companies is attributable to their intangible assets such as patents, trademarks , software, employee skills, customer satisfaction and efficiency of product innovation; (ii) there is no reliable way to place a value on internally generated intangible assets; (iii) if the financial statements are not fully relevant to answer their questions, investors are left to guess where the companies stand and guessing is of course risky; it raises the cost of capital promoting volatility and ultimately distorts the allocation of capital; (iv) when a company capitalizes a cost it means that it is treating the cost as though it were an investment rather than an expense; (v) classic intangible customer acquisition costs is an asset or an expense determines whether the companies earnings are overstated or understated; (vi) how an intangible should be treated depends on what happens in the future; (vii) it is important to recall that where there is uncertainty about value capital, cost is higher and the efficiency of capital allocation is reduced; and (viii) more information reduces uncertainty and hence volatility and risk. The research study is just a descriptive study.

Bhattacharjee and Deb (2003) have written an article on “Smart Accounting: A Shift from Conventional AIS to Automated AIS.” The objective of the study is to focus on the application of computer technology in accounting field by the accounting involved in the accounting process. The authors have discussed that: (i) the introduction of automation in accounting system has changed their paperwork and enabled them to locate their desired information simply with fingertips on mouse; (ii) automated AIS with the help of data base management and reduces the complexity of the accountant’s book oriented role and increase accessibility and availability of such information much more than ever before; (iii) automated AIS has enabled an accountant of a subsidiary of a multinational company to present accounting reports to the headquarter through online and even via teleconferencing or video conferencing; (iv) in automated AIS, the decision making capability of modern accountants is much more improved in the context of speed, accuracy and comprehensiveness; (v) automated AIS has brought a radical change in accountants role in providing the sufficient amount of necessary information to the concerned authority in the form of financial reports; (vi) automation in accounting system has made the modern accountants familiar with various AIS software instead of the physical AIS books; (vii) automated AIS in both public and private levels are being extensively used to provide them a great support so that they can ensure accuracy of their job; and (viii) automated AIS ensures smart accounting with the change in every respect even in the roles of accountants. In this study the authors did not develop and test any hypothesis empirically.

Chowdhury and Chowdhury (1996) have written an article titled “Conceptual Framework of Accounting: Do we need one in Bangladesh?”. The authors mention that the conceptual framework comprises a series of Statements of Accounting Concepts (SACs) which are used as a general guide in the preparation and audit of general purpose of financial statements. The conceptual framework identifies the essential elements of general purpose financial statements, such as assets, liabilities, equity, revenue, expenses and provides authoritative guidance to the definition,

measurements and recognition criteria for each of these elements. Many developed and developing countries like Bangladesh may construct a conceptual framework and may also consider making a mandatory requirement for the preparation and audit to comply with such framework. It is specially needed in preparing and auditing the financial statements of public sector enterprises as well as all companies listed with Dhaka Stock Exchange Limited and Chittagong Stock Exchange Limited. But the study is not devoid of limitations. It has certain limitations such as (i) the research study is just a descriptive study and (ii) the authors did not consider any research hypothesis.

Jahan (1999) wrote an article entitled “Quality of Information Used in Small Enterprise Marketing Management and Its Impact on Business: A Case Study of Kushtia District” wherein he attempted to examine the quality of accounting information and its impact on small business. The author used both primary and secondary data for achieving the objectives of the study. He sampled 40 respondents of small enterprises. The study of the author was limited to four areas of decision making viz., product decision, demand forecasting, product pricing and sales management. The author found that both internal and external information is used for decision making by the small entrepreneurs and there is no formal or systematic data processing system and the validity of data is not beyond question. The author suggested that all small enterprises should introduce the double entry system of accounting and data collection, recording and documentation process should be followed systematically. The limitations of the study are: (i) the findings of the study are not consistent with the achievement of objectives and (ii) the author did not consider other important strategic decision areas such as capital expenditure decisions, financing decision in the study.

Hossain (1991) wrote an article on “Information System in a Garment Factory: A Model”. The author has discussed that: (i) delay in the reporting of information may need to balance the relative merits of timely reporting and provision of reliable information; (ii) damage of records and information of an organization means loss

of its assets because information is an important tool to damage an organization; (iii) increasing volume and complexity of work demands specialization of work. Functions of a business organization can be categorized as Marketing production, personnel, finance etc; (iv) specialization helps organization in (a) getting specialized services/advice (b) particular person can be held responsible for a particular function; (v) for production scheduling priority is to be given to marketing schedule. Finance manager should earlier be informed of the commitment of other managers and when export documents will be available for negotiation by bank to keep his cash flow smoothly; (vi) in small organization it is easy to see what is going on but for a big organization it is difficult, if not impossible. So, information should flow systematically; and (vii) information flow should be arranged in such a way that right information can be obtained at minimum cost quickly and accurately by the right person. In this study the author did not mention any research hypothesis.

Islam (2005) has written an article on “An Examination of Corporate Environmental Information Disclosed by the Bangladeshi Public Limited Companies”. The author has examined the different annual reports of different companies in Bangladesh. He argues that our government made our capital market open for investors in the late 70’s and from that time it became somewhat compulsory for the companies to disclose their environmental information in their annual reports for the full knowledge of the investors. But the article focuses on the very condition of our public limited companies as corporate reporting practice is still a new concept for a developing country like Bangladesh and the public are still ignorant about environmental disclosure in corporate reporting practices. The paper has two specific purposes, first is to explore a very recent environmental practices in Bangladeshi publicly traded companies and the second one is to examine significant differences in the quality of environmental disclosure between industry types and between company sizes. For this purpose, he has made a survey using the Mann-Whitney U test. The result shows that 40% of the companies surveyed have

made environmental disclosure which is more descriptive and more general in nature. 16% of the total companies surveyed have disclosed environmental information under a separate heading in the annual reports. Moreover, his finding show a significant statistical difference in sales revenue and in employee sizes between companies having environmental disclosure and companies not having environmental disclosure. However, he has emphasized on further research in this field and has suggested a different perspective to be adopted for analyzing the contents of a company's annual reports. The author did not consider the various aspects of methodology.

Siddique and Brahma (2005) have written an article on “Globalization of Accounting with Special Reference to Bangladesh”. The purpose of this paper is to review the development in setting global accounting standards in the last few decades and the problems and opportunities they present for globalization in accounting in future. The process of globalization in accounting in Bangladesh first started in 1977, when the Institute of Chartered Accountants of Bangladesh (ICAB) became a member of the International Federation of Accountants (IFAC) and International Accounting Standards Committee (IASC). Accounting has emerged to meet the needs of today's trade and industry nationally and internationally. Accounting has come to play a major role in the present world of global economic interdependence. The globalization in economy goes hand in hand with harmonizing accounting practices at a global as well as regional level. The accountancy profession does play a vital role in the process of economic globalization. The authors mention that the globalization of accounting is linked to the process of globalization of the world economy. Economic globalization has been intensified in recent decades. The research study is just a descriptive study.

Muttakin and Hossain (2003) have written an article on “Presentation of Financial Statements: A Study of the Listed Cement Companies”. The objectives of the study are (i) to examine the legal framework for the presentation of financial statements, (ii) to study the presentation of financial statements of the sample cement

companies and (iii) to evaluate them in the light of IAS-1, presentation of financial statements. Presentation of financial statements is regulated by legal framework and accounting standards in order to ensure the quality of the statements and to serve the needs of the interested users. Presentation of financial statements is required by the Companies Act, 1994 and the Securities and Exchange Rules, 1987 in order to protect the interested users of financial statements and to ensure fair presentation of financial position, result of operation and cash flows. The authors found that the sample companies followed the legal provision and IAS-1 for preparing and presentation of Financial Statements. These have resulted in fair presentation of the financial statements to a great extent. The research work has some limitations as the authors have not considered the various aspects of methodology and leaving no opportunity for hypothesis testing.

Ahmed (1996) has written an article on “Computer Based Information System for Strategic Planning and Competitive Advantage”. In this article the author discussed how computer based information system can help an organization in decision making reducing cost, expanding role of management, increasing deference of an organization locking in customers and suppliers and changing the basic of competition. The author mention that in modern information system, computer has a very significant role in storing, processing and disseminating information and computer based information system (CBIS) has impact on various aspects in business organization like decision making, nature or organization and many other managerial activities that lead in strategic activities in business organization. The author also discussed the problem with computer based information system such as security problems and technical complexity. The author also mentions that the business world is becoming faster and more competitive; the need for information system is increasing in business organization for being efficient in their operation. The limitation of the study is that the article is based on literature review and no survey has been made about the use of computer based information systems for strategy planning in any organization.

Shaikh (2001) wrote an article on “Accounting Information Disclosure to Employees: Annual Report and Employee Report Controversy”. The objectives of the study are: (i) to see whether employees get copy of annual report from their companies and annual reports satisfy their information needs; and (ii) to find out whether the companies provide copy of annual report to their employees and their perception regarding employees’ information needs satisfaction. The author has opined that annual report is made for the shareholders and not for the employees. A small number of employees get copy of annual report but they think that annual report does not satisfy their information needs. They want separate employee reports. Companies do not supply copy of annual report to employees and think that annual report will not satisfy their information needs, and companies need to produce separate report of information for the employees. Separate report which contains financial and other operating information should be provided to the employees by the companies to satisfy their information needs.

Fowzia and Nasrin (2011) have made an article entitled “Application of Computerized Accounting System in Financial Institutions in Bangladesh”. The objectives of the study are (i) to measure individually whether the perceptions about using computerized accounting systems is same or not for different financial institutions, (ii) to assess the level of perceptions of four factors of different financial institutions and (iii) to identify the factors which influence the users to use computerized accounting software for different financial institutions in Bangladesh. The authors mention that AIS is quite well established and numerous commercial packages as well as tailor-made systems have been developed. The business world follows accounting systems that has varying levels of efficiency and excessive costs for such information. The authors also mention that the perceptions of the employees in Bangladesh who are using the computerized accounting system is positive as all factors influence the adoption of computerized accounting system. The limitation of the study is that the time period is not sufficient.

Loqman (1986) made a study on “Accounting System as an Aid to Management Decision: An Analysis of the Opinions of Management in Nationalized Industries of Bangladesh”. The objectives of the study are: (i) to examine the purposes of accounting systems; (ii) to identify the sources of accounting and non-accounting information; (iii) to evaluate the purposes of generating data and preparing financial statements presented through the accounting systems; (iv) to identify the various management areas of uses of data generated as such; (v) to examine the problems at data generation processing and reporting stages of the systems; (vi) to locate the shortcomings of financial statements and reports prepared under the systems ; and (vii) to assess the important problems hindering the use identify the measures for redesigning the present accounting systems for helping management use in its various decision and control areas effectively. The findings of the study are: (i) accounting systems have been viewed by the respondents more as the systems for recording and reporting. The business operation is an information systems for decision making ;(ii) the source of accounting information cover both formal as well as informal media which include financial statements, reports, funds flow statements and value added statements, discussions, observation etc; (iii) untimely submission of information, lack of coordination among various departments, inadequate floor level reporting, dearth of competent analysis, variation in some figures from statement to statement, coding and allocation problem, lack of full authority over reporting every matter, etc have been identified as problems encountered at gathering, processing and reporting stages of accounting systems.

Dey (2000) has written an article on “A Comparative Study on Readability of the Financial Statements of MNCs and PLCs in Bangladesh”. The objectives of the study are: (i) to make a comparative study of the reading ease/difficulty level of the directors’ report, audit report and notes to the financial statements of the MNCs and the PLCs in Bangladesh and (ii) to find out whether there is any significant difference between the readability scores of some selected portion of financial statements of the MNCs and the PLCs in Bangladesh. The author mentions that the

mean readability scores of director's report, auditor's report, and notes to financial statements of MNCs for all the years are higher than those of the PLCs while the average standard deviation of readability scores of director's report of the MNCs is higher than those of the PLCs but in case of auditor's report and notes to financial statements the average standard deviations of the MNCs are lower than those of the PLCs. The author also mentions that the significant difference is also observed between the readability scores of the audit reports and notes to the financial statements of the MNCs and the PLCs in Bangladesh.

Islam (2000) wrote an article entitled "Qualitative Characteristics of Financial Disclosure of the Commercial Banks in Bangladesh". The objectives of the study are: (i) to identify the qualitative requirements for the disclosure of information of the banks and (ii) to compare the disclosure practices with the qualitative requirements. Financial statements are the important sources of financial information. The objective of financial statements is to provide information to the users that are useful in making economic decisions. The success of economic decisions by users depends to a great extent on the quality of accounting information. The author mentions that the balance sheet and profit and loss account of the banks were prepared in the traditional Form. All banks prepared their financial statements every year on going concern principle under historical cost concept. The auditors in their report mentioned that the accounts and financial statements were prepared in accordance with relevant laws and these statements exhibited a true and fair view of the state of affairs of the bank. The author also mentions that the information disclosed in the financial statements shown in the annual reports of the commercial banks in Bangladesh fulfils certain qualitative characteristics.

Pramanik and Islam (1999) have conducted a research article on "Disclosure of Accounting Policies: A Study of the Commercial Banks in Bangladesh". The objectives of the study are: (i) to enquire into the disclosure requirements relating to accounting policies of the banks; (ii) to compare the accounting policies disclosed

with the relevant disclosure requirements and (iii) to measure the adequacy of the accounting policies disclosed. Accounting policies consist of the principles, bases, conventions, rules and procedure adopted by management in preparing and presenting financial statements. There are two accounting policies like general accounting policies and particular accounting policies. The general accounting policies describe those general policies which are adopted in the preparation of financial statements with respect to the measurement base and matching of revenues and expenses. The particular accounting policies describe the bases, rules and procedures adopted by an entity for preparing financial statements. The authors mention that despite several shortcomings observed in case of accounting policies of all the banks, the nationalized banks comparatively provided better disclosure of accounting policies than the private banks.

Hye (1986) wrote an article entitled “Disclosure of Accounting Policies and Its Current Status in Bangladesh”. The disclosure of accounting policy relating to the financial statements is an important aspect of disclosure. Disclosure of accounting policies has a profound effect on the appraisal of and interpretation of information contained in financial statements. The author mentions that the disclosure of accounting policies helps achieve some purpose such as (i) to narrow the areas of differences among firms in the disclosure, measurements, and method of presentation of financial information in financial statements and financial reports, (ii) to change the quantity and quality of information in published financial reports, (iii) to assist the investors and creditors in their financial decisions, (iv) to bring about uniformity in accounting practice and thereby increase comparability of information contained in financial statements and (v) to provide assistance in permitting better interpretation of the financial statements of a firm. The author has conducted a descriptive research study.

Hakim and Morshed (2004) has written an article on “Decision-Support Systems: A Tool for Executive Decision Making”. Decision making is an important part of all managerial activities of any organization. Decision-Support Systems is computer based system that integrates quantitative techniques of decision making with data processing facilities is very useful and effective tool for the executives in making decisions and to improve the effectiveness of executives in any organization. The DSS focuses on providing information interactively to support special types of decisions by individual manager and its helps the decision makers to choose the best alternative solutions. The DSS also assist the decision maker by identifying and measuring the relevant alternatives, along with providing relevant information to the decision maker. A well DSS is used at many levels of the organization for promoting managerial decisions effectiveness. The authors mention that the DSS encourages decentralization and participation in decision making reducing centralization of power and authority. DSS is a very useful tool for executives in case of semi-structured and unstructured decision situations. Now-a-days executives are becoming familiar with DSSs and frequently applying it with confidence. In this study the authors did not consider any hypothesis.

Bhuiyan and Houqe (2004) have conducted a research article entitled “Accounting and Reporting Policies in the International Setting: A Review of the Policies of Multinational Corporations”. The aims of this is to identify the efforts in the international setting to develop guidelines for a harmonized global accounting and reporting and ways to regulate the accounting and reporting of organization operating in international setting. The users of information need corporate reports which are comparable regardless of national origin and which disclose in usable form the economic and social information required for effective evaluation and decision-making. The authors mention that with the geographic growth of business operations, accounting and reporting have assumed an international dimension. International accounting reporting issues are increasingly becoming matters of concern both to developing and developed countries and should be subject to

multilateral consultations. In this study the authors did not develop and test any hypothesis empirically for their study.

Ahmad and Morshed (1998) had written an article entitled “Decision Support Systems: Effective use of Computer for Managerial Decisions”. Decision support systems are fundamentally concerned with improving the effectiveness and efficiency of knowledge management activities that occur in the course of decisions making. Decision making for management control is principally concerned with how efficiently and effectively resources are utilized and how well operational units are performing. Decision support systems are an effective tool that can aid a manager in making comprehensive, quick and efficient decision for achieving the specific purpose. In order to develop the economy of Bangladesh through proper resource utilization and correct decision-making decision support systems should be applied in all major levels of management throughout the country and it helps in setting priority and ensures efficient decision making in resource utilization. The authors mention that decisions to be made are often very critical for smooth operation and existence of the organization in the long run, may it be government organization or a non-government one, manufacturing or trading or service organization. Users training, involvement, and experience, top management’s support; length of use; and novelty of the application are among the most important factors in DSS’s success. In this study the authors did not test any research hypothesis for their study.

Dey (2007) has made a paper on "Accounting Information System in Commercial Banks - An Evaluation in Bangladesh". The objectives of the study are: (i) to know about the accounting information system of Banks; (ii) to know about the use of the methods of accounting system in the banks; (iii) to know about their data control or internal control system; (iv) to know about the process of providing information to users; (v) to know about the retail banking services provided by the banks; and (vi) to know about the satisfaction of the bankers about their accounting information system and problems of Accounting Information System. The author found that

most of the commercial banks follow combination of manual and computerized system for data collection. nationalized commercial banks, specialized banks, foreign banks use combination of accrual basis and cash basis but the private banks follow accrual basis. For data recording, the nationalized, private and foreign banks use computer, whereas specialized banks do it manually. All the banks performed data management and maintenance through computer though it is not properly organized. Internal control system seems to be sound. The limitations of the study are: (i) the author has not evaluated the development procedure of AIS of the banks and (ii) the author did not measure the satisfaction of external users of AIS and the selection of respondents have been confined to only bank executives.

Goposetti and Srinivas (2012) had written an article on “Accounting Information System (AIS)-A Conceptual Study”. The main purpose of the study is to provide a conceptual view about Accounting Information System. For the operational purpose the sub objectives are (i) to provide a structural framework of Accounting Information System and (ii) to study the role of Accounting Information System in Corporate Governance. The authors found that the AIS provide meaningful information to take various managerial decisions. By using AIS, all the stakeholders such as suppliers, customers, employees, shareholders etc. can be able to get accurate information about the economic affairs of a business organization to ascertain profit and losses. It is also helpful to the company auditors in generating accounts within short time at the end of every accounting period. Accounting Information System is an appropriate tool of information provisioning the environment for decision making and also eliminates the paper work as well as reduces the cost very significantly. Accounting Information System also helps the business enterprises in the global context to make rational decision in a swift manner for the betterment of the business. In this study the authors have not considered any hypothesis and methodology of the study is narrow.

Dalci and Tanis have written an article on “Benefits of Computerized Accounting Information Systems on the JIT Production Systems”. The authors have presented in their article that Accounting Information Systems have also been computerized as a result of significant improvements in the technology. As AIS are being computerized, accountants must gain the skills to use computerized systems. The use of computerized AIS has brought opportunities for companies to perform the accounting functions more effectively and efficiently because the use of computerized AIS has brought significant time and cost savings. Use of information technology to perform accounting functions has brought a chance for companies to progress toward paperless offices. Companies applying a JIT production system may as well apply it more effectively if they use computerized systems. Such tools as electronic data interchange and electronic funds transfer can provide companies with opportunities to apply JIT production system more effectively and save money. The authors also have mentioned that improvements in the information technology have facilitated the use of cost and management accounting procedures for this reason most of the companies have started to apply JIT production system as a tool to become competitive. Companies applying JIT productions system aim at minimizing all inventory levels and delivering the goods and services to costumers on time. In this sense, use of information technology has also helped companies apply JIT production system more effectively. In this study the authors did not develop and test any hypothesis for their study.

Daoud and Triki (2013) have conducted a study on “Accounting Information Systems in an ERP Environment and Tunisian firm performance”. The purpose of the study is to examine the influence of the accounting information system in an ERP environment on firm performance. The authors found that the accounting practices are determined by top management commitment to the ERP system deployment project and by qualified external expertise. These practices are also influenced by the information quality produced by the accounting information systems and by the ERP system quality. The study also found that the ERP system

allows the use of new general accounting practices, cost accounting and financial management. Companies must strive to increase their use of these practices to improve their performance. Accounting information systems provides both historical and forecasting accounting information that covers financial accounting, management control and financial analysis and accounting information systems are supported by ERP technology and assesses their effects on business performance.

Sori (2009) wrote an article entitled “Accounting Information Systems (AIS) and Knowledge Management: A Case Study”. The author has shown in his research study that most of the people that are involved in the company’s operation within and outside the organization get the benefits from the accounting information generated the implementation of AIS for decision making and the company used automated AIS known as Contract Plus–Financial and Project Accounting package commercially developed by a private company (ZYXW). The automated AIS assists quickly the process to generate financial statements and overcome human weaknesses in data processing. The AIS assists the operational managers to produce monthly reports for income statements, balance sheet and statement of changes in financial position for the strategic and the top managerial level plan, control and decide resources allocation, information process and overcome traditional human weaknesses and enhances the resource management, the process of monitoring, control and prediction of ZBMS business for continuing business profit. ZBMS is a company that registered in Kuala Lumpur and operates in construction industry. The AIS enhanced the organizations’ accounting functions and added information value to develop the growth of tacit and explicit knowledge, where personnel were trained intensively and experience and trouble shooting were recorded for future reference and training. In this study the author did not consider any hypotheses in his research study.

Gordon and Miller (1976) have written an article on “A Contingency Framework for the Design of Accounting Information Systems”. The objective of the study is to provide a framework for designing accounting information systems which consider the specific needs of the organization. At the very outset of the paper, the two writers have affirmed that their objective is to provide a framework for designing AIS and they are confident of their work as they have considered the specific or particular needs of different organizations. The article, to some extent, can be considered through-going as it not only outlines the framework for the designing of AIS but also it focuses on the former researches concerning the same problem but which, in their opinion, have taken ‘a rather narrow and inflexible view of accounting information.’ For this reason, they have taken into consideration the various attributes such as environmental, organizational and decision making style etc for designing a definite and prevalent AIS. The paper is divided into three sections and each of the sections ultimately leads to the discussion of designing an effective AIS. They have shown us how the different features of an organization work for making an AIS and what are the proper requisites of AIS. In this study the authors have not considered any hypothesis in their study.

Sajady, Dastgir and Nejad (2008) have written a paper on “Evaluation of the Effectiveness of Accounting Information Systems”. The study shows that the accounting systems are important parts of the fabric of organizational life and need to be evaluated in their wider managerial, organizational and environmental context. The effectiveness of accounting information systems not only depends on the purposes of such systems but also depends on contingency factors of each organization. Accounting information systems are said to be effective when the information provided by them serves widely the requirement of the systems users. Effective systems should systematically provide information which has potential effects on decision-making process. The findings of the study are that implementation of accounting information systems could lead to better decision-

making by managers, more effective internal control systems, enhancement of the quality of financial reports and facilitating financial transaction process.

Onaolapo and Odetayo (2012) have written an article entitled “Effect of Accounting Information System on Organizational Effectiveness: A Case Study of Selected Construction Companies in Ibadan, Nigeria”. The main objective of this study is to examine the effect of quality of accounting information system on the organization performance. While the specific objectives are: (i) to find out the effect of AIS on administrative effectiveness and (ii) to examine how AIS lead to better decision-making by managers. The authors mentioned that automated AIS provide a tool for finance department to enhance organizational effectiveness especially in this era of global technology advancements. The authors concluded that AIS has a significant effect on organizational effectiveness. The authors found that good accounting information enhance administrative effectiveness. The authors also found that AIS leads to good financial reports and also leads to better decision-makings. The authors also mention that the management of the companies should engage those that are computer literate and highly experienced, they should also be trained with latest information technology ascertained competitive effectiveness of the organization. In the study the authors did not mention the different aspects of methodology and the numbers of respondents are insufficient.

Grande, Estebanez and Colomina (2011) conducted an article on “The impact of Accounting Information Systems (AIS) on Performance Measures: Empirical Evidence in Spanish SMEs”. The authors mention that the AIS shows that computerized accounting tools are directly related to the economic and financial results and productivity in small and medium-sized business organizations and the greater effort made by SMEs to implement, invest and improving accounting information systems corresponds to better financial and economic results for the whole management of firms. The authors found that there is a positive relationship among the SMEs that use AIS for fiscal and bank management and better performance measures. The authors also mention that this study provides value

added in accounting literature given the scarcity of works dealing with the relationship between the application and use of AIS and performance and productivity indicators in SMEs in Spain. In this study the authors did not consider the various aspect of methodology.

Kobayashi (1995) has written an article entitled “Distribution Strategy and Accounting Information”. The author has focused in his paper on the crucial problems of retailers emphasizing that it has become difficult for the retailers to sustain competitive advantage over a long period. He strongly believes that the business environment changes with every passing moment and so there can be no guarantee that the business methods which work today can also be implemented tomorrow. With this paper, he wants to make the companies related with retailing, aware of the problems and for this reason he has proposed certain strategies for coping with these problems. His guiding proposition in this paper is that constant adaptation to the changing environment is the key to sustaining competitive advantage. The exceptionality of the paper lies in his proposal of a new accounting system which he has named as Dynamic Accounting for Sustainable Competitive Advantage (DASCA) which he believes will support environmental adaptation. He has also shown how his new design of accounting differs from the traditional designs of accounting. He expresses that the retail business is relatively easy to enter and there have been many cases in which unique retail services and ideas were easily copied. So, he advocates for the duality accounting as it welcomes dynamism which can be a source of development of a company. At the last of the paper, he looks forward with the view that by maintaining a dual view, accounting can give us a complete, real and multi-faceted picture of the corporate world which in return can enrich the retailer’s knowledge about the different activities of the Japan retail market. In this study the author has not considered any hypothesis and it is a descriptive study.

Breton and Taffler (2000) have written an article on “Accounting Information and Analyst Stock Recommendation Decisions: A Content Analysis Approach”. Financial analysis is material in security market for interpreting and disseminating corporate financial and other information which is used for analyzing stocks. The authors have tried to make assessment on the relative importance of accounting measures in comparison with the non-financial information items. They argue that accounting information is of fundamental importance to the analysts but the analysts are equally concerned with the firm’s management and strategy and its trading environment in arriving at their investment recommendation. The article is valued by the accounting policy makers as from it they can understand how the financial analysts play a vital role in security markets and how much their investment recommendations have a material impact on trading activity and stock returns.

Siop and Ahmed (2000) have prepared an article on “The Use of Accounting Information by Small Enterprise Owners/Managers in Emerging Economics: The Case for Papua, New Guinea”. The objectives of this study are; (i) the extent of perceived awareness and use of selected financial accounting and management control techniques by Small Enterprise owners/managers in managing their enterprise; (ii) the effect of the owners/managers level of education and business experience on the awareness and use of selected financial accounting and management control techniques. The authors have concluded: that (i) accounting and financial management are needed for public and private organizations interested in developing small- scale entrepreneurship in developing countries in general and in PNG in particular; (ii) the Small Enterprise owner/manager is a person establishing a business enterprise assuming the managerial responsibility and carrying on a formal and legal operation of a particular type of business in a given area/ locality; (iii) education level can affect the awareness and usage of accounting information but only business experience does not improve the level of its awareness and usage; and (iv) there is a big gap between the owners /managers

awareness and the use of financial management controls/techniques. In this study the authors did not consider any hypothesis for their study.

Calderon, Olsen and Conrad (1996) have written an article entitled “Database Coverage in the Accounting Information Systems Course”. The authors tried to examine the extents of coverage of database management systems concepts and topics in the undergraduate accounting information systems (AIS) course. The authors surveyed on three hundred three AIS instructors to examine whether accounting instructors cover contemporary data base management systems topics in the AIS course. The authors used survey method to conduct their research. The response rate was: twenty percent (20%) subjects were asked to rate their coverage of each topic on a seven point scale which reflected different level of coverage of data base management. The authors found that despite the 1986 recommendations of the AAA committee on contemporary approaches to teaching AIS and recent changes in the accounting profession it appears that large numbers of AIS instructors are not covering fundamental concepts and topics in the area of data base management systems. Moreover, the level of coverage is relatively low among those instructors who do incorporate database concepts and topics into their AIS courses. Despite the growth in information technology and increasing importance of database tools and technique in practice, current coverage at database topics is below the level recommended by the 1986 AAA committee. This study has not addressed the reasons for the low level of coverage of data base systems in the AIS course.

1.8 Conclusion

A host of research works done by various researchers on different aspects of AIS and also on other related aspects have been reviewed along with their limitations. It is evident from the review of research works that none of the study has examined the characteristics of AIS. From this perspective the present study has been designed to examine and evaluate the different aspects of AIS of selected mobile telecommunication companies.

1.9 The Structure of the Thesis

The present research study consists of **nine** chapters. The main focus of this research study is the existing Accounting Information Systems of the selected mobile telecommunication companies.

The first chapter covers the prelude, a profile of the telecommunication sector in Bangladesh, statement of the problem, justification of the study, objectives of the study, hypotheses of the study, the review of related literature and structure of the thesis.

The second chapter shows the methodology of the study. This chapter focuses on the selection of sample, choice of the period, nature and sources of data, methods of data collection, preparation of questionnaire, selection of the respondents, statistical tools used for the study and reliability of data.

The third chapter comprises the theoretical and conceptual framework. This chapter highlights the various concepts which are related with AIS. In addition, the chapter also describes the computerized AIS and accounting software.

The fourth chapter shows the evaluation of the practice of AIS and company's performance. The main focus of this chapter is to present the practice of AIS through the questionnaire survey on the company executives. Various accounting policies and notes to the financial statements have also been discussed in the same chapter.

The fifth chapter focuses on the legal framework and the accounting standards. This chapter also analyzes the opinions of the respondents regarding the degree of application of legal framework and compliance with various standards for preparing the financial statements.

The sixth chapter evaluates the efficiency of AIS through selected indicators. Opinions of the respondents have been collected in respect of the selected indicators. The areas of this chapter are effective internal control system, proper security measure, good documentation, separation of operation from accounting, the

extent of disclosure, cost effectiveness, flexibility to meet future needs, processing power of accountants and independent internal and external audit.

The seventh chapter shows the factors influencing the efficiency of AIS. This chapter examines the various influencing factors which are size of the company, age of the company, earning of the company, availability of trained accountant, internal control system, internal audit, internal check, attitude of management, organizational structure, resource of the company, rank of responsible executive and good use of information technology. This chapter also analyzes the opinions of the respondents regarding the various influencing factors of AIS.

The eighth chapter examines the opinions of the respondents regarding the qualitative characteristics of accounting information which are relevance, reliability, usefulness, understandability, comparability and consistency.

The ninth chapter concludes and summarizes the whole study. The study also shows the suggestions and limitations of the study and giving recommendations to further research on this field.

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CHAPTER FOUR

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CHAPTER TWO

Research Methodology

2.1 Introduction

Research methodology is the way to systematically solve the research problem and every researcher follows some systematic methods to complete the research work. A scientific approach to the research methodology is very much essential to evaluate the research problem systematically. The aim of research methodology is to set up the foundation of the statistical analysis. This chapter shows the different aspects of research methodology.

2.2 Selection of the Sample

There are six mobile telecommunication companies in Bangladesh. Researcher has selected two mobile telecommunication companies viz Grameenphone Ltd. (here in after Company # 1) and Teletalk Bangladesh Limited (here in after Company # 2) from the population for the purpose of our study because the data of remaining companies are not available. One company is enlisted under Dhaka and Chittagong stock exchange and another one is state owned company. The selection of the companies is based on the facility of data collection. The selection of Sample Company is made purposively for exclusive study.

2.3 Selection of the Period

Researcher has selected a period of study for five years starting from 2008 to 2012. The period of study has been selected on the basis of availability of data collection.

2.4 Nature and Sources of Data

The present study is based on both primary and secondary data. The secondary data have been collected from the audited annual reports of the Grameenphone Ltd. and Teletalk Bangladesh Limited. Primary data are the opinions of the selected respondents and collected from the respondents personally through structured questionnaires. The other sources of information are as follows:

2.4.1 Documentary Source

Researcher has also visited various libraries such as Rajshahi University library, Dhaka University library, ICAB library and ICMAB library to develop the theoretical and conceptual aspects of the research study.

2.4.2 Books

Different authors have described their ideas and theories in their books. All such books are essential for the researcher in order to form an idea about different concepts relevant to the study.

2.4.3 Articles

Researcher has collected various articles in different fields of Accounting Information Systems in Bangladesh and abroad to conduct literature review.

2.5 Preparation of Questionnaire

Researcher has prepared three sets of close - ended questionnaire for the selected respondents in the light of objectives and hypotheses of the study. The questionnaires were prepared and pilot tested with experts in the field and suggestions from the experts have been incorporated to improve the quality of questionnaires. First set is for company executives and the questionnaire consists of two parts, part one is related to respondent's profile and part two is related to the practice of AIS. Second set is for experts in accounting (chartered accountants, cost and management accountants and teachers in accounting) and the questionnaire consists of three parts, part one is related to respondent's profile, part two is devoted to the evaluation of different dimensions of financial statements and others and part three describes the factors influencing the efficiency of AIS. Third set is meant for security consultants and the questionnaire consists of two parts, part one is related to respondent's profile and part two is related to the evaluation of different dimensions of financial statements. Likert five point rating scale has been used in this questionnaire for measuring the opinions of the respondents. The point on the

rating scale measured the opinions of the respondents like greatly=5, moderately=4, slightly=3, neutral=2 and not=1.

2.6 Selection of the Respondents

Primary data for the purpose of the present research study have been collected on 195 respondents consisting of 60 chartered accountants (CA), 50 cost and management accountants (CMA), 30 teachers in accounting (Acad.) and 55 security consultants (SC). 200 questionnaires were distributed out of which 195 respondents have given valuable opinions on the questionnaire and the remaining 5 respondents did not return the questionnaire. The researcher visited the respondents personally for collecting the data.

2.6.1 Age Group of the Selected Respondents

Table # 2.1

Table showing the age group of the respondents

	Respondent Groups									
	CA		CMA		Acad.		SC		Total	
Age Group	No.	%	No.	%	No.	%	No.	%	No.	%
Below 30	16	26.67	06	12.00	02	6.67	28	50.91	52	26.67
30 – 35	28	46.67	23	46.00	10	33.33	18	32.73	79	40.51
35 – 40	08	13.33	10	20.00	02	6.67	06	10.91	26	13.33
40 - 45	02	3.33	06	12.00	05	16.66	02	3.63	15	7.69
45 – 50	00	00	03	6.00	05	16.67	00	00	08	4.10
50 – 55	02	3.33	01	2.00	02	6.67	01	1.82	06	3.08
55 and above	04	6.67	01	2.00	04	13.33	00	00	09	4.62
Total	60	100	50	100	30	100	55	100	195	100

(Source: Opinion Survey)

Table # 2.1 shows that the age group of the respondents and it is evident that 26.67% of the respondents are in the age group below 30, 40.51% of the respondents are in the age group 30–35, 13.33% of the respondents are in the age group 35-40, 7.69% of the respondents were in the age group 40-45, 4.10% of the respondents are in the age group 45-50, 3.08% of the respondents are in the age

group 50-55 and 4.62% of the respondents are in the age group 55 and above. Thus, it is evident that the majority respondents are in the age group 30-35.

2.6.2 Educational Qualifications of the Selected Respondents

Table # 2.2

Table showing the educational qualifications of the respondents

	Respondent Groups									
	CA		CMA		Acad.		SC		Total	
Educational Qualifications	No.	%	No.	%	No.	%	No.	%	No.	%
Graduate	10	16.67	06	12.00	00	00	11	20.00	27	13.85
Post-Graduate	50	83.33	44	88.00	14	46.66	44	80.00	152	77.95
M. Phil	00	00	00	00	02	6.67	00	00	02	1.02
Ph. D.	00	00	00	00	14	46.67	00	00	14	7.18
Total	60	100	50	100	30	100	55	100	195	100

(Source: Opinion Survey)

Table # 2.2 shows that educational qualification of the respondents. From the above Table it is evident that 13.85% of the respondents are graduates, 77.95% of the respondents are post-graduates, 1.02% of the respondents had M. Phil degree and 7.18% of the respondents had Ph. D. degree. Thus, it is evident that the majority respondents are post-graduates.

2.6.3 Basic Discipline of Education of the Selected Respondents

Table # 2.3

Table showing the basic discipline of education of the respondents

	Respondent Groups									
	CA		CMA		Acad.		SC		Total	
Basic Discipline	No.	%	No.	%	No.	%	No.	%	No.	%
Arts	00	00	01	2.00	00	00	03	5.45	04	2.05
Science	03	5.00	05	10.00	00	00	12	21.82	20	10.26
Business/Commerce	57	95.00	44	88.00	30	100	38	69.09	169	86.67
Engineering	00	00	00	00	00	00	02	3.64	02	1.02
Total	60	100	50	100	30	100	55	100	195	100

(Source: Opinion Survey)

Table # 2.3 shows that the basic discipline of education of the respondents and it is evident that the 2.05% of the respondents belong to arts group, 10.26% of the respondents belong to science group, 86.67% of the respondents belong to business/commerce group and 1.02% of the respondents belong to engineering group. Thus, it is evident that the majority respondents belong to business/commerce group.

2.6.4 Length of Services of the Selected Respondents

Table # 2.4

Table showing the length of service of the respondents

	Respondent Groups									
	CA		CMA		Acad.		SC		Total	
Length of Service	No.	%	No.	%	No.	%	No.	%	No.	%
Below 5	37	61.67	16	32.00	01	3.34	40	72.72	94	48.20
5 - 10	09	15.00	21	42.00	12	40.00	10	18.18	52	26.67
10 - 15	07	11.67	08	16.00	04	13.33	02	3.64	21	10.77
15 - 20	02	3.33	03	6.00	06	20.00	02	3.64	13	6.67
20 - 25	00	00	00	00	03	10.00	00	00	03	1.54
25 – 30	02	3.33	02	4.00	00	00	01	1.82	05	2.56
30 and above	03	5.00	00	00	04	13.33	00	00	07	3.59
Total	60	100	50	100	30	100	55	100	195	100

(Source: Opinion Survey)

Table # 2.4 presents the length of service of the respondents and it is found that the 48.20% of the respondents are in the range of below 5 years length of service, 26.67% of the respondents are in the range of 5-10 years length of service, 10.77% of the respondents are in the range of 10-15 years length of service, 6.67% of the respondents are in the range of 15-20 years length of service, 1.54% of the respondents are in the range of 20-25 years length of service, 2.56% of the respondents are in the range of 25-30 years length of service and 3.59% of the respondents are in the range of 30 and above years length of service. Thus, it is evident that the majority respondents are in the range of below 5 years length of service.

2.7 Reliability of Data

For preparing a research report, the reliability of data is to be ensured to form a sound basis for conclusion. The reliability test is used to find out the reliability of the results of the opinions. The Chronbach Alpha test has been used to test reliability. It is represented by the symbol alpha (α). The standard level of Chronhach Alpha level is 0.7 or more. If the value of Chronhach Alpha is 0.7 or more then it is evident that the reliability is ensured. The results of Cronbach Alpha test have been presented in chapter five, chapter six, chapter seven and chapter eight.

2.8 Tools of Analysis

After obtaining the data from the different sources, various statistical tools like Mean Values, Standard Deviation, Co-efficient of Variation, Chi-Square test, ANOVA test and t test have been used to analyze the collected data. Researcher has used SPSS for conducting the tests.

2.9 Conclusion

The chapter shows the methodology of the study. The sources of primary and secondary data have been revealed here. Most of the secondary data for the study have been collected from the audited annual reports of the selected companies and the various statistical tools have been used to analyze the collected data. This study has used close-ended questionnaire to collect the opinions of respondents such as company executives, experts in accounting and security consultants.

CHAPTER THREE

Theoretical and Conceptual Framework

3.1 Introduction

The conceptual framework of accounting plays vital role for providing meaningful information to the interested stakeholders and it is designed to establish concepts which help to prepare various financial reports for the different stakeholders. Conceptual framework establishes a generalized theory which helps the formation of financial accounting and reporting standards. The conceptual framework comprises a set of statements of accounting procedures which are used as a general guide in the preparation and audit of general purpose financial statements. The conceptual frameworks identify the essential elements of general purpose of financial statements, such as assets, liabilities, equity, revenue, expenses and it is strongly desirable that all large entities required preparing financial statements complying with a broader set of requirements including the accounting standards and conceptual framework. It is believed that the application of a conceptual framework is a help for the preparers and auditors in endeavoring to fulfill their legal and professional obligations in connection with preparation and audit of general purpose financial statements (Chowdhury and Chowdhury, 1996). According to Financial Accounting Standards Board (FASB), “the conceptual framework is a coherent system of interrelated objectives and fundamentals that can lead to consistent standards and that prescribes the nature, function, and limits of financial accounting and financial statements”.

3.2 Importance of the Conceptual Framework

The importance and necessity of conceptual framework is multi-dimensional. The interested users need to use conceptual framework to reach their particular goals and to take an authentic decision. The importances of conceptual framework are given below:

- (i) It is important to prepare the different financial statements and financial report easily as it gives a clear idea of the procedures that have been employed to make it.

- (ii) It is crucial for preparing an impartial and compact report
- (iii) It is necessary to solve the different problems rapidly occurring in the modern business world of accounting practices.
- (iv) It helps to select the best alternative from a range of options.
- (v) It is a tool in protecting freedom of the auditors. Last of all, it is vital to set accounting standard. So, in the modern accounting, it is of great importance (Uddin, et al, 2013)

Concept of Accounting Information Systems

For defining Accounting Information Systems (AIS) we can separately define the terms ‘Accounting’, ‘Information’ and ‘Systems’.

3.3 Accounting

Accounting is related to all business activities and it is a necessity for providing meaningful information to the various interested users because that information is used for necessary decision-making purposes. Accounting is also used to measure the various economic activities and to prepare the different financial statements of any business organization. The decision making process has become more complex and complicated in the modern business world. So, the decision making process should be based on correct and relevant data. In present time accounting has already been established as important systems of every business organization for producing information timely to the interested users. According to American Institute of Certified Public Accountants (AICPA), “accounting is the art of recording classifying and summarizing, in a significant manner and in terms of money, transactions and events which are, in part at least, of a financial character and interpreting the result thereof”. So, accounting is an information system that provides meaningful information relevant to a business enterprise that helps to

understand the financial position of any business concern, prepare the different financial statements and users use these statements for decision making process.

3.4 Generally Accepted Accounting Principles

Generally Accepted Accounting Principles refer to certain basic and established rules and procedures which are adopted and accepted generally and universally. In fact, Generally Accepted Accounting Principles mean some principles related with accounting practices and their implementation that are generally accepted. The purpose of GAAP is to help ensure that financial statements will provide relevant, reliable and comparable information to the interested users on a consistent basis.

3.5 Basic Accounting Assumptions

The procedures of accounting that have been acknowledged for preserving the practices of accounting are known as accounting concepts or assumptions. All kinds of tasks related with accounting practice are performed based on some concepts or assumptions and these concepts or assumptions are given below:

3.5.1 Business Entity Assumption

According to this assumption, every business organization is visualized or conceived to be separated from its owners who supply capital of the business organization. In this respect, all economic events that change the financial position of the business organization are recorded in the books of accounts. The business organization itself is the owner of all the assets and in that case it is liable to take all the responsibilities. In this regard, a business organization is an entity that is lively and active taking in different tasks. So, it can be said that an accounting entity is held to be separate and distinct from its owners and the personal activities of the owners are not taken into consideration in the accounting measurements of the business itself (Smith, Keith and Stephens, 1983).

3.5.2 Going Concern Assumption

This assumption believes that the business entity will continue for an unlimited period of time to fulfill its objectives and to reach its goal. It is true that some business failures occur every year but a business is established keeping in view some objectives and so it cannot stop its operations in the middle of the way. Actually, preserving the continuity of business is the focus point of this assumption. It is very logical and suitable for business to go forward keeping in view this assumption as business organizations are assumed to continue for an indefinite period in the future.

3.5.3 Monetary Unit Assumption

This assumption indicates that all activities of the business organization are measured in terms of money. As per this assumption, money is the standard or common unit of all kinds of measurement in business activities. Whatever the business events or transactions, if those are capable of being measured or expressed in terms of money, they are recorded into books of account of business, otherwise they are not recorded in the books. It is a common denominator to account for the transactions of business organization in a uniform manner which ensures comparability (Jain and Narang, 2001).

3.5.4 Periodicity Assumption

According to this assumption the economic activities of the business enterprise are divided into specific time period (Kieso, Weygandt and Warfield, 2004). This assumption considers business a continued or moving entity. But it is not desired by anyone that all the transactions will be accounted or calculated only when this eternal movement is finished. So, a procedure has been devised by accounting to divide the eternal journey or movement of business entity into shorter period which is generally a calendar year so that shareholders may be aware of the profit and loss and financial position of the concerned entity. It is very essential for having a

comparative study between two or more accounting periods which in turn helps the related users to know their actual condition.

3.6 Basic Accounting Principles

The principles related with accounting practice which are in use are some established and proven rules and procedures and they have been acknowledged and accepted even by the international rules. It is the centre around which every type of accounting tasks is done. It gives the guidelines how business transactions should be recorded into books of accounts. These principles are given below:

3.6.1 Historical Cost Principle

According to this principle, the assets and liabilities are recorded in the books of accounts of business enterprise on the basis of their acquisition cost (Kieso, Weygandt and Warfield, 2004). Cost is relevant as well as reliable as it is measured objectively. Moreover, as it represents the assets sacrificed, it is mostly relevant. However, it represents, the exchange price or monetary consideration given for acquiring goods or services and recorded in the books of accounts and reported in the financial statements. Though this principle is the mostly argued and debated one, it is taken as reality based principle in accounting practice.

3.6.2 Revenue Recognition Principle

This principle indicates that revenue is recognized to be earned on the date on which it is realized in the accounting period. The principle of revenue recognition determines the point of time at which revenue is considered as having been earned. Revenue can be recognized which it meets the criteria for revenue recognition which are (a) measurability of the asset value; (b) existence of a transaction; and (c) substantial completion of earning process. Revenue refers to the value of good or services which are handed to the customers of the business. Revenue is one of the

effective ways to increase the assets and to measure the solvency of business enterprise.

3.6.3 Matching Principle

The focus point of this principle is that let the expense follow the revenues of a business organization (Kieso, Weygandt and Warfield, 2004). This principle holds the view that all the expenses done in generating revenue should be matched with the revenue generated period by period. Purpose for which expenses are made is given the most importance in measuring and matching expenses with revenue. According to this principle, relevant revenue is enlisted in opposition of appropriate expenditure. However, it is very important as a principle as it compromises between cost and revenue and match them to determine the profit.

3.6.4 Full Disclosure Principle

According to this principle the different financial statements and the accompanying notes should be rich with necessary data and information as it is brought out to report the financial condition of a business entity for better understanding of the interested users who take the decision depend on disclosure of information (Welsch, Newman and Zlatkovich, 1986). It is done to make it easier for the interested users to know the actual condition of the business enterprise. It is necessary to apply full disclosure principle because the large volume of information reflected in the annual report is necessary for the decision maker to take effective decisions. The presentation and publication of all the necessary information is essential to form sound decision by interested decision makers.

3.7 Accounting Constraints

Constraints in accounting refer to the exceptions in the use of accounting principle in special circumstances. The two main constraints are (i) the cost-benefit relationship constraint and (ii) materiality constraint. The others constraints are (i) industry practice constraint and (ii) conservatism constraint.

3.7.1 Cost-Benefit Relationship Constraint

This constraint focuses on the costs of providing accounting information should be lower than the benefits of providing accounting information (Kieso, Weygandt and Warfield, 2004). Cost-benefit relationship constraint shows the hindrance and the interest of users. In presenting accounting information, we have to bear expenses but these expenses become fruitful when we get advantages from that particular information. Accounting information becomes acceptable to the users for taking decision when the advantages of information are greater than those of expenses. So, a principle of balance should be followed to ensure the best use of information and to protect the interest of the users.

3.7.2 Materiality Constraint

According to this constraint, information should be presented when it is material. The constraint holds that when all the information related with business is disclosed, it is important to evaluate which are more important and which are less important. The book of accounts should not be verbose with unnecessary and irrelevant information. So, it is important to assess the relevance of information during enlisting all the information of business.

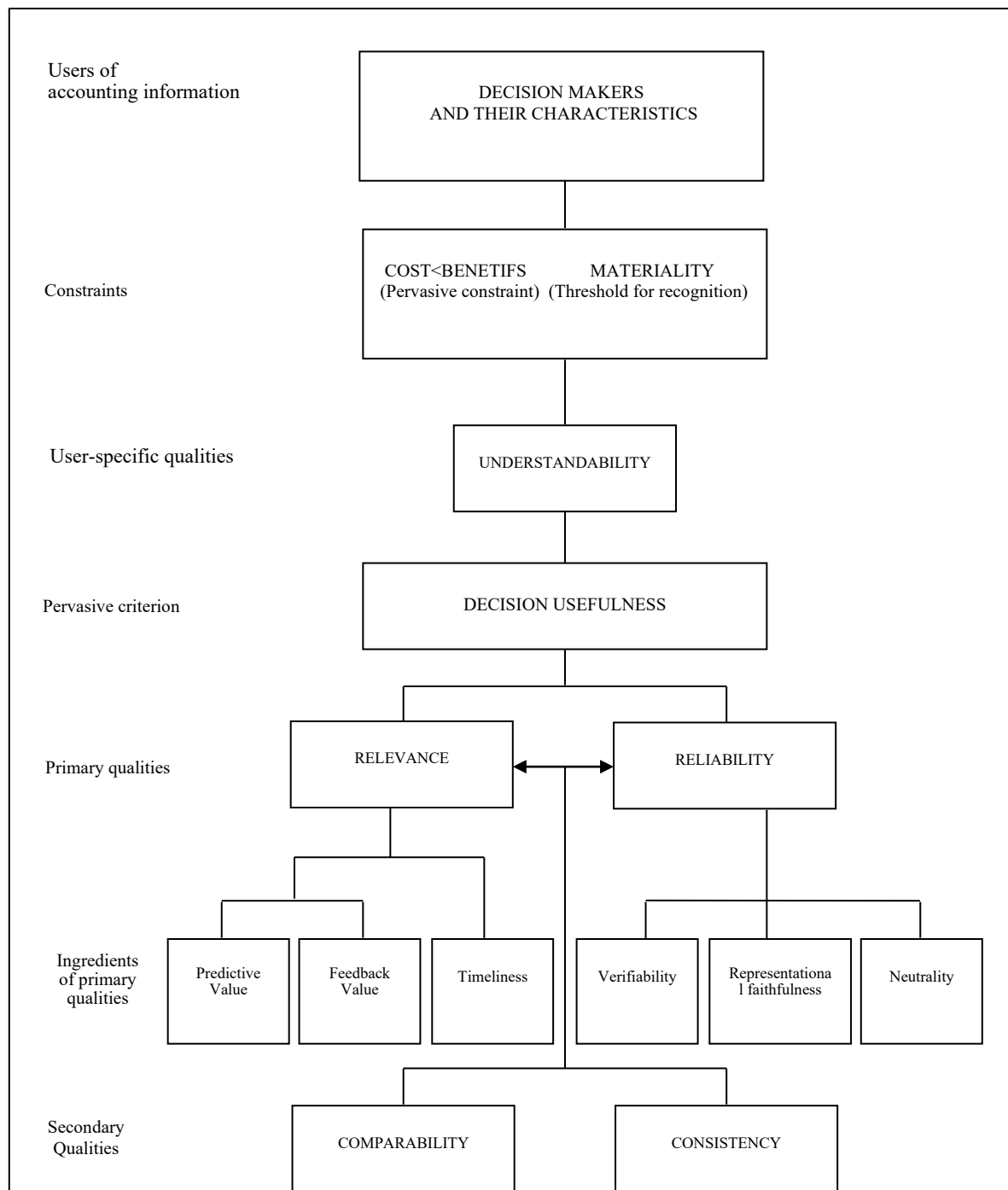
3.7.3 Industry Practice Constraint

This constraint indicates that the accounting practice depends on the nature of particular business organizations. The peculiar nature of some industries and business concerns sometimes requires departure from basic accounting theory (Kieso, Weygandt and Warfield, 2004). According to the variety type and structure of business, we have to avoid the practice and implementation of some of accounting principles and same kinds of principles are not applicable to these various sectors.

3.7.4 Conservatism Constraint

The main theme of this constraint is to recognize all losses but anticipate no profits. So, the secured way should be followed during making a financial report. Secured way refers to the cautiousness maintained before making any investment and it reduces the uncertainty related with investment and probable loss. In the world of business, the largest amount of unrealized profit is not counted rather a little possibility of loss is considered greatly.

3.8 Hierarchy of Accounting Qualities



(Source: Kieso, Weygandt and Warfield, 2004, p. 32)

3.8.1 Definition of FASB Hierarchy of Accounting Qualities

Comparability	The quality of information that enables users to identify similarities in and differences between two sets of economic phenomena.
Completeness	The inclusion in reported information of every material that is necessary for faithful representation of the relevant phenomena. (Source: SFAC-2)
Conservatism	A prudent reaction to uncertainty to try to ensure that uncertainty and risks inherent in business situations are adequately considered.
Consistency	Conformity from period to period with unchanging policies and procedures.
Feedback Value	The quality of information that enables users to confirm or correct prior expectations.
Materiality	The magnitude of an omission or misstatement of accounting information that, in the light of surrounding circumstances, makes it probable that the judgment of a reasonable person relying on the information would have been changed or influenced by the omission or misstatement.
Neutrality	Absence in reported information of bias intended to attain a

	predetermined result or to induce a particular mode of behavior.
Predictive Value	The quality of information that helps users to increase the likelihood of correctly forecasting the outcome of past or present events.
Relevance	The capacity of information to make a difference in a decision by helping users to form predictions about the outcomes of past, present, and future events or to confirm or correct prior expectations.
Reliability	The quality of information which assures that information is reasonably free from error and bias and faithfully represented what it purports to represent.
Representational Faithfulness	Correspondence or agreement between a measure or description and the phenomenon that it purports to represent (sometimes called validity).
Timeliness	Having information available to a decision maker before it loses its capacity to influence decisions.
Understandability	The quality of information that enables users to perceive its significance.
Verifiability	The ability through consensus among measures to ensure that information represents what it purports to represent or that the chosen method of measurement has been used without error or bias.

(Source: SFAC-2, 1980)

3.9 Information

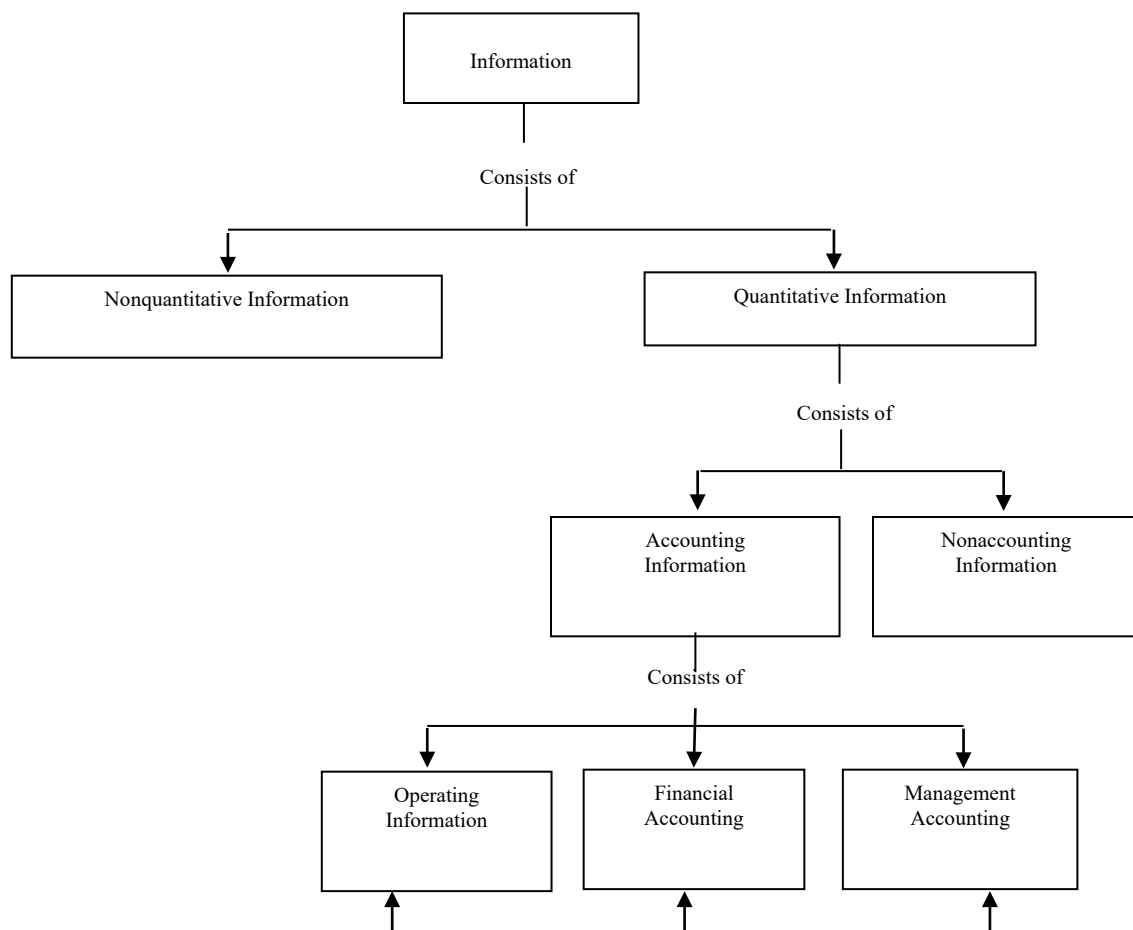
Information is very essential element for decision making and it is helpful to decision makers for taking effective decision. Information is the main strength of

any business organization to operate all kinds of developments and it is the most powerful tool to perform the business activities properly. Information plays the important role in every sphere of modern business world. Information refers to data that have meaning to the decision makers. Information is different from data. Data usually represent observations of measurements of economic events that are of importance to information system users. Data is the input to an information system. Information is the processed output that is organized, meaningful, and useful to the interested person who receives it. The various characteristics of information are reliable, relevant, complete, understandable and verifiable (Steinbart, 1994).

3.9.1 Types of Information

Information differs greatly among organizations of various types and these are given below:

Figure: Types of Information



3.10 Users of Accounting Information

Modern business world is the world of information technology. It is called a “Global village”. To take the right decision at the right moment, we need appropriate and suitable information. In the modern business world, various interested parties use information according to their needs to fulfill their various demands. Actually accounting information functions as a “barometer” of the real condition of a business. The basic objective of AIS is to provide information through different financial statements which are used by the interested users for decision making process. The various users of accounting information generated by AIS are internal and external and these are given below:

3.10.1 Internal users

The persons or groups which work within an organization are known as internal users of accounting information. Internal users consist of owners, management and employees in the different level of management who use accounting information to perform effectively of their various activities inside an organization. The internal users are given below:

3.10.1.1 Owner

Owners are one of the central or major figures among the internal users of accounting information produced by AIS. Accounting information is widely used by the owner groups for measuring the profit and loss of the business, for utilizing

the capital properly and to know whether the business is being driven appropriately or not.

3.10.1.2 Management

Accounting information is very vital to the management which actually makes the management sensible to changes taking part in the business organization. A management should possess the art of getting things done through others to ensure better work by the sub-ordinates properly. Accounting information works as an aid in this respect which in return helps the manager to appreciate the works of employees and to know the true financial position of a business. Moreover, a management has the function of planning and controlling and accounting information adds the right pace to these functions. Besides, accounting information is very helpful in fixing reasonable selling prices of goods to incur a reasonable margin of profit on sales (Jain and Narang, 2004).

3.10.1.3 Employees

Employees are the implementers of every work done inside a business firm. The interests of employees and financial progress are inter-related that is they are dependent on one another. Employees use accounting information to determine the true or correct amount of their salary and bonus. They also use accounting information to have knowledge about the profit and economic condition of a business body (Jain and Narang, 2004).

3.10.2 External Users

Financial statements prepared by the AIS with accounting information carries a lot of importance to the external users who refer to the groups or persons working outside the organization and all kinds of accounting functions are performed for them. Following discussion can give us a good introduction with the various external users of accounting information.

3.10.2.1 Investors

Investors are the major user of accounting information included in the financial statements. It is of great importance to the investors who made the investment as they need to know whether the investment they have made or going to make is safe or unsafe. It helps them to evaluate and compare an organizations past performance with its future prospects and these gives them certainty and security regarding investment (Jain and Narang, 2004).

3.10.2.2 Consumers

These types of users always want to buy a standard good with the minimum price. Consumers use accounting information to be sure of the proper standard and reasonable price of produced goods/services by a company. Accounting information helps to fix a reasonable price that reduces the possibility of exploitation of consumers and manufactures (Jain and Narang, 2004).

3.10.2.3 Creditors

Creditors want to have a clear idea of a concerned firm or company before they have any transaction that is before giving loans or granting credit. They want to have the repayment within short-term and as this repayment is made with current assets, therefore the creditors are interested to know the position of current assets. Accounting information included in financial statements can give them a complete view to liquid position of a company (Uddin, 2004).

3.10.2.4 Research Scholars

Accounting information reflects the financial performance of a particular organization at a given point of time. So, it is of immense value to the research scholars who are engaged in financial research work of a country. It provides the researchers with necessary data giving his research work an authentic view (Uddin, 2004).

3.10.2.5 Government

Financial statements make the government aware of income tax, VAT, sale tax, duties etc. payable to government by business concerns. Besides, it helps the government to analyze the financial position of any company which results in good financial policy and decisions (Uddin, 2004).

3.10.2.6 Tax Authority

It is really very essential to have correct information to determine the appropriate amount of tax. Tax is calculated according to the profit and sales of a company. So, the information related with these sectors is very important to the tax authority.

3.10.2.7 Bankers

To ensure security of the loan given to the business concern, bank studies financial capacity of the business concern so that they can have the regular flow of payment of interest on loan. The balance sheet with lot of accounting information reflects the financial solvency of an organization (Uddin, 2004).

3.10.2.8 Trade Association

Trade associations are consisted of members and it always tries to protect the interest of the members. The financial statements of a business concern are widely used by them to ensure and fix maximum benefit to their members (Uddin, 2004).

3.10.2.9 Stock Exchange

Stock exchange deals with shares and debentures of various companies. The share brokers need the help of financial statements to know the position of a business concern and they take decision for their investments depend on the accounting information (Uddin, 2004).

3.10.2.10 Members of Non-profit Organization

Accounting information is equally used by schools, colleges, hospitals, clubs and different charitable institutions etc. as they contribute funds to be utilized. This information helps them to assess whether their contributed funds have been used properly and direct them to take decisions regarding continuation or withdrawal of funds to a business concern (Jain and Narang, 2004).

3.10.2.11 People

Financial statements of a business are the indicators of social development of a country. Mass people become aware of financial progress of their country through financial statements. It helps them to know the employment condition, market condition, supply of goods etc of the country (Uddin, 2004).

So, it can be said that accounting information is of great importance to everyone. It gives us a clear picture of thousands of business transactions taking place in business throughout the world.

3.11 System

Every organization has system for providing relevant and reliable information to the interested users for taking effective decision. System is necessary to achieve organizational goals of any business organization. A system is a set of two or more interrelated components that interact to achieve a goal. Systems are almost always composed of smaller subsystems, each performing a specific function important to and supportive of the larger systems of which it is a part. The systems concept also encourages integration, which is eliminating duplicate recording, storage, reporting and other processing activities in an organization (Romney and Steinbart, 2006).

3.11.1 Information Systems

An information system is an organized means of collecting, entering, and processing data and of storing, managing, controlling, and reporting information so

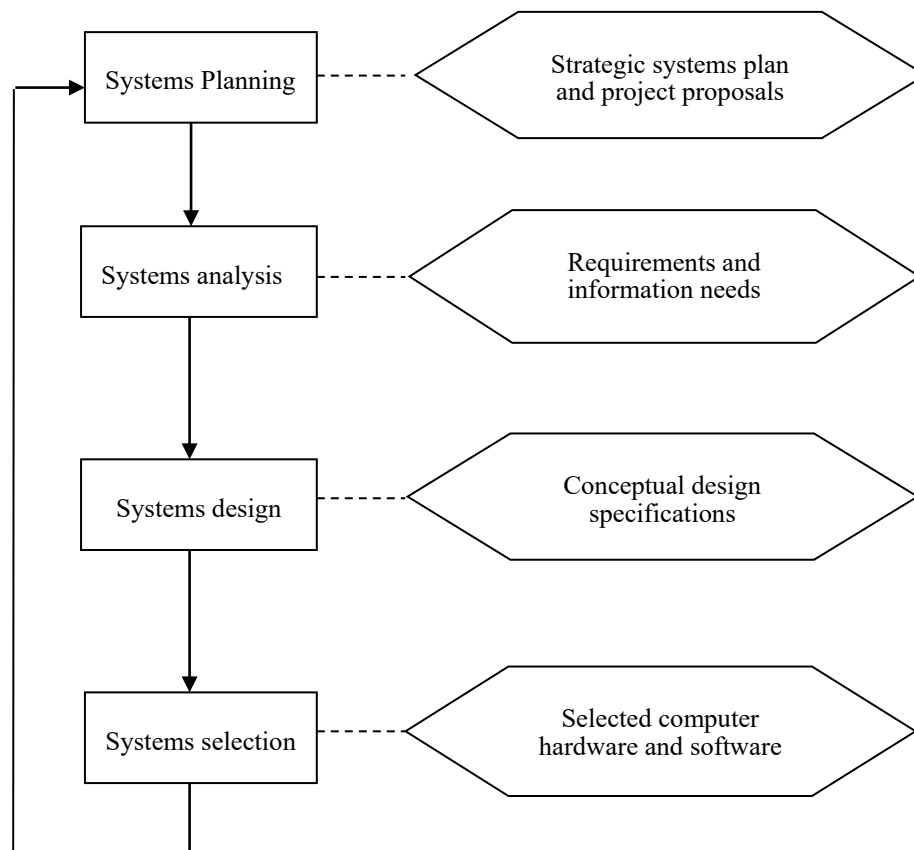
that an organization can achieve its objectives and goals. The various types of information systems are given below (Steinbart, 1994):

1. Management Information Systems (MIS)
2. Accounting Information Systems (AIS)
3. Decision Support systems (DSS)
4. Executive Information Systems (EIS)
5. Expert Systems (ES)
6. Office Automation Systems (OAS)
7. End-User Systems (EUS)

3.11.2 Systems Development Life Cycle

The system development life cycle describes the development and post-development periods of one cycle in the life of an information systems and it consists of several phases that follow a sequence. Each phase of the system development life cycle is planning, analysis, design, selection, implementation and operation.

Figure: The phases in a systems development life cycle.



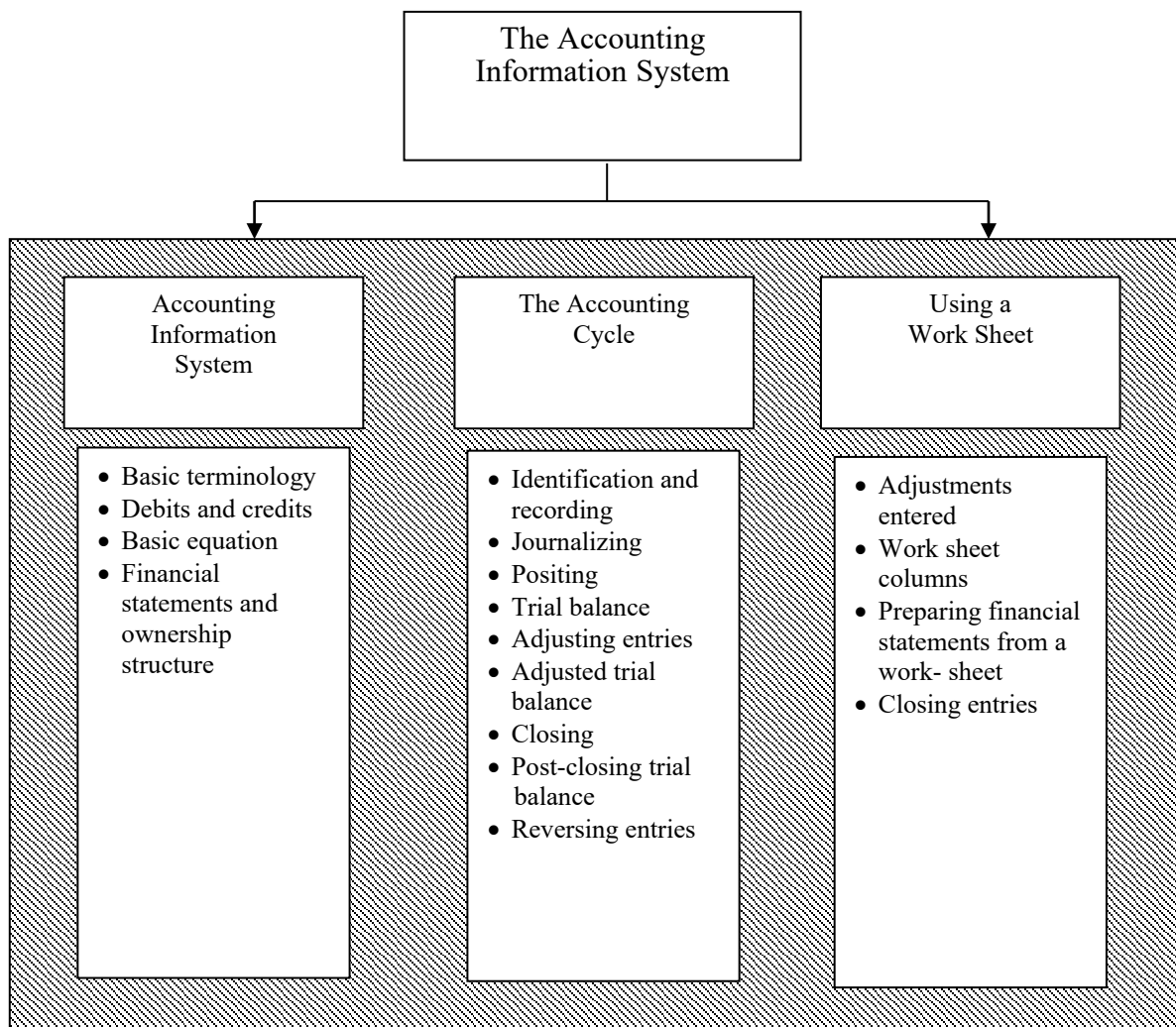
3.12 Accounting Information Systems

AIS is more useful information system in every business organizations to perform their business operations properly and are helpful to meet competitive challenges. AIS perform various activities which help provide meaningful information through preparing the different financial statements to help companies administrations to take decisions related to operational activities and for the satisfaction of the different stakeholders. AIS is a subset of the Management Information System that collects and process financial data and data about transactions. AIS are often the largest subsystem of the MIS and in many organizations may be the only formal information systems (Steinbart, 1994). So, AIS is a system that produce meaningful information through passing various steps such as data collection, data maintenance, data control, data management and information generation through preparing the different financial statements for the interested users in taking effective decision making process for achieving their specific purpose. According to the AICPA, an AIS has five primary objectives and these objectives are given below:

1. Identify and record all valid transaction.

2. Properly classify transaction.
3. Record transactions at their proper monetary value.
4. Record transaction in the proper accounting period.
5. Properly present transaction and related disclosure in the financial statements (Romney and Steinbart, 2006).

Figure: The Accounting Information System



(Source: Kieso, Weygandt and Warfield, 2004, p. 62)

3.13 Advantages of Accounting Information Systems

AIS is a technologically equipped system that is indispensable to compete in the present corporate world. The advantages that can be obtained by an organization from its AIS are as follows:

- (i) Higher quality product or services with minimum waste of materials can be produced with the help of AIS as it can monitor and improve the quality of products and services.
- (ii) Different business operation gets continuity with the help of AIS as it controls business operations automatically with sending order to the warehouse when material are required.
- (iii) By providing timely, reliable and accurate information, it enhances the capability of providing information that helps the decision makers greatly.
- (iv) AIS not only provide competitive advantage to an organization over other organizations but also facilitate sharing of expertise with clients. These are essential for achieving a winning position in market.

- (v) AIS help to improve communication systems and information flow within the organization and beyond its boundary.
- (vi) AIS help both information provider and users by instructing them how to provide or gather information and how to collect relevant information and use them properly.
- (vii) AIS very advantageous to exercise control over the internal and external affairs of an organization. Infact, it is a system that helps in two ways (Mukherjee, 2008).

3.14 Functions of Accounting and Information Systems

The main function of AIS is to provide accounting information through passing the different stages of data conversion and tasks for the satisfaction of the interested users to take decision. The important functions of AIS are mentioned below:

Data collection: The data collection function involves steps such as capturing the transaction data, recording the data into forms and validating and editing the data to ensure their accuracy and completeness.

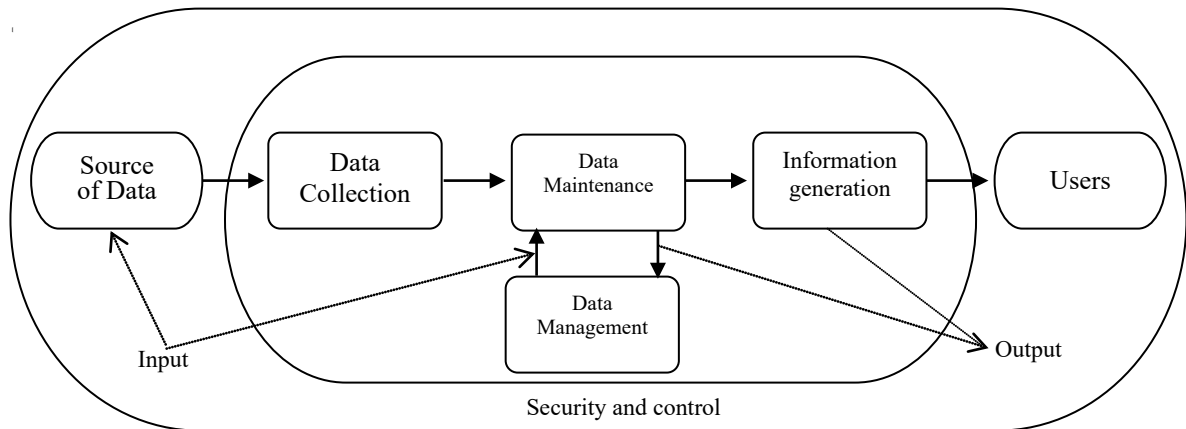
Data Maintenance: The data maintenance function includes classifying, transcribing, sorting, batching, merging, calculating, summarizing and comparing of data.

Data management: The data management function involves three steps such as the storage of data, updating of files and retrieval of data from files.

Data control: The data control functions include the safeguarding of data and assuring of their accuracy.

Information generation: The information generation function includes the interpreting, reporting and communicating information.

Figure: Functions of an AIS.



(Source: Wilkinson, Cerullo, Raval and Wing, 2000, p. 11)

3.15 Principles of Accounting Information Systems

The efficient and effective AIS is based on certain basic principles and these are given below:

- (i) **Cost Effectiveness:** Cost effectiveness indicates the fact that whatever expenses we have to bear to get information, those expenses should be justified by the benefits obtained from the information. In a word, the cost of providing information should be outweighed by the benefits of information.
- (ii) **Useful Output:** Information can only be useful when it is understandable to all who use it. It should be relevant to the situation and reliable to the users. Besides, it should be timely and accurate as outdated and inaccurate information is nothing but a burden to the users.
- (iii) **Flexibility:** The system should be flexible enough so that it can face or meet the different changes made upon it according to the demands of situation and users. Flexibility helps the system be updated (Weygandt, Kieso and Kimmel, 2005).

3.16 Importance of Accounting Information Systems

The competitive business world the AIS is very important to every business organization. The importances of AIS are given below:

- (i) AIS increases the efficiency to manage different economic affairs. So, it can be said that the system is essential to manage the economic activities and affairs in a coherent effective way.
- (ii) AIS influence decisions taken by users. So, it is essential for various decisions making.
- (iii) AIS helps to process information to make it useful. So, the system is used to process information used by accountants, managers, auditors, etc (Cushing, 1982).
- (iv) AIS is a system of application consisted of general theories of information. So, it is crucial for solving day to day business problems.
- (v) AIS not only processes information and data but also stores them for future use. So, it has a far-reaching impact to the users of information.

3.17 Computerized Accounting Information Systems

The development of information technology generally computer technology, bears a great significance in the competitive business world and the AIS has been computerized. AIS has benefited more from computer technology than any other area of business. The proper application of computers to AIS is important because the computer systems can correctly and effectively performed all functions of AIS than manual systems for preparing the different financial statements. In order to remove the various limitations of manual systems many business organizations have been introduced computerized AIS because the numbers of transactions of the business organization have been increasing day by day. At present, sound AIS is playing a key role in the development of economy and it is totally depending on the computerized AIS. Advancements in information technology (IT) have enabled companies to use computers to carry out their activities that were previously

performed manually. AIS that was previously performed manually can now be carried on with the help of computers. Therefore, improvements in the information technology have facilitated the use of cost and management accounting procedures (Fowzia and Nasrin, 2011). Overall success of an organization depends on the appropriate management. Good AIS is the prerequisite for efficient management. All the activities of a financial organization are controlled through the help of sound AIS. In this respect, time and cost can be saved when the accounting functions are done through the help of computer. Computerized AIS offers many advantages over manual systems. In manual AIS, processing of data is slow and subject to error. Fortunately, improvements in the technology have enabled companies to collect, process, and retrieve data quickly. From the above discussion, it can be said undoubtedly that using computer technology in AIS has widen the scope of AIS for different sectors. AIS is solely related with correctness, reliability, speed, efficient management and many other things and computer technology is the magic wand that has endowed AIS with all these qualities and facilities. The world of business has evolved a lot during the last decades getting more competitive and complicated. Innumerable and important transactions are done every second throughout the world. Though all the activities of AIS in the past were done manually, there were problems of appropriateness and speed. But computerized AIS has contributed a lot to bring about a great change which is ultimately the demand of the modern world. We hope that computerized AIS is going to help a lot to solve different transactional and financial problems in the future time.

3.18 Accounting Software

Accounting software is very useful software for maintaining business activities of any business organization because accountants perform the accounting functions more efficiently and finally prepare the different financial statements most easily at the end of every accounting period. Accounting software is used to record, process and maintain all economic transactions of any organization in computerized

systems. Accounting software is software that includes the basic functions of accounting such as input, processing and output and all activities are performed by the functional modules. At present many firms are using accounting software to prepare their accounting reports swiftly, perfectly and timely. The double entry accounting system get started with manual accounting maintained by several employees within an organization. It requires a lot of manpower, stationery and it is time consuming, in this system there are several problems, e.g., it is a paper based system, delay in finalizing transition, higher labor cost, uncertainty of events, costly affairs and error prone (Gopiseti and Srinivas, 2012). So, it can be said that for enhancing the ability, efficiency of the activities of the selected companies, accounting software is a must to attain its goals.

3.19 Conclusion

This chapter highlights the theoretical and conceptual framework which is related with Accounting Information Systems. The entire theoretical frameworks have been designed on the basis of AIS. The well AIS is conducted on the basis of accounting principles, assumption and constraints and these are essential for preparing the different meaningful financial statements. When the different financial statements are prepared based on Generally Accepted Accounting Principle, it must be more reliable, relevant, comparable, understandable and transparent for the different stakeholders to take decisions. Financial statements are the important sources of information for the interested users. The accurate financial statements are a great help to the various interested stakeholders to take sound decision for achieving their goals according to their needs. The chapter also has focused on the computerized AIS and accounting software. For removing the various limitations of manual AIS, computerized AIS has been established in many organizations to conduct their business effectively. Accounting software is used to record and process accounting transactions and it performs these activities through using the various modules. At

present computerized AIS adds value to the business organization to perform the various functions of AIS through reducing the cost and providing appropriate information free from any error and computerized AIS serves all activities with the help of accounting software.

CHAPTER FOUR

Practice of AIS and the Evaluation of Companies' Performance

4.1 Introduction

AIS is a system for providing accounting information, which is presented in the different financial statements such as income statement, balance sheet, owners' equity statement and cash flow statement and disseminated in annual reports at the end of every accounting period. The information produced by the AIS should be made available to all stakeholders for necessary decision making. Decision making is an important function in running any organization and a large number of decisions are regularly made by the management. For decision making, AIS provides the essential information regarding the various activities of the business to the management and external parties who use this information to make effective decisions according to their needs. This chapter discusses the practice of AIS and the evaluation of companies' performance. In order to achieve this purpose researcher has analyzed the opinions of the company executives and audited annual reports. The results of the analysis have been presented in the following section. In the first phase researcher has analyzed the opinions of the selected respondents and in the second phase the operational performance of the selected companies has been evaluated.

4.2 Analysis of Opinion of Company Executives regarding AIS

The AIS has a great role in many decisions. AIS refers to recording and reporting business performance of any organization. Internal users and external users are the main users of accounting information produced by AIS and they collect their necessary information in annual reports through financial statements. Success of business depends on efficiency AIS to a great extent and for those AIS is absolutely necessary to all organization including mobile telecommunication companies. Efficient AIS is essential for the selected companies for recording of transaction, processing these transactions and finally preparing the different financial statements

to the different interested users. Proper AIS is necessary for any organization for improving the quality of accounting information which helps management to perform their various activities and also assist to the external users to take decisions. The practices of AIS of the selected companies are given below:

4.2.1 AIS of Company # 1

The AIS of the company is fully computerized and it uses accounting software for recording of transactions, processing of transactions and preparing the different financial statements like income statement, balance sheet, owners' equity statement, cash flow statement and other statements as desired by management. These financial statements are prepared in accordance with International Accounting Standards (IASs)/Bangladesh Accounting Standards (BASs) and International Financial Reporting Standards (IFRSs)/Bangladesh Financial Reporting Standards (BFRSs), the Companies Act, 1994, the Securities and Exchange Rules 1987 and other applicable laws in Bangladesh. The company follows the provisions of IAS/BAS 1, 2, 7, 8, 12, 16, 17, 18, 21, 23, 24, 32, 34, 37 and 38 respectively for preparing and presenting the different financial statements. The company follows Going Concern and Historical Cost principle for preparing the financial statements. The company prepares financial statements on a consistent basis and management use these statements for decision making. The authority of purchase transaction is sourcing division and managing director and the authority of sales transaction is General Manager. The various documents for authorizing payment for purchase are voucher, invoice and purchase order. Past history of the customer, credit worthiness and payment records are considered for credit sales. The proper authority in the receipt of money/cheques from the accounts receivable is treasurer/head of treasury and the proper authority of payment of cash against vouchers is treasurer and chief accountant. Journal like general journal, special journal (purchase journal and sales journal), cash receipt journal, cash disbursement journal and ledger like general ledger and subsidiary ledger are used to record all types of transactions these are performed by the accounting software. The company management prepares the

different financial statements including accounting policies and notes to the financial statements with the help of AIS. The company processes all transactions by the computer. The company uses password in the computer and changes password frequently on the basis of demand of security of information. The company uses number for codifying accounts and use audit trail for linking transaction processing. The company proves accuracy of posted amounts by preparing a trial balance, using audit trial and rechecking and preserves source of documents by a guard file at the initiating stage and in hard disk of the computer in the network systems and the proper authority of access is department head. The company assigns responsibility for processing transaction by describing responsibilities according to previously prepared schedule. The company uses group coding system. The company uses on-line processing systems and the objectives of data management are capturing and storing relevant data, occupying smallest possible space for storing data, up-dating files timely and making it accessible to users, satisfying a variety of information needs, safeguarding from loss or unauthorized access and economy. The company uses parity check, read after write check, dual read check and validity check in computer system. The company maintains backup files and also maintains distribution register of output. The company uses the total system approach for system development for performing the various activities. The company maintains separation of AIS department for recording and processing economic data and finally preparing the financial reports. The company maintains master file, transaction file, reference file and history file for recording various business activities. The company uses AIS for various purposes such as reporting to interested users, decision making and control. Ratio analysis, working capital forecast, variance analysis and break-even analysis are used for internal decision making and control purpose which are generated through AIS. The company takes financing decision, investment decision, capital structure decision, working capital decision, pricing decision, servicing decision and outsourcing decision with the help of AIS. The company uses accounting

information generated by AIS through financial statements for performing various managerial functions such as planning, coordinating, controlling, directing, budgeting, motivating and decision making. The company prepares reports on monthly basis and the annual report and market information is the main sources of information of different decision makers for decision making. The company publishes the annual reports for the interested users in every accounting year. The company follows human resources accounting practice. The company uses straight line method for charging depreciation. The company uses weighed average method for pricing material issues and EOQ method is used for inventory control. The company maintains communication network with various managers and various employees in the firm for serving various purposes. The AIS is involved in the different stages of data conversion and task like data collection, data management, data processing, data control and information generation. The users of accounting information produced by AIS are internal and external. Internal users consist of managers and employees in different level of management and external users consist of creditors, customers, suppliers, stock holders, trade union, tax authority and government agencies. Various resources like data, supplies, equipment, personal and funds which are required by the AIS department. The purpose of AIS of the company is to provide information that supports decision making, to provide information that supports day to day operations and to provide information that pertains to stewardship. The AIS is an important supporting system of the company for decision making and control. The benefit of AIS exceeds the cost of AIS and it provides competitive advantages for the company. AIS of the company is satisfied with various activities such as data processing requirement, operations requirement and top-management control requirement. The company has changed the practice procedure of AIS for changing growth of business activities and maintains news files on the basis of future needs. The company considers effective internal control system, proper security measure, good documentation, separation of operation from accounting, extent of disclosure; cost effectiveness, flexibility to meet future need,

processing power of accountant and independent internal and external audit for judging the efficiency of AIS. The company provides sufficient training of existing employees for developing the AIS.

4.2.2 AIS of Company # 2

The AIS of the company is fully computerized and it uses accounting software for recording of transactions, processing of transactions and preparing the different financial statements like income statement, balance sheet, owners' equity statement and cash flow statement and others statement as desired by management. The different financial statements are prepared on going concern basis under the historical cost convention on Generally Accepted Accounting Principles (GAAP) in accordance with Bangladesh Accounting Standards (BASs) and Bangladesh Financial Reporting Standards (BFRSs), the Companies Act, 1994, and other applicable laws and regulations. The company follows the provisions of IAS/BAS 1, 2, 7, 8, 12, 16, 17, 18, 21, 24, 37 and 38 respectively for preparing and presenting the different financial statements. The company has used appropriate accounting policies in preparation of these financial statement supported by reasonable and prudent judgment and assumptions as necessary. International Accounting Standards (IASs) and International Financial Reporting Standards (IFRSs) as applicable in Bangladesh are followed in preparation of these financial statements in compliance with the relevant accounting principles. The company prepares financial statement on a consistent basis and management uses these statements for various decisions making purposes. The authority of purchase transaction of the company is deputy general manager procurement and the authorities of sales transaction is General Manager (marketing) and sales and distribution department. The company uses various documents like voucher, invoice and purchase order for authorizing payment for purchases. The proper authority for the receipt of money/cheques for accounts receivable is junior or associate officer (sales and distribution section) and the proper authority for payment of cash against vouchers is designated authorizing officer. Journal like general journal, special journal

(purchase journal and sales journal), cash receipt journal, cash disbursement journal and ledger like general ledger and subsidiary ledger are used to record of transactions all types are performed by the accounting software. The company prepares the different financial statements including accounting policies and notes to the financial statements with help of AIS for the satisfaction of the different users. The company processes all of its economic data with the help of computer. The company uses password in the computer. The company uses number for codifying accounts and audit trail for linking transaction processing. The company proves accuracy of posted amounts by preparing trial balance, using audit trial and rechecking. The company preserves source documents in a guard file at the initiating stage and in hard disk of the computer and the proper authority of access is section head. The company assigns responsibility for processing transactions by the person employed for processing transactions. The company uses mnemonic coding system. The company uses on-line processing systems and the objectives of data management are capturing and storing relevant data and up-dating files timely and makings it accessible to users. The company uses dual read check in computer system. The company maintains backup files and also maintains distribution register of output. The company uses the total system approach for system development for performing the various activities. The company maintains separation AIS department from recording and processing economic data and finally preparing the financial reports. The company maintains master file and transaction file for recording various business activities. The company uses AIS to control. Working capital forecast and variance analysis report are used for internal decision making and control purpose and the reports are generated through AIS. The company takes financing decision, investment decision and capital structure decision with the help of AIS. The company uses accounting information generated by AIS for performing various managerial functions such as planning, controlling, budgeting and decision making. The company prepares reports on monthly basis and the annual report and market information is the main sources of information of

different decision makers for decision making. The company publishes the reports for the interested users annually. The company uses straight line method for charging depreciation. The company uses weighed average method for issuing pricing material and ABC analysis method is used for inventory control. The company maintains communication network between various managers and employees in the firm for serving various purpose. The AIS is involved in the different stages of data conversion and tasks like data collection, data processing, data management, data control and information generation. The users of accounting information are internal and external. Internal users consist of owner, managers and employees in different level of management and external users consist of creditors, customers, trade union, tax authority and government agencies. Various resources like data, equipment and funds which are required by the AIS department. The purpose of AIS of the company is to provide information that supports decision making and to provide information that supports day to day operations. The AIS is important supporting system for decision making and control of the company. The benefit of AIS exceeds the cost of AIS and it provides competitive advantages for the company. AIS is satisfied for top-management control requirement. The company has changed the practice procedures of AIS for changing growth of business activities and maintains sales invoices and new files according to needs. The company considers effective internal control system, proper security measure, good documentation, separation of operation from accounting, extent of disclosure, cost effectiveness, independent internal and external audit and processing power of accountant for judging the efficiency of AIS. The company considers the trained manpower, upgrade of the procedures of AIS; introduces more control measures and develops internal control systems for developing the efficiency of existing AIS.

4.2.3 Analysis of Opinions of Experts in Accounting

Researcher conducted an opinion survey on the respondents regarding the various factors for increasing the efficiency of existing AIS of the selected companies and the results are given below:

Table # 4.1

Table showing the opinions of the respondents regarding the various factors for increasing the efficiency of existing AIS of the selected companies

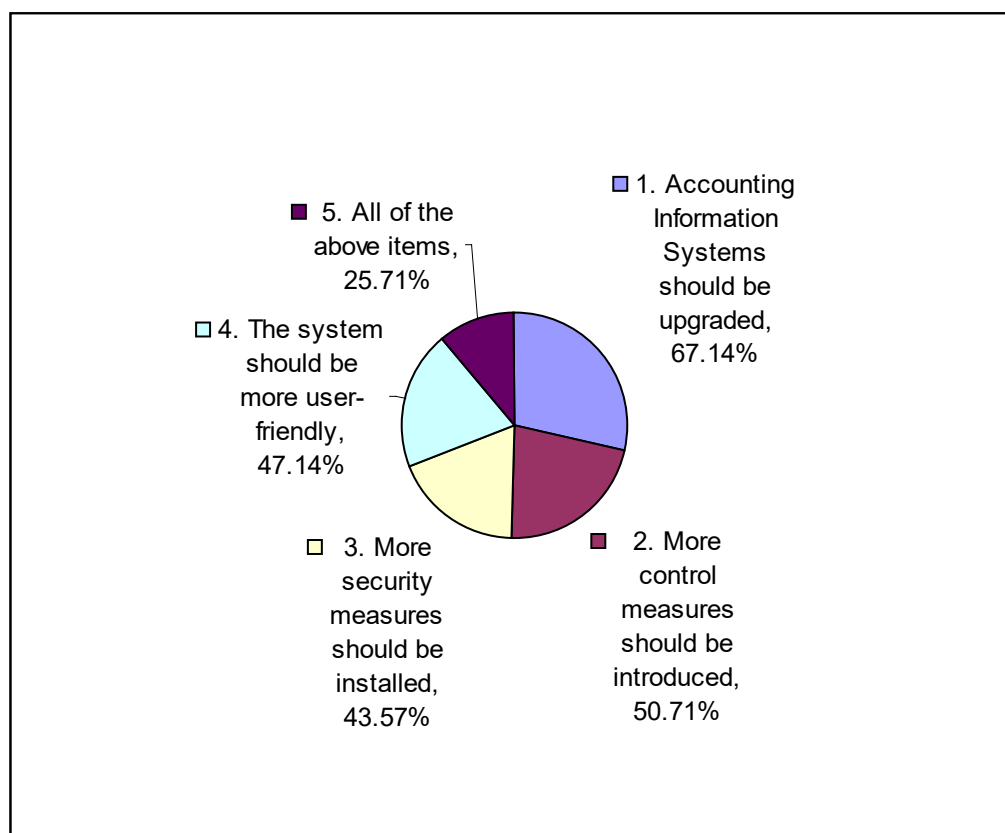
Items	Respondents Group							
	CA		CMA		Acad.		Total	
	No.	%	No.	%	No.	%	No.	%
1. Accounting Information Systems should be upgraded	34	56.67	36	72.00	24	80.00	94	67.14
2. More control measures should be introduced	26	43.33	28	56.00	17	56.67	71	50.71
3. More security measures should be installed	19	31.67	25	50.00	17	56.67	61	43.57
4. The system should be more user-friendly	27	45.00	28	56.00	11	36.67	66	47.14
5. All of the above items	09	15.00	20	40.00	07	23.33	36	25.71
Total	60		50		30		140	

(Source: Opinion Survey)

From Table # 4.1 it is evident that 67.14% of the respondents think that the AIS should be upgraded, 50.71% of the respondents opine that more control measures should be introduced, 43.57% of the respondents state that more security measures should be installed, 47.14% of the respondents are of the opinions that the system should be user-friendly and 25.71% of the respondents opine that all of the alternatives for increasing the efficiency of existing AIS of the selected companies. Majority of the respondents think that the AIS should be upgraded for increasing the efficiency of existing AIS of the selected companies. It deserves mention here that respondents from all categories opted for more than one factor for increasing the efficiency of AIS of the selected companies. The following Pie-chart clearly presents the opinions of the respondents regarding the various considerable factors for increasing the efficiency of existing AIS of the selected companies.

Pie-chart # 4.1

Presentation through Pie-chart of the opinions of the respondents regarding the various factors for increasing the efficiency of existing AIS of the selected companies



(Source: Opinion Survey)

The Pie-chart shows that the respondents have expressed their opinions regarding the various factors for increasing the efficiency of existing AIS of the selected companies during the period under study. From the above Pie-chart it is evident that most of the respondents opine that the AIS should be upgraded for increasing the effectiveness of existing AIS of the selected companies.

4.2.4 Analysis of Opinions of the Security Consultants

In this section researcher has analyzed the opinions of the security consultants regarding the interested information

Table # 4.2

Table showing the opinions of the respondents regarding the required information from the financial statements of the selected companies

Items	SC	
	No.	%
1. Profitability of the company	43	78.18
2. Liquidity of the company	33	60.00
3. Growth of the company	48	87.27
4. Dividend of the company	36	65.45
5. Dividend payout ratio	29	52.73
6. Cash flow of the company	35	63.64
7. Information about new project	30	54.55
8. All of the above	29	52.73
Total	55	

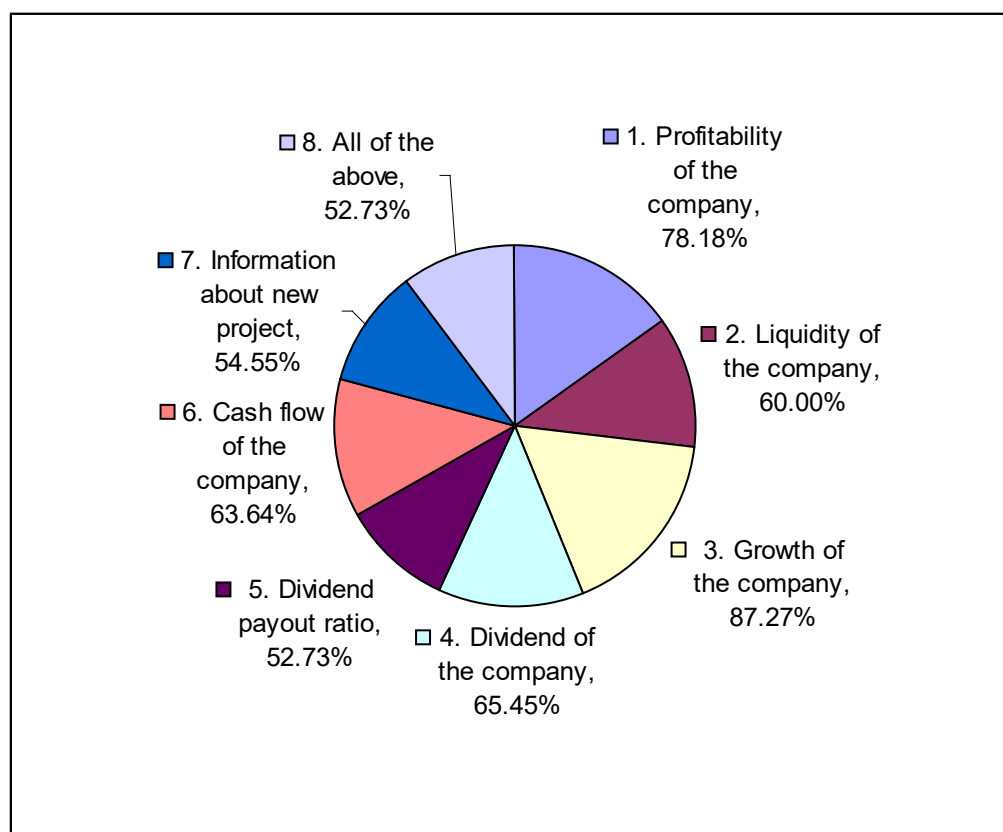
(Source: Opinion Survey)

Table # 4.2 shows that 78.18% of the respondents are interested in getting the information of profitability of the selected companies, 60.00% of the respondents are interested to get the information of liquidity of the selected companies, 87.27% of the respondents are interested to get the information of growth of the selected companies, 65.45% of the respondents are interested to get the information of dividend of the selected company, 52.73% of the respondents are interested to get the information of dividend payout ratio of the selected company, 63.64% of the respondents are interested to get the information of cash flow statement of the selected companies, 54.55% of the respondents are interested to get the information of about new project of the selected companies and 52.73% of the respondents are interested to get the information of all alternatives of the selected companies. From the above Table it is evident that the majority respondents are interested to get the information of growth of the selected companies. It is to be noted that the responses

of the respondents are overlapping. The following Pie-chart clearly presents the opinions of the respondents regarding the required information from the financial statements of the selected companies

Pie-chart # 4.2

Table showing the opinions of the respondents regarding the required information from the financial statements of the selected companies



(Source: Opinion Survey)

The Pie-chart shows the opinions of the respondents regarding the required information from the financial statements of the selected companies. From the above Pie-chart it is evident that 87.27% of the respondents are interested to get the information of growth of the selected companies.

4.3 Financial Statements

Business organizations communicate their financial condition and operating results to the interested users through preparing the different financial statements produced by AIS and these statements are available in the audited annual reports which are published at the end of accounting period. The different financial statements are necessary to the interested stockholders for evaluating the financial conditions of any business organization for taking every decision making process. Accurate judgments are impossible unless financial statements are clear and understandable by the interested parties. The objective of financial statements is to provide financial information regarding the financial performance and the financial position of any organization that assist the users in making economic decisions. According to conceptual framework, the basic elements of financial statements are assets, liabilities, equity, investments by owners, distributions to owners, comprehensive income, revenues, expenses, gains and losses. The four basic financial statements such as balance sheet, income statement/profit and loss account, statement of changes in equity and cash flow statement including accounting policies and note of the financial statements which contain in the audited annual reports of the selected companies are given below:

4.3.1 Income Statement of the Selected Companies

Income statement is the product of AIS. The income statement provides relevant information regarding revenues and expenses of the ongoing operations over a period of time of any business organization. Revenues are inflows and expenses are outflows. Management uses past and current income statement for future planning and decision making. The selected companies follow the provisions of the Companies Act, 1994 for preparing the income statement/profit and loss account. The selected companies show gross profit after deduction of cost of network operations from revenue and show operating revenue after deduction of operating cost from gross profit. The selected companies show profit before tax after deducting non-operating expenses from operating profit and show profit after tax

after deduction tax expenses from profit before tax during the period under study. Revenue consists of traffic revenue, subscription revenue, connection revenue, roaming revenue, interconnection revenue, customer support revenue, SMS and MMS revenue, internet and data revenue, VAS and other revenue, sale of handsets, sale of data card, sale of vehicle tracking systems, infrastructure sharing revenue, commissions, broadband internet revenue, bills pay service, IT service maintenance fee and replacement of SIM cards. Cost of network operating consists of direct cost of revenue, network operation and maintenance expenses, depreciation and amortization, direct cost of hardware revenue, general and administrative expenses, selling and distribution expenses, expenditure for others and provision for bad and doubtful debts. Non-operating income/expense consists of interest on fixed deposits, interest on short term deposit, default interest provision for BTRC and bank charges and commission. Other income/expenses consist of sale of tender document, foreign exchange, commission from education board and others, miscellaneous income and other income from others and gain on disposal of property, plant and equipment.

4.3.2 Balance Sheet of the Selected Companies

Balance sheet is one of the most important financial statements and another product of AIS which provides information regarding financial positions and stability of a business organization that help the interested users for taking various investment decisions. Balance sheet presents the assets, property, owner's equity and liabilities of the selected companies and also gives a summary of firm's resources and obligations on a particular date. Management uses balance sheet for taking decision to perform the business activities properly and the external parties use balance sheet to get valuable and relevant information and a clear picture about the solvency of business which help them in different types of decision making relating to investments and others. The selected companies prepare balance sheet in accordance with the related provisions of the Companies Act, 1994. The selected companies also follow the provisions of International Accounting Standard (IAS) /Bangladesh Accounting Standard (BAS) for presentation of the financial statements.

4.3.3 Statement of Changes in Equity of the Selected Companies

The statement of changes in owner's equity shows the ending capital which is invested by the owners and changes in equity over the accounting period of any business organization. The owners' equity is increased by the two ways such as investment by the owners and net income from the operation of the business and decrease by the two ways such as withdrawals by the owners and losses from the operation of the business at a specific accounting period. The statement of changes in owners' equity is used to know the amount of starting equity and the amount of their equity at the end of the period. The selected companies prepare statement of change in equity at the end of every accounting period to know the ending equity. The selected companies follow a columnar format which reconciles the opening and closing balances of each element of shareholders' equity. Thus it presented reconciliation between the carrying amounts of share capital, share premium, capital reserve, deposit from shareholders, general reserve at the beginning and end of a particular period, separately disclosing each change. Both the selected companies showed the figures for the two years.

4.3.4 Cash Flow Statement of the Selected Companies

Cash flow statement is an important financial statement that provides information about the cash receipts and payments and net changes in cash resulting from operating, investing and financing activities of the business organization for a particular period of time. Managers get necessary information about cash inflows for business operations which are used in decision making of different aspects. Cash flow statement also provides information which determines the capacity of company to meet its short term liability. The selected companies present cash flow statement in their annual report of every accounting period. The selected companies follow the provision of International Accounting Standard (IAS)/Bangladesh Accounting Standard (BAS) for preparing and presenting the cash flow statements. The selected companies show net cash used in investing activities and financing

activities of the current. The selected companies reconcile with closing cash balance.

4.3.5 Financial Ratios of the Selected Companies

Financial ratio is an important tool to know about the financial positions of any business organization. Financial ratio is also known as accounting ratio or business ratio. Financial ratio is one of the most commonly used tools to evaluate the financial performance of any business organization. The various financial ratios helped the company management to analyze their current financial position and to determine strengths and weakness of their business. The selected companies show various financial ratios in their annual reports which help evaluate the financial conditions by the interested stakeholders.

4.3.6 Accounting Policies of the Selected Companies

Accounting policies mean some rules and procedures which are adopted by management and they help in preparing and presenting the financial statements at the end of every accounting period and it assists users to better understand and interpret company financial statements. Accounting policies are essential for presenting the quantity and quality of financial information contained in the financial statements and financial reports. Accounting policies are also necessary for the computation of depreciation, the recognition of capital expenditures and matching of revenues and expenses. In the absence of sufficient accounting policies of the selected companies it will be impossible to interpret the financial statements in a better way and the decision maker would be unable to take sound decisions. The users of different financial statements must be aware of the accounting policies used by organization so that they can better understand the financial statements and make comparisons with the statements of others. Both of the companies provide accounting policies in notes to financial statements under the heading of significant accounting policies according to International Accounting Standard (IAS)/Bangladesh Accounting Standard (BAS). The various accounting policies of the selected are given below:

4.3.6.1 Company # 1

From the analysis of the company annual reports it is apparent that the company applies accounting policies consistently in different financial statements in different years. The financial statement of the company prepares having made a comparison with parent company. The cost of property, plant and equipment comprises its purchase price, import duties and non-refundable taxes after deducting trade discount and rebates and any others related costs. The company charges depreciation on the property, plant and equipment by using the straight-line method. The cost of intangible assets consist of purchase price, import duties and non-refundable taxes and any other cost of preparing the asset for its intended use and it records less accumulated amortization and accumulated impairment loss. Net amount of financial assets and liabilities are presented in the statement of financial position. Ordinary shares are classified as equity. Incremental costs are directly attributable to the issue of ordinary shares which are recognized as deduction from equity, net of any tax effect. A financial asset is impaired if there is objective evidence of impairment which may result from one or more events that occurred after the initial recognition of the assets, and the loss events had an impact on the estimated future cash flows of that assets that can be reliable. The cost of inventories determine by using the weighted average cost method. Income tax consists of current and deferred tax where current tax is the expected tax payable on the taxable income for the period. Differed tax is measured to the extent that it is probable that future taxable profits. Provision is measured at the best estimate of the expenditure required to settle the present obligation at the reporting date. The expense relating to any provision is presented in the income statement net of any reimbursement. A provision is recognized in the statement of financial position but the contingent liabilities and assets are not recognized. Revenues are measured according to the fair value of the consideration received or receivable, net of discounts and related taxes. Revenues comprise of subscription and traffic fees, connection fees, customer equipment, discounts, rendering IT service and revenue

from construction contracts. Connection costs in excess of connection revenue are charged as expenses when incurred. Connection costs up to connection revenue are deferred and amortized over the period of estimated customer relationship. Monetary assets and liabilities in foreign currencies at the date of statement of financial position are translated into Taka at the exchange rate prevailing at that date. Earnings per share of the company is calculated by dividing the profit or loss attributable to ordinary shareholders of the company by the weighted average number of ordinary shares outstanding during the period. Amounts recognized in the financial statements are adjusted for events after the reporting period that provide evidence of conditions that existed at the end of the reporting period.

4.3.6.2 Company # 2

From the analysis of company annual reports it is evident that the company follows almost the same accounting policies in different years. The company prepares the financial statements in accordance with legal framework, GAAP, BASs and BFRSs. All property, plant and equipment shown in the balance sheet at cost less accumulated depreciation. The cost includes the acquisition and other installation cost of the property, plant and equipment. The company uses straight-line method for charging depreciation on the property, plant and equipment and the depreciation rate is different for the various types of assets. Capital work in progress consists of acquisition cost of network plant and machinery and capital components and related installation cost till the date of use in network service. The company shows intangible assets at cost less accumulated amortization using the straight-line method. The company settles the inventories using the weighted average method. Employees got the handsets at original cost and they are charged the expenses at the issuing time. Sundry debtors consist of receivable from distributors, dealers, inter-operators and unrealized bills for network revenue which are identified at the balance sheet date. The company maintains provision for the bad debts and the different rate of provision of bad debts in different categories are up to 1 year 0 %, more than 1 year to 2 years 15%, more than 2 years to 3 years 50% and above 3

years 100%. Income tax expenses comprise the current and deferred taxes. Current tax is the expected tax payable on the taxable income for the period. Deferred tax is measured at the tax rates that are expected to be applied to the temporary differences when they reverse, based on the laws that have been enacted or substantively enacted by the date of statement of financial position. Transactions in foreign currencies are converted into equivalent Taka applying the ruling rate at the date of such transactions. The company presents the various sources of revenues such as network revenue, prepaid network revenue, postpaid revenue, interconnection revenue, roaming revenue, backbone revenue, hardware revenue, connection revenues, SIM replacement revenues and customer support revenue under the heading of revenue recognition. Events after the reporting period that provide additional information about the company's position at the balance sheet date or those that indicate the going concern assumption is not appropriate are presented in the financial statements.

4.3.7 Notes to the Financial Statements of the Selected Companies

Notes to financial statements are a vital part of financial statements as they help the interested users know the detailed information regarding items of different financial statements of the selected companies. Sufficient notes are important to know different financial statements as it indicates the inclusion of various items which are important for the better interpretation of the different parts of financial statements. These notes are presented following systematic way in the annual reports. Each of the items like balance sheet, income statement and other include related note in the notes to financial statements section which help the user to understand the included items of the different financial statements. The selected companies present information about their corporate background and nature of the business. They also give information about the basis of preparation of the different financial statements. Necessary notes about the various accounting policies are also given by the selected companies under the heading of significant accounting policies. They place information about the estimated useful life of tangible and intangible assets. Note

about income tax rate and the amount of income tax expenses are provided by both the companies. They also gather information in the notes to financial statements section about the revenue recognition, measurement and presentation. Information about the direct cost of revenue is also presented by the selected companies. They present information about the cost of SIM cards, scratch card and handset. They present information that includes the network operation and maintenance expenses, general and administrative expenses and selling and distribution expenses. The above information is necessary to determine the profit or loss of the companies on study. The selected companies give information about the depreciation and amortization. Information about the bad debt expenses, provision for bad debts and recovery of bad debts are presented by the selected companies. Gain or loss of foreign exchange, categories of receivable are presented by them. Their balance sheet includes information about the advances deposits and prepayments, cash and cash equivalents. Information related with provision, trade and other payables have been stated by them. Even the unearned revenue has been presented with great importance by the selected companies. VAT payable, capital management, credit facilities available and commitments and contingencies are also presented by them.

4.4 Evaluation of Companies Performance

Financial performance analysis generally means the analysis of operational results which represent the company's performance as well as the operating performance at the end of every accounting period reflected in the different financial statements. Financial performance analysis is the process of determining the operating results of selected companies from the financial statements. Financial analysis is to determine the efficiency of the company's management. Financial performance is also important to understand the financial position of selected companies. The purpose of the financial analysis is to know the efficiency and performance of company's management. In the following section researcher has analyzed the operational results of the selected companies, developed null hypotheses and conducted paired sample t test to test the null hypotheses.

4.4.1: Year-wise Operating Revenue

Ho_{1.1}: There is no significant difference in operating revenue of the selected companies.

Table # 4.3

Table showing the operating revenue of the selected companies during the years 2008 to 2012

(Taka in Million)

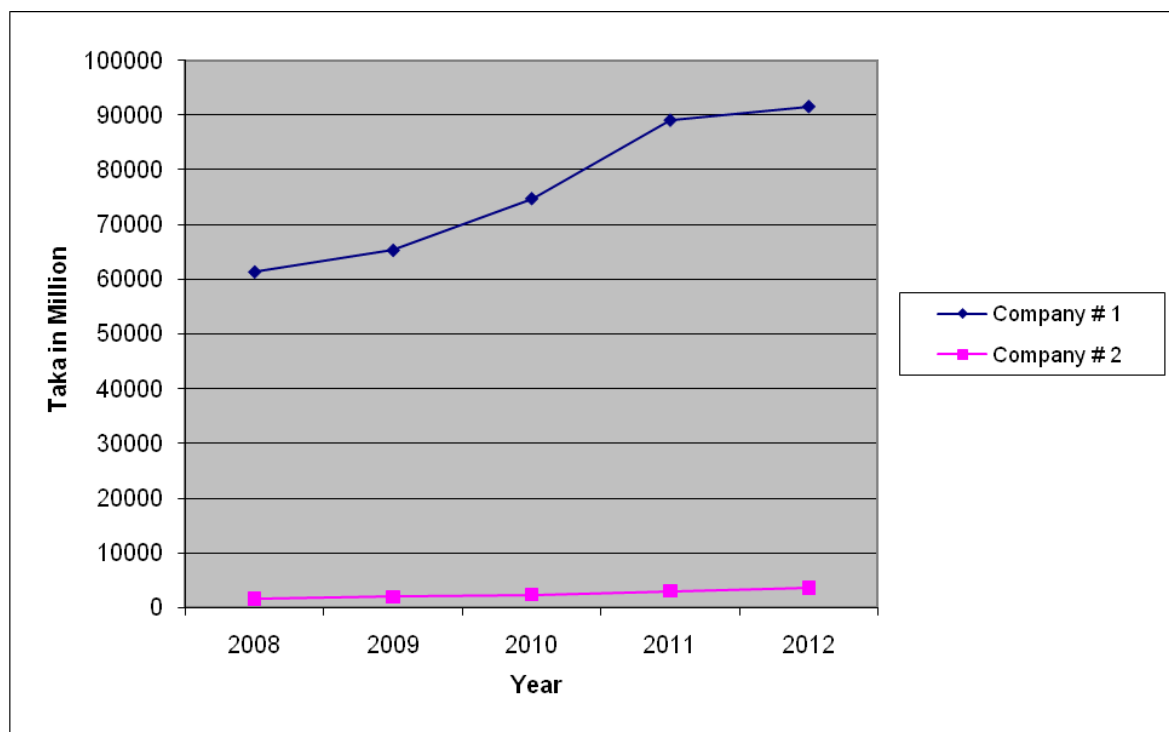
Year	Company # 1	Company # 2	t	Sig.
2008	61358.98	1519.08	12.934	0.000
2009	65299.57	1900.01		
2010	74724.50	2284.01		
2011	89006.70	2989.81		
2012	91488.94	3572.80		
Avg.	76375.74	2453.14		
SD	13591.00	828.96		
CV	17.79	33.79		

(Source: Audited Annual Reports of the Selected Companies)

Table 4.3 shows the operating revenue of the selected companies during the period under study. The average operating revenue is 76375.74 million of Company # 1 and 2453.14 million of Company # 2. The standard deviation of operating revenue is 13591.00 and 828.96 respectively. The coefficient of variation of operating revenue is 17.79 and 33.79 respectively during the period under study. The Table shows that the operating revenue of Company # 1 is greater than that of Company # 2 during the study period. The Table also shows an increasing tendency. In order to see whether there is any significant difference in operating revenue of the selected companies, researcher conducted paired sample t test. The result shows that t value is 12.934 which is significant at 0.000 level and the null hypothesis is rejected. This indicates that there is significant difference in operating revenue of the selected companies. The following Graph clearly presents the year-wise operating revenue of the selected companies during the period under study.

Graph # 4.1

Graphical presentation of the operating revenue of the selected companies during the years 2008 to 2012



(Source: Audited Annual Reports of the Selected Companies)

The Graph 4.1 shows the year-wise operating revenue of the selected companies and the increasing tendency of operating revenue of the selected companies. The Graph presents that the selected companies earned the highest revenues in the year 2012 and the lowest in the year 2008 during the period under study. The Graph also presents the operating revenue of the Company # 1, greater than that of Company # 2.

4.4.2: Year-wise Gross Profit

$H_{01,2}$: There is no significant difference in gross profit of the selected companies.

Table # 4.4

Table showing the gross profit of the selected companies during the years 2008 to 2012

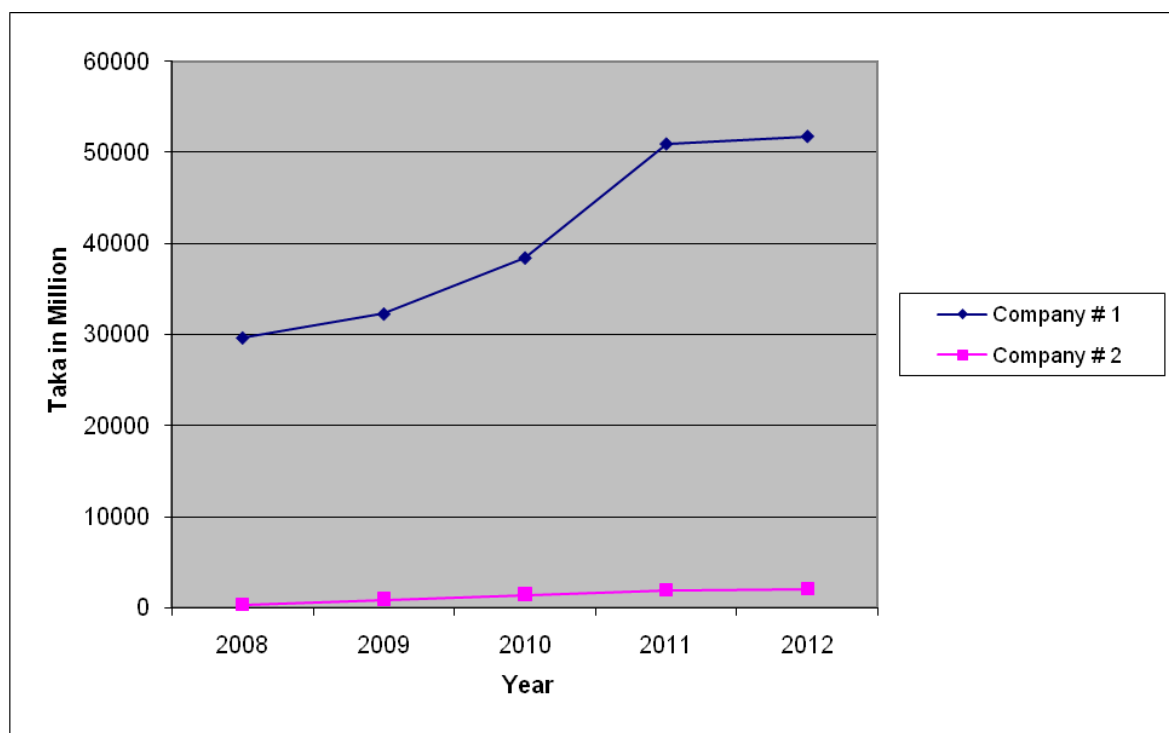
(Taka in Million)				
Year	Company # 1	Company # 2	t	Sig.
2008	29590.21	320.04	9.081	0.001
2009	32221.67	898.25		
2010	38403.09	1426.02		
2011	50949.54	1886.02		
2012	51778.36	2028.22		
Avg.	40588.57	1311.71		
SD	10347.78	708.99		
CV	25.49	54.05		

(Source: Audited Annual Reports of the Selected Companies)

Table 4.4 shows the gross profit of the selected companies during the period under study. The average gross profit is 40588.57 million of Company # 1 and 1311.71 million of Company # 2. The standard deviation of gross profit is 10347.78 and 708.99 respectively. The coefficient of variation of gross profits is 25.49 and 54.05 respectively during the period under study. The gross profit of Company # 1 and Company # 2 show increasing tendency. In order to see whether there is any significant difference in gross profit of the selected companies paired sample t test was conducted. The result shows that t value is 9.081 which is significant at 0.001 level. So, the null hypothesis is rejected. This indicates that there is significant difference in gross profit of the selected companies. In fine, it can be opined that the gross profit of Company # 1 is better than that of the Company # 2 during the study period. The following Graph clearly presents the year-wise gross profit of the selected companies during the period under study.

Graph # 4.2

Graphical presentation of the gross profit of the selected companies during the years 2008 to 2012



(Source: Audited Annual Reports of the Selected Companies)

The Graph 4.2 presents the year-wise gross profit of the selected companies. The Graph presents that the selected companies earned the highest gross profit in the year 2012 and lowest in the year 2008 during the period under study but the increasing trend of gross profit of 2012 of Company # 1 was minimum. The Graph also shows that the gross profit of the Company # 1, greater than that of Company # 2 during the period under study.

4.4.3: Year-wise Operating Profit

Ho_{1.3}: There is no significant difference in operating profit of the selected companies.

Table # 4.5

Table showing the operating profit of the selected companies during the years 2008 to 2012

(Taka in Million)

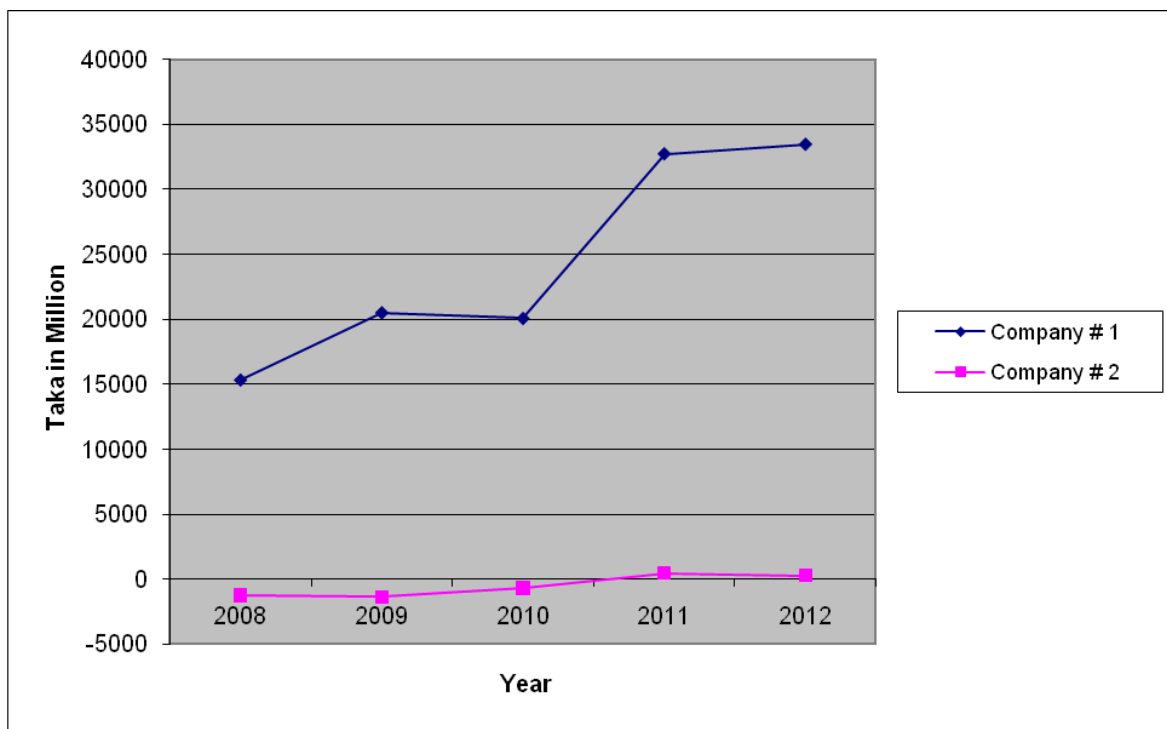
Year	Company # 1	Company # 2	t	Sig.
2008	15349.97	-1246.75	7.561	0.002
2009	20518.21	-1363.77		
2010	20082.05	-674.34		
2011	32741.21	485.84		
2012	33474.36	321.72		
Avg.	24433.16	-495.46		
SD	8178.18	863.30		
CV	33.47	-174.24		

(Source: Audited Annual Reports of the Selected Companies)

Table 4.5 shows the operating profit of the selected companies during the period under study. The average operating profit of Company # 1 and Company # 2 is 24433.16 million and -495.46 million respectively. The standard deviation of operating profit is 8178.18 and 863.30 respectively. The coefficient of variation of operating profit is 33.47 and -174.24 respectively during the period under study. The Table shows the operating profit of Company # 1 increasing tendency and the operating profits of Company # 2 negative all the years except 2011 and 2012 during the study period. So, it is evident that the operating profit of Company # 1 is better than that of Company # 2 during the study period. In order to see whether there is any significant difference in operating profit of the selected companies paired sample t test has been conducted. The result shows that t value is 7.561 which is significant at 0.002 level. So, the null hypothesis is rejected. This indicates that there is significant difference in operating profit of the selected companies. The following Graph clearly presents the year-wise operating profit of the selected companies.

Graph # 4.3

Graphical presentation of the operating profit of the selected companies during the years 2008 to 2012



(Source: Audited Annual Reports of the Selected Companies)

The graph 4.3 shows the operating profit position of selected companies covering a period of five years. The highest operating profit position was in 2012 and the lowest operating profit position was in 2008 during the period under study. The graph also shows that the operating profit position of Company # 1 has increased and decreased tendency during the period under study. The operating profit of Company # 2 is negative in the years 2008, 2009 and 2010 and positive in the years 2011 and 2012 during the period under study. In fine, it is evident that the operating profit position of Company # 1 is better than that of Company # 2.

4.4.4: Year-wise Profit before Tax

Ho_{1.4}: There is no significant difference in profit before tax of the selected companies.

Table # 4.6

Table showing the profit before tax of the selected companies during the years 2008 to 2012

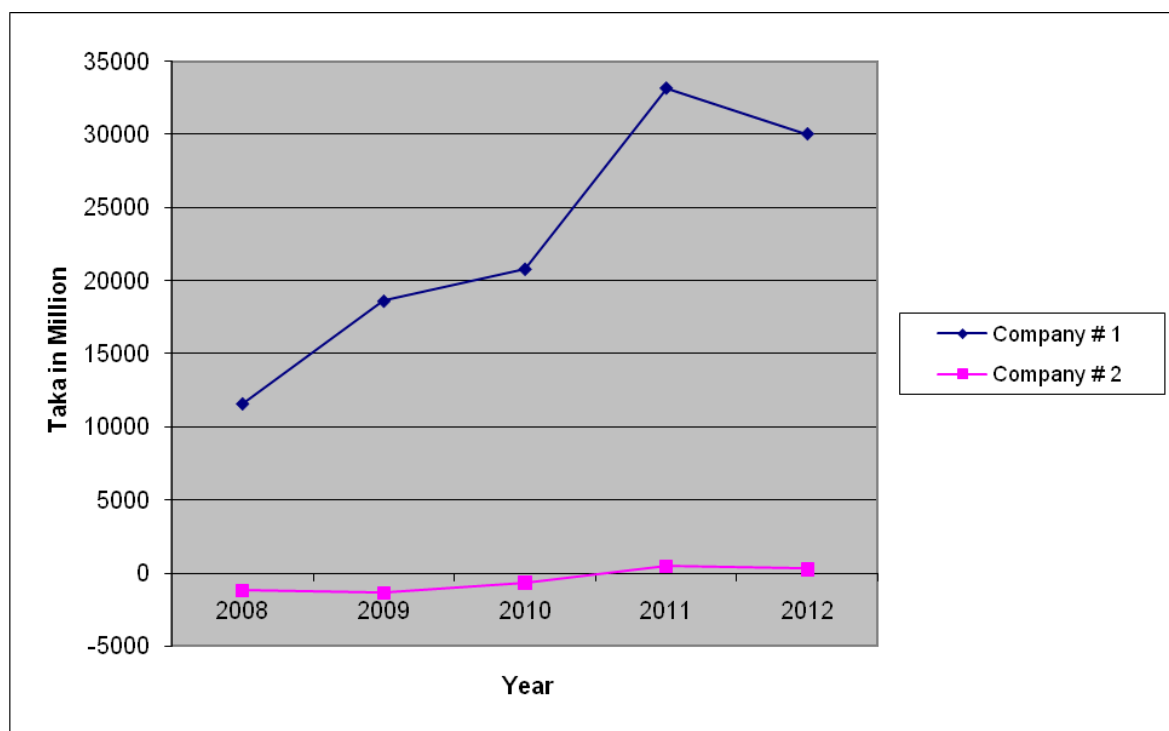
(Taka in Million)				
Year	Company # 1	Company # 2	t	Sig.
2008	11578.84	-1158.59	6.503	0.003
2009	18595.96	-1302.58		
2010	20785.85	-629.84		
2011	33164.94	468.10		
2012	30039.76	271.88		
Avg.	22833.07	-470.21		
SD	8767.64	809.83		
CV	38.40	-172.23		

(Source: Audited Annual Reports of the Selected Companies)

Table 4.6 expresses the profit before tax of the selected companies during the period under study. The average profit before tax is 22833.07 million of Company # 1 and -470.21 million of Company # 2 respectively. The standard deviation of profit before tax is 8767.64 and 809.83 respectively. The coefficient of variation of profit before tax is 38.40 and -172.23 respectively during the period under study. The Table shows the profit before tax of Company # 1 increasing and decreasing tendency and the Company # 2 negative all the years exception 2011 and 2012 during the study period. In order to see whether there is any significant difference in profit before tax of the selected companies paired sample t test has been conducted. The result shows that t value is 6.503 which is significant at 0.003 level. So, the null hypothesis is rejected. This indicates that there is significant difference in profit before tax of the selected companies. The following Graph clearly presents the year-wise profit before tax of the selected companies during the period under study.

Graph # 4.4

Graphical presentation of the profit before tax of the selected companies during the years 2008 to 2012



(Source: Audited Annual Reports of the Selected Companies)

The Graph 4.4 shows the profit before tax position of selected companies during the period under study. The Company # 1 has earned the highest profit before tax in the year 2011 and the lowest in the year 2008 during the period under study. It is found that the profit before tax of Company # 1 has increased and decreased during the period under study. The Graph also shows that the Company # 2 has failed to earn profit before tax all the years except year 2011 and 2012 during the period under study. In fine it is evident that the profit before tax position of Company # 1 is greater than that of Company # 2 during the period under study.

4.4.5: Year-wise Profit after Tax

$H_{01.5}$: There is no significant difference in profit after tax of the selected companies.

Table # 4.7

Table showing the profit after tax of the selected companies during the years 2008 to 2012

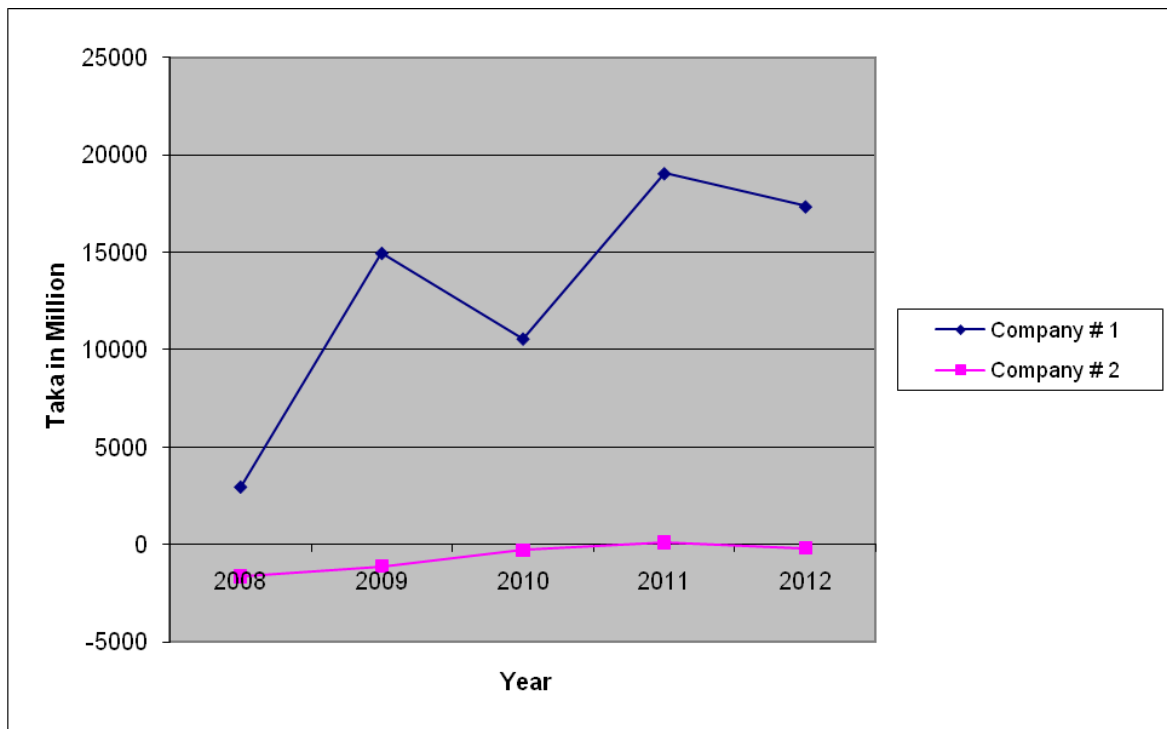
(Taka in Million)				
Year	Company # 1	Company # 2	t	Sig.
2008	2983.87	-1626.53	5.172	0.007
2009	14968.17	-1099.61		
2010	10579.18	-288.94		
2011	19052.70	110.28		
2012	17354.54	-175.04		
Avg.	12987.69	-615.97		
SD	6435.32	721.79		
CV	49.55	-117.18		

(Source: Audited Annual Reports of the Selected Companies)

Table 4.7 shows that the profit after tax of the selected companies during the period under study. The average profit after tax is 12987.69 million of Company # 1 and -615.97 million of Company # 2 respectively during the period under study. The standard deviation of profit after tax is 6435.32 and 721.79 respectively. The coefficient of variation of profit after tax is 49.55 and -117.18 respectively during the period under study. The Company # 1 shows increasing and decreasing tendency for earning profit during the study period but the profit after tax of Company # 2 is negative all the years except the year 2011 during the study period. In order to see whether there is any significant in profit after tax of the selected companies paired sample t test was conducted. The result shows that t value is 5.172 which is significant at 0.007 level and the null hypothesis is rejected. This indicates that there is significant difference in profit after tax of the selected companies. The following Graph clearly presents the year-wise profit after tax of the selected companies during the period under study.

Graph # 4.5

Graphical presentation of the profit after tax of the selected companies during the years 2008 to 2012



(Source: Audited Annual Reports of the Selected Companies)

The Graph 4.5 shows the year wise net profit of the selected companies during the study period. The Company # 1 has earned the highest net profit in the year 2011 and lowest in the year 2008 during the period under study. The Graph presents the increasing and decreasing tendency of earnings of net profit of Company # 1 during the period under study. The Graph also shows that the Company # 2 is facing losses expect in the year 2011 during the period study. The Graph also presents the net profit of the Company # 1 which is greater than that of Company # 2 during the period under study.

4.5 Major Observations

- ❖ The selected companies prepare their different financial statements on going concern basis under the historical cost convention using Generally Accepted Accounting Principles (GAAP) in accordance with accounting standards, The Companies Act 1994, The Securities and Exchange Rules 1987 and other applicable laws in Bangladesh.
- ❖ The selected companies follow various Bangladesh Accounting Standards (BASs)/International Accounting Standards (IASs) such as 1, 2, 7, 8, 12, 16, 17, 18, 21, 23, 24, 32, 34, 37 and 38 respectively and the selected companies also follow the provisions of International Financial Reporting Standards (IFRSs)/Bangladesh Financial Reporting Standards (BFRSs) for preparing and presenting the different financial statements.
- ❖ The existing AIS helps recording various accounting transactions, processing these transactions and preparing the financial statements like income statement, balance sheet, owners' equity statement, cash flow statement and others statement as desired by management for the decision making of the interested users.
- ❖ AIS provides information to support all levels of management such as operational level, middle level and top level management in taking effective decisions.
- ❖ AIS develops organizational decision making process by providing relevant and reliable information through preparing the different financial statements to the interested decision makers.
- ❖ The computerized AIS of the selected companies give an opportunity for better recording of their various business activities.
- ❖ The selected companies use number a great of codified accounts and use audit trail for linking transaction processing.

- ❖ The selected companies prove accuracy of posted amounts by preparing trial balance, using audit trial and rechecking.
- ❖ The selected companies use on-line processing systems and the objectives of data management are capturing and storing relevant data, occupying smallest possible space for storing data, up-dating files timely and making it accessible to uses, satisfying a variety of information needs, safeguarding from loss or unauthorized access and economy.
- ❖ AIS of the selected companies passes through the different stages of data conversion and tasks like data collection, data management, data processing, data control and information generation for the satisfaction of the different users.
- ❖ The purposes of AIS of the selected companies are to provide information that supports decision making, day to day operations and pertaining stewardship.
- ❖ The selected companies produce different reports with the help of AIS to the interested users in taking decisions.
- ❖ The selected companies make financing decision, investment decision, capital structure decision, working capital decision, pricing decision, servicing decision and outsourcing decision with the help of AIS.
- ❖ The selected companies use accounting information for various managerial functions such as planning, coordination, controlling, directing, budgeting, motivation and decision making.
- ❖ The selected companies provide accounting policies under the heading of significant accounting policies according to International Accounting Standard (IAS) as adopted in Bangladesh Accounting Standard (BAS).
- ❖ The selected companies follow various accounting policies for preparing and presenting the different financial statements.
- ❖ The selected companies maintain master file, transaction file, reference file and history file for recording various business activities.

- ❖ The selected companies use straight line method for charging depreciation.
- ❖ The selected companies prepare additional files for changing growth of business activities.
- ❖ Major developments have been made in the computerized AIS and it can now support all types of managerial decisions including strategic decisions.
- ❖ The average operating revenue of the selected companies is 76375.74 and 2453.14 million respectively and the null hypothesis is rejected which means that there is significant difference in operating revenue of the selected companies during the period under study.
- ❖ The average gross profit of the selected companies is 40588.57 and 1311.71 million respectively and the null hypothesis is rejected which means that there is significant difference in gross profit of the selected companies during the period under study.
- ❖ The average operating profit of the selected companies is 24433.16 and - 495.46 million respectively and the null hypothesis is rejected which means that there is significant difference in operating profit of the selected companies during the period under study.
- ❖ The average profit before tax of the selected companies is 22833.07 of and - 470.21 million respectively and the null hypothesis is rejected which means that there is significant difference in profit before tax of the selected companies during the period under study.
- ❖ The average profit after tax of the selected companies is 12987.69 of and - 615.97 million respectively and the null hypothesis is rejected which means that there is significant difference in profit after tax of the selected companies during the period under study.

4.6 Conclusion

The appropriate design of AIS supports to increase the management and financial performance and this influences organizational performance. This chapter attempts the opinions of the company executives regarding the existing AIS and evaluate the companies' performance through analysis the operational results. From the previous analysis it is evident that the AIS of the selected companies is fully computerized and process all transaction and prepare the different financial statements like income statement, balance sheet, owners' equity statement, cash flow statement and others statement as desired by management using the accounting software. These financial statements prepare according to Generally Accepted Accounting Principles (GAAP), the provision of accounting standards, the Companies Act 1994, the Securities and Exchange Rules 1987 and other applicable laws in Bangladesh. The selected companies follow the provisions of IAS/BAS 1, 2, 7, 8, 12, 16, 17, 18, 21, 23, 24, 32, 34, 37 and 38 respectively. It is also evident that the operational results of the selected companies over the study period Company # 1 has been able to earn good profit but the performance of Company # 2 is not satisfactory because it had been continuously facing loss for the last several years with the exception of 2011. The financial position of Company # 1 is better than that of Company # 2 during the period under study. The proper accounting, management and financial control Company # 1 has shown better performance than that of Company # 2 for earning profit. Poor internal management is responsible for unable of earning profit and the company should take necessary steps for improving the good internal management. In addition, all hypotheses are rejected which indicate that there is significant difference in operational results of the selected companies during the period under study.

CHAPTER FIVE

Evaluation of the Legal Framework and Accounting Standards

5.1 Introduction

AIS uses the business documents and procedures which are needed to prepare the different financial statements and other accounting reports for the satisfaction of the different stakeholders to take decisions. One of the most important purposes of AIS is to provide necessary information through preparing the different financial statements which help management control business operations and assist external users in making decision with respect to the business. Presentation of financial statements is regulated by legal framework and accounting standards in order to ensure the quality of the statements and to serve the needs of the users like present and potential investor, employees, lenders, suppliers and other trade creditors, customers, governments and their agencies and the public. Financial statements provide information to various interested users about the financial position, performance and cash flows in making economic decisions (Muttakin and Hossain, 2003). A good number of legal frameworks are necessary for preparing and ensuring fair presentation of different financial statements which is prepared at the end of each accounting period and those are the output of AIS and its design because these regulatory bodies like The Companies Act, 1994, Securities and Exchange ordinance, 1969, Securities and Exchange Rules, 1987, the Income Tax Ordinance, 1984 and the Local Authorities prescribe the reporting practice to be followed by the business organization and other enterprises also. Consequently, the design of the AIS and the functions of AIS are influenced by these regulatory bodies because AIS of any organization has to generate information required by these regulatory bodies for taking effective decisions. This chapter analyses the application of legal framework and compliance with accounting standards of the selected companies. The different regulations are given below:

5.2 The Companies Act, 1994

The Companies Act, 1994 is the most important legal framework for the both listed and non-listed companies in Bangladesh. This Act provides basic requirements for accounting and reporting which are applicable to all companies of Bangladesh. The Companies Act, 1994, has replaced the Companies Act, 1913. This Act, provides the important provisions regarding the preparation and presentation of different financial statements. The various sections of this Act cover the accounts and related matters are quoted from this Act and these provisions are given below:

5.2.1 List of the Related Provisions

Sections	Related Provisions
181	The obligation to keep the proper books of accounts
182	Inspection of books of account
183	Submission of audited balance sheet and profit and loss account
184	Board's report
185	Form and contents of balance sheet and profit and loss accounts
189	Authentication of balance sheet, profit and loss account, etc
213	Power and duties of auditors

Section 181 of the Company Act, 1994: Proper books of account should be maintained by every company keeping in view the following things-

- (a) all sums of money received and expended by the company and the matters in respect of which the receipt and expenditure takes place;
- (b) all sales and purchases of goods by the company;
- (c) the assets and liabilities of the company; and
- (d) in the case of a company engaged in production, distribution, marketing, transportation, processing, manufacturing, milling, extraction and mining activities, such particulars relating to utilization of material, labour and other items of overhead cost.

In Section 182(1): The registrars or Government officer as authorized by the Government in this behalf have the authority to inspect the books of account and other books and papers of every company.

In Section 183(1): The board of directors of every company should be presented the audited balance sheet and profit and loss account in the annual general meeting.

In Section 184 (1): A former established report should be attached to every balance sheet by its Board of Directors in general meeting keeping in view the following rules -

- (a) the state of the company's affairs;
- (b) the amount, if any, which the Board proposes to carry to any reserve in such balance sheet;
- (c) the amount, if any, which the Board recommends should be paid by way of dividend;
- (d) material changes and commitments, if any, affecting the financial position of the company which has occurred between the end of the financial year of the company to which the balance sheet is related and the date of the report.

In Section 184 (2): Any changes taken place during the financial year should be maintained in the Board's report as it is material for the appreciation of the state of company's affairs by its members:-

- (a) in the nature of the company's business;
- (b) in the company's subsidiaries or in the nature of the business carried on by them; and
- (c) generally in the classes of business in which the company has an interest.

In Section 185 (1): A summary of the property and assets and of the capital and liabilities of the company should be contained in a balance sheet of a company. It should given a true and fair view of affairs as at the end of the financial year. It is subject to the provision of this section in Part-I of Schedule XI and it approves of

circumstances. General instruction of preparing balance sheet should be followed in this case.

In Section 185 (2): Every profit and loss account of a company should give a true and fair view of the profit and loss of the company for the financial year and it should strictly comply with the requirements of Part II of Schedules XI.

In Section 189: Every balance sheet and profit and loss account or income and expenditure account should be signed on behalf of the Board of Directors-

- (i) in the case of banking company, by the manager, or managing agent, or managing agent, if any, and, where there are more than three directors of the company, by at least three of those directors or, where there are not more than three directors, by all the directors;
- (ii) in the case of any other company, by its managing agent, manager or secretary, if any, and by not less than two directors of the company one of whom should be the managing directors where there is one.

In Section 213 (1): Every auditor of a company shall have a right of access at all times to the books and accounts and vouchers of the company, whether kept at the head office of the company or elsewhere and shall be entitled to require from the officers of the company such information and explanation as the auditor may think necessary for the performance of his duties as auditors.

In Section 213 (3): The auditor should make a report to be presented in the annual general meeting of the company on the accounts examined by him, and on every balance sheet and profit and loss account and on every other document declared by this Act to be part of or annexed to the balance sheet or profit and loss accounts which are laid before the company in general meeting during his tenure of office and the report shall state whether, in his opinion and to the best of his information and according to the explanation given to him, the said accounts give the

information required by this Act in the manner so required and give a true and fair view-

- (a) in the case of the balance sheet, of the state of the company's affairs as at the end of its financial year;
- (b) in the case of the profit and loss account, of the profit or loss for its financial year.

Section (4): The auditors report shall also state-

- (a) whether he has obtained all the information and explanation which to the best of his knowledge and belief were necessary for the purposes of his audit;
- (b) whether, in his opinion, proper books of account as required by law have been kept by the company so far as appears from his examination of those books and proper returns adequate for the purposes of his audit have been received from branches not visited by him;
- (c) whether the company's balance sheet and profit and loss account dealt with by the report are in agreement with the books of account and returns.

In Bangladesh, the preparation and presentation of financial statements of listed and unlisted company are regulated by the Companies Act, 1994. From the analysis of annual reports and opinions of the company executives it is evident that the selected companies follow the provisions of the Companies Act, 1994 for preparing and presenting the different financial statements for the interested users shown in the annual report.

5.3 Securities and Exchange Ordinance 1969 and Rules 1987

Securities and Exchange Ordinance 1969 and Rules 1987 are necessary for preparing the different financial statements of the listed companies in the stock exchange. The International Organization of Securities Commission (IOSCO) is the apex body of all securities commissions in the world and Bangladesh Securities and Exchange Commission (BSEC) is a member of the International Organization of Securities Commission (IOSCO). The Securities and Exchange Commission (SEC) of Bangladesh regulates accounting and disclosure requirements of financial reporting practices of listed companies. The profit and loss account/income statements and balance sheet are the major financial statements, according to the Companies Act, 1994 whereas the Securities and Exchange Commission Rules 1987 included the cash flow statements and notes to the accounts as an integral part of the financial statements in addition to profit and loss account and balance sheet. The Securities and Exchange Rules 1987 require listed companies to follow International Accounting Standards (IASs) and International Standards on Auditing (ISAs) adopted by the Institute of Chartered Accountants of Bangladesh (ICAB) (Hossain, 2010). According to section 1(2) the financial statements of an issuer of a listed security shall be prepared in accordance with the requirements laid down in the schedule and the International Accounting Standards as adopted by the ICAB (Amended SEC/Sec-7/SER-1987/03/132dated, 22.10.1997). According to section 1(3) the financial statements of an issuer of a listed security shall be audited by a chartered accountant in accordance with the International Standards of Auditing as adopted by the ICAB and the report of the auditors shall be in Form “B” annexed to the schedule (Amended SEC/Sec-7/SER-1987/03/132dated, 22.10.1997). The financial statements of an issuer of listed companies should be prepared in accordance with the requirements laid down in the Schedule and IASs. The financial statements shown in the annual report prepared by the listed companies of stock exchange should be audited by a partnership firm of chartered accountants in accordance with the International Standards on Auditing applicable in Bangladesh.

5.3.1 Compliance Status of the Conditions of BSEC

Status of compliance with the conditions imposed by the Bangladesh Securities and Exchange Commission's Notification No SEC/CMRRCD/2006-158/134/Admin/44 dated 07 August, 2012 issued under section 2CC of the Securities and Exchange Ordinance, 1969 is presented below:

Condition No.	Title	Compliance Status (√ has been put in the appropriate column)		Remarks (If any)
		Complied	Not Complied	
1.	Board of Directors (BoD)			
1.1	Board's Size (number of Board members – minimum 5 and Maximum 20)	√		
1.2	Independent Directors			
1.2 (i)	At least one fifth (1/5) of the total number of Directors shall be Independent Directors	√		
1.2 (ii)	Independent Director means a director:			
1.2 (ii) (a)	who either does not hold any share in the company or holds less than one percent (1%) shares of the total paid-up shares of the company	√		
1.2 (ii) (b)	who is not a sponsor of the company and is not connected with the company's any sponsor or director or shareholder who holds one percent (1%) or more shares of the total paid-up shares of the company on the basis of family relationship. His/her family members also should not hold above mentioned shares in the company	√		
1.2 (ii) (c)	who does not have any other relationship, whether pecuniary or otherwise, with the company or its subsidiary/associated companies	√		
1.2 (ii) (d)	who is not a member, director or officer of any stock exchange	√		
1.2 (ii) (e)	who is not a shareholder, director or officer of any member of stock exchange or an intermediary of the capital market	√		

1.2 (ii) (f)	who is not a partner or executive or was not a partner or an executive during the preceding 3 (three) years of the company's statutory audit firm	√		
1.2 (ii) (g)	who shall not be an independent director in more than 3 (three) listed companies	√		
1.2 (ii) (h)	who has not been convicted by a court of competent jurisdiction as a defaulter in payment of any loan to a bank or a Non-Bank Financial Institution (NBFI)	√		
1.2 (ii) (i)	who has not been convicted for a criminal offence involving moral turpitude	√		
1.2 (iii)	Independent Director(s) shall be appointed by BoD approved by the shareholders in the Annual General Meeting (AGM)	√		
1.2 (iv)	The post of independent director(s) cannot remain vacant for more than 90 (ninety) days	None		
1.2 (v)	The Board shall lay down a code of conduct of all Board members and annual compliance of the code to be recorded	√		
1.2 (vi)	The tenure of office of an independent director shall be for a period of 3 (three) years, which may be extended for 1 (one) term only	√		
1.3 (i)	Independent Director shall be a knowledgeable individual with integrity who is able to ensure compliance with financial, regulatory and corporate laws and can make meaningful contribution to business	√		
1.3 (ii)	Independent Director should be a Business Leader/Corporate Leader/Bureaucrat/University Teacher with Economics or Business Studies or Law background/Professionals like Chartered Accountants, Cost & Management Accountants, Chartered Secretaries. The independent director must have at least 12 (twelve) years of corporate management/professional experiences	√		
1.3 (iii)	In special cases the above qualifications may be relaxed subject to prior approval of Commission	None		

1.4	The Chairman of the Board and the Chief Executive Officer (CEO) shall be different individuals. The Chairman shall be elected from among the directors. The Board of Directors shall clearly define respective roles and responsibilities of the Chairman and the CEO	√		
1.5	The Director's Report shall include the following additional statements:			
1.5 (i)	Industry outlook and possible future developments in the industry	√		
1.5 (ii)	Segment-wise or product-wise performance	√		
1.5 (iii)	Risks and concerns	√		
1.5 (iv)	A discussion on Cost of Goods sold, Gross Profit Margin and Net Profit Margin	√		
1.5 (v)	Discussion on continuity of any Extra-Ordinary gain or loss	√		
1.5 (vi)	Basis for related party transactions - a statement of all related party transactions should be disclosed in the annual report	√		
1.5 (vii)	Utilization of proceeds from public issues, rights issues and/or through any other instrument	√		
1.5 (viii)	An explanation if the financial results deteriorate after the company goes for Initial Public Offering (IPO)	None		
1.5 (ix)	If significant variance occurs between Quarterly Financial performance and Annual Financial Statements, the management shall explain about the variance	None		
1.5 (x)	Remuneration to directors including independent directors	√		
1.5 (xi)	The financial statements present fairly its state of affairs, the result of its operations, cash flows and changes in equity	√		
1.5 (xii)	Proper books of account have been maintained	√		
1.5 (xiii)	Adaptation of appropriate accounting policies & estimates	√		
1.5 (xiv)	IAS/BAS/IFRS/BFRS, as applicable in Bangladesh, have been followed and	√		

	adequate disclosure for any departure			
1.5 (xv)	The system of internal control is sound in design and has been effectively implemented and monitored	√		
1.5 (xvi)	Going Concern (ability to continue as a going concern)	√		
1.5 (xvii)	Highlight and explain significant deviations from the last year's operating results	√		
1.5 (xviii)	Key operating and financial data of at least preceding 5 (five) years shall be summarized	√		
1.5 (xix)	Reason for non declaration of Dividend	None		
1.5 (xx)	The number of Board meetings held during the year and attendance by each director	√		
1.5 (xxi)	Pattern of shareholding and name wise details (disclosing aggregate number of shares):			
1.5 (xxi) (a)	Parent/Subsidiary/Associated Companies and other related parties	√		
1.5 (xxi) (b)	Directors, Chief Executive Officer (CEO), Company Secretary (CS), Chief Financial Officer (CFO), Head of Internal Audit (HIA) and their spouses and minor children	√		
1.5 (xxi) (c)	Executives	√		
1.5 (xxi) (d)	Shareholders holding ten percent (10%) or more voting interest in the company	√		
1.5 (xxii)	In case of the appointment/re-appointment of a director, disclose:			
1.5 (xxii) (a)	a brief resume of the director	√		
1.5 (xxii) (b)	nature of his/her expertise in specific functional areas	√		
1.5 (xxii) (c)	names of companies in which the person also holds the directorship and the membership of committees of the board	√		
2.1	Appointment of CFO, HIA and CS and defining their respective roles, responsibilities & duties	√		
2.2	The CFO and the CS shall attend the meetings of the Board of Directors	√		

3	Audit Committee			
3 (i)	The company shall have an Audit Committee as a sub-committee of the BoD	√		
3 (ii)	The Audit Committee shall assist the BoD in ensuring that the financial statements reflect true and fair view of the state of affairs of the company and in ensuring a good monitoring system within the business	√		
3 (iii)	The Audit Committee shall be responsible to the BoD. The duties of the Audit Committee shall be clearly set forth in writing	√		
3.1 (i)	The Audit Committee shall be composed of at least 3 (three) members	√		
3.1 (ii)	The BoD shall appoint members of the Audit Committee who shall be directors of the company and shall include at least 1 (one) Independent Director	√		
3.1 (iii)	All members of the audit committee should be “financially literate” and at least 1 (one) member shall have accounting or related financial management experience	√		
3.1 (iv)	Expiration of the term of service of Audit Committee members making the number lower than 3 (three) and fill up the vacancy (ies) by the Board not later than 1 (one) month from the date of vacancy(ies)	None		
3.1 (v)	The Company Secretary shall act as the secretary of the Audit Committee	√		
3.1 (vi)	The quorum of the Audit Committee meeting shall not constitute without at least 1 (one) independent director	√		
3.2 (i)	The BoD shall select the Chairman of the Audit Committee, who shall be an Independent Director	√		
3.2 (ii)	Chairman of the audit committee shall remain present in the AGM	√		
3.3	Role of Audit Committee			
3.3 (i)	Oversee the financial reporting process	√		
3.3 (ii)	Monitor choice of accounting policies and principles	√		
3.3 (iii)	Monitor Internal Control Risk	√		

	management process			
3.3 (iv)	Oversee hiring and performance of external auditors	√		
3.3 (v)	Review the annual financial statements before submission to the board for approval	√		
3.3 (vi)	Review the quarterly and half yearly financial statements before submission to the board for approval	√		
3.3 (vii)	Review the adequacy of internal audit function	√		
3.3 (viii)	Review statement of significant related party transactions submitted by the management	√		
3.3 (ix)	Review Management Letters/Letter of Internal Control weakness issued by statutory auditors	√		
3.3 (x)	Disclosure to the Audit Committee about the uses/applications of IPO funds by major category (capital expenditure, sales and marketing expenses, working capital, etc), on a quarterly basis, as a part of their quarterly declaration of financial results. Further, on an annual basis, shall prepare a statement of funds utilized for the purposes other than those stated in the prospectus	None		
3.4.1 (i)	Reporting to BoD on the activities of the Audit Committee	√		
3.4.1 (ii) (a)	Reporting to BoD on conflicts of interests	None		
3.4.1 (ii) (b)	Reporting to BoD on any fraud or irregularity or material defect in the internal control system	None		
3.4.1 (ii) (c)	Reporting to BoD on suspected infringement of laws	None		
3.4.1 (ii) (d)	Reporting to BoD on any other matter	None		
3.4.2	Reporting to BSEC (if any material impact on the financial condition & results of operation, unreasonably ignored by the management)	None		
3.5	Reporting to the Shareholders of Audit Committee activities, which shall be	√		

	signed by the Chairman and disclosed in the Annual Report			
4.00	External / Statutory Auditors			
4.00 (i)	Non- engagement in appraisal or valuation services or fairness opinions	√		
4.00 (ii)	Non-engagement in designing and implementation of Financial Information System	√		
4.00 (iii)	Non-engagement in Book Keeping or other services related to the accounting records or financial statements	√		
4.00 (iv)	Non- engagement in Broker-Dealer services	√		
4.00 (v)	Non- engagement in Actuarial services	√		
4.00 (vi)	Non- engagement in Internal Audit services	√		
4.00 (vii)	Non- engagement in any other services that the Audit Committee determines	√		
4.00 (viii)	No partner or employees of the external audit firms shall possess any share of the company during the tenure of their assignment	√		
5	Subsidiary Company			
5 (i)	Provisions relating to the composition of the BoD of the holding company shall be made applicable to the composition of the BoD of the subsidiary company	√		
5 (ii)	At least 1 (one) Independent Director on the BoD of the holding company shall be a director on the BoD of the subsidiary company.	√		
5 (iii)	The minutes of the Board meeting of the subsidiary company shall be placed for review at the following Board meeting of the holding company	√		
5 (iv)	The minutes of the respective Board meeting of the holding company shall state that they have reviewed the affairs of the subsidiary company also	√		
5 (v)	The Audit Committee of the holding company shall also review the financial statements, in particular the investments made by the subsidiary company	√		

6	The CEO and CFO shall certify to the Board that they have reviewed financial statements for the year and that to the best of their knowledge and belief:			
6 (i) (a)	these statements do not contain any materially untrue statement or omit any material fact or contain statements that might be misleading	√		
6 (i) (b)	these statements together present a true and fair view of the company's affairs and are in compliance with existing accounting standards and applicable laws	√		
6 (ii)	there are, to the best of knowledge and belief, no transactions entered into by the company during the year which are fraudulent, illegal or violation of the company's code of conduct	√		
7 (i)	Obtaining certificate from a practicing Professional Accountant/Secretary regarding compliance of conditions of Corporate Governance Guidelines of the BSEC and include in the Annual Report	√		
7 (ii)	Directors statement in the directors' report whether the company has complied with these conditions	√		

(Source: Annual Report of GPL, 2012)

Securities and Exchange Ordinance 1969 and Securities and Exchange Rules, 1987 are mandatory for listed companies in Dhaka and Chittagong stock exchange. From the analysis of annual reports it is evident that the Company # 1 follows the provision of Bangladesh Securities and Exchange Commission (BSEC). The Company # 1 prepares the different financial statements at the end of every accounting period for the interested stakeholders and submitted to the Stock Exchange and Bangladesh Security and Exchange Commission (BSEC) timely and the Company # 2 is not listed in the Stock Exchange.

5.4 The Income Tax Ordinance, 1984

The Income Tax Ordinance, 1984 is important for listed and non-listed company and it greatly influences the presentation and disclosure in annual financial report of any business organization at the every accounting period. Subject to the rules and orders of the Government regulating the terms and conditions of service of persons in public services and posts, appointment of income-tax authorities shall be made in accordance with the provisions of this Ordinance. Many small businesses would not keep their books of accounts properly to pay income tax but large organizations are liable to keep proper books of accounts according to law to meet the legal obligation of the income tax law. So, accounting procedures and reporting is greatly influenced by income tax law. The various accounts of every company both public and private must be audited by professional chartered accountant before submission of return of income (Hossain, 2010). National Board of Revenue is the regulator of Income Tax Ordinance 1984. The huge amount of revenues comes from direct tax of Bangladesh government and it is very important for developing the economy. There are some limitations in Income Tax Ordinance, 1984. It is true that tax is one of the vital issues of any business or businessmen. The businessmen choose that system of accounting which will provide tax benefit. Ultimately it affects the preparation of correct accounts. For these reason the interested users do not get correct and sufficient information from financial statements. According to contents of the Companies Act, 1994 of Bangladesh every company should prepare its different financial statements at the end of each financial year for the various interested users. Again to determine the liability and finalize the tax matters these financial statements along with the auditors report are to be submitted to tax authority. Every company prepares its annual reports including the different financial statements in accordance with some accounting principles and assumptions. But in some cases contents of prevailing tax law in our country as applied by the tax authority create barriers in preparation of correct financial statements of a company for the interested users (Hossain, 2007). Researcher made

an opinion survey on the respondents regarding the degree of application of legal framework for preparing the financial statements of the selected companies. In order to see whether there is significant difference of opinions among the respondents regarding the application of legal framework for preparing the financial statement of the selected companies a null hypothesis has been developed and χ^2 test and ANOVA test have been conducted to test the null hypothesis.

Ho₂: There is no significant difference of opinions among the respondents regarding the degree of application of legal framework for preparing the financial statements of the selected companies.

Table # 5.1

Table showing the opinions of the respondents regarding the degree of application of legal framework for preparing the financial statements of the selected companies

	Respondent Groups								χ^2	Sig.
	CA		CMA		Acad.		Total		6.336	0.387
Types of Opinions	No.	%	No.	%	No.	%	No.	%		
Greatly Applied	30	50.00	22	44.00	11	36.67	63	45.00		
Moderately Applied	28	46.67	26	52.00	16	53.33	70	50.00		
Slightly Applied	00	00	02	4.00	01	3.33	03	2.14		
Neutral	02	3.33	00	00	02	6.67	04	2.86		
Not Applied	00	00	00	00	00	00	00	00		
Total	60	100	50	100	30	100	140	100		

(Source: Opinion Survey)

Table # 5.1 shows the opinions of the respondents regarding the degree of application of legal framework for preparing the financial statements of the selected companies and it is evident that 45.00% of the respondents opine that the selected companies greatly apply legal framework, 50.00% of the respondents think that the selected companies moderately apply legal framework, 2.14% of the respondents opine that the selected companies slightly apply legal framework, 2.86% of the respondents are neutral and none of the respondents opine that the selected companies does not apply legal framework. Majority of the respondents opine that

the selected companies moderately apply legal framework for preparing the financial statements. In order to see whether there is any significant difference of opinions among the respondents regarding the application of legal framework for preparing the financial statement of the selected companies χ^2 test has been conducted. It is found that the value of χ^2 is 6.336 which is significant at 0.387 levels. So, the null hypothesis is accepted which means that there is no significant difference of opinions among the respondents regarding the application of legal framework for preparing the financial statement of the selected companies. From the foregoing discussion it is evident that the selected companies follow the provisions of legal framework for preparing the financial statements. In order to find out the difference between groups and within groups researcher has conducted ANOVA test and the results are given in the following Table:

Table # 5.1.A

Table showing the results of ANOVA test regarding degree of application of legal framework for preparing the financial statements of the selected companies

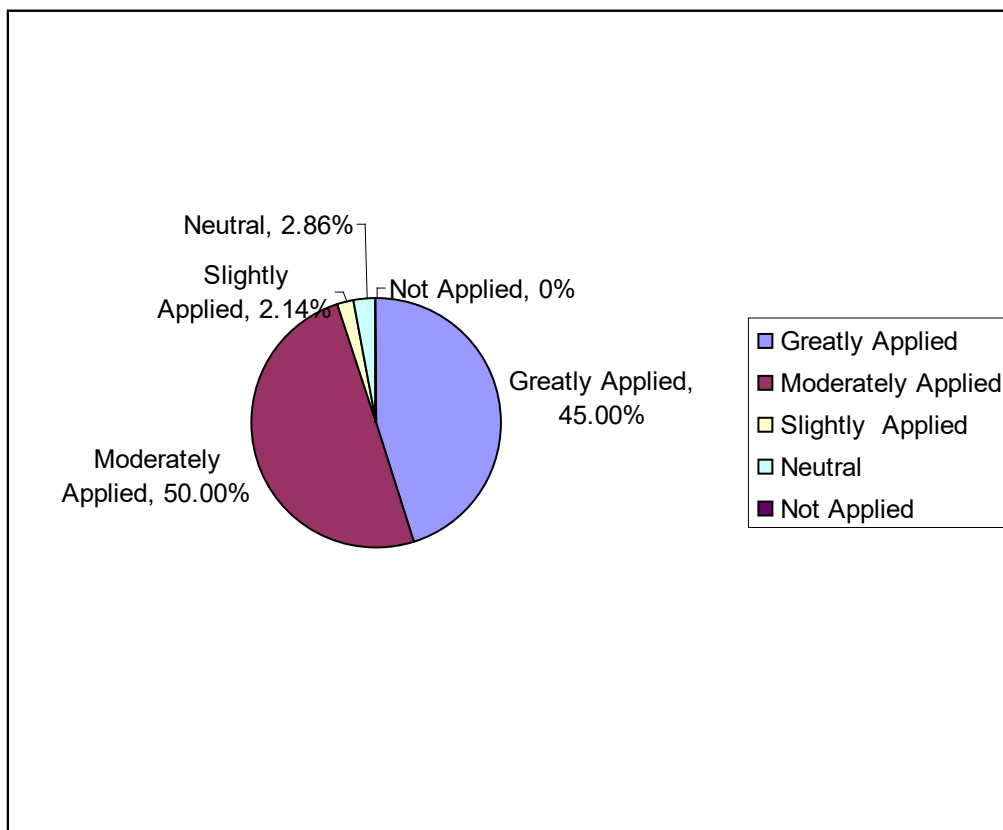
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.152	2	0.576	1.283	0.281
Within Groups	61.533	137	0.449		
Total	62.685	139			

(Source: Opinion Survey)

From the above Table it is evident that there is no significant difference of opinions on the degree of application of legal framework for preparing the financial statements of the selected companies among the different respondents groups. The following Pie-chart clearly presents the opinions of the respondents regarding the degree of application of legal framework for preparing the financial statements.

Pie-chart # 5.1

Presentation through Pie-chart of the opinions of the respondents regarding the degree of application of legal framework for preparing the financial statements of the selected companies



(Source: Opinion Survey)

The aforesaid Pie-chart shows that the respondents have expressed the opinions of the respondents regarding the degree of application of legal framework for preparing the financial statements of the selected companies as 45.00% greatly, 50.00% moderately, 2.14% slightly and 2.86% neutral. From the above Pie-chart it is evident that the majority of the respondents opine that the selected companies moderately apply the legal framework for preparing the different financial statements of the selected companies.

5.5 Accounting Standards

Accounting standards are essential for preparing and presenting the different financial statements because those standards ensure the quality of accounting information. Accounting standards are guiding philosophy that show the right path to the professional accountants in preparing the financial statements. In fact, accounting standards are a set of norms and rules that direct how to treat different financial transactions and their disclosures. Accounting standards give an opportunity to the accounting profession to have a universal form for preparing the different financial statements and those enable the users to make a comparative study of financial transactions that helps form sound decisions. It is comprised of certain purposes which are vital to bridge the gap between financial statements and its various users. In addition, accounting standards are set with a view to minimizing the scope of personal judgments and establishing a correct measure of values that help the accountants and other users in every sphere of their activities. The purpose of accounting standards is to create a sense of confidence among the users regarding proper accounting practices for producing the relevant and reliable accounting information So that the users can face and solve any accounting transactional problem being ensured of the guidelines it provides (Basu and Das, 2006). So, accounting standards are material to the selected companies for preparing and presenting the transparent financial statements to the interested users. In Bangladesh, Institute of Chartered Accountants of Bangladesh (ICAB) is the proper authority to adopt International Accounting Standards as Bangladesh Accounting Standards. ICAB is a national professional Accounting Body in Bangladesh, established under the Bangladesh Chartered Accountants Order, 1973. ICAB has adopted IASs as BASs and IFRSs as BFRSs respectively. The BASs and BFRSs are shown in the following Table with their effective date:

5.5.1 The various Bangladesh Accounting Standards and their effective date

BAS	Title of Adopted IAS as BAS	Effective date of BAS
1	Presentation of Financial Statements	1 January 2007
2	Inventories	1 January 2007
7	Statement of Cash Flows	1 January 1999
8	Accounting Policies, Changes in Accounting Estimates and Errors	1 January 2007
10	Events After the Reporting Period	1 January 1999
11	Construction Contracts	1 January 1999
12	Income Taxes	1 January 1999
16	Property, Plant and Equipment	1 January 2007
17	Leases	1 January 2007
18	Revenue	1 January 2007
19	Employees Benefits	1 January 2004
20	Accounting for Government Grants and Disclosure of Government Assistance	1 January 1999
21	The Effects of Changes in Foreign Exchange Rates	1 January 2007
23	Borrowing Costs	1 January 2010
24	Related Party Disclosures	1 January 2007
26	Accounting and Reporting by Retirement Benefit Plans	1 January 2007
27	Consolidated and Separate Financial Statements	1 January 2010
28	Investments in Associates	1 January 2007
29	Financial Reporting in Hyperinflationary Economics	Not adopted
31	Interests in Joint Ventures	1 January 2007
32	Financial Instruments: Presentation	1 January 2010
33	Earnings Per Share	1 January 2007
34	Interim Financial Reporting	1 January 1999
36	Impairment of Assets	1 January 2005
37	Provisions, Contingent Liabilities and Contingent Assets	1 January 2007
38	Intangible Assets	1 January 2005
39	Financial Instruments: Recognition and Measurement	1 January 2010
40	Investment Property	1 January 2007
41	Agriculture	1 January 2007

(Source: ICAB-CAPA International Conference, 2012)

5.5.2 The various Bangladesh Financial Reporting Standards and their effective date

BFRS	Title of Adopted IFRS as BFRS	Effective date of BFRS
1	First-time Adoption of International Financial Reporting Standards	1 January 2009
2	Share-based Payment	1 January 2007
3	Business Combinations	1 January 2010
4	Insurance Contracts	1 January 2010
5	Non-current Assets Held for Sale and Discontinued Operations	1 January 2007
6	Exploration for and evaluation of Mineral Resources	1 January 2007
7	Financial Instruments: Disclosure	1 January 2010
8	Operating Segments	1 January 2010
IFRS 9	Financial Instruments	Adopted by ICAB and going to publish in 2011 (Effective Date on or after 1 January 2013)
IFRS 10	Consolidated Financial Statements	
IFRS 11	Joint Arrangements	
IFRS 12	Disclosure of Interests in Other Entities	
IFRS 13	Fair Value Measurement	
IFRS for SMEs	BFRS for SMEs Small Medium Size Entities	1 January 2013

(Source: ICAB-CAPA International Conference, 2012)

The different accounting standards adopted by the Institute of Chartered Accountants of Bangladesh (ICAB) influence the disclosure of accounting information produced by AIS of any organization. Adequate disclosure of accounting information is essential for the interested users to take sound decisions. An appropriate AIS helps the adequate disclosure of accounting information and it depends on the accounting standards. Adherences to the sufficient accounting standards are necessary to the consistent preparation of different financial statements of any organization. The absence of consistency and conformity with a standard makes it impossible to compare the financial condition and results of operation of different organizations. Standards ensure the conformity of meaning and ideas of various financial statements made both in domestic and international sphere. If there are no accounting standards, the users will be confused to analyze financial statements in a meaningful way. Accounting standards regulate the whole process of accounting practice in a disciplined way and its absence may really hamper the whole process of accounting practice. From the analysis of annual reports and opinions of executives of the selected companies it is evident that the selected companies follow the provisions of IAS/BAS 1, 2, 7, 8, 12, 16, 17, 18, 21, 23, 24, 32, 34, 37 and 38 respectively and the selected companies also follow the provisions of International Financial Reporting Standards (IFRSs) /Bangladesh Financial Reporting Standards (BFRSs) for providing accounting information through preparing the different financial statements. A good number of accounting standards help prepare and present the credible financial statements for the interested users. In the absence of sufficient accounting standards, the preparation and presentation of meaningful financial statements is impossible. It is also evident that the selected companies follow a large number of accounting standards for preparing and presenting the different financial statements. Researcher made an opinion survey of the respondents regarding the degree of compliance with

accounting standards for preparing the financial statements of the selected companies. In order to see whether there is any significant difference of opinions among the respondents regarding the degree of compliance with accounting standards for preparing the financial statements of the selected companies the researcher has developed a null hypothesis and conducted χ^2 test and ANOVA test to validate the null hypothesis.

H₀₃: There is no significant difference of opinions among the respondents regarding the degree of compliance with accounting standards for preparing the financial statements of the selected companies.

Table # 5.2

Table showing the opinions of the respondents regarding the degree on compliance with accounting standards for preparing the financial statements of the selected companies

	Respondent Groups								χ^2	Sig.
	CA		CMA		Acad.		Total		16.447	0.012
Types of Opinions	No.	%	No.	%	No.	%	No.	%		
Greatly Complied	22	36.67	13	26.00	04	13.33	39	27.86		
Moderately Complied	35	58.33	36	72.00	20	66.67	91	65.00		
Slightly Complied	00	00	00	00	02	6.67	02	1.43		
Neutral	03	5.00	01	2.00	04	13.33	08	5.71		
Not Complied	00	00	00	00	00	00	00	00		
Total	60	100	50	100	30	100	140	100		

(Source: Opinion Survey)

Table # 5.2 presents the opinions of the respondents regarding the degree on compliance with accounting standards for preparing the financial statement of the selected companies and it is found that 27.86% of the respondents opine that the selected companies greatly comply with accounting standards, 65.00% of the respondents think that the selected companies moderately comply with accounting standards, 1.43% of the respondents comment that the selected companies slightly comply with accounting standards, 5.71% of the respondents are neutral and none

of the respondents opine that the selected companies do not comply with accounting standards. Majority of the respondents comment that the selected companies moderately comply with accounting standards for preparing the financial statements. In order to see whether there is any significant difference of opinions among the respondents regarding the degree of compliance with accounting standards for preparing the financial statement of the selected companies the researcher has conducted χ^2 test. It is found that the value of χ^2 is 16.447 which is significant at 0.012 levels. So, the null hypothesis is rejected which means that there is significant difference of opinions among the respondents regarding the degree of compliance with accounting standards by the selected companies. From the foregoing discussion it is evident that the respondents are not unanimous regarding the compliance with accounting standards for preparing the financial statements. In order to find out the difference between groups and within groups researcher has conducted ANOVA test and the results are given in the following Table:

Table # 5.2.A

Table showing the results of ANOVA test regarding the degree on compliance with accounting standards for preparing the financial statements of the selected companies

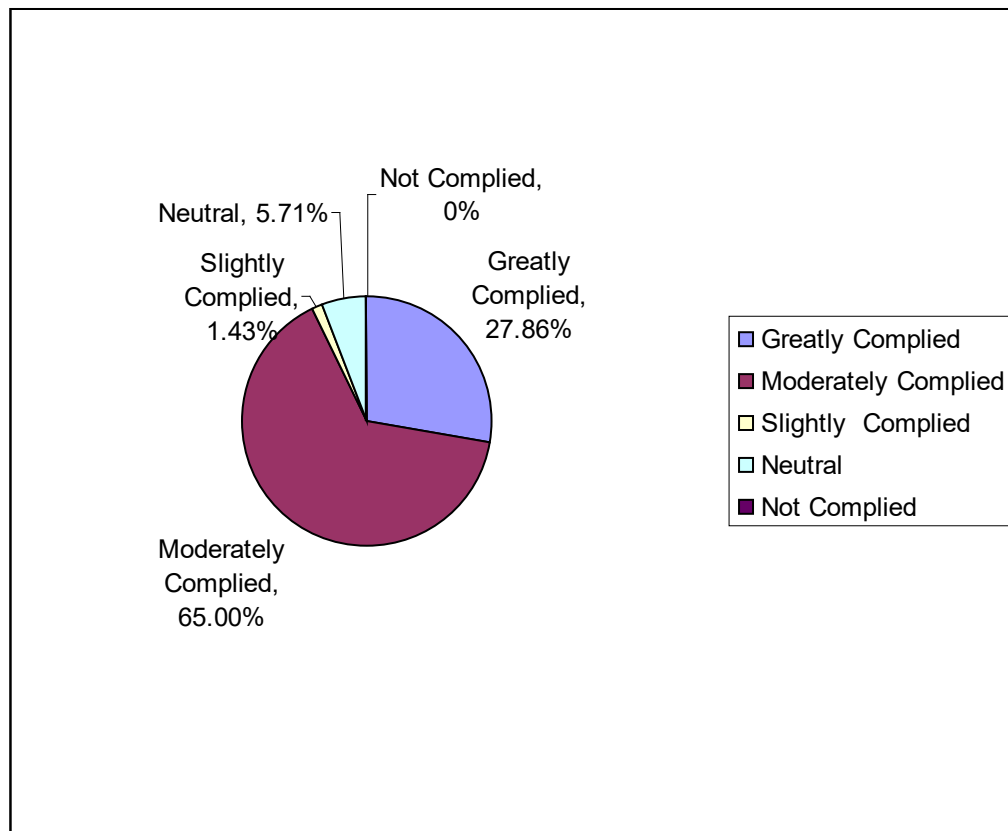
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.737	2	2.368	4.983	0.008
Within Groups	65.113	137	0.475		
Total	69.850	139			

(Source: Opinion Survey)

From the above Table it is found that there is significant difference of opinions on the degree on compliance with accounting standards for preparing the financial statements of the selected companies among the different respondents groups. The following Pie-chart clearly presents the opinions of the respondents regarding the degree on compliance with accounting standards for preparing the financial statements.

Pie-chart # 5.2

Presentation through Pie-chart of the opinions of the respondents regarding the degree on compliance with accounting standards for preparing the financial statement of the selected companies



(Source: Opinion Survey)

The above Pie-chart shows that the respondents have expressed the opinions regarding the degree on compliance with accounting standards for preparing the financial statement of the selected companies as 27.86% greatly, 65.00% moderately, 1.43% slightly and 5.71% neutral. From the above Pie-chart it is evident that the majority of the respondents think that the selected companies moderately comply with accounting standards for preparing the financial statements of the selected companies.

5.6 Test of Reliability

The reliability test is used to find out the reliability of the results of the opinions of the respondents regarding the application of legal framework and compliance with accounting standards for preparing the financial statements of the selected companies. The Chronbach's Alpha test has been used to test reliability and the results are given below:

Table # 5.3

Table showing the Cronbach Alpha test results of the opinions of the respondents regarding the application of legal framework and compliance with accounting standards for preparing the financial statements of the selected companies

Mean	Variance	Std. Dev.	Alpha Value
8.5214	1.6902	1.3001	0.8717

(Source: Opinion Survey)

For the purpose of testing reliability of results researcher has conducted the Cronbach Alpha test regarding the application of legal framework and compliance with accounting standards for preparing the financial statements of the selected companies. The result shows that the value of Alpha is above 0.7. So, it is evident that the reliability is ensured.

5.7 Major Observations

- ❖ 50.00% of the respondents think that the selected companies moderately apply legal framework for preparing the financial statements and the null hypothesis is accepted which means that there is no significant difference of opinions among the respondents regarding the application of legal framework for preparing the financial statement of the selected companies.
- ❖ 65.00% of the respondents opine that the selected companies moderately comply with accounting standards for preparing the financial statement and the null hypothesis is rejected which means that there is significant difference of opinions among the respondents regarding the degree of compliance with accounting standards for preparing the financial statement of the selected companies.

5.8 Conclusion

The regulatory framework gives guideline to the selected companies for preparing and presenting the different financial statements for the satisfaction of the interested users and proper decision making. The Companies Act 1994, the Securities and Exchange Rules 1987, Income Tax Ordinance, 1984, the provision of accounting standards and other applicable laws in Bangladesh influence the practice of AIS of the selected companies. The chapter shows the degree of application of legal framework and compliance with accounting standards for preparing the different financial statements of the selected companies. From the foregoing analysis it is apparent that majority of the respondents think that the selected companies moderately apply legal framework for preparing the financial statements and the null hypothesis is accepted and majority of the respondents think that the selected companies moderately comply with accounting standards for preparing the financial statements and the null hypothesis is rejected. A sound AIS is crucial for providing relevant and reliable information for the interested users to take desirable decision about business entity.

CHAPTER SIX

Evaluation of the Efficiency of AIS through Selected Indicators

6.1 Introduction

AIS is an information system that collects and processes relevant economic data for providing meaningful information through preparing the different financial statements which are used in decisions making process of internal and external parties. The important functions of the AIS of the selected companies are to collect and process data efficiently and generate relevant and reliable accounting information for the purpose of planning, controlling, coordinating and decision making process. The accounting information produced by AIS is decision oriented, the various decision makers take every decision depending on accounting information and the interested users always expect quality accounting information that is available in the different financial statements and it is possible when AIS works efficiently. Financial statements are the important sources of accounting information and the different users get necessary information from the financial statements and those are prepared with the help of AIS. An efficient AIS depends on some factors. To evaluate the efficiency of AIS we have identified some indicators of the efficiency of AIS. These indicators have been identified through reviewing existing literatures on AIS. This chapter shows the various indicators which are used to judge the efficiency of AIS of the selected companies and demonstrates the opinions of the respondents. These indicators are effective internal control system, proper security measure, good documentation, separation of operation from accounting, extent of disclosure; cost effectiveness, flexibility to meet future needs, processing power of accountants and independent internal and external audit. Before analyzing these indicators at first researcher has analyzed the opinions of the respondents regarding the various indicators to judge the efficiency of AIS of the selected companies and the results are given in the following Table:

Table # 6.1

Table showing the opinions of the respondents regarding the various indicators to judge the efficiency of AIS of the selected companies

	Respondent Groups							
	CA		CMA		Acad.		Total	
Items	No.	%	No.	%	No.	%	No.	%
1. Effective Internal Control System	57	95.00	43	86.00	28	93.33	128	91.43
2. Proper Security Measure	34	56.67	32	64.00	22	73.33	88	62.86
3. Good Documentation	35	58.33	36	72.00	21	70.00	92	65.71
4. Separation of Operation from Accounting	31	51.67	32	64.00	21	70.00	84	60.00
5. Extent of Disclosure	48	80.00	42	84.00	23	76.67	113	80.71
6. Cost Effectiveness	35	58.33	38	76.00	16	53.33	89	63.57
7. Flexibility to Meet Future Needs	31	51.67	31	62.00	17	56.67	79	56.43
8. Processing Power of Accountants	25	41.67	27	54.00	14	46.67	66	47.14
9. Independent Internal and External Audit	46	76.67	41	82.00	24	80.00	111	79.29
10. All of the above items	20	33.33	25	50.00	12	40.00	57	40.71
Total	60		50		30		140	

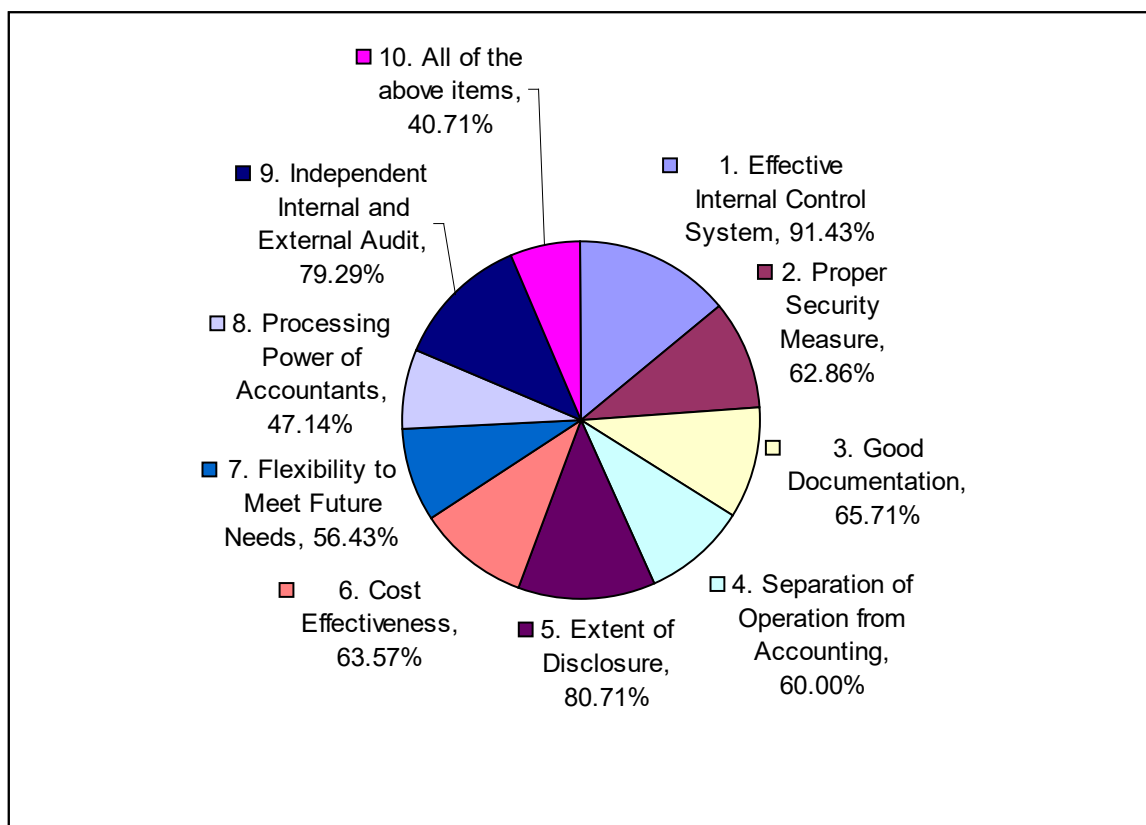
(Source: Opinion Survey)

Table # 6.1 shows the positive opinions of the respondents in judging the efficiency of the AIS of the selected companies and observe that 91.43% of the respondents opine that the effective internal control system, 62.86 % the of the respondents think that the proper security measure, 65.71% of the respondents state that good documentation, 60.00% of the respondents opine that the separation of operation from accounting, 80.71% of the respondents think that the extent of disclosure, 63.57% of the respondents reveal that the cost effectiveness, 56.43% of the respondents think that the flexibility to future needs, 47.14% of the respondents mention that the processing power of accountants, 79.29% of the respondents think that the independent internal and external audit and 40.71% of the respondents opine that all the alternatives are necessary for judging the efficiency of AIS.

Majority of the respondents opine that the existence of effective internal control system' is the indicator to judge the efficiency of AIS of the selected companies. The following Pie-chart clearly presents the opinions of the respondents regarding the various indicators to judge the efficiency of AIS of the selected companies

Pie-chart # 6.1

Presentation through Pie-chart of the opinions of the respondents regarding the various indicators to judge the efficiency of AIS of the selected companies



(Source: Opinion Survey)

The above Pie-chart presents that the respondents have given their opinions regarding the various indicators to judge the efficiency of AIS of the selected companies. From the above Pie-chart it is evident that 91.43% of the respondents opine that the effective internal control system is an indicator to judge the efficiency of AIS of the selected companies.

6.2 Effective Internal Control System

An effective internal control system is an important way to judge the efficiency of AIS of the selected companies. Internal control system refers to plans and procedures which are adopted by the management to protect assets, ensure the accuracy of records, provide meaningful information, ensure the acceptability of accounting information, ensure the implementation of accounting policies, improve the operational efficiency and enhance the efficiency of existing AIS. AIS involves processing of transactions and provide meaningful information through preparing the different financial statements. Effective internal control system is essential for successful operation of business and it generates reliable and relevant information with the help of AIS division. If good internal control system exists in any organization, management can use information with greater reliance to maintain their business activities properly. But if internal control is not strong, management can not achieve its goals and there will be financial mismatch in the business firms. So, the existence of effective internal control system is essential for sound financial management of a business firm.

6.2.1 Company # 1

From an overview of annual reports and opinions of the executives it is evident that the company has established an effective internal control system as a part of good corporate governance. Board of directors, management, and personnel of the company ensure sound internal controls to provide reasonable assurance regarding the achievement of company objectives in the areas of effectiveness and efficiency of operations, reliability of financial reporting and compliance with laws and regulations. Five essential components of internal control such as control environment, risk assessment, control activities, information and communication and monitoring are embedded into the governance culture of the company (Annual Report, 2009). The company has adopted information systems control and information systems audit for ensuring the security and quality of accounting

information produced by AIS. The existing internal control system of the company provides physical check regularly, makes the routine of duties of officers, divides duties and responsibilities clearly and there is no loophole in the authorization process. The major characteristics of existing internal control system of company are functional responsibilities are appropriately segregated, day to day transactions and recording thereof supervised by responsible officials, existence of a system of authorization procedure that is adequate to provide accounting control over assets, liability, revenue and expenses, existence of a system of periodic comparison of record with actual assets and liabilities and action to correct differences and existence of a recording procedure which check that transaction to be recorded and processed have been authorized. The existing internal control system of the company is helpful for achieving entity's specifies objective. It also ensures compliance with applicable laws and regulations and the separation of operations and custody of the assets. The internal control system of the company is properly designed to handle transaction processing, safeguarding of assets, prevention of errors and frauds and detection of errors and frauds.

6.2.2 Company # 2

From an overview of annual reports and opinions of the executives it is evident that the internal control of the company is sound. Internal control system includes policies and procedures which pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transaction and dispositions of the assets, proceed reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with Generally Accepted Accounting Principles, and that receipts and expenditures are being made only in accordance with authorizations of management and directors and provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of assets that could have a material effect on the financial statements (Annual Report, 2011). The company has adopted information

systems control and information systems audit for ensuring the security and quality of accounting information produced by AIS. The existing internal control systems of the company are physical check regularly done; make the routine of duties of officers and duties and responsibilities clearly divided. The characteristics of existing internal control system of company are that the functional responsibilities are appropriately segregated, day to day transactions and recording thereof are supervised by responsible officials, existence of a system of authorization procedure that is adequate to provide accounting control over assets, liability, revenues and expenses and existence of a recording procedure which check that transactions to be recorded and processed have been authorized. The existing internal control system is helpful for achieving entity's specifies objective. It also ensures compliance with applicable laws and regulations. The internal control system is properly designed to handle transaction processing, safeguarding of assets, prevention of errors and frauds and detection of errors and frauds. Researcher made an opinion survey of the respondents regarding the types of internal controls of the selected companies and the results are given below:

Table # 6.2

Table showing the opinions of the respondents regarding the various types of internal control for the selected companies

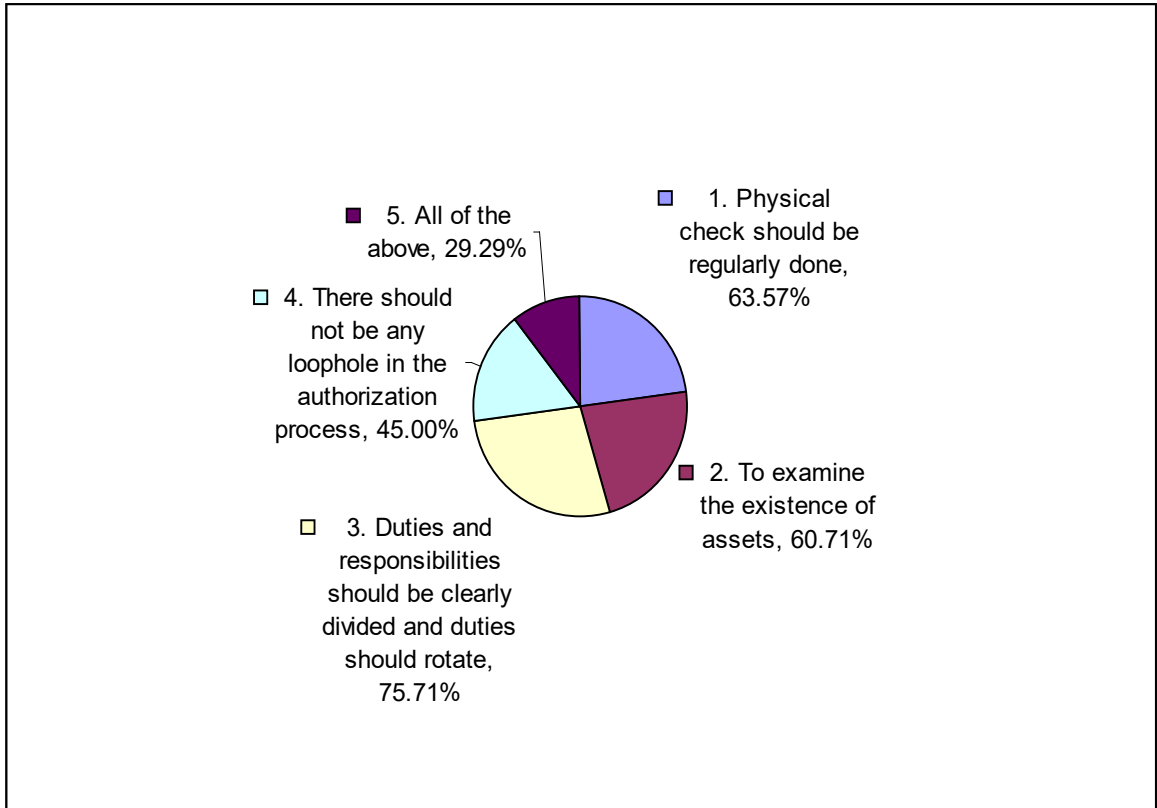
Items	Respondent Groups							
	CA		CMA		Acad.		Total	
	No.	%	No.	%	No.	%	No.	%
1. Physical check should be regularly done	34	56.67	32	64.00	23	76.67	89	63.57
2. To examine the existence of assets	38	63.33	31	62.00	16	53.33	85	60.71
3. Duties and responsibilities should be clearly divided and duties should rotate	46	76.67	37	74.00	23	76.67	106	75.71
4. There should not be any loophole in the authorization process	28	46.67	26	52.00	09	30.00	63	45.00
5. All of the above	19	31.67	14	28.00	08	26.67	41	29.29
Total	60		50		30		140	

(Source: Opinion Survey)

Table # 6.2 shows the opinion of the respondents regarding the various types of internal control and it is found that 63.57% of the respondents opine that the physical check should be regularly done, 60.71% of the respondents think that the existence of assets should be examined, 75.71% of the respondents mention that the duties and responsibilities should be clearly divided and duties should rotate, 45.00% of the respondents state that there should not be any loophole in the authorization process and 29.29% of the respondents think that all alternatives are ways of achieving internal control system. Majority of the respondents opine that the duties and responsibilities should be clearly divided and duties should rotate for the effective internal control systems of the selected companies. The following Pie-chart clearly presents the opinions of the respondents regarding the various types of internal control for the selected companies

Pie-chart # 6.2

Presentation through Pie-chart of the opinions of the respondents regarding the various types of internal control for the selected companies



(Source: Opinion Survey)

The above Pie-chart focuses that the respondents have given their opinions regarding the various types of internal control for the selected companies. From the above Pie-chart it is evident that the 75.71% respondents opine that duties and responsibilities should be clearly divided and duties should rotate according to necessity for existing internal control systems of the selected companies.

Table # 6.3

Table showing the opinions of the respondents regarding the various factors which are considered for measuring the efficiency of internal control of the selected companies

Items	Respondent Groups							
	CA		CMA		Acad.		Total	
	No.	%	No.	%	No.	%	No.	%
1. The internal control environment is helpful for achieving entity's specify objective	20	33.33	17	34.00	18	60.00	55	39.29
2. The internal control system ensures compliance with applicable laws and regulations	41	68.33	34	68.00	13	43.33	88	62.86
3. The internal control system is properly designed to handle transaction processing, safeguarding of assets, prevention of errors and frauds and detection of errors and frauds	47	78.33	38	76.00	24	80.00	109	77.86
4. The internal control system ensures separation of operations and custody of the assets	24	40.00	20	40.00	11	36.67	55	39.29
5. All of the above	15	25.00	12	24.00	07	23.33	34	24.29
Total	60		50		30		140	

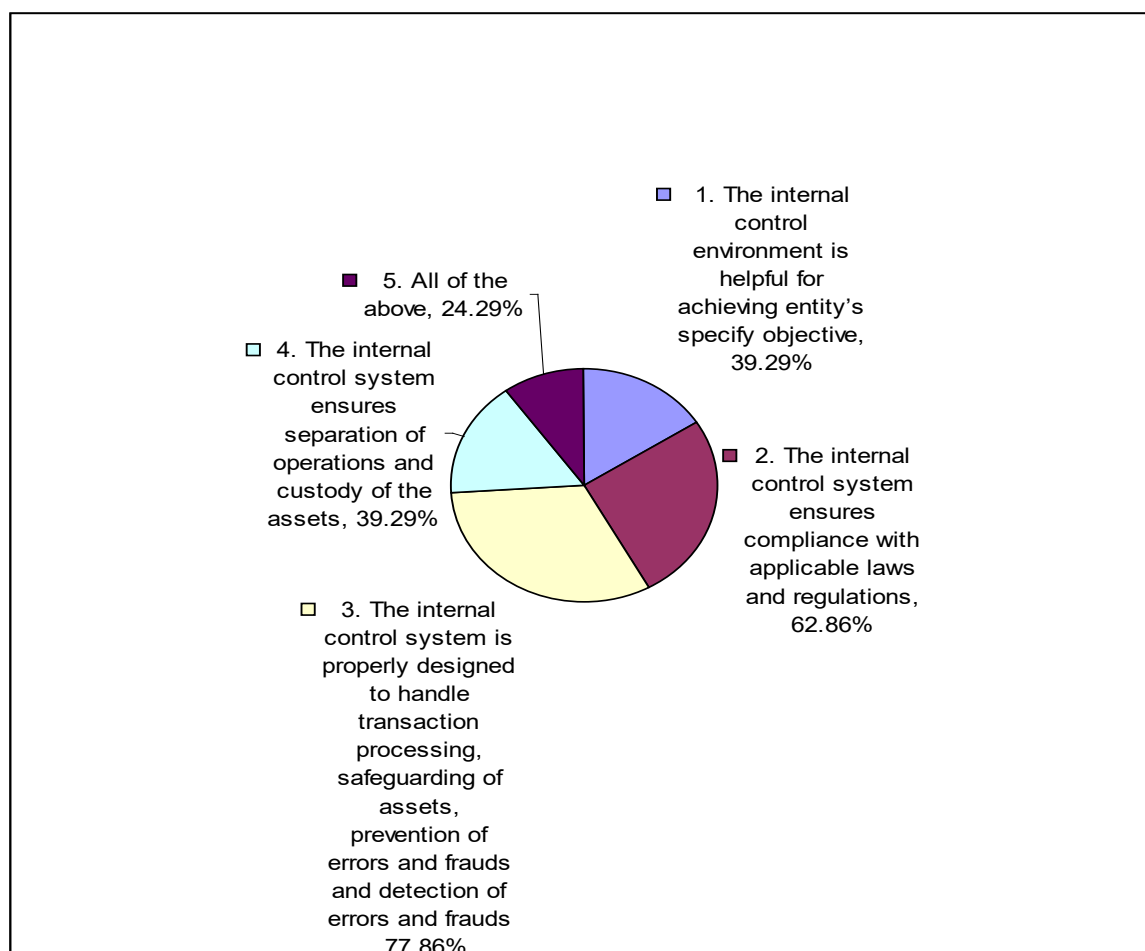
(Source: Opinion Survey)

Table # 6.3 presents the opinions of the respondents regarding the various factors which are considered for measuring the efficiency of internal control of the selected companies and observe that 39.29% of the respondents opine that the internal control environment is helpful for achieving entity's specific objective of the selected companies, 62.86% of the respondents think that the internal control system should ensure compliance with applicable laws and regulations, 77.86% of the respondents mention that the internal control system should be properly designed to handle transaction processing, safeguarding of assets, prevention of

errors and frauds and detection of errors and frauds, 39.29% of the respondents state that the internal control system should ensure separation of operations and custody of the assets of the selected companies and 24.29% of the respondents think all alternatives are necessary to measure the effectiveness of internal control of the selected companies. Majority of the respondents opine that the internal control system being properly designed to handle transaction processing, safeguarding of assets, prevention of errors and frauds and detection of errors and frauds as a factor to measure the effectiveness of the internal control systems of the selected companies. The following Pie-chart clearly shows the opinions of the respondents regarding the various factors which are considered for measuring the efficiency of internal control of the selected companies.

Pie-chart # 6.3

Presentation through Pie-chart of the opinions of the respondents regarding the various factors which are considered for measuring the efficiency of internal control of the selected companies



(Source: Opinion Survey)

The Pie-chart presented above has expressed views of the respondents regarding the various factors which are considered for measuring the efficiency of internal control of the selected companies. From the above Pie-chart it is evident that 77.86% of the respondents opine that the internal control system is properly designed to handle transaction processing safeguarding of assets, prevention of errors and frauds and detection of errors and frauds is necessary for measuring the effectiveness of internal control of the selected companies.

6.3 Proper Security Measure

Security measure is an effective way to judge the efficiency of AIS of the selected companies. If there is any security measure in any business firm then its existence augments the efficiency of the AIS. Proper security measure is necessary for increasing the efficiency of AIS because it ensures the safeguarding of assets of a firm. It also prevents unauthorized access by the users. Improper alteration of data can be prevented and reconstruction of lost data and prevention of breakdown of machinery can also be possible through installation of a good security measure. Good security measures cover all transaction cycles such as inputs, procedures and outputs. Proper security measure is essential for any business organization for (i) safeguarding the assets of a firm, (ii) protecting from unauthorized access (iii) protecting from breakdowns and interruptions (iv) protecting from unauthorized access (v) protecting from loss of data, (vi) protecting from improper alteration of data and (vii) recovering and reconstruction of lost data. From the opinions of the executives of the selected companies it is evident that the selected companies follow various security measures like (i) unauthorized access is restricted, (ii) prevent fraud, (iii) making a list of assets and (iv) physical verification of assets for safeguarding the assets. The nature of security measure of the selected companies is preventive. The selected companies maintain proper security measures for providing information with the help of the AIS such as (i) restricting of access to computers, (ii) using of file password, (iii) using of data backup and reconstruction procedure and (iv) preventing of unauthorized tampering of data. Researcher made a survey of the opinion of the respondents regarding the various security measures for proper security of information produced by AIS of the selected companies and the results are given below:

Table # 6.4

Table showing the opinions of the respondents regarding the various types of security measure for proper security of information produced by the AIS of the selected companies

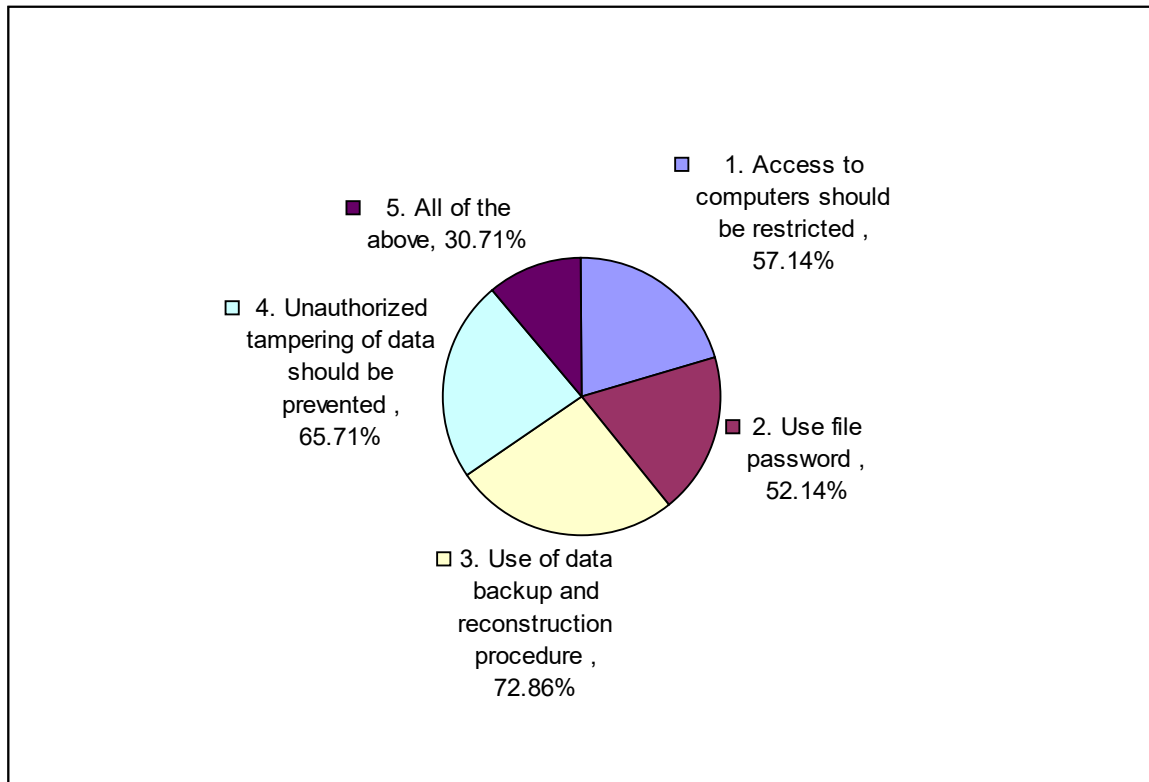
	Respondent Groups							
	CA		CMA		Acad.		Total	
Items	No.	%	No.	%	No.	%	No.	%
1. Access to computers should be restricted	35	58.33	27	54.00	18	60.00	80	57.14
2. Use file password	26	43.33	30	60.00	17	56.67	73	52.14
3. Use of data backup and reconstruction procedure	42	70.00	38	76.00	22	73.33	102	72.86
4. Unauthorized tampering of data should be prevented	40	66.67	33	66.00	19	63.33	92	65.71
5. All of the above	18	30.00	15	30.00	10	33.33	43	30.71
Total	60		50		30		140	

(Source: Opinion Survey)

Table # 6.4 shows the opinions of the respondents regarding the various types of security measure for proper security of information produced by the AIS of the selected companies and 57.14% of the respondents opine that the access to computers should be restricted, 52.14% of the respondents think that the use of file password, 72.86% of the respondents mention the use of data backup and reconstruction procedure, 65.71% of the respondents state the prevention of unauthorized tampering of data and 30.71% of the respondents think all alternatives are required for proper security of information produced by the accounting information systems of the selected companies. Majority of the respondents opine the use of data backup and reconstruction procedure as a security measure for proper security of information produced by AIS of the selected companies. The following Pie-chart clearly shows the opinions of the respondents regarding the various types of security measure for proper security of information produced by AIS of the selected companies.

Pie-chart # 6.4

Presentation through Pie-chart of the opinions of the respondents regarding the various types of security measure for proper security of information produced by AIS of the selected companies



(Source: Opinion Survey)

The above Pie-chart highlights the opinions of the respondents regarding the various types of security measure for proper security of information produced by AIS of the selected companies. From the above Pie-chart it is evident that 72.86% of the respondents opine that the use of data backup and reconstruction procedure is essential for proper security of information produced by AIS of the selected companies.

6.4 Good Documentation

Good documentation is another important factor to judge the efficiency of AIS of the selected companies. Good documentation is essential for providing reliable and relevant information which helps decide correctly and also help external parties for taking decision effectively. Good documentation is used as the basis for providing relevant and reliable information through preparing the different financial statements, which consists of income statement, balance sheet, owner's equity statements and cash flow statement for both management and variety of external users to help them reach better decisions. The accounting process begins with a transaction and completes with the preparation of different financial statements and recording of a transaction. The account personnel considers the supporting documents which show the legality of this transaction. With respect to the users the documentation helps ensure that they perform procedures reliably, consistently, and efficiently. Documents are originated in different departments of a company but copies of all of them are sent to the accounts department where they are summarized, analyzed, and then entered in the books of accounts and prepare the different financial statements to the interested users. Since AIS is the provider of correct information it is evident that the AIS of the selected companies are efficient. From an overview of the opinions of the company executives it is evident that there is sufficient document in the selected companies to maintain their various activities. The selected companies maintain various files for recording their business activities and preparing the different financial statements for the interested users to take effective decision according to their needs.

6.5 Separation of Operation from Accounting

Separation of operation from accounting is an important factor to judge the efficiency of AIS of the selected companies. Separation of operation from accounting increases the efficiency of AIS because the separation of operation from accounting ensures correct processing of transactions without manipulation of

figure. AIS provides meaningful information efficiently that are necessary to assist both internal and external information to interested users for taking decisions. In order to take sound decisions correct and accurate information are necessary which encourage shareholder value. One of the major purposes of AIS is providing accounting information which support day to day business operations. Some essential activities of AIS are data collection, data management, data maintenance, data control and information generation for fulfilling this purpose. The accountants who are engaged in the processing of transaction is separated from cash collection procedure for ensuring the prevention of manipulation of accounts and increasing the quality of accounting information produced by AIS through different financial statements and disclosure in their annual reports. From an overview of the opinions of the executives it is evident that the selected companies maintain separation for recording various activities and particular officers perform particular activities to achieve their aims.

6.6 The Extent of Disclosure

Disclosure means communicating relevant and reliable information for the interested stakeholders to make effective decision making process. Disclosure in financial reporting is the presentation of necessary information related to a business entity to meet the needs of different users. The users group needs accounting information to decide in their respective field of interest. For example, the investor group requires information regarding investment feasibility. The creditors group requires information to form judgment regarding the credit worthiness of the borrows. Thus the needs for information of the different groups vary. So, a company has to meet the demand of users but it is a difficult task to meet the demand of all users because there are cost constraints. So, in the light of foregoing discussion disclosure means disseminating relevant information of a business enterprise to the audience of interest. Disclosure is an important variable in any measurement of accounting quality together with such characteristics as

measurement method; presentation and timeliness of reporting and can take a number of different forms. Normally disclosure might be considered in relation to the annual report but there are a number of other routes by which company information is communicated (Marston and Robson, 1997). In the corporate sector, accountability and transparency is the carrying need of the day. Communication of economic information to the interest groups is assuming greater importance due to increasing control of economic activities by the corporate sector. Adequate disclosure is the most important way by which we can meet the information need of diverse interest groups of nation decision making. Meaningful communication through disclosure in financial statement also ensures transparency and accountability (Akter and Hoque, 1993). Extent of disclosure is another important indicator to judge the efficiency of AIS of the selected companies. One of the most important goals in the preparation of financial statements is to provide sufficient and timely information to the interested users of financial statements. Actually AIS provide information through preparing the different financial statements which is needed in decision making. The adequate disclosure of accounting information is essential for taking every effective decision. In the absence of adequate disclosure of accounting information, the decision makers can not make sound decisions. So, the extent of disclosure increases the efficiency of AIS. Researcher made an opinion survey of the respondents regarding the adequacy, informativeness and conciseness of accounting information produced by AIS of the selected companies. These factors are related with the extent of disclosure and in this section the opinions of the respondents have been analyzed. In order to see whether there is significant difference of opinions among the respondents regarding the adequacy, informativeness and conciseness of accounting information produced by AIS of the selected companies, researcher developed null hypotheses and conducted χ^2 test and ANOVA test to test the null hypothesis. The following hypothesis has been developed to test the degree of adequacy of accounting information produced by AIS of the selected companies.

Ho₄: There is no significant difference of opinions among the respondents regarding the adequacy of accounting information produced by AIS of the selected companies

Table # 6.5

Table showing the opinions of the respondents regarding the adequacy of accounting information produced by AIS of the selected companies

	Respondent Groups										χ^2	Sig.
	CA		CMA		Acad.		SC		Total		9.703	0.642
Types of Opinions	No.	%	No.	%	No.	%	No.	%	No.	%		
Greatly Adequate	15	25.00	19	38.00	08	26.67	18	32.73	60	30.77		
Moderately Adequate	40	66.66	25	50.00	16	53.34	30	54.54	111	56.92		
Slightly Adequate	03	5.00	06	12.00	04	13.33	06	10.91	19	9.74		
Neutral	01	1.67	00	00	01	3.33	01	1.82	03	1.54		
Not Adequate	01	1.67	00	00	01	3.33	00	00	02	1.03		
Total	60	100	50	100	30	100	55	100	195	100		

(Source: Opinion Survey)

Table # 6.5 shows the opinions of the respondents regarding the adequacy of accounting information produced by AIS of the selected companies and it is evident that 30.77% of the respondents think that the accounting information is greatly adequate, 56.92% of the respondents mention that the accounting information is moderately adequate, 9.74% of the respondents opine that the accounting information is slightly adequate, 1.54% of the respondents are neutral and 1.03% of the respondents opine that the accounting information are not adequate. Majority of the respondents think that the accounting information produced by AIS of the selected companies is moderately adequate. In order to see whether there is any significant difference of opinions among the respondents regarding the adequacy of accounting information produced by AIS of the selected companies, researcher has conducted χ^2 test. It is found that the value of χ^2 is 9.703 which is significant at 0.642 levels. So, the null hypothesis is accepted which means that there is no significant difference of opinions among the respondents regarding the adequacy of accounting information produced by AIS of the selected companies. From the foregoing discussion it is evident that the accounting information produced by AIS

and disseminated through annual reports is adequate. In order to find out the difference between groups and within groups researcher has conducted ANOVA test and the results are given in following Table:

Table # 6.5.A

Table showing the results of ANOVA test regarding the adequacy of accounting information produced by AIS of the selected companies

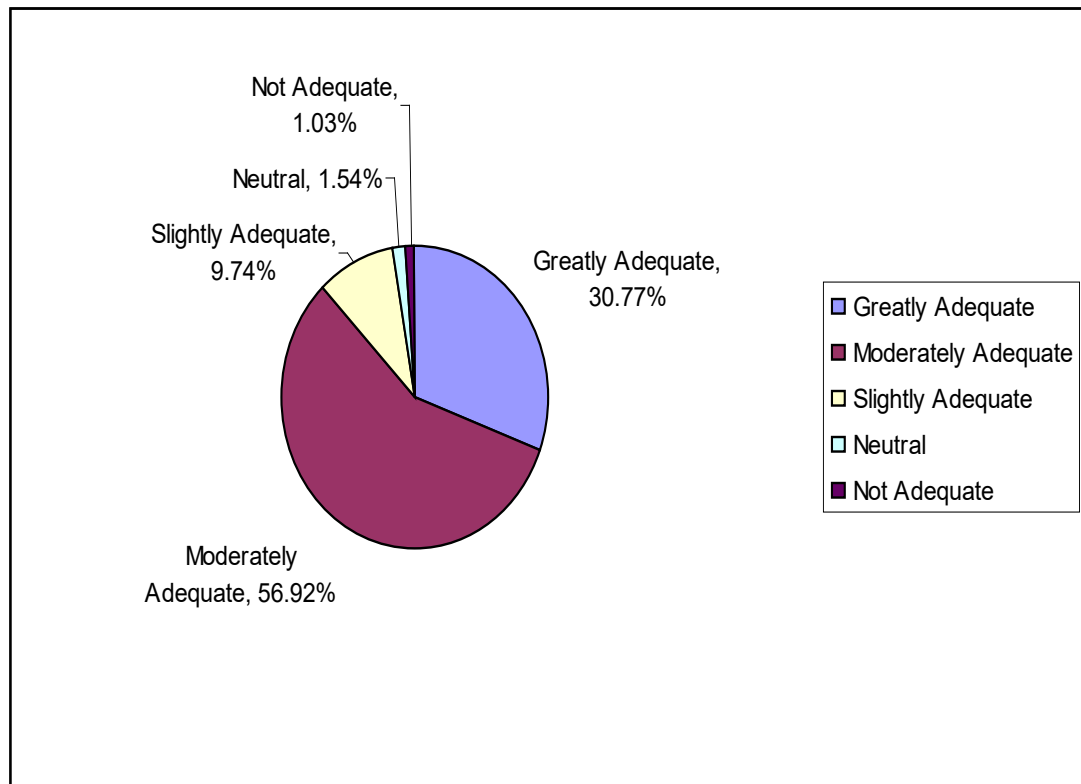
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.735	3	0.578	1.073	0.362
Within Groups	102.952	191	0.539		
Total	104.687	194			

(Source: Opinion Survey)

From the above Table it is evident that there is no significant difference of opinions on the adequacy of accounting information produced by AIS of selected companies among the different respondents groups. The following Pie-chart clearly shows the opinions of the respondents regarding the adequacy of accounting information produced by AIS of the selected companies.

Pie-chart # 6.5

Presentation through Pie-chart of the opinions of the respondents regarding the adequacy of accounting information produced by AIS of the selected companies



(Source: Opinion Survey)

The above Pie-chart shows that the respondents have expressed their opinions regarding the adequacy of accounting information produced by AIS of the selected companies as 30.77% greatly, 56.92% moderately, 9.74% slightly, 1.54% neutral and 1.03% not adequate. From the above Pie-chart it is evident that the majority of the respondents opine that the accounting information produced by AIS of the selected companies is moderately adequate. The following hypothesis has been developed to test the degree of informativness of accounting information produced by AIS of the selected companies.

H₀₅: There is no significant difference of opinions among the respondents regarding the informativeness of accounting information produced by AIS of the selected companies

Table # 6.6

Table showing the opinions of the respondents regarding the informativeness of accounting information produced by AIS of the selected companies

	Respondent Groups										χ^2	Sig.
	CA		CMA		Acad.		SC		Total		21.262	0.047
Types of Opinions	No.	%	No.	%	No.	%	No.	%	No.	%		
Greatly Informative	14	23.33	23	46.00	08	26.67	19	34.54	64	32.82		
Moderately Informative	41	68.33	22	44.00	21	70.00	33	60.00	117	60.00		
Slightly Informative	05	8.34	04	8.00	00	00	01	1.82	10	5.13		
Neutral	00	00	01	2.00	00	00	02	3.64	03	1.54		
Not Informative	00	00	00	00	01	3.33	00	00	01	0.51		
Total	60	100	50	100	30	100	55	100	195	100		

(Source: Opinion Survey)

Table # 6.6 presents the opinions of the respondents regarding the informativeness of accounting information produced by AIS of the selected companies and it is found that 32.82% of the respondents think that the accounting information is greatly informative, 60.00% of the respondents mention that the accounting information is moderately informative, 5.13% of the respondents opine that the accounting information is slightly informative, 1.54% of the respondents are neutral and 0.51% of the respondents opine that the accounting information is not informative. Majority of the respondents think that the accounting information produced by AIS of the selected companies is moderately informative. In order to see whether there is any significant difference of opinions among the respondents' regarding the informativeness of accounting information produced by AIS of the selected companies, researcher has conducted χ^2 test. It is found that the value of χ^2 is 21.262 which is significant at 0.047 levels. So, the null hypothesis is rejected which means that there is significant difference of opinions among the respondents regarding the informativeness of accounting information produced by AIS of the

selected companies. From the previous discussion it is evident that the respondents are not unanimous regarding the informativeness of the accounting information produced by AIS and disseminated in annual report. In order to find out the difference between groups and within groups researcher has conducted ANOVA test and the results are given in the following Table:

Table # 6.6.A

Table showing the results of ANOVA test regarding the informativeness of accounting information produced by AIS of the selected companies

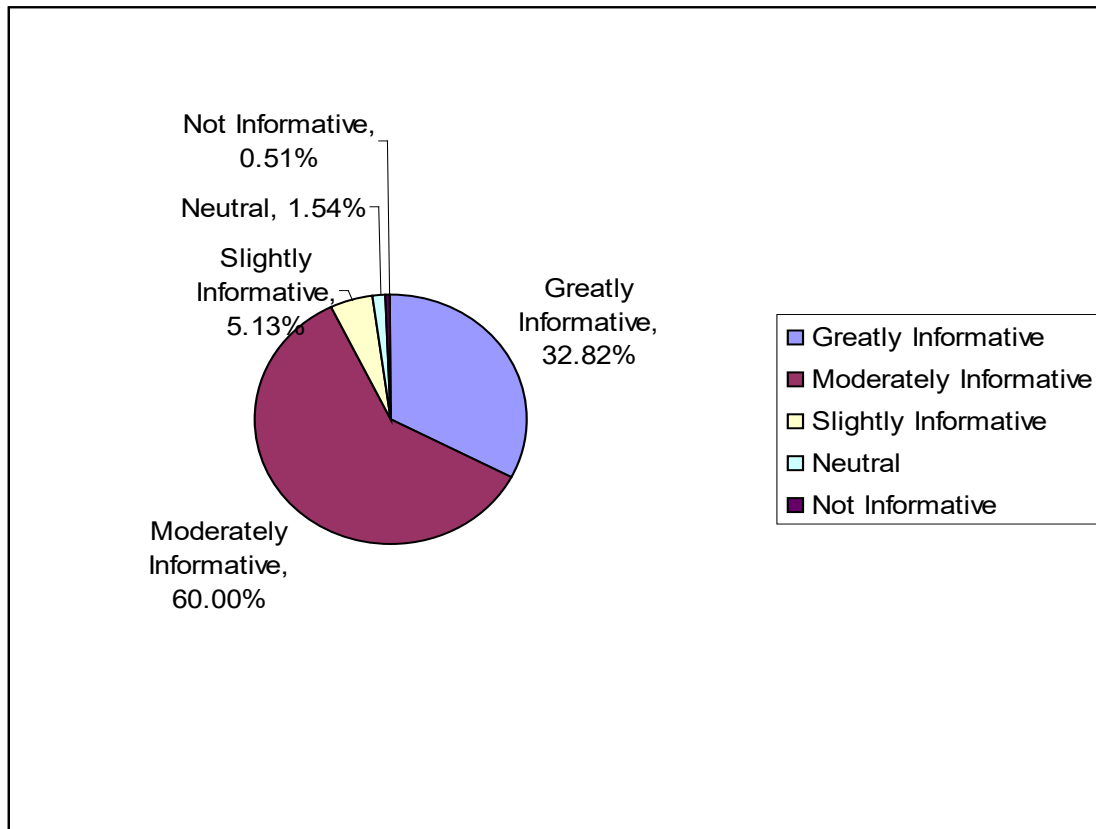
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.142	3	0.381	0.871	0.457
Within Groups	83.473	191	0.437		
Total	84.615	194			

(Source: Opinion Survey)

From the above Table it is evident that there is no significant difference of opinions on the informativeness of accounting information produced by AIS of selected companies among the different respondents groups. The following Pie-chart clearly presents the opinions of the respondents regarding the informativeness of accounting information produced by AIS of the selected companies.

Pie-chart # 6.6

Presentation through Pie-chart of the opinions of the respondents regarding the informativeness of accounting information produced by AIS of the selected companies



(Source: Opinion Survey)

The Pie-chart presents the opinions of the respondents regarding the informativeness of accounting information produced by AIS of the selected companies as 32.82% greatly, 60.00% moderately, 5.13% slightly, 1.54% neutral and 0.51% not. From the above Pie-chart it is evident that the majority of the respondents opine that the accounting information produced by AIS of the selected companies is moderately informative. The following hypothesis has been developed to test the degree of conciseness of accounting information produced by AIS of the selected companies.

Ho₆: There is no significant difference of opinions among the respondents regarding the conciseness of accounting information produced by AIS of the selected companies.

Table # 6.7

Table showing the opinions of the respondents regarding the conciseness of accounting information produced by AIS of the selected companies

	Respondents Groups									χ^2	Sig.
	CA		CMA		Acad.		SC		Total		
Types of Opinions	No.	%	No.	%	No.	%	No.	%	No.	%	
Greatly Concise	15	25.00	08	16.00	07	23.33	08	14.55	38	19.49	
Moderately Concise	37	61.67	28	56.00	15	50.00	33	60.00	113	57.95	
Slightly Concise	05	8.33	11	22.00	06	20.00	10	18.18	32	16.41	
Neutral	02	3.33	02	4.00	02	6.67	03	5.45	09	4.61	
Not Concise	01	1.67	01	2.00	00	00	01	1.82	03	1.54	
Total	60	100	50	100	30	100	55	100	195	100	

(Source: Opinion Survey)

Table # 6.7 shows the opinions of the respondents regarding the conciseness of accounting information produced by AIS of the selected companies and it is found that 19.49% of the respondents think that the accounting information is greatly concise, 57.95% of the respondents mention that the accounting information is moderately concise, 16.41% of the respondents opine that the accounting information is slightly concise, 4.61% of the respondents are neutral and 1.54% of the respondents opine that the accounting information is not concise. Majority of the respondents think that the accounting information produced by AIS of the selected companies is moderately concise. In order to see whether there is any significant difference of opinions among the respondents regarding the conciseness of accounting information produced by AIS of the selected companies, researcher has conducted χ^2 test. It is found that the value of χ^2 is 7.563 which is significant at 0.818 levels. So, the null hypothesis is accepted which means that there is no significant difference of opinions among the respondents regarding the conciseness

of accounting information produced by AIS of the selected companies. From the foregoing discussion it is evident that the accounting information produced by AIS and disseminated in annual report is concise. In order to find out the difference between groups and within groups researcher has conducted ANOVA test and the results are given in the following Table:

Table # 6.7.A

Table showing the results of ANOVA test regarding the conciseness of accounting information produced by AIS of the selected companies

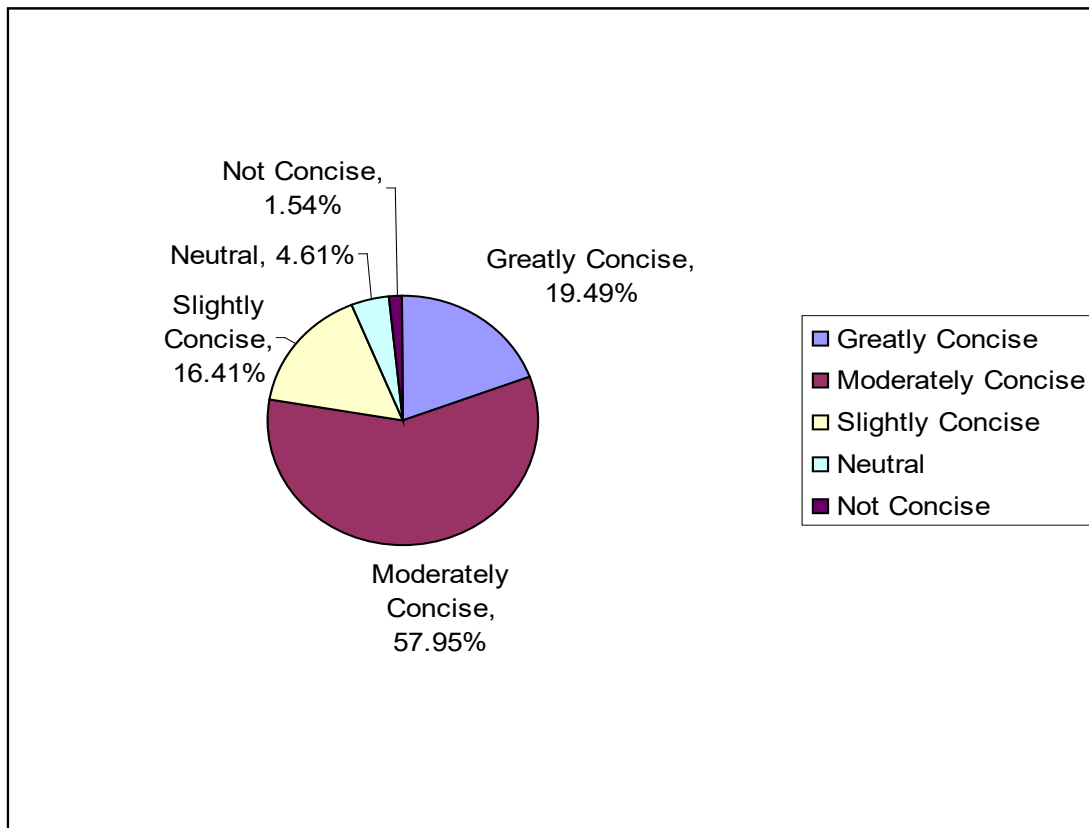
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.388	3	0.796	1.185	0.317
Within Groups	128.350	191	0.672		
Total	130.738	194			

(Source: Opinion Survey)

From the above Table it is evident that there is no significant difference of opinions on the conciseness of accounting information produced by AIS of selected companies among the different respondents groups. The following Pie-chart clearly shows the opinions of the respondents regarding the conciseness of accounting information produced by AIS of the selected companies.

Pie-chart # 6.7

Presentation through Pie-chart of the opinions of the respondents regarding the conciseness of accounting information produced by AIS of the selected companies



(Source: Opinion Survey)

The Pie-chart shows the opinions of the respondents regarding the conciseness of accounting information produced by AIS of the selected companies as 19.49% greatly, 57.95% moderately, 16.41% slightly, 4.61% neutral and 1.54 not concise. From the above Pie-chart it is evident that majority of the respondents opine that the accounting information produced by AIS of the selected companies is moderately concise.

6.7 Test of Reliability

The reliability test is used to find out the reliability of the results of the opinions of the respondents regarding the adequacy, informativeness and conciseness of accounting information produced by AIS of the selected companies. The Chronbach Alpha test has been used to test reliability and the results which are given below:

Table # 6.8

Table showing the Cronbach Alpha test results of the opinions of the respondents regarding the adequacy, informativeness and conciseness of accounting information produced by AIS of the selected companies

Mean	Variance	Std. Dev.	Alpha Value
12.2718	4.3330	2.0816	0.9289

(Source: Opinion Survey)

For the purpose of testing reliability of results researcher has conducted the Cronbach Alpha test regarding the adequacy, informativeness and conciseness of accounting information produced by AIS of the selected companies. The result shows that the value of Alpha is above 0.7. So, it is evident that the reliability is ensured.

6.8 Cost Effectiveness

Cost effectiveness is another important factor to judge the efficiency of AIS of the selected companies. AIS can lead to cost effectiveness because efficient AIS helps identify excess cost and those excess cost can be reduced by the management. AIS considers the specific needs of every business. One of the major considerations in improving the efficiency of an AIS is cost effectiveness and the AIS is cost effective when the benefit of AIS is higher than that of its cost. From the analysis of annual reports of different years of the selected companies it is evident that the Company # 1 has earned a huge amount of profit during the period under study due to cost control but the Company # 2 has not been able to earn the profit during the study period due to inability to cost control.

6.9 Flexibility to Meet Future Needs

Flexibility to meet future needs is an important factor to judge the efficiency of AIS of the selected companies. Flexibility is of great importance in AIS. Flexibility is a strategy that is related with future requirements of the various interested users of any organization. Flexibility is the important factor for successful operation of any business which provides reliable and relevant information timely for the interested users to take correct decision. Every business organization requires an AIS that are necessary for offering service to future changing need of timely and reliable information for comparing with competitive environment in order to perform successful operation. In the competitive businesses world the AIS of any business organization is always flexible in data processing systems to meet the changing demands of the various stakeholders in future time through new system development. Flexibility to meet future needs increases the efficiency of AIS because it considers the information producing capacity against changes which is related with future requirements of an organization. From a scrutiny of the opinion of the executives of the selected companies it is evident that the selected companies are more flexible to meet the future needs.

6.10 Processing Power of Accountants

Processing power of accountant is an important factor to judge the efficiency of AIS of the selected companies. AIS provides information for management to perform their business activities properly and management expects accurate information because it helps dynamic decision making process. Accurate information depends on proper processing power of accountants and it's a fundamental task in any AIS. AIS is to process historical data to produce accounting information through preparing the different financial statements such as income statement, balance sheet, owner's equity and cash flow statement which evaluate the company performance at the end of every accounting period including financial positions. AIS collects data, processes them and produces reliable and relevant information through preparing the different financial statements useful for its users in order to take appropriate action supported by judgment of management. So, it is evident from the discussion that AIS supports decision making process and information used in this process is dependent on the processing power of the accountants because they are associated with information generation. Without the ability of proper processing power of accountants, timely preparation of accounting information for the interested users is impossible in any organization. From the view of the executive of the selected companies it is evident that the various activities of AIS are performed properly by the trained accountants in of AIS.

6.11 Independent Internal and External Audit

Independent audit is an important factor to judge the efficiency of AIS of the selected companies. Internal audit is the process of continuous critical review of various activities of any business organization which is conducted by assigned personnel who is a full time employee but there is no involvement in accounts section. The main purpose of internal audit is to give suggestions to the authorities to take the proper plan to perform business activities properly. External audit is a systematic process of evaluating the different financial statements and other related

financial information of any organization and these activities are performed by professional Chartered Accountants. The external auditor has sufficient knowledge of internal audit activities which assist in planning and developing an effective audit process. From the overview of annual reports it appears that Company # 1 of the selected companies have separate internal audit department that monitors the operational activities of the company in the light of policies and procedures for ensuring an effective internal control, transparency and accountability in the organization but unit two has not internal audit department. The selected companies prepare their various financial statements such as income statement, balance sheet, owner's equity statement and cash flow statement included in their annual report at the end of every accounting period by the Professional Chartered Accountants. Independent audit provides the opportunity for continuous improvement of the accuracy and reliability of accounting information which lead to increase the efficiency of AIS of the selected companies.

6.12 Major Observations

- ❖ The major characteristics of existing internal control systems of the selected companies are functional responsibilities are appropriately segregated, day to day transactions and recording thereof supervised by responsible officials, existence of a system of authorization procedure that is adequate to provide accounting control over assets, liability, revenue and expenses, existence of a system of periodic comparison of record with actual assets and liabilities and action to correct differences and existence of a recording procedure which check that transaction to be recorded and processed have been authorized.
- ❖ The benefits of exiting internal control systems of the selected companies are assets are safeguarded, transactions are properly processed and recorded, authority and responsibility become co-extensive, routine supervision of day to day transaction, assets are properly handled, accurate financial reporting and adequate disclosures.
- ❖ The existing internal control system of the company is helpful for achieving entity's specific objective. It also ensures compliance with applicable laws and regulations and the separation of operations and custody of the assets. The internal control system of the company is properly designed to handle transaction processing, safe guarding of assets, prevention of errors and frauds and detection of errors and frauds.
- ❖ 56.92% of the respondents reveal that the accounting information produced by AIS of the selected companies is moderately adequate and the null hypothesis is accepted which means that there is no significant difference of opinions among the respondents regarding the adequacy of accounting information produced by AIS of the selected companies.
- ❖ 60.00% of the respondents opine that the accounting information produced by AIS of the selected companies is moderately informative and the null hypothesis is rejected at 0.047 level of significance which indicate that there

is significant difference of opinions among the respondents regarding the informativeness of accounting information produced by AIS of the selected companies.

- ❖ 57.95% of the respondents think that the accounting information produced by AIS of the selected companies is moderately concise and the null hypothesis is accepted which indicate that there is no significant difference of opinions among the respondents regarding the conciseness of accounting information produced by AIS of the selected companies.

6.13 Conclusion

Some indicators are identified to judge the efficiency of AIS of the selected companies and theses indicators have been discussed in this chapter. From the previous discussion it is evident that 91.43% of the respondents think that the effective internal control system and 80.71% of the respondents state that the extent of disclosure is important way to judge the efficiency of AIS. 60.00% and above of the respondents state that proper security measure, good documentation, separation of operation from accounting, cost effectiveness and independent internal and external audit are important way to judge the efficiency of AIS. 56.43% of the respondents think that the flexibility to meet future needs and 47.14% of the respondents reveal that the processing power of accountants are way to judge the efficiency of AIS. 40.71% of the respondents think that the all indicators are important to judge the efficiency of AIS of the selected companies. In addition, majority of the respondents reveal that the accounting information produced by AIS of the selected companies is moderately adequate and the null hypothesis is accepted. Majority of the respondents also think that the accounting information produced by AIS is moderately informative and the null hypothesis is rejected. Majority of the respondents think that the accounting information produced by AIS of the selected companies is moderately concise and the null hypothesis is accepted. So, it is evident from the previous discussion that the existence of the discussed factors increases the efficiency of AIS of the selected companies.

CHAPTER SEVEN

Factors Influencing the Efficiency of AIS

7.1 Introduction

AIS is important system of any organization, which is responsible for providing meaningful information through preparing the different financial statements for the purpose of planning, controlling, analyzing and decision making to the interested parties according to their needs and financial statements are one of the best sources of accounting information which help to know the financial situations and operational results of a company. AIS is organized component which provides effective decision making oriented information to the internal and external users and this information is available for use by all levels of management in making decisions. Every company has to work within a particular environment and the AIS is strongly influenced by its environment. The environment may be stable or fluctuating. Some factors influence the efficiency of AIS of the selected companies. This chapter has analyzed the various influencing factors of the efficiency of AIS of the selected companies. Researcher made an opinion survey of the respondents regarding the various influencing factors of the efficiency of AIS of the selected companies. Null hypotheses are developed and χ^2 test and ANOVA test are used to justify these null hypotheses.

7.2 Size of the company

Size of the company is an influencing factor of efficiency of AIS. Size of the company is an important factor that can influence the efficiency of AIS in a greater way because large organizations can develop well decorated AIS than small companies. As we know, if the company grows in size, its coding system of accounts and the chart of accounts become more complex. The large company discloses more information in their annual reports than that of the small companies. So, size of the company influences the efficiency of AIS. The following hypothesis

has been developed to test the degree of influence of size of the company as an influencing factor of the efficiency of AIS of the selected companies:

Ho_{7.1}: There is no significant difference of opinions among the respondents regarding the size of the company as an influencing factor of the efficiency of AIS of the selected companies.

Table # 7.1

Table showing the opinions of the respondents regarding the size of the company as an influencing factor of the efficiency of AIS of the selected companies

	Respondent Groups								χ^2	Sig.
	CA		CMA		Acad.		Total		4.766	0.782
Types of Opinions	No.	%	No.	%	No.	%	No.	%		
Greatly	33	55.00	27	54.00	20	66.67	80	57.14		
Moderately	12	20.00	14	28.00	06	20.00	32	22.86		
Slightly	08	13.33	03	6.00	03	10.00	14	10.00		
Neutral	06	10.00	05	10.00	01	3.33	12	8.57		
Not	01	1.67	01	2.00	00	00	02	1.43		
Total	60	100	50	100	30	100	140	100		

(Source: Opinion Survey)

Table # 7.1 shows the opinions of the respondents regarding the size of the company as an influencing factor of the efficiency of AIS of the selected companies and it is evident that 57.14% of the respondents opine that size greatly influences, 22.86% of the respondents think that it moderately influences, 10.00% of the respondents state that it slightly influences, 8.57% of the respondents are neutral and 1.43% of the respondents opine that it does not influence efficiency of AIS. Majority of the respondents are of the opinions that the size of the company greatly influences the efficiency of AIS of the selected companies. In order to see whether there is any significant difference of opinions among the respondents regarding the size of the company as an influencing factor of the efficiency of AIS of the selected companies, researcher has conducted χ^2 test. It is found that the value of χ^2 is 4.766 which is significant at 0.782 levels. So, the null hypothesis is accepted which means that there is no significant difference of opinions among the respondents regarding

the size of the company as an influencing factor the efficiency of AIS of the selected companies. From the previous discussion it is evident that the size of the company influences the efficiency of AIS. In order to find out the difference between groups and within groups researcher has conducted ANOVA test and the results are given in the following Table:

Table # 7.1.A

Table showing the results of ANOVA test regarding the size of the company as an influencing factor of the efficiency of AIS of the selected companies

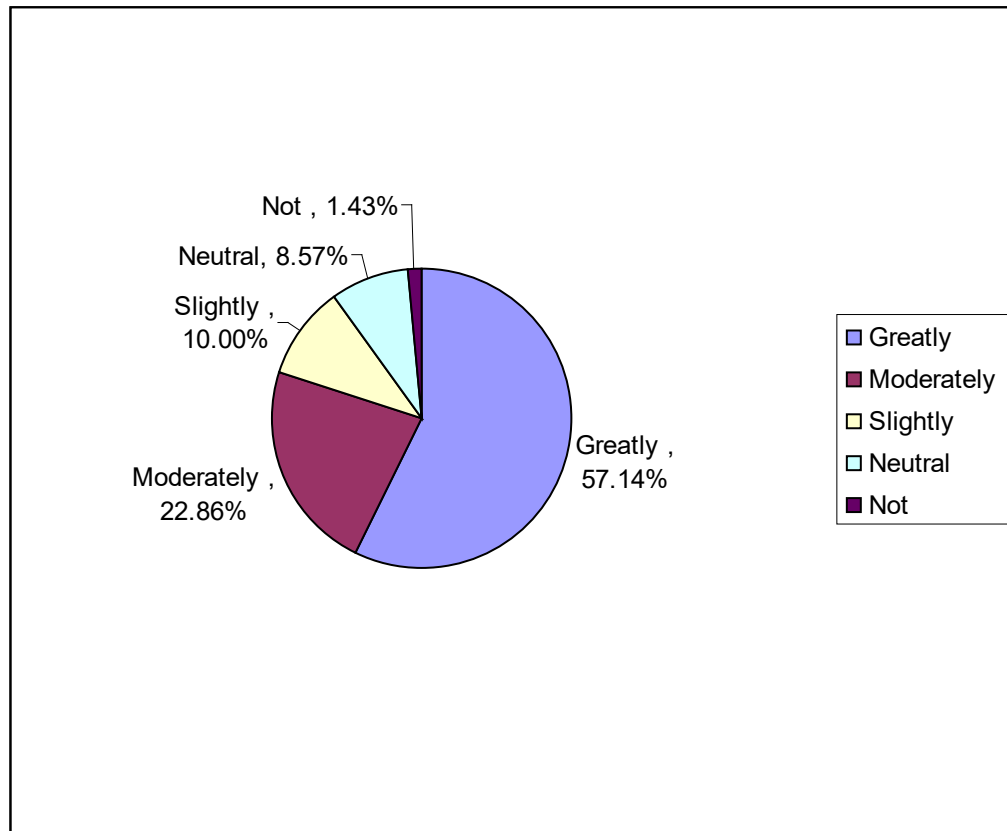
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.330	2	1.165	1.075	0.344
Within Groups	148.413	137	1.083		
Total	150.743	139			

(Source: Opinion Survey)

From the above Table it is evident that there is no significant difference of opinions on the size of the company as an influencing factor of the efficiency of AIS of selected companies among the different respondents groups. The following Pie-chart clearly presents the opinions of the respondents regarding the size of the company as an influencing factor of the efficiency of AIS of the selected companies.

Pie-chart # 7.1

Presentation through Pie-chart of the opinions of the respondents regarding the size of the company as an influencing factor of the efficiency of AIS of the selected companies



(Source: Opinion Survey)

The above Pie-chart presents the opinions of the respondents regarding the size of the company as an influencing factor of the efficiency of AIS of the selected companies as 57.14% greatly, 22.86% moderately, 10.00% slightly, 8.57% neutral and 1.43% not. From the above Pie-chart it is evident that the majority of the respondents think that the size of the company greatly influences the efficiency of AIS of the selected companies.

7.3 Age of the company

Age of the company is another important influencing factor of the efficiency of AIS of the selected companies. When a company gets established with the process of time, information processing technique, coding of accounts, design the future corporate plan, design the safeguarding of assets and generating business documents become easier for management. Management designs the AIS in such a way that can provide relevant and reliable information by preparing the different financial statements to the management and external users. So, the age of the company influences the efficiency of AIS. The following hypothesis has been developed to test the degree of influence of age of the company as an influencing factor of the efficiency of AIS of the selected companies:

Ho_{7.2}: There is no significant difference of opinions among the respondents regarding the age of the company as an influencing factor of the efficiency of AIS of the selected companies.

Table # 7.2

Table showing the opinions of the respondents regarding the age of the company as an influencing factor of the efficiency of AIS of the selected companies

	Respondent Groups								χ^2	Sig.
	CA		CMA		Acad.		Total		5.575	0.695
Types of Opinions	No.	%	No.	%	No.	%	No.	%		
Greatly	16	26.67	18	36.00	12	40.00	46	32.86		
Moderately	23	38.33	15	30.00	13	43.33	51	36.43		
Slightly	14	23.33	12	24.00	03	10.00	29	20.71		
Neutral	05	8.33	04	8.00	02	6.67	11	7.86		
Not	02	3.34	01	2.00	00	00	03	2.14		
Total	60	100	50	100	30	100	140	100		

(Source: Opinion Survey)

Table # 7.2 shows the opinions of the respondents regarding the age of the company as an influencing factor of the efficiency of AIS of the selected companies and it is observed that 32.86% of the respondents think that it greatly influences, 36.43% of the respondents state that the factor moderately influences, 20.71% of the

respondents opine that it slightly influences, 7.86% of the respondents are neutral and 2.14% of the respondents think that it does not influence. Majority of the respondents comment that the age of the company moderately influences the efficiency of AIS of the selected companies. In order to see whether there is any significant difference of opinions among the respondents regarding the age of the company as an influencing factor of the efficiency of AIS of the selected companies, researcher has conducted χ^2 test. It is found that the value of χ^2 is 5.575 which is significant at 0.695 levels. So, the null hypothesis is accepted which means that there is no significant difference of opinions among the respondents regarding the age of the company as an influencing factor of the efficiency of AIS of the selected companies. From the foregoing discussion it is found that the age of company influences the efficiency of AIS. In order to find out the difference between groups and within groups researcher has conducted ANOVA test and the results are given in the following Table:

Table # 7.2.A

Table showing the results of ANOVA test regarding the age of the company as an influencing factor of the efficiency of AIS of the selected companies

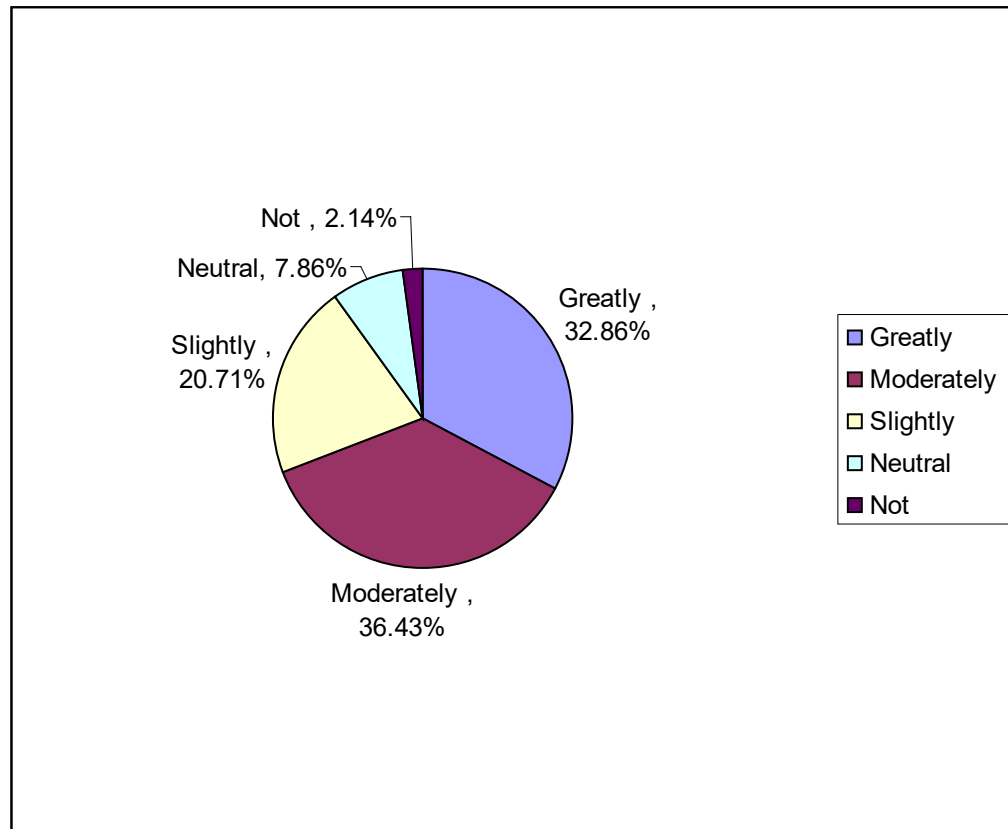
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.200	2	1.600	1.550	0.216
Within Groups	141.400	137	1.032		
Total	144.600	139			

(Source: Opinion Survey)

From the above Table it is found that there is no significant difference of opinions on the age of the company as an influencing factor of the efficiency of AIS of selected companies among the different respondents groups. The following Pie-chart clearly shows the opinions of the respondents regarding the age of the company as an influencing factor of the efficiency of AIS of the selected companies.

Pie-chart # 7.2

Presentation through Pie-chart of the opinions of the respondents regarding the age of the company as an influencing factor of the efficiency of AIS of the selected companies



(Source: Opinion Survey)

The above Pie-chart shows the opinions of the respondents regarding the age of the company as an influencing factor of the efficiency of AIS of the selected companies as 32.86% greatly, 36.43% moderately, 20.71% slightly, 7.86% neutral and 2.14% not. From the above Pie-chart it is evident that the majority of the respondents opine that the age of the company moderately influences the efficiency of AIS of the selected companies.

7.4 Earning of the company

Earning of the company is another influencing factor of efficiency of AIS of the selected companies. Earning of the company is an effective way to the interested users to interpret the financial information and to know profitability, solvency,

liquidity and efficiency of any company. The amount of earning is the product of AIS and it measures the financial condition of the selected companies. AIS is related with financial performance and financial performance is related with organizational performance and it is expected to have positive effects on organizational performance. AIS provides financial information regarding financial performance through financial statements of a firm in a particular period and earning is used to judge whether any business concern is performing well or not. Earning also helps management of the company to interpret financial performance against other competitors for forecasting, planning and controlling. The following hypothesis has been developed to test the degree of influence of earning of the company as an influencing factor of the efficiency of AIS of the selected companies:

Ho_{7.3}: There is no significant difference of opinions among the respondents regarding the earning of the company as an influencing factor of the efficiency of AIS of the selected companies.

Table # 7.3

Table showing the opinions of the respondents regarding the earning of the company as an influencing factor of the efficiency of AIS of the selected companies

	Respondent Groups								χ^2	Sig.
	CA		CMA		Acad.		Total		10.043	0.262
Types of Opinions	No.	%	No.	%	No.	%	No.	%		
Greatly	22	36.67	22	44.00	18	60.00	62	44.29		
Moderately	21	35.00	17	34.00	09	30.00	47	33.57		
Slightly	13	21.67	06	12.00	01	3.33	20	14.29		
Neutral	02	3.33	02	4.00	02	6.67	06	4.28		
Not	02	3.33	03	6.00	00	00	05	3.57		
Total	60	100	50	100	30	100	140	100		

(Source: Opinion Survey)

Table # 7.3 shows the opinions of the respondents regarding the earning of the company as an influencing factor of the efficiency of AIS of the selected companies and it appears that 44.29% of the respondents opine that earning greatly influences

efficiency of AIS, 33.57% of the respondents state that it moderately influences 14.29% of the respondents think that it slightly influences, 4.28% of the respondents are neutral and 3.57% of the respondents opine that it does not influence. Majority of the respondents comment that the earning of the company greatly influences the efficiency of AIS of the selected companies. In order to see whether there is any significant difference of opinions among the respondents regarding the earning of the company as an influencing factor of the efficiency of AIS of the selected companies, researcher has conducted χ^2 test. It is found that the value of χ^2 is 10.043 which is significant at 0.262 level. So, the null hypothesis is accepted which means that there is no significant difference of opinions among the respondents regarding the earning of the company as an influencing factor the efficiency of AIS of the selected companies. From the previous discussion it is evident that the earning of company influences the efficiency of AIS. In order to find out the difference between groups and within groups researcher has conducted ANOVA test and the results are given in the following Table:

Table # 7.3.A

Table showing the results of ANOVA test regarding the earning of the company as an influencing factor of the efficiency of AIS of the selected companies

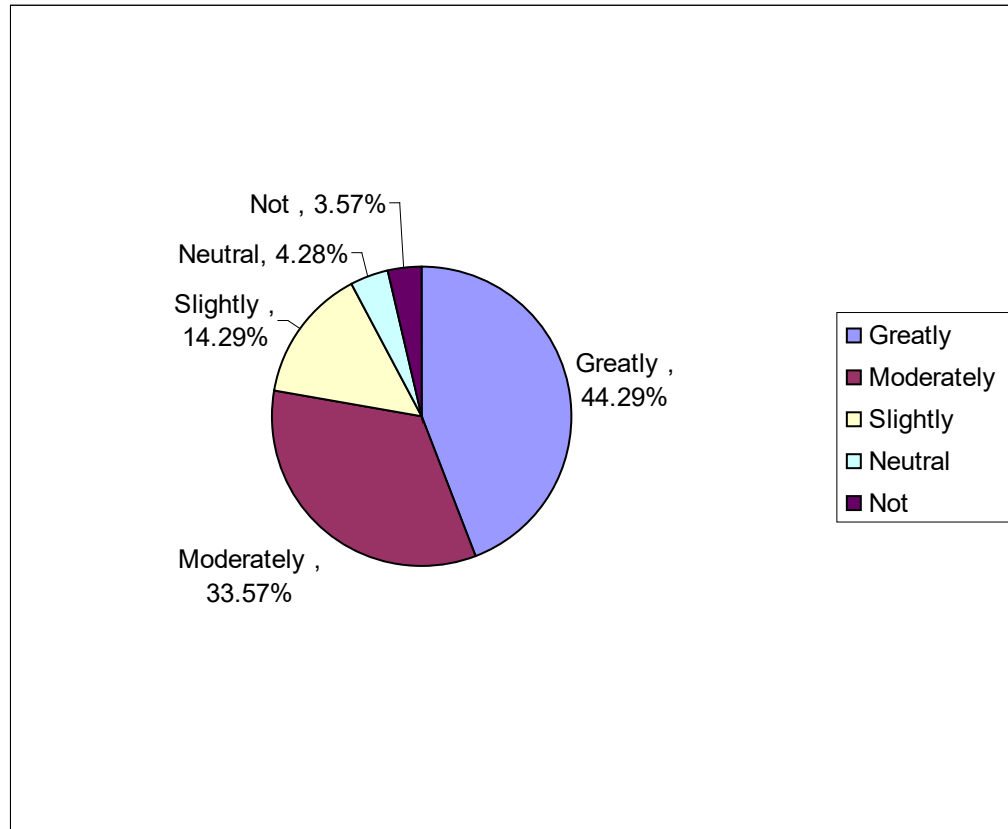
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.223	2	2.111	1.993	0.140
Within Groups	145.170	137	1.060		
Total	149.393	139			

(Source: Opinion Survey)

From the above Table it is evident that there is no significant difference of opinions on the earning of the company as an influencing factor of the efficiency of AIS of selected companies among the different respondents groups. The following Pie-chart clearly presents the opinions of the respondents regarding the earning of the company as an influencing factor of the efficiency of AIS of the selected companies.

Pie-chart # 7.3

Presentation through Pie-chart of the opinions of the respondents regarding the earning of the company as an influencing factor of the efficiency of AIS of the selected companies



(Source: Opinion Survey)

The above Pie-chart highlights the opinions of the respondents regarding the earning of the company as an influencing factor of the efficiency of AIS of the selected companies as 44.29% greatly, 33.57% moderately, 14.29% slightly, 4.28% neutral and 3.57% not. The above Pie-chart it is evident that the majority of the respondents think that the earning of the company greatly influence the efficiency of AIS of the selected companies.

7.5 Availability of Trained Accountant

Availability of trained accountant also influences the efficiency of AIS of the selected companies. Trained accountant can prescribe easily format of accounts, chart of accounts, coding of accounts and design of the AIS. The accountant personnel is responsible for ensuring reliability and relevance of accounting information and these activities are related to the ability of accountant because AIS provides information through preparing the different financial statement to the user and all activities of AIS is performed by account personnel so, the trained accountant influences the efficiency of AIS. The following hypothesis has been developed to test the degree of influence of availability of trained accountant as an influencing factor of the efficiency of AIS of the selected companies:

Ho_{7.4}: There is no significant difference of opinions among the respondents regarding the availability of trained accountant as an influencing factor of the efficiency of AIS of the selected companies.

Table # 7.4

Table showing the opinions of the respondents regarding the availability of trained accountant as an influencing factor of the efficiency of AIS of the selected companies

	Respondent Groups								χ^2	Sig.
	CA		CMA		Acad.		Total		1.958	0.743
Types of Opinions	No.	%	No.	%	No.	%	No.	%		
Greatly	48	80.00	39	78.00	23	76.67	110	78.57		
Moderately	12	20.00	10	20.00	07	23.33	29	20.71		
Slightly	00	00	01	2.00	00	00	01	0.72		
Neutral	00	00	00	00	00	00	00	00		
Not	00	00	00	00	00	00	00	00		
Total	60	100	50	100	30	100	140	100		

(Source: Opinion Survey)

Table # 7.4 presents the opinions of the respondents regarding the availability of trained accountant as an influencing factor of the efficiency of AIS of the selected companies and it is observed that 78.57% of the respondents think that the

availability of trained accountant greatly influences, 20.71% of the respondents think that it moderately influences, 0.72% of the respondents state that it slightly influences, none of the respondents are neutral and none of the respondents opine that it does not influence. Majority of the respondents think that the availability of trained accountant greatly influences the efficiency of AIS of the selected companies. In order to see whether there is any significant difference of opinions among the respondents regarding the availability of trained accountant as an influencing factor of the efficiency of AIS of the selected companies, researcher has conducted χ^2 test. It is found that the value of χ^2 is 1.958 which is significant at 0.743 levels. So, the null hypothesis is accepted which means that there is no significant difference of opinions among the respondents regarding 'the availability of trained accountant' as an influencing factor of the efficiency of AIS of the selected companies. From the previous discussion it is found that the 'availability of trained accountant' influences the efficiency of AIS. In order to find out the difference between groups and within groups researcher has conducted ANOVA test and the results are given in the following Table:

Table # 7.4.A

Table showing the results of ANOVA test regarding the availability of trained accountant as an influencing factor of the efficiency of AIS of the selected companies

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.049	2	0.025	0.129	0.879
Within Groups	26.087	137	0.190		
Total	26.136	139			

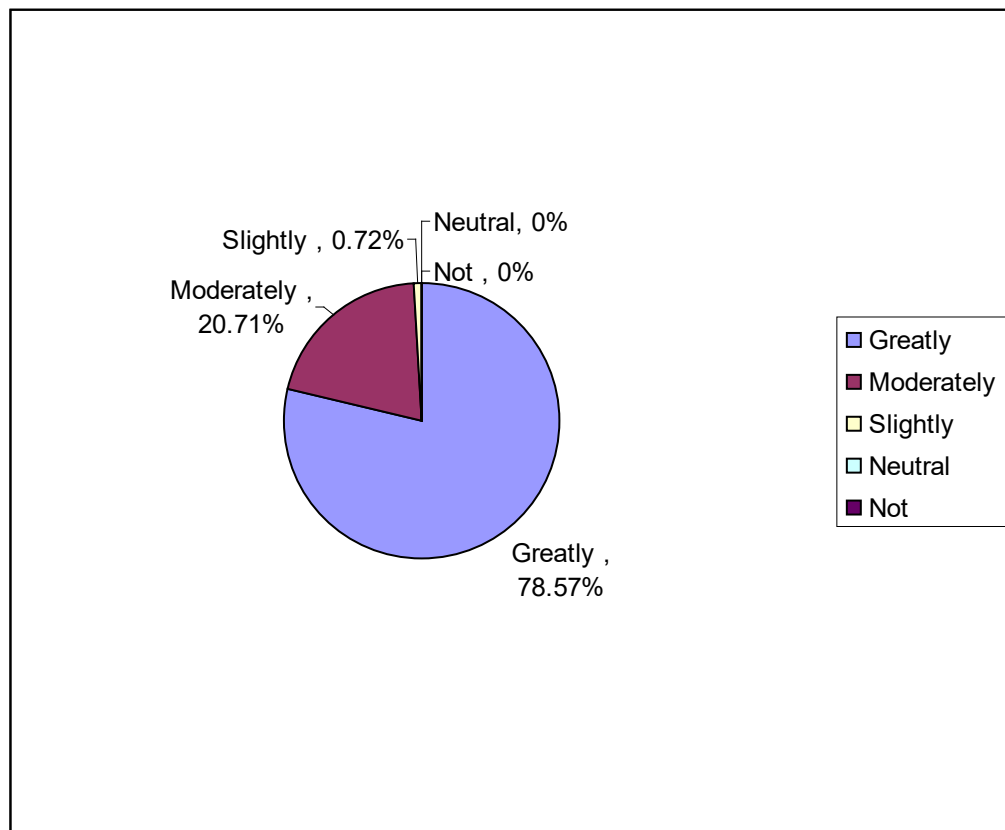
(Source: Opinion Survey)

From the above Table it is evident that there is no significant difference of opinions on the availability of trained accountant as an influencing factor of the efficiency of AIS of selected companies among the different respondents groups. The following Pie-chart clearly shows the opinions of the respondents regarding the availability of

trained accountant as an influencing factor of the efficiency of AIS of the selected companies.

Pie-chart # 7.4

Presentation through Pie-chart of the opinions of the respondents regarding the availability of trained accountant as an influencing factor of the efficiency of AIS of the selected companies



(Source: Opinion Survey)

The above Pie-chart shows the opinions of the respondents regarding the availability of trained accountant as an influencing factor the efficiency of AIS of the selected companies as 78.57% greatly, 20.71% moderately and 0.72% slightly. From the above Pie-chart it is observed that the majority of the respondents are of the opinions that the availability of trained accountant greatly influences the efficiency of AIS of the selected companies.

7.6 Internal Control System

Internal control system is also another influencing factor of the efficiency of AIS of the selected companies. An effective internal control system develops good performance. Internal control system consists of all policies and procedures adopted by the management of an entity to assist in achieving their goals. The existence of internal control system influences the processing of business transactions and providing correct information through preparing the different financial statements in conformity with all applicable rules. The different procedures prescribed by the internal control system influence the quality of accounting information provide by AIS and it develops operational efficiency of the selected companies. The following hypothesis has been developed to test the degree of influence of internal control system as an influencing factor of the efficiency of AIS of the selected companies:

Ho_{7.5}: There is no significant difference of opinions among the respondents regarding the internal control system as an influencing factor of the efficiency of AIS of the selected companies.

Table # 7.5

Table showing the opinions of the respondents regarding the internal control system as an influencing factor of the efficiency of AIS of the selected companies

	Respondent Groups								χ^2	Sig.
	CA		CMA		Acad.		Total		3.882	0.422
Types of Opinions	No.	%	No.	%	No.	%	No.	%		
Greatly	51	85.00	39	78.00	22	73.33	112	80.00		
Moderately	08	13.33	09	18.00	08	26.7	25	17.86		
Slightly	01	1.67	02	4.00	00	00	03	2.14		
Neutral	00	00	00	00	00	00	00	00		
Not	00	00	00	00	00	00	00	00		
Total	60	100	50	100	30	100	140	100		

(Source: Opinion Survey)

Table # 7.5 shows the opinions of the respondents regarding the internal control system as an influencing factor of the efficiency of AIS of the selected companies and it is found that 80.00% of the respondents opine that it greatly influences,

17.86% of the respondents think that it moderately influences, 2.14% of the respondents opine that it slightly influences, none of the respondents is neutral and none of the respondents opine that it does not influence. Majority of the respondents think that the internal control system greatly influences the efficiency of AIS of the selected companies. In order to see whether there is any significant difference of opinions among the respondents regarding the internal control system as an influencing factor of the efficiency of AIS of the selected companies, researcher has conducted χ^2 test. It is evident that the value of χ^2 is 3.882 which is significant at 0.422 level. So, the null hypothesis is accepted which means that there is no significant difference of opinions among the respondents regarding the internal control system as an influencing factor of the efficiency of AIS of the selected companies. From the previous discussion it is evident that the internal control system influences the efficiency of AIS. In order to find out the difference between groups and within groups researcher has conducted ANOVA test and the results are given in the following Table:

Table # 7.5.A

Table showing the results of ANOVA test regarding the internal control system as an influencing factor of the efficiency of AIS of the selected companies

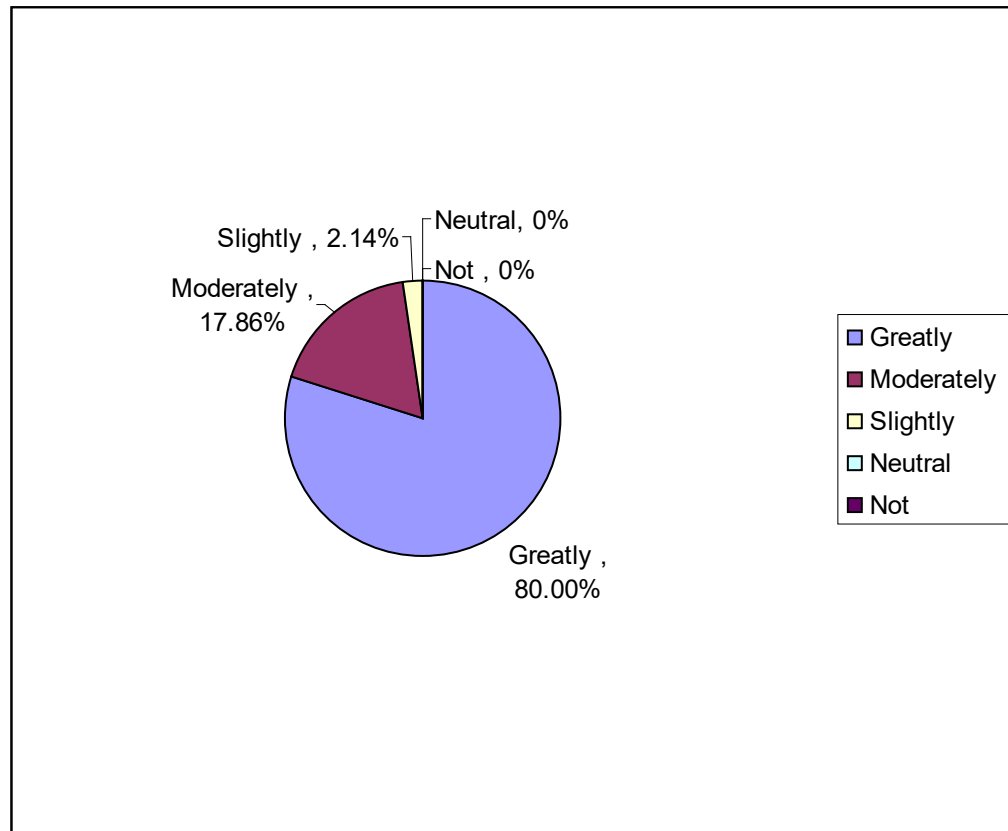
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.316	2	0.158	0.725	0.486
Within Groups	29.820	137	0.218		
Total	30.136	139			

(Source: Opinion Survey)

From the above Table it is evident that there is no significant difference of opinions on the internal control system as an influencing factor of the efficiency of AIS of selected companies among the different respondents groups. The following Pie-chart clearly presents the opinions of the respondents regarding the internal control system as an influencing factor of the efficiency of AIS of the selected companies.

Pie-chart # 7.5

Presentation through Pie-chart of the opinions of the respondents regarding the internal control system as an influencing factor of the efficiency of AIS of the selected companies



(Source: Opinion Survey)

The above Pie-chart presents the opinions of the respondents regarding the internal control system as an influences factor of the efficiency of AIS of the selected companies as 80.00% greatly, 17.86% moderately and 2.14% slightly. The above Pie-chart shows that the majority of the respondents opine that the internal control system greatly influences the efficiency of AIS of the selected companies.

7.7 Internal Audit

Internal audit is an important influencing factor of efficiency of AIS of the selected companies. Internal audit is the continuous process of review of the financial and other operating activities and these activities are performed by the accounting personnel who are the full time employee but not involved with the accounting department. Internal audit is essential for ensuring the reliability of accounting information and improving the efficiency of operational activities. Internal audit is necessary to evaluate the transparency of accounting information generated by AIS of the selected companies through preparing the different financial statements to the interested users for taking effective decisions. The following hypothesis has been developed to test the degree of influence of internal audit as an influencing factor of the efficiency of AIS of the selected companies:

Ho_{7.6}: There is no significant difference of opinions among the respondents regarding the internal audit as an influencing factor of the efficiency of AIS of the selected companies.

Table # 7.6

Table showing the opinions of the respondents regarding the internal audit as an influencing factor of the efficiency of AIS of the selected companies

	Respondent Groups								χ^2	Sig.
	CA		CMA		Acad.		Total		7.918	0.441
Types of Opinions	No.	%	No.	%	No.	%	No.	%		
Greatly	27	45.00	26	52.00	21	70.00	74	52.86		
Moderately	23	38.33	19	38.00	08	26.67	50	35.72		
Slightly	08	13.33	05	10.00	01	3.33	14	10.00		
Neutral	01	1.67	00	00	00	00	01	0.71		
Not	01	1.67	00	00	00	00	01	0.71		
Total	60	100	50	100	30	100	140	100		

(Source: Opinion Survey)

Table # 7.6 shows the opinions of the respondents regarding the internal audit as an influencing factor of the efficiency of AIS of the selected companies and it is found that 52.86% of the respondents opine that it greatly influences, 35.72% of the

respondents think that it moderately influences, 10.00% of the respondents state that it slightly influences, 0.71% of the respondents are neutral and 0.71% of the respondents opine that it has no influence. Majority of the respondents are of the opinions that the internal audit greatly influences the efficiency of AIS of the selected companies. In order to see whether there is any significant difference of opinions among the respondents regarding the internal audit as an influencing factor of the efficiency of AIS of the selected companies, researcher has conducted χ^2 test. It is observed that the value of χ^2 is 7.918 which is significant at 0.441 level. So, the null hypothesis is accepted which means that there is no significant difference of opinions among the respondents regarding the internal audit as influencing factor of the efficiency of AIS of the selected companies. From the foregoing discussion it is evident that the internal audit influences the efficiency of AIS. In order to find out the difference between groups and within groups researcher has conducted ANOVA test and the results are given in the following Table:

Table # 7.6.A

Table showing the results of ANOVA test regarding the internal audit as an influencing factor of the efficiency of AIS of the selected companies

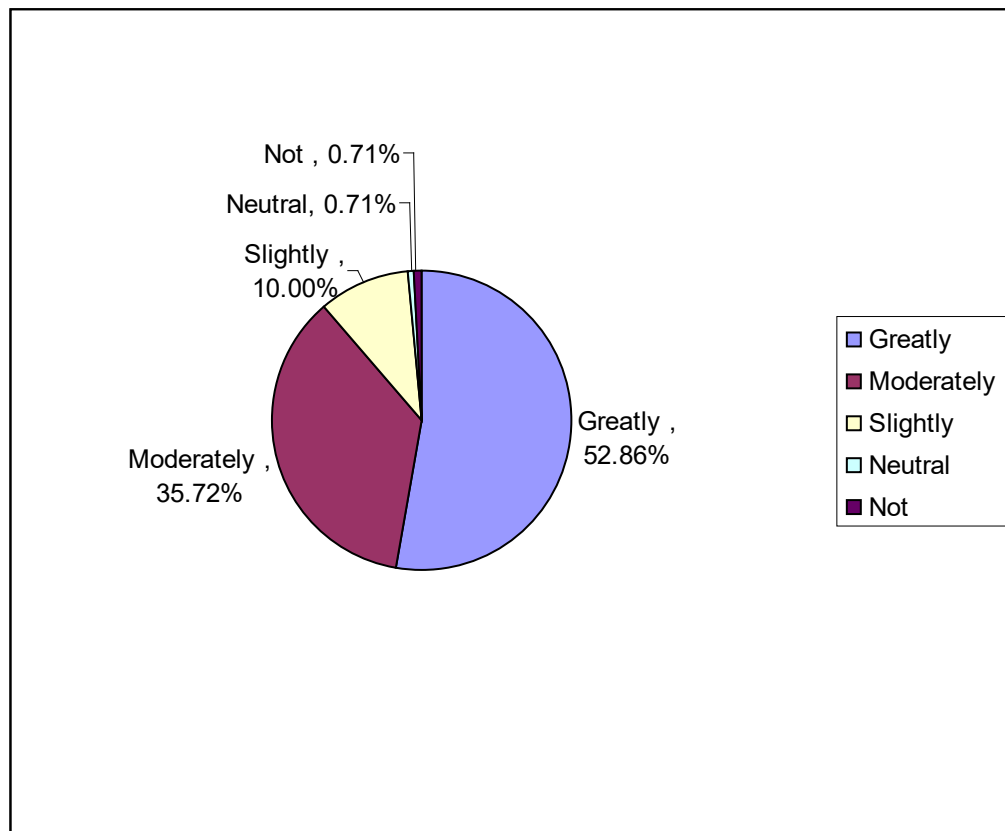
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.813	2	1.906	3.456	0.034
Within Groups	75.580	137	0.552		
Total	79.393	139			

(Source: Opinion Survey)

From the above Table it is evident that there is significant difference of opinions on the internal audit as an influencing factor of the efficiency of AIS of selected companies among the different respondents groups. The following Pie-chart clearly presents the opinions of the respondents regarding the internal audit as an influencing factor of the efficiency of AIS of the selected companies.

Pie-chart # 7.6

Presentation through Pie-chart of the opinions of the respondents regarding the internal audit as an influencing factor of the efficiency of AIS of the selected companies



(Source: Opinion Survey)

The above Pie-chart shows the opinions of the respondents regarding the internal audit as an influencing factor of efficiency of AIS of the selected companies as 52.86% greatly, 35.72% moderately, 10.00% slightly, 0.71% neutral and 0.71% not. From the above Pie-chart it is evident that the majority of the respondents think that the internal audit greatly influences the efficiency of AIS of the selected companies.

7.8 Internal Check

Internal check is an important influencing factor of efficiency of AIS of the selected companies because internal checks increase the individual skill and efficiency of the employees due to repetitive performance of the specific task. Internal check is an effective way to perform the business activities properly. Internal check is crucial to ensure the accuracy and reliability of records of business transactions so that AIS can provide the quality information to the interested users to take effective decision. Internal check assists to record transactions properly, identify the errors and protect against fraud or other unauthorized transactions. The following hypothesis has been developed to test the degree of influence of internal check as an influencing factor of the efficiency of AIS of the selected companies:

Ho_{7.7}: There is no significant difference of opinions among the respondents regarding the internal check as an influencing factor of the efficiency of AIS of the selected companies.

Table # 7.7

Table showing the opinions of the respondents regarding the internal check as an influencing factor of the efficiency of AIS of the selected companies

	Respondent Groups								χ^2	Sig.
	CA		CMA		Acad.		Total		3.488	0.480
Types of Opinions	No.	%	No.	%	No.	%	No.	%		
Greatly	32	50.00	20	40.00	14	46.67	66	47.14		
Moderately	22	40.00	27	54.00	13	43.33	62	44.29		
Slightly	06	10.00	03	6.00	03	10.00	12	8.57		
Neutral	00	00	00	00	00	00	00	00		
Not	00	00	00	00	00	00	00	00		
Total	60	100	50	100	30	100	140	100		

(Source: Opinion Survey)

Table # 7.7 describes the opinions of the respondents regarding the internal check as an influencing factor of the efficiency of AIS of the selected companies and it is found that 47.14% of the respondents opine that it greatly influences, 44.29% of the respondents think that it influences moderately, 8.57% of the respondents state that

it slightly influences, none of the respondents is neutral and none of the respondents opine that it does not influence. Majority of the respondents opine that the internal check greatly influences the efficiency of AIS of the selected companies. In order to see whether there is any significant difference of opinions among the respondents regarding the internal check as an influencing factor of the efficiency of AIS of the selected companies, researcher has conducted χ^2 test. It is found that the value of χ^2 is 3.488 which is significant at 0.480 levels. So, the null hypothesis is accepted which means that there is no significant difference of opinions among the respondents regarding the internal check as an influencing factor of the efficiency of AIS of the selected companies. From the previous discussion it is observed that the internal check influences the efficiency of AIS. In order to find out the difference between groups and within groups researcher has conducted ANOVA test and the results are given in the following Table:

Table # 7.7.A

Table showing the results of ANOVA test regarding the internal check as an influencing factor of the efficiency of AIS of the selected companies

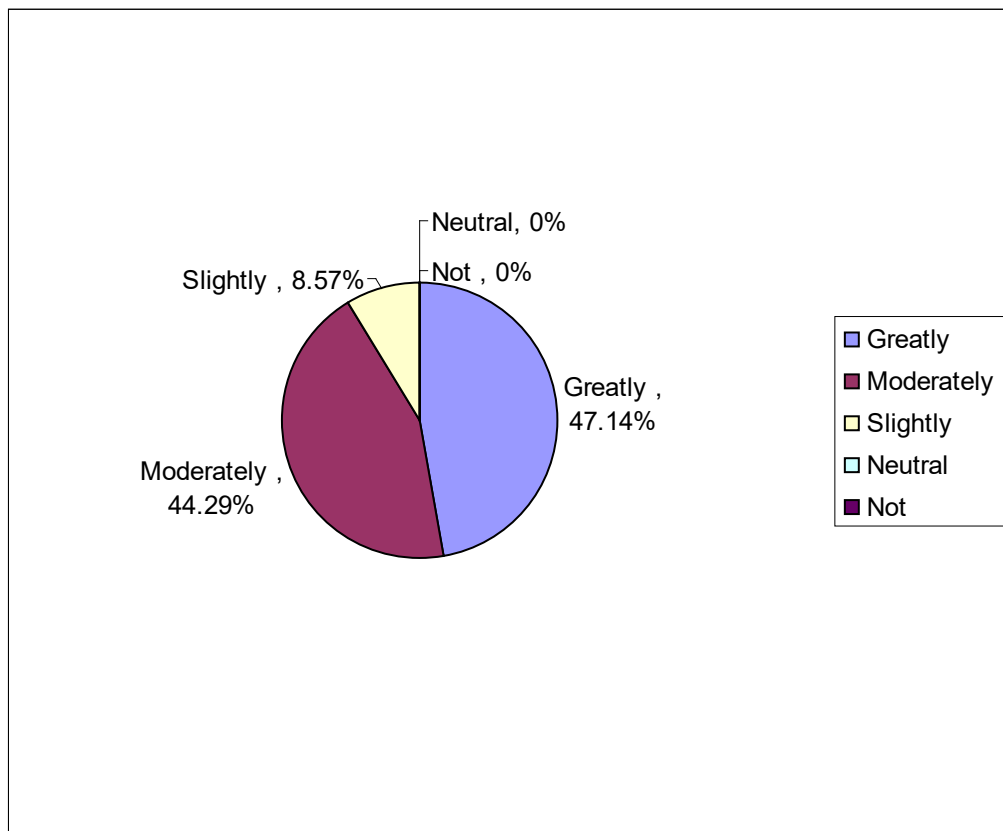
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.099	2	0.050	0.303	0.739
Within Groups	56.587	137	0.413		
Total	56.686	139			

(Source: Opinion Survey)

From the above Table it is found that there is no significant difference of opinions on the internal check as an influencing factor of the efficiency of AIS of selected companies among the different respondents groups. The following Pie-chart clearly presents the opinions of the respondents regarding the internal check as an influencing factor of the efficiency of AIS of the selected companies.

Pie-chart # 7.7

Presentation through Pie-chart of the opinions of the respondents regarding the internal check as an influencing factor of the efficiency of AIS of the selected companies



(Source: Opinion Survey)

The above Pie-chart presents the opinions of the respondents regarding the internal check as an influences factor of the efficiency of AIS of the selected companies as 47.14% greatly, 44.29% moderately and 8.57% slightly. The above Pie-chart focus that the majority of the respondents think that the internal check greatly influences the efficiency of AIS of the selected companies.

7.9 Attitude of Management

The attitude of management is an important influencing factor of the efficiency of AIS of the selected companies. AIS is influenced by attitude of the management because management is concerned with systems planning, systems analysis, systems implementation, coordination, control and communication and it's also associated with the design of internal control systems, implementation of internal control systems and contents of information. The attitude of management is also concerned with devising chart of accounts, proposing accounting policies and implementation of different administrative control. So, the attitude of management influences the efficiency of AIS to a great extent. The following hypothesis has been developed to test the degree of influence of attitude of management as an influencing factor of the efficiency of AIS of the selected companies:

Ho_{7.8}: There is no significant difference of opinions among the respondents regarding the attitude of management as an influencing factor of the efficiency of AIS of the selected companies.

Table # 7.8

Table showing the opinions of the respondents regarding the attitude of management as an influencing factor of the efficiency of AIS of the selected companies

	Respondent Groups								χ^2	Sig.
	CA		CMA		Acad.		Total		4.014	0.404
Types of Opinions	No.	%	No.	%	No.	%	No.	%		
Greatly	48	80.00	33	66.00	21	70.00	102	72.86		
Moderately	10	16.67	14	28.00	06	20.00	30	21.43		
Slightly	02	3.33	03	6.00	03	10.00	08	5.71		
Neutral	00	00	00	00	00	00	00	00		
Not	00	00	00	00	00	00	00	00		
Total	60	100	50	100	30	100	140	100		

(Source: Opinion Survey)

Table # 7.8 describes the opinions of the respondents regarding the attitude of management as an influencing factor of the efficiency of AIS of the selected

companies and it is evident that 72.86% of the respondents opine that attitude of management greatly influences efficiency of AIS, 21.43% of the respondents think that it moderately influences, 5.71% of the respondents state that it slightly influences, none of the respondents is neutral and none of the respondents opine that it does not influence. Majority of the respondents opine that the attitude of management greatly influences the efficiency of AIS of the selected companies. In order to see whether there is any significant difference of opinions among the respondents regarding the attitude of management as an influencing factor of the efficiency of AIS of the selected companies, researcher has conducted χ^2 test. It is observed that the value of χ^2 is 4.014 which is significant at 0.404 level. So, the null hypothesis is accepted which means that there is no significant difference of opinions among the respondents regarding the attitude of management as an influencing factor of the efficiency of AIS of the selected companies. From the previous discussion it is observed that attitude of management influences the efficiency of AIS. In order to find out the difference between groups and within groups researcher has conducted ANOVA test and the results are given in the following Table:

Table # 7.8.A

Table showing the results of ANOVA test regarding the attitude of management as an influencing factor of the efficiency of AIS of the selected companies

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.952	2	0.476	1.420	0.245
Within Groups	45.933	137	0.335		
Total	46.885	139			

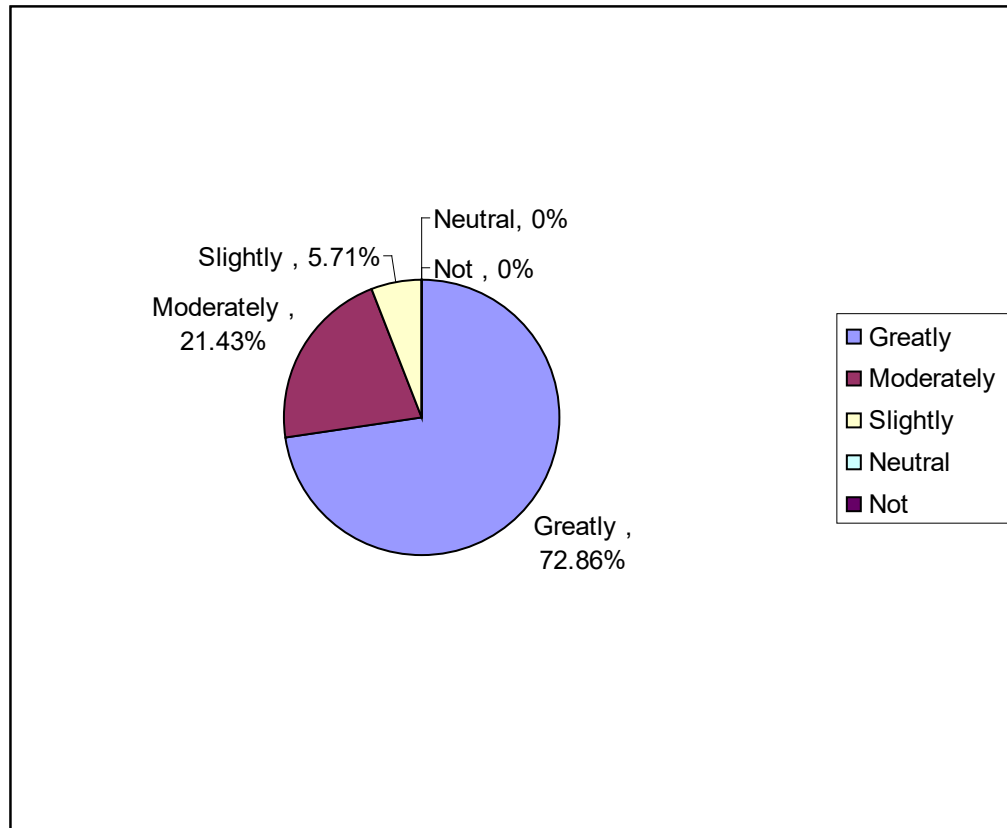
(Source: Opinion Survey)

From the above Table it is evident that there is no significant difference of opinions on the attitude of management as an influencing factor of the efficiency of AIS of selected companies among the different respondents groups. The following Pie-chart clearly shows the opinions of the respondents regarding the attitude of

management as an influencing factor of the efficiency of AIS of the selected companies.

Pie-chart # 7.8

Presentation through Pie-chart of the opinions of the respondents regarding the attitude of management as an influencing factor of the efficiency of AIS of the selected companies



(Source: Opinion Survey)

The above Pie-chart shows the opinions of the respondents regarding the attitude of management as an influences factor of the efficiency of AIS of the selected companies as 72.86% greatly, 21.43% moderately and 5.71% slightly. From the above Pie-chart it is found that the majority of the respondents are of the opinions that the attitude of management greatly influences the efficiency of AIS of the selected companies.

7.10 Organizational Structure

Organizational structure is another important influencing factor related to the efficiency of AIS of the selected companies. The organizational structure relates to the line of authority, responsibility and reporting and it provides decision for planning, controlling and motivating which is necessary of successfully operations. The centralization and decentralization authority is important aspect of organizational structure (Romney and Steinbart, 2006). In the centralized organization, the higher level of management gets the upper hand and prominence in decision making whereas in the decentralized organization, the lower level executives get some opportunity to participate in decision making. Hence the following hypothesis has been developed to test the degree of influence of organizational structure as an influencing factor of the efficiency of AIS of the selected companies:

Ho_{7.9}: There is no significant difference of opinions among the respondents regarding the organizational structure as an influencing factor of the efficiency of AIS of the selected companies.

Table # 7.9

Table showing the opinions of the respondents regarding the organizational structure as an influencing factor of the efficiency of AIS of the selected companies

	Respondent Groups								χ^2	Sig.
	CA		CMA		Acad.		Total		3.892	0.691
Types of Opinions	No.	%	No.	%	No.	%	No.	%		
Greatly	35	58.33	25	50.00	12	40.00	72	51.43		
Moderately	19	31.67	20	40.00	15	50.00	54	38.57		
Slightly	05	8.33	03	6.00	02	6.67	10	7.14		
Neutral	01	1.67	02	4.00	01	3.33	04	2.86		
Not	00	00	00	00	00	00	00	00		
Total	60	100	50	100	30	100	140	100		

(Source: Opinion Survey)

Table # 7.9 shows the opinions of the respondents regarding the organizational structure as an influencing factor of the efficiency of AIS of the selected companies

and it is observed that 51.43% of the respondents think that organizational structure greatly influences, 38.57% of the respondents opine that it moderately influences, 7.14% of the respondents state that it slightly influences, 2.86% of the respondents are neutral and none of the respondents opine that it does not influence. Majority of the respondents opine that the organizational structure greatly influences the efficiency of AIS of the selected companies. In order to see whether there is any significant difference of opinions among the respondents regarding the organizational structure as an influencing factor of the efficiency of AIS of the selected companies, researcher has conducted χ^2 test. It is found that the value of χ^2 is 3.892 which is significant at 0.691 levels. So, the null hypothesis is accepted which means that there is no significant difference of opinions among the respondents regarding the organizational structure as an influencing factor of the efficiency of AIS of the selected companies. From the previous discussion it is found that organizational structure influences the efficiency of AIS. In order to find out the difference between groups and within groups researcher has conducted ANOVA test and the results are given the in the following Table:

Table # 7.9.A

Table showing the results of ANOVA test regarding the organizational structure as an influencing factor of the efficiency of AIS of the selected companies

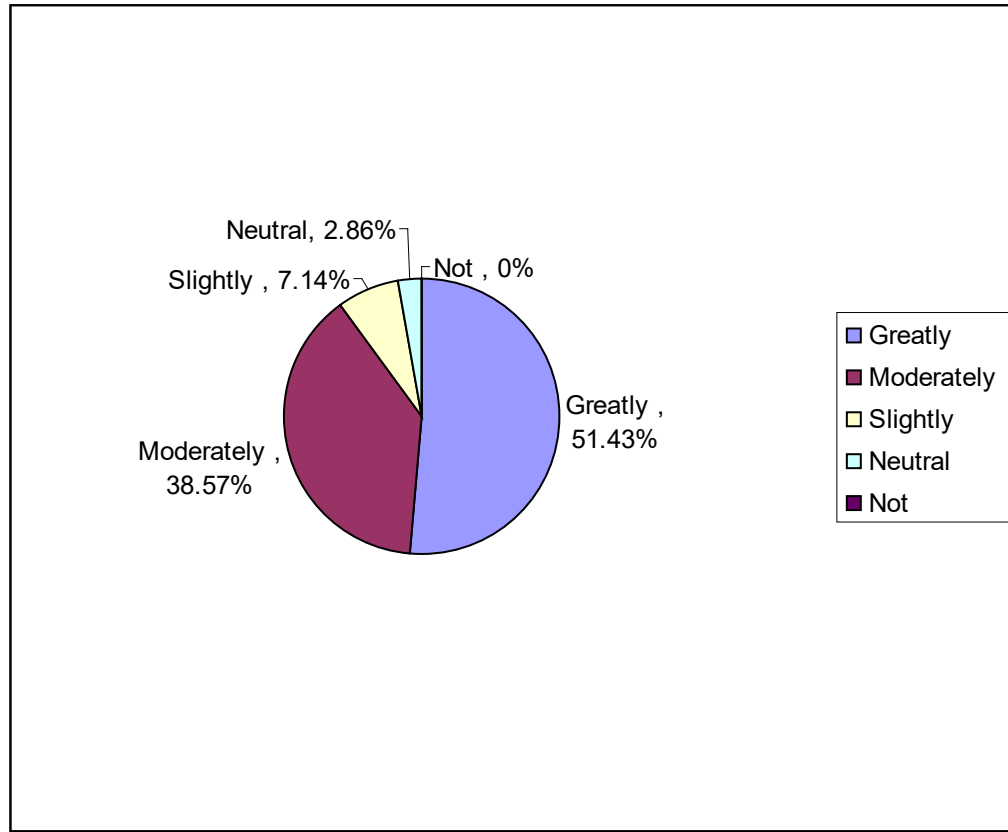
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.851	2	0.426	0.764	0.468
Within Groups	76.320	137	0.557		
Total	77.171	139			

(Source: Opinion Survey)

From the above Table it is evident that there is no significant difference of opinions on the organizational structure as an influencing factor of the efficiency of AIS of selected companies among the different respondents groups. The following Pie-chart clearly shows the opinions of the respondents regarding the organizational structure as an influencing factor of the efficiency of AIS of the selected companies.

Pie-chart # 7.9

Presentation through Pie-chart of the opinions of the respondents regarding the organizational structure as an influencing factor of the efficiency of AIS of the selected companies



(Source: Opinion Survey)

The above Pie-chart shows the opinions of the respondents regarding the organizational structure as an influences factor of the efficiency of AIS of the selected companies as 51.43% greatly, 38.57% moderately, 7.14% slightly and 2.86% neutral. The above Pie-chart presents that the majority of the respondents think that the organizational structure greatly influences the efficiency of AIS of the selected companies.

7.11 Resource of the Company

Resource is another important influencing factor related with the efficiency of AIS of the selected companies. The organizations which have limited resource for its AIS may fall over a high turnover rate and technological obstacles which can curtail the efficiency of AIS. For the proper functioning of AIS sufficient resources must be made available to AIS department. Without sufficient resources AIS can not work properly. Accordingly, the following hypothesis has been developed to test the degree of influence of resource of the company as an influencing factor of the efficiency of AIS of the selected companies:

Ho_{7.10}: There is no significant difference of opinions among the respondents regarding the resource of the company as an influencing factor of the efficiency of AIS of the selected companies.

Table # 7.10

Table showing the opinions of the respondents regarding the resource of the company as an influencing factor of the efficiency of AIS of the selected companies

	Respondent Groups								χ^2	Sig.
	CA		CMA		Acad.		Total		7.575	0.476
Types of Opinions	No.	%	No.	%	No.	%	No.	%		
Greatly	25	41.67	25	50.00	14	46.67	64	45.72		
Moderately	30	50.00	21	42.00	10	33.33	61	43.57		
Slightly	03	5.00	02	4.00	04	13.33	09	6.43		
Neutral	02	3.33	01	2.00	02	6.67	05	3.57		
Not	00	00	01	2.00	00	00	01	0.71		
Total	60	100	50	100	30	100	140	100		

(Source: Opinion Survey)

Table # 7.10 shows the opinions of the respondents regarding the resource of the company as an influencing factor of the efficiency of AIS of the selected companies and it is evident that 45.72% of the respondents opine that it greatly influences, 43.57% of the respondents think that its effect is moderate, 6.43% of the respondents state that it slightly influences, 3.57% of the respondents are neutral and 0.71% of the respondents opine that it does not influence efficiency of AIS.

Majority of the respondents think that the resource of the company greatly influences the efficiency of AIS of the selected companies. In order to see whether there is any significant difference of opinions among the respondents regarding the resources of the company as an influencing factor of the efficiency of AIS of the selected companies, researcher has conducted χ^2 test. It is found that the value of χ^2 is 7.575 which is significant at 0.476 levels. So, the null hypothesis is accepted which means that there is no significant difference of opinions among the respondents regarding the resource of the company as an influencing factor of the efficiency of AIS of the selected companies. From the previous discussion it is evident that resource of the company influences the efficiency of AIS. In order to find out the difference between groups and within groups researcher has conducted ANOVA test and the results are given in the following Table:

Table # 7.10.A

Table showing the results of ANOVA test regarding the resource of the company as an influencing factor of the efficiency of AIS of the selected companies

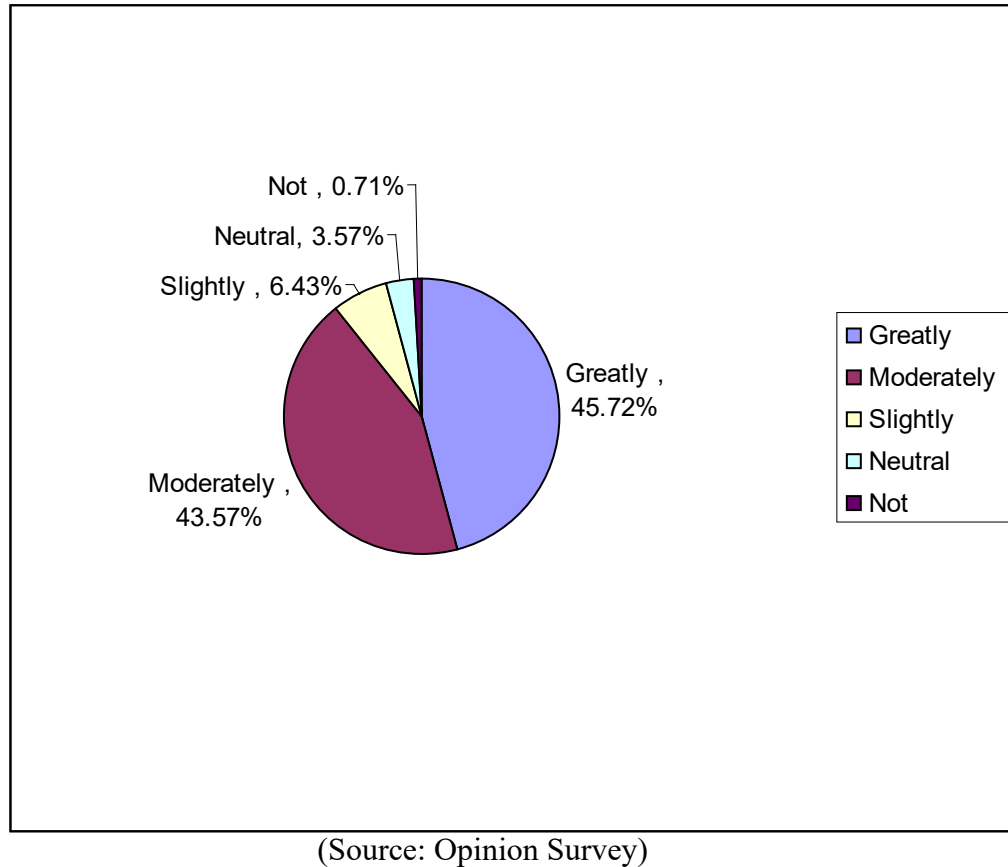
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.480	2	0.240	0.370	0.692
Within Groups	88.920	137	0.649		
Total	89.400	139			

(Source: Opinion Survey)

From the above Table it is found that there is no significant difference of opinions on the resource of the company as an influencing factor of the efficiency of AIS of selected companies among the different respondents groups. The following Pie-chart clearly mentions the opinions of the respondents regarding the resource of the company as an influencing factor of the efficiency of AIS of the selected companies.

Pie-chart # 7.10

Presentation through Pie-chart the opinions of the respondents regarding the resource of the company as an influencing factor of the efficiency of AIS of the selected companies



The above Pie-chart shows the opinions of the respondents regarding the resources of the company as an influences factor of the efficiency of AIS of the selected companies as 45.72% greatly, 43.57% moderately, 6.43% slightly, 3.57% neutral and 0.71% not. The above Pie-chart presents that the majority of the respondents think that the resource of the company greatly influences the efficiency of AIS of the selected companies.

7.12 Rank of Responsible Executive

Rank of responsible executive may be an important influencing factor of the efficiency of AIS of the selected companies. The appropriate executive can operate the business activities properly. The competition is widely increasing and the companies need to keep up pace with these changes by improving the quality of information and it is possible when the various functions of AIS are performed by the higher executive. AIS processes economic data for providing information which is used in planning, controlling and decision making process. For providing accurate information with much less effort the proper executive should hold the proper rank. So, the position of executive influences the efficiency of AIS. The following hypothesis has been developed to test the degree of influence of rank of responsible executive as an influencing factor of the efficiency of AIS of the selected companies:

Ho_{7.11}: There is no significant difference of opinions among the respondents regarding the rank of responsible executive as an influencing factor of the efficiency of AIS of the selected companies.

Table # 7.11

Table showing the opinions of the respondents regarding the rank of responsible executive as an influencing factor of the efficiency of AIS of the selected companies

	Respondent Groups								χ^2	Sig.
	CA		CMA		Acad.		Total		16.989	0.030
Types of Opinions	No.	%	No.	%	No.	%	No.	%		
Greatly	23	38.34	20	40.00	06	20.00	49	35.00		
Moderately	24	40.00	24	48.00	11	36.67	59	42.14		
Slightly	08	13.33	05	10.00	11	36.67	24	17.14		
Neutral	02	3.33	01	2.00	02	6.66	05	3.58		
Not	03	5.00	00	00	00	00	03	2.14		
Total	60	100	50	100	30	100	140	100		

(Source: Opinion Survey)

Table # 7.11 presents the opinions of the respondents regarding the rank of responsible executive as an influencing factor of the efficiency of AIS of the

selected companies. It is found that 35.00% of the respondents opine that the rank of responsible executive greatly influences, 42.14% of the respondents think that it has influence but it is moderate, 17.14% of the respondents state that it slightly influences, 3.58% of the respondents are neutral and 2.14% of the respondents opine that it has no effect. Majority of the respondents opine that the rank of responsible executive moderately influences the efficiency of AIS of the selected companies. In order to see whether there is any significant difference of opinions among the respondents regarding the rank of responsible executive as an influencing factor of the efficiency of AIS of the selected companies, researcher has conducted χ^2 test. It is found that the value of χ^2 is 16.989 which is significant at 0.030 level. So, the null hypothesis is rejected which means that there is significant difference of opinions among the respondents regarding the rank of responsible executive as an influencing factor of the efficiency of AIS of the selected companies. From the previous discussion it is observed that the respondents are not unanimous that the rank of responsible executive influences the efficiency of AIS. In order to find out the difference between groups and within groups researcher has conducted ANOVA test and the results are given in the following Table:

Table # 7.11.A

Table showing the results of ANOVA test regarding the rank of responsible executive as an influencing factor of the efficiency of AIS of the selected companies

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.890	2	2.945	3.543	0.032
Within Groups	113.853	137	0.831		
Total	119.743	139			

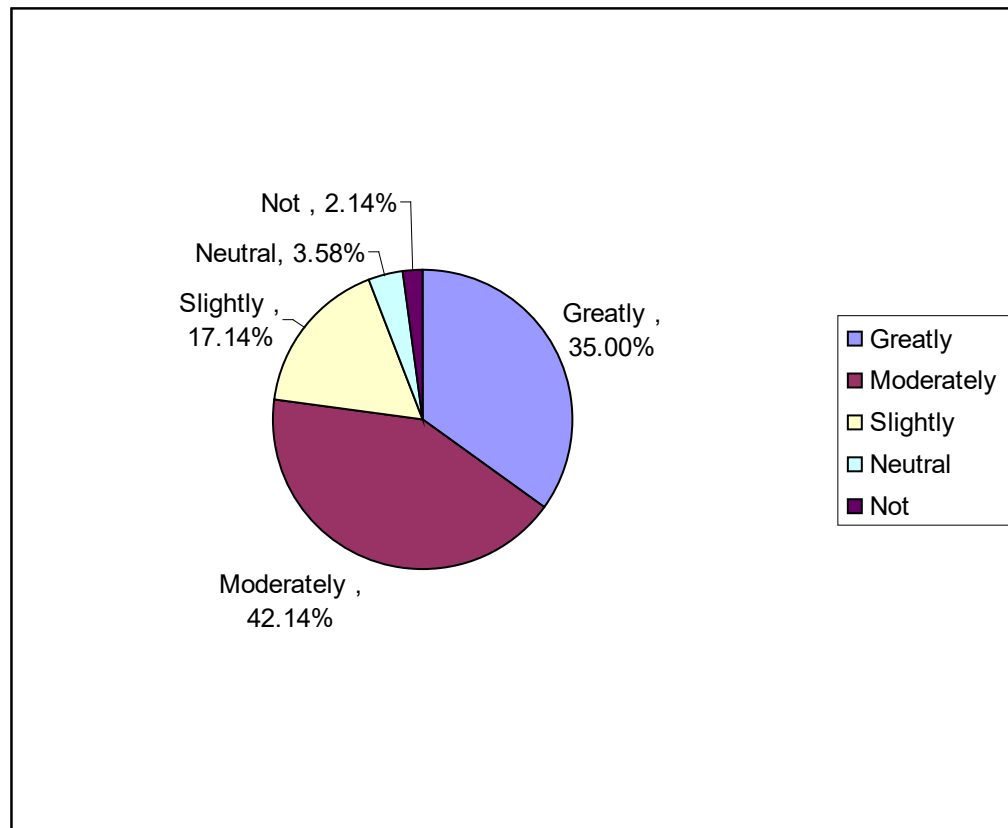
(Source: Opinion Survey)

From the above Table it is evident that there is no significant difference of opinions on the rank of responsible executive as an influencing factor of the efficiency of AIS of selected companies among the different respondents groups. The following Pie-chart clearly shows the opinions of the respondents regarding the rank of

responsible executive as an influencing factor of the efficiency of AIS of the selected companies.

Pie-chart # 7.11

Presentation through Pie-chart of the opinions of the respondents regarding the rank of responsible executive as an influencing factor of the efficiency of AIS of the selected companies



(Source: Opinion Survey)

The above Pie-chart shows the opinions of the respondents regarding the rank of responsible executive as an influencing factor the efficiency of AIS of the selected companies as 35.00% greatly, 42.14% moderately, 17.14% slightly, 3.58% neutral and 2.14% not. From the above Pie-chart it is evident that the majority of the respondents think that the rank of responsible executive moderately influences the efficiency of AIS of the selected companies.

7.13 Good use of Information Technology

Good use of IT is an important influencing factor for increasing the efficiency of AIS of the selected companies. At present time IT has played an important role in the business enterprises because development of proper implementation of IT is a support to management for ensuring the quality of information produced by AIS. Good use of IT increases the efficiency of AIS through replacing the paper documents with electronic documents so that information is produced easily and correctly on time to the interested users for taking decisions. The good use of IT has a significant influence on AIS. Today, almost all organizations are using computers in their daily businesses. The following hypothesis has been developed to test the degree of influence of good use of information technology as an influencing factor of the efficiency of AIS of the selected companies:

Ho_{7.12}: There is no significant difference of opinions among the respondents regarding the good use of information technology as an influencing factor of the efficiency of AIS of the selected companies.

Table # 7.12

Table showing the opinions of the respondents regarding the good use of information technology as an influencing factor of the efficiency of AIS of the selected companies

	Respondent Groups								χ^2	Sig.
	CA		CMA		Acad.		Total		4.623	0.593
Types of Opinions	No.	%	No.	%	No.	%	No.	%		
Greatly	40	66.66	39	78.00	18	60.00	97	69.29		
Moderately	18	30.00	10	20.00	11	36.67	39	27.86		
Slightly	01	1.67	01	2.00	01	3.33	03	2.14		
Neutral	01	1.67	00	00	00	00	01	0.71		
Not	00	00	00	00	00	00	00	00		
Total	60	100	50	100	30	100	140	100		

(Source: Opinion Survey)

Table # 7.12 shows the opinions of the respondents regarding the good use of information technology as an influencing factor of the efficiency of AIS of the selected companies and it is evident that 69.29% of the respondents think that good

use of information technology greatly influences the efficiency of AIS, 27.86% of the respondents opine that it moderately influences, 2.14% of the respondents state that it slightly influences, 0.71% of the respondents are neutral and none of the respondents opine that it does not influence. Majority of the respondents are of the opinions that the good use of information technology greatly influences the efficiency of AIS of the selected companies. In order to see whether there is any significant difference of opinions among the respondents regarding the good use of information technology as an influencing factor of the efficiency of AIS of the selected companies, researcher has conducted χ^2 test. It is found that the value of χ^2 is 4.623 which is significant at 0.593 levels. So, the null hypothesis is accepted which means that there is no significant difference of opinions among the respondents regarding the good use of information technology as an influencing factor of the efficiency of AIS of the selected companies. From the previous discussion it is observed that the good use of information technology influences the efficiency of AIS. In order to find out the difference between groups and within groups researcher has conducted ANOVA test and the results are given in the following Table:

Table # 7.12.A

Table showing the results of ANOVA test regarding the good use of information technology as an influencing factor of the efficiency of AIS of the selected companies

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.873	2	0.436	1.401	0.250
Within Groups	42.670	137	0.311		
Total	43.543	139			

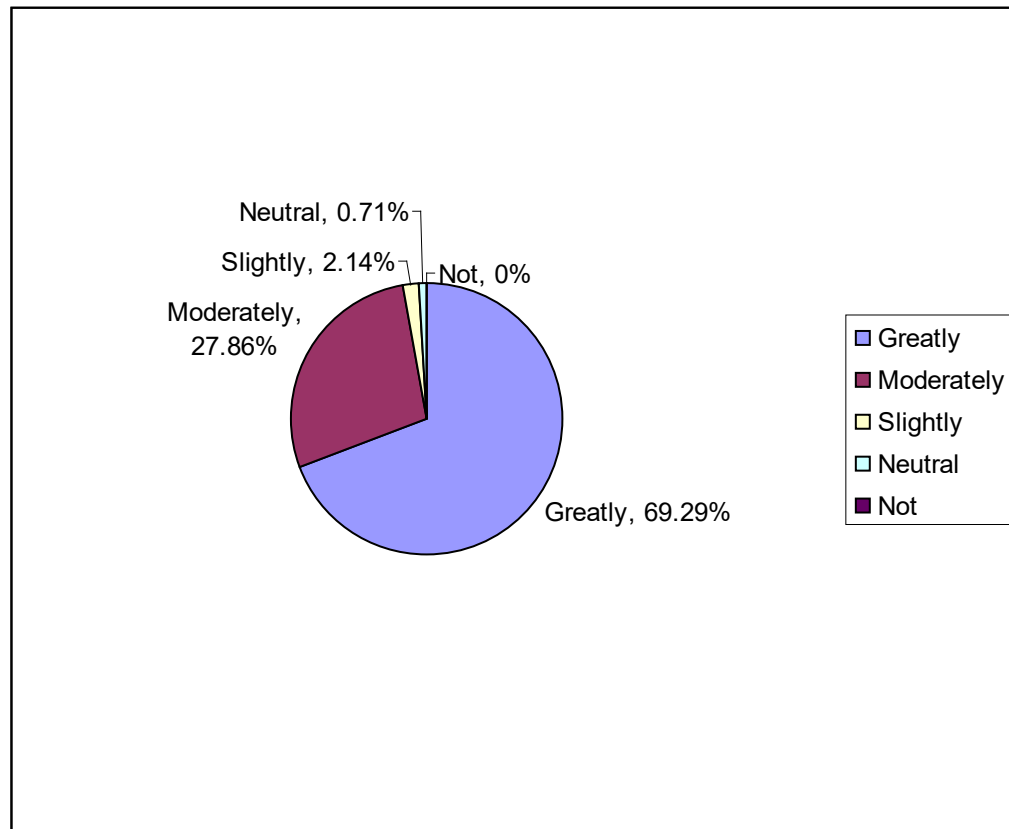
(Source: Opinion Survey)

From the above Table it is found that there is no significant difference of opinions on the good uses of information technology as an influencing factor of the efficiency of AIS of selected companies among the different respondents groups. The following Pie-chart clearly presents the opinions of the respondents regarding

the good use of information technology as an influencing factor of the efficiency of AIS of the selected companies.

Pie-chart # 7.12

Presentation through Pie-chart of the opinions of the respondents regarding the good use of information technology as an influencing factor of the efficiency of AIS of the selected companies



(Source: Opinion Survey)

The above Pie-chart shows the opinions of the respondents regarding the good use of information technology as an influencing factor of the efficiency of AIS of the selected companies as 69.29% greatly, 27.86% moderately, 2.14% slightly and 0.71% neutral. From the above Pie-chart it is evident that majority of the respondents think that the good use of information technology greatly influences the efficiency of AIS of the selected companies.

7.14 Test of Reliability

The reliability test is used to find out the reliability of the results of the opinions of the respondents regarding the influencing factors of the efficiency of AIS of the selected companies. The Chronbach Alpha test has been used to test reliability and the results are given below:

Table # 7.13

Table showing the Cronbach Alpha test results of the opinions of the respondents regarding the influencing factors of the efficiency of AIS of the selected companies

Mean	Variance	Std. Dev.	Alpha Value
52.6571	67.4643	8.2137	0.9729

(Source: Opinion Survey)

For the purpose of testing reliability of results researcher has conducted the Cronbach Alpha test. The result shows that the value of Alpha is above 0.7. So, it is evident that the reliability is ensured. Researcher has also conducted another test called Split-half reliability test and the results are given in the following Table:

Table # 7.14

Table showing the Split-half test results of the opinions of the respondents regarding the influencing factors of efficiency of AIS of the selected companies

Mean	Variance	Std. Dev.	Alpha Value
25.2643	25.2318	5.0231	0.9614
27.3929	10.6431	3.2624	0.9430

(Source: Opinion Survey)

From Table 7.14 it is found that the Split-half reliability coefficient of the first half is 0.9614 and that of second half is 0.9430 in case of influencing factors of the efficiency of AIS of the selected companies. Since the two values are almost same. So, it is evident that the results regarding the opinions of the respondents are reliable.

7.15 Major Observations

- ❖ 57.14% of the respondents opine that the size of the company greatly influences the efficiency of AIS and the null hypothesis is accepted which indicate that there is no significant difference of opinions among the respondents regarding the size of the company as an influencing factor of the efficiency of AIS of the selected companies
- ❖ 36.43% of the respondents think that the age of the company moderately influences the efficiency of AIS and the null hypothesis is accepted which means that there is no significant difference of opinions among the respondents regarding the age of the company as an affecting factor of the efficiency of AIS of the selected companies.
- ❖ 44.29% of the respondents hold the view that the earning of the company greatly impacts the efficiency of AIS and the null hypothesis is accepted which indicate that there is no significant difference of opinions among the respondents regarding the earning of the company as an influencing factor of the efficiency of AIS of the selected companies.
- ❖ 78.57% of the respondents reveal that the availability of trained accountant greatly influences the efficiency of AIS and the null hypothesis is accepted which means that there is no significant difference of opinions among the respondents regarding the availability of trained accountant as an influencing factor of the efficiency of AIS of the selected companies.
- ❖ 80.00% of the respondents opine that the internal control system greatly impacts the efficiency of AIS and the null hypothesis is accepted which indicate that there is no significant difference of opinions among the respondents regarding the internal control system as an influencing factor of the efficiency of AIS of the selected companies.
- ❖ 52.86% of the respondents reveal that the internal audit greatly influences the efficiency of the AIS and the null hypothesis is accepted which indicate that there is no significant difference of opinion among the respondents regarding

the internal audit as an influencing factor of the efficiency of AIS of the selected companies.

- ❖ 47.14% of the respondents opine that the internal check greatly influences the efficiency of AIS and the null hypothesis is accepted which indicate that there is no significant difference of opinions among the respondents regarding the internal check as an influencing factor of the efficiency of AIS of the selected companies.
- ❖ 72.86% of the respondents think that the attitude of management greatly influences the efficiency of AIS and the null hypothesis is accepted which indicate that there is no significant difference of opinions among the respondents regarding the attitude of management as an influencing factor of the efficiency of AIS of the selected companies.
- ❖ 51.43% of the respondents opine that the organizational structure greatly influences the efficiency of AIS and the null hypothesis is accepted which indicate that there is no significant difference of opinions among the respondents regarding the organizational structure as an influencing factor of the efficiency of AIS of the selected companies.
- ❖ 45.72% of the respondents reveal that the resource of the company greatly impacts the efficiency of AIS and the null hypothesis is accepted which means that there is no significant difference of opinions among the respondents regarding the resources of the company as an influencing factor of the efficiency of AIS of the selected companies.
- ❖ 42.14% of the respondents think that the rank of responsible executive moderately influences the efficiency of AIS and the null hypothesis is rejected which indicate that there is significant difference of opinions among the respondents regarding the rank of responsible executive as an influencing factor of the efficiency of AIS of the selected companies.
- ❖ 69.29% of the respondents reveal that the good use of information technology greatly influences the efficiency of AIS and the null hypothesis is

accepted which indicate that there is no significant difference of opinions among the respondents regarding the good use of information technology as an influencing factor of the efficiency of AIS of the selected companies.

7.16 Conclusion

Every company has to work within a particular environment and the AIS is strongly influenced by its environment. The efficiency of AIS is influenced by some factors and all these factors determine the characteristics of the AIS. From the aforesaid discussion it is apparent that the majority of the respondents opine that the size of the company, earning of the company, availability of trained accountant, internal control system, internal audit, internal check, attitude of management, organizational structure, resource of the company and good use of information technology greatly influences the efficiency of AIS and the null hypotheses are accepted which means that there is no significant difference of opinions among the respondents regarding these various influencing factors of the efficiency of AIS of the selected companies. It is also evident that majority of the respondents reveal that the age of the company moderately influence the efficiency of AIS and the null hypothesis is accepted which indicate that there is no significant difference of opinions among the respondents regarding the age of the company as an influencing factors of the efficiency of AIS of the selected companies. In addition, majority of the respondents think that the rank of responsible executive moderately influences the efficiency of AIS and the null hypothesis is rejected which means that there is significant difference of opinions among the respondents regarding the rank of responsible executive as an influencing factor of the efficiency of AIS of the selected companies. AIS produces information and different factors influence its design, development, planning and implementation.

CHAPTER EIGHT

Qualitative Characteristics of Accounting Information

8.1 Introduction

The accounting information is useful to all users to take decisions. Accounting information produced by AIS through preparation of the financial statements is very significant to the interested users and the users take decision with the help of quality information. The main objective of AIS is to produce relevant and reliable information to the interested stakeholders in taking effective decisions. Among the different qualities, relevance and reliability are the two primary or initial qualities that make accounting information useful for decision-making purposes. The AIS serves the interested parties by providing quality accounting information in making business and economic decisions. The qualitative characteristics of accounting information are very vital to take decision which is generated by AIS showed in the annual report and the qualitative characteristics of accounting information include relevance, reliability, usefulness, understandability, comparability and consistency. As it is very important, every company should ensure the qualitative characteristics of accounting information. Accounting information is useful and required greatly to meet the needs of decision maker. The characteristics can be viewed as a hierarchy of qualities as some of them are of such importance that they help us to distinguish better information. This chapter shows the qualitative characteristics of accounting information produced by AIS of the selected companies. The researcher has made an opinion survey of the respondents regarding the qualitative characteristics of accounting information produced by AIS of the selected companies, null hypotheses have been developed and χ^2 test and ANOVA tests are used to justify these null hypotheses.

8.2 Relevance

Relevance is viewed with the utmost importance and it is at the top of the hierarchy of qualities. Relevance indicates the potentiality inherent in information that can influence decision outcomes. Relevant information must be supplied to the different decision makers for taking sound decisions. Information has the quality of relevance when it influences the economic decisions of users by helping them evaluate past, present or future events of confirming, or correcting their past evaluations (Patwary, 2005). Relevance is one of the most qualitative important characteristics of accounting information generated by AIS through preparing the financial statements. It has the capacity of making a difference in a decision. It helps to form predictions or to confirm or correct prior expectations (SFAC-2, 1980). Relevant information helps decision makers make predications about future; it has “Predictive value”. Relevant information also helps decision makers confirm or correct prior expectations which means it has “Feedback value”. In addition to this, the quality of “Timeliness” makes the information more relevant. To sum up, relevant financial statements are timely, have a predictive value and are able to provide feedback from past situations. Relevance can be measured using three aspects of this quality and these are given below:

8.2.1 Predictive value

External decision makers can be helped greatly by the accounting information which is generated by AIS shown in the annual report that increases their ability to make predictions about the outcome of future events. The predictive value minimizes uncertainty and insecurity regarding investment made by the interested users. Accounting information is essential for various user groups like present and potential investor, creditors, employees to government, various regulatory agencies, researchers and even mass people. So, an accounting information should have the quality which can help foresee the future of the business enterprise. Thus, predictive value of information makes it useful for predictions regarding the business enterprise and its different works especially which are related with future. The

predictive value of information helps the users to have a clear understanding of the ability of the enterprise and gives the users the insight to take advantage when the opportunity comes (Siddiqui and Chowdhury, 2003).

8.2.2 Timeliness

Timeliness means the information must be available to a decision maker before it loses its capacity to influence decisions (SFAC-2, 1980). Actually information that is not available when it is needed or becomes available only long after it has lost value for future actions is useless. A report should be issued in a timely manner, in order to allow the manager to take effective action. Accounting information generated by AIS is solely used by interested users to take decisions. If it loses its capacity to influence decisions, it is nothing but an outworn thing to the various users. It is true that timeliness alone does not make information relevant but the absence of it can render information irrelevant. In order to be of maximum use the date of publication of financial reports should be as soon as possible after the period or event to which they relate. Modern world is the world of information and data. The persons having relevant information can keep pace with time that is the current world. If information needs to keep pace with time, it should have the quality of timeliness. Not only data need to be processed accurately but also they are to be processed in a timely manner. The emphasis on timeliness implies that data are also to be processed efficiently. In addition, it reminds us that errors in data are to be detected as early as possible and to be corrected fully (Wilkinson, 1986). Hence, it teaches us error analysis at the right time for compact, updated accounting information.

8.2.3 Feedback Value

The quality of feedback value of information that enables users to confirm or correct prior expectations (SFAC-2, 1980). Accounting information is helpful to decision makers in confirming past predictions or in making updates, necessary adjustments or correction to predictions currently outstanding. It confirms or corrects prior expectations. Feedback value is very important quality of accounting

information because it helps us to know the reality before taking any decision (Siddiqui and Chowdhury, 2003). As human being we have expectations that are very high and we like to live in a world of dream. For this reason, if the desired thing is not to the level of our expectation, we just fall down in a second. In every transaction, the users have some expectations about what they are going to get. If users have any wrong impression about a business, or transaction, feedback value can correct it initially before they fall into problems or losses. Feedback value ensures that the users understand the information provided by AIS shown in the different financial statements in taking decision. Feedback value works as a guide that really increases the relevance of accounting information presented in different financial statements. The following hypothesis has been developed to test the degree of relevance of accounting information produced by AIS of the selected companies.

Ho_{8.1}: There is no significant difference of opinions among the respondents regarding the relevance of accounting information produced by AIS of the selected companies.

Table # 8.1

Table showing the opinions of the respondents regarding the relevance of accounting information produced by AIS of the selected companies

	Respondent Groups										χ^2	Sig.
	CA		CMA		Acad.		SC		Total		2.139	0.907
Types of Opinions	No.	%	No.	%	No.	%	No.	%	No.	%		
Greatly Relevant	22	36.67	21	42.00	08	26.67	20	36.36	71	36.41		
Moderately Relevant	33	55.00	24	48.00	19	63.33	30	54.55	106	54.36		
Slightly Relevant	05	8.33	05	10.00	03	10.00	05	9.09	18	9.23		
Neutral	00	00	00	00	00	00	00	00	00	00		
Not Relevant	00	00	00	00	00	00	00	00	00	00		
Total	60	100	50	100	30	100	55	100	195	100		

(Source: Opinion Survey)

Table # 8.1 shows the opinions of the respondents regarding the relevance of accounting information produced by AIS of the selected companies and it is evident

that 36.41% of the respondents opine that the accounting information is greatly relevant, 54.36% of the respondents think that the accounting information is moderately relevant, 9.23% of the respondents state that the accounting information is slightly relevant, none of the respondents is neutral and none of the respondents opine that the accounting information is irrelevant. Majority of the respondents opine that the accounting information is moderately relevant. In order to see whether there is any significant difference of opinions among the respondents regarding the relevance of accounting information produced by AIS of the selected companies, the researcher has conducted χ^2 test. It is found that the value of χ^2 is 2.139 which is significant at 0.907 levels. So, the null hypothesis is accepted which means that there is no significant difference of opinions among the respondents regarding the relevance of accounting information produced by AIS of the selected companies. From the foregoing discussion it is found that the accounting information produced by AIS and disseminated in annual report is relevant. In order to find out the difference between groups and within groups researcher has conducted ANOVA test and the results are given in the following Table:

Table # 8.1.A

Table showing the results of ANOVA test regarding the relevance of accounting information produced by AIS of the selected companies

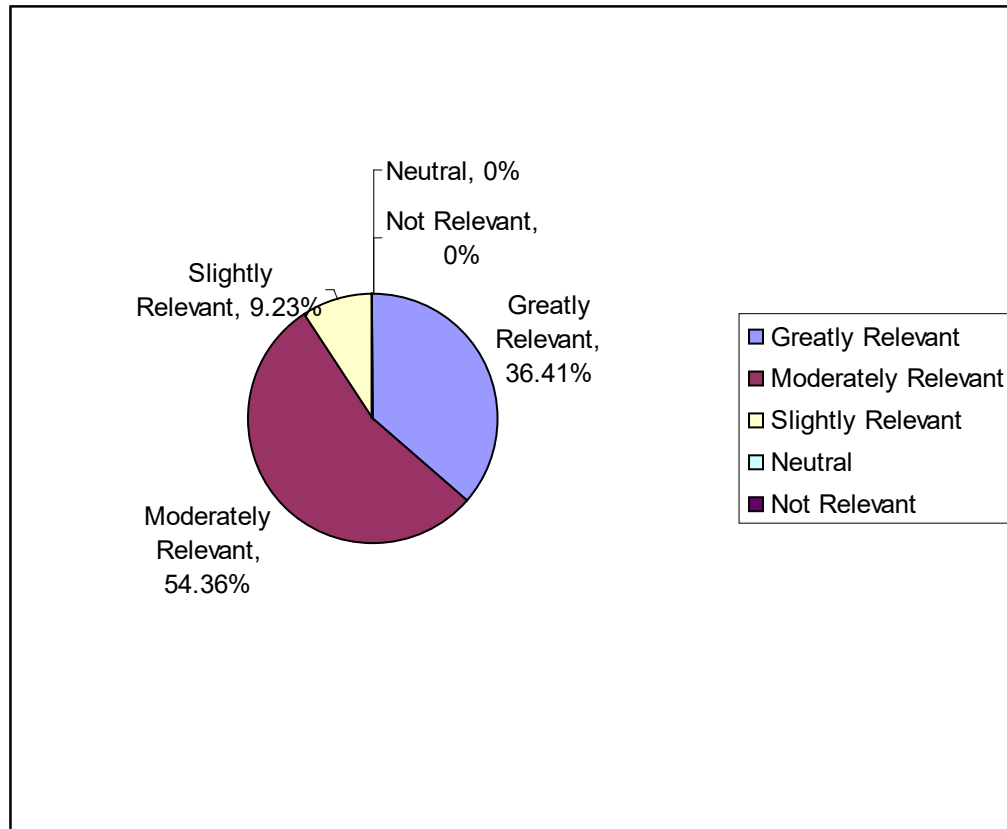
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.456	3	0.152	0.391	0.759
Within Groups	74.139	191	0.388		
Total	74.595	194			

(Source: Opinion Survey)

From the above Table it is evident that there is no significant difference of opinions on the relevance of accounting information produced by AIS of selected companies among the different respondents groups. The following Pie-chart clearly presents the opinions of the respondents regarding the relevance of accounting information produced by AIS of the selected companies.

Pie-chart # 8.1

Presentation through Pie-chart of the opinions of the respondents regarding the relevance of accounting information produced by AIS of the selected companies



(Source: Opinion Survey)

The above Pie-chart presents the opinions of the respondents regarding the relevance of accounting information produced by AIS of the selected companies as 36.41% greatly, 54.36% moderately and 9.23% slightly. From the above Pie-chart it is evident that the majority of the respondents are of the opinions that the accounting information produced by AIS of the selected companies is moderately relevant.

8.3 Reliability

Reliability is one of the important qualitative characteristics of accounting information produced by AIS shown in the annual reports in the financial statements section. The report, of course, meets a high standard of accuracy (Wilkinson, 1986). If information is relevant but so unreliable in nature that its recognition may be potentially misleading. Accounting information must be reliable that is free from material error and bias so that the interested users can get accurate picture from the financial reports about the company's performance. If the financial statements lack reliability or accuracy, the lenders and investors may find loophole in the financial statements and can find reason to question the business owner and its management's ability. In financial statements, any kind of avoidance or escape is seen as a kind of dishonesty and it is against the principle of reliability. Preparing the different financial statements accurately may not be possible but users must be able to determine how much confidence to be placed in a particular report. That means, information should be free from error (Patwary, 2005). In this respect the verification of reports by independent accountants that is the auditors should increase confidence in reports. Reliability must meet three aspects and these are given below:

8.3.1 Verifiability

Verifiability is Accounting information produced by AIS should be verifiable by others. Verifiability is a quality of representational faithfulness. It excludes the possibility of biased measurement. The quality of verifiability gives the assurance that the information presented in the financial statements pertains to the events and transactions that is true and useful. Verifiability is an important attribute of accounting information for obtaining similar kinds of results that makes the information authentic and unified. So, obviously verifiability is a positive quality of accounting information that makes it really useful (Most, 1982).

8.3.2 Representational Faithfulness

Representational faithfulness is correspondence or agreement between a measure of description and the phenomenon it purports to represent (SFAC–2, 1980). Representational faithfulness is another important qualitative characteristic of accounting information of the selected companies. Representational faithfulness is necessary for preparing and presenting the different financial statements at the end of every accounting period. The different decisions makers take decision on the basis of accounting information which is available in the financial statements. If the information is to be represented faithfully in the different financial statements, the interested users get the reliable and relevant information which help to take effective decision. So, according to the quality of accounting information namely representational faithfulness, the accounting information produced by AIS should be narrated in such a way that it cannot puzzle a user rather it should be easy and straight forward in its presentation so that it can provide the desired faithfulness to the interested users.

8.3.3 Neutrality

Neutrality is another important qualitative characteristic of accounting information produced by AIS at the time of preparing the different financial statements shown in the annual report of the selected companies. The accounting information is directed toward the common users rather than the particular needs of specific users (Porwal, 2001). Information must be neutral that is free from all kinds of partiality, biasness and prejudices. If a financial statement, by its selection or presentation of information leads the user to take a decision or make a judgment which is predetermined, that piece of information cannot be neutral rather it is a complex web where the users are caught according to the intention of the owner. The users very easily become a victim of apparently neutral information. Neutral information does not influence the reader of financial statements; rather it guides them to take a good decision. Accounting information should not favour one group of users or preparers over another group. It should be free from all kinds of misleading

prejudicial remarks. Both in making and in using accounting standards, the major concern should be the relevance and reliability of information, not how that information affects one group or another (Smith, Keith and Stephens, 1983). Accordingly, the following hypothesis has been developed to test the degree of reliability of accounting information produced by AIS of the selected companies.

Ho_{8.2}: There is no significant difference of opinions among the respondents regarding the reliability of accounting information produced by AIS of the selected companies.

Table # 8.2

Table showing the opinions of the respondents regarding the reliability of accounting information produced by AIS of the selected companies

	Respondent Groups										χ^2	Sig.
	CA		CMA		Acad.		SC		Total		6.281	0.901
Types of Opinions	No.	%	No.	%	No.	%	No.	%	No.	%		
Greatly Reliable	18	30.00	13	26.00	09	30.00	14	25.45	54	27.69		
Moderately Reliable	35	58.33	27	54.00	15	50.00	31	56.36	108	55.39		
Slightly Reliable	04	6.67	07	14.00	05	16.67	05	9.10	21	10.77		
Neutral	03	5.00	03	6.00	01	3.33	04	7.27	11	5.64		
Not Reliable	00	00	00	00	00	00	01	1.82	01	0.51		
Total	60	100	50	100	30	100	55	100	195	100		

(Source: Opinion Survey)

Table # 8.2 shows the opinions of the respondents regarding the reliability of accounting information produced by AIS of the selected companies and it is observed that 27.69% of the respondents think that the accounting information is greatly reliable, 55.39% of the respondents opine that the accounting information is moderately reliable, 10.77% of the respondents state that the accounting information is slightly reliable, 5.64% of the respondents are neutral and 0.51% of the respondents opine that the accounting information is not reliable. Majority of the respondents think that the accounting information is moderately reliable. In order to see whether there is any significant difference of opinions among the respondents regarding the reliability of accounting information produced by AIS of

the selected companies, researcher has conducted χ^2 test. It is found that the value of χ^2 is 6.281 which is significant at 0.901 levels. So, the null hypothesis is accepted which means that there is no significant difference of opinions among the respondents regarding the reliability of accounting information produced by AIS of the selected companies. From the previous discussion it is evident that the accounting information produced by AIS and disseminated in annual report is reliable. In order to find out the difference between groups and within groups researcher has conducted ANOVA test and the results are given in the following Table:

Table # 8.2.A

Table showing the results of ANOVA test regarding the reliability of accounting information produced by AIS of the selected companies

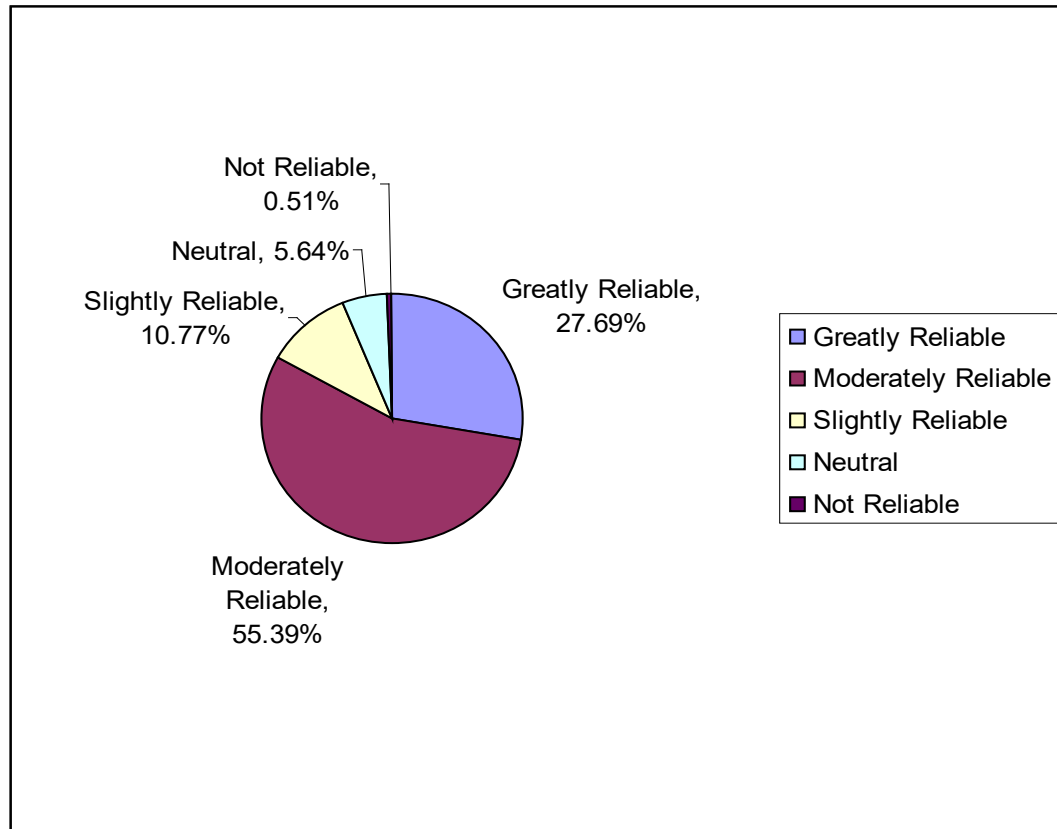
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.945	3	0.315	0.475	0.700
Within Groups	126.727	191	0.663		
Total	127.672	194			

(Source: Opinion Survey)

From the above Table it is found that there is no significant difference of opinions on the reliability of accounting information produced by AIS of selected companies among the different respondents groups. The following Pie-chart shows the opinions of the respondents regarding the reliability of accounting information produced by AIS of the selected companies.

Pie-chart # 8.2

Presentation through Pie-chart of the opinions of the respondents regarding the reliability of accounting information produced by AIS of the selected companies



(Source: Opinion Survey)

The Pie-chart shows the opinions of the respondents regarding the relevance of accounting information produced by AIS of the selected companies as 27.69% greatly, 55.39% moderately, 10.77% slightly, 5.64% neutral and 0.51 not reliable. From the above Pie-chart it is evident that the majority of the respondents think that the accounting information produced by AIS of the selected companies is moderately reliable.

8.4 Usefulness

Usefulness is the most important qualitative characteristics of any reported accounting information and it ensures the supply of the most useful information for the decision-making process of the interested users. Interested users would like to use accounting information to fulfill the various purposes but it is also true that

what is useful to one user may be obsolete or waste to another user (Smith, Keith and Stephens, 1983). For information to be useful there must be a connection between these users and the decisions they make (Kieso, Weygandt and Warfield, 2004). So, the qualitative characteristics of usefulness is a very vital attribute of accounting information produced by AIS and disclosed in the annual report through different financial statements of the selected companies for the interested users to take effective decision. The following hypothesis has been developed to test the degree of usefulness for decision making of accounting information produced by AIS of the selected companies.

Ho_{8.3}: There is no significant difference of opinions among the respondents regarding the usefulness of accounting information produced by AIS of the selected companies.

Table # 8.3

Table showing the opinions of the respondents regarding the usefulness of accounting information produced by AIS of the selected companies

	Respondent Groups										χ^2	Sig.
	CA		CMA		Acad.		SC		Total		8.534	0.481
Types of Opinions	No.	%	No.	%	No.	%	No.	%	No.	%		
Greatly Useful	20	33.33	21	42.00	10	33.34	26	47.27	77	39.49		
Moderately Useful	31	51.67	22	44.00	13	43.33	16	29.09	82	42.05		
Slightly Useful	08	13.33	07	14.00	06	20.00	11	20.00	32	16.41		
Neutral	01	1.67	00	00	01	3.33	02	3.64	04	2.05		
Not Useful	00	00	00	00	00	00	00	00	00	00		
Total	60	100	50	100	30	100	55	100	195	100		

(Source: Opinion Survey)

Table # 8.3 shows the opinions of the respondents regarding the usefulness of accounting information produced by AIS of the selected companies and it is found that 39.49% of the respondents think that the accounting information produced by AIS of the selected companies is greatly useful, 42.05% of the respondents opine that the accounting information is moderately useful, 16.41% of the respondents state that the accounting information are slightly useful, 2.05% of the respondents

are neutral and none of the respondents opine that the accounting information is not useful. Majority of the respondents think that the accounting information produced by AIS of the selected companies is moderately useful. In order to see whether there is any significant difference of opinions among the respondents regarding the usefulness of accounting information produced by AIS of the selected companies, researcher has conducted χ^2 test. It is found that the value of χ^2 is 8.534 which is significant at 0.481 levels. So, the null hypothesis is accepted which means that there is no significant difference of opinions among the respondents regarding the usefulness of accounting information produced by AIS of the selected companies. From the discussion it is documented that the accounting information produced by AIS and disseminated in annual report is useful for decision making. In order to find out the difference between groups and within groups researcher has conducted ANOVA test and the results are given in following Table:

Table # 8.3.A

Table showing the results of ANOVA test regarding the usefulness of accounting information produced by AIS of the selected companies

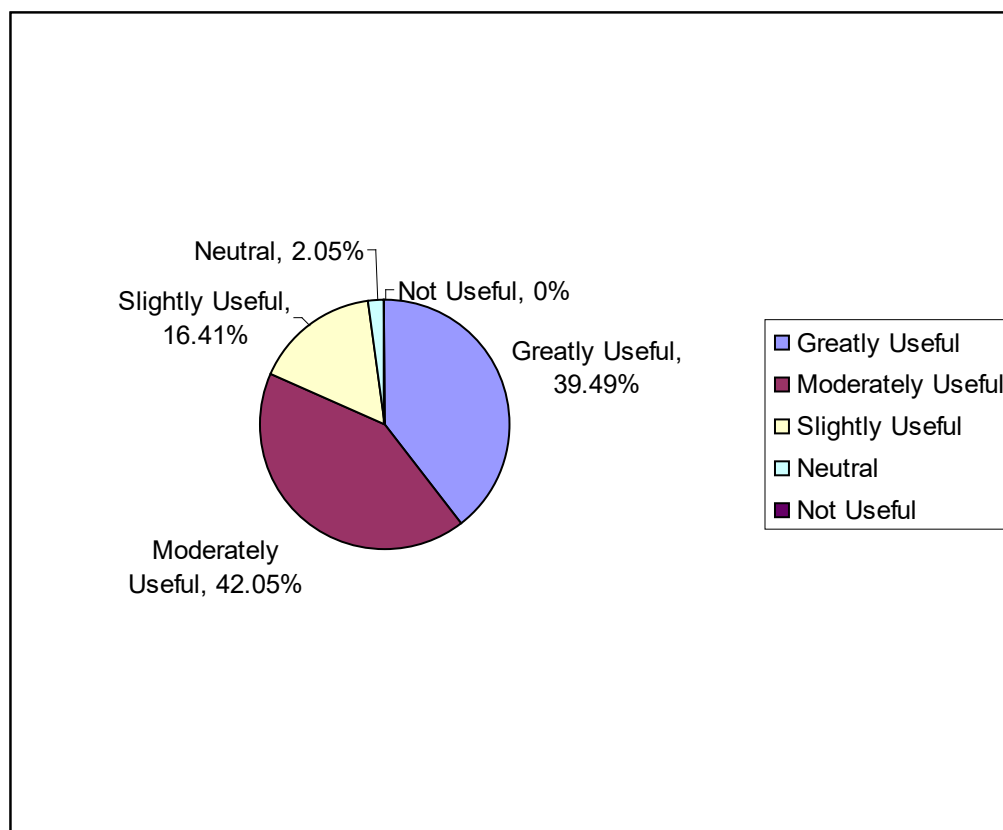
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.899	3	0.300	0.489	0.690
Within Groups	117.080	191	0.613		
Total	117.979	194			

(Source: Opinion Survey)

From the above Table it is evident that there is no significant difference of opinions on the usefulness of accounting information produced by AIS of the selected companies among the different respondents groups. The following Pie-chart clearly shows the opinions of the respondents regarding the usefulness of accounting information produced by AIS of the selected companies.

Pie-chart # 8.3

Presentation through Pie-chart of the opinions of the respondents regarding the usefulness of accounting information produced by AIS of the selected companies



(Source: Opinion Survey)

The above Pie-chart shows the opinions of the respondents regarding the usefulness of accounting information produced by AIS of the selected companies as 39.49% greatly, 42.05% moderately, 16.41% slightly and 2.05% neutral. From the above Pie-chart it is evident that the majority of the respondents think that the accounting information produced by AIS of the selected companies is moderately useful.

8.5 Understandability

An essential qualitative characteristic of accounting information provided through financial statements is understandability by the interested users. For this purpose, the accounting information generated by AIS through preparing the different financial statements must be understandable to the various interested users so that they can take sound decisions according to their needs. Understandability is an

important qualitative characteristic of accounting information of any business organization. Understandability is the quality of information that permits reasonably informed users to perceive its significance (Kieso, Weygandt and Warfield, 2004). Understandability means the generated accounting information should be easily comprehensible to the interested users and it ensures that the accounting information is presented in the financial statements in a simple manner so that the interested users can understand it easily. The report should provide information in a clear and it should be in a readily usable format (Wilkinson, 1986). The provider of accounting information should prepare financial statements by aggregating, classifying, characterizing, and presenting in a clear way so that it is easily understandable to the interested users for achieving goals through taking effective decisions. In this respect, words within the financial statements should be as simple as possible and technical accounting jargon should be avoided as far as possible. The following hypothesis has been developed to test the degree of understandability of accounting information produced by AIS of the selected companies.

Ho_{8.4}: There is no significant difference of opinions among the respondents regarding the understandability of accounting information produced by AIS of the selected companies.

Table # 8.4

Table showing the opinions of the respondents regarding the understandability of accounting information produced by AIS of the selected companies

	Respondent Groups										χ^2	Sig.
	CA		CMA		Acad.		SC		Total		11.174	0.264
Types of Opinions	No.	%	No.	%	No.	%	No.	%	No.	%		
Greatly Understandable	24	40.00	21	42.00	10	33.33	19	34.55	74	37.95		
Moderately Understandable	29	48.33	22	44.00	17	56.67	30	54.55	98	50.25		
Slightly Understandable	07	11.67	07	14.00	03	10.00	03	5.45	20	10.26		
Neutral	00	00	00	00	00	00	03	5.45	03	1.54		
Not Understandable	00	00	00	00	00	00	00	00	00	00		
Total	60	100	50	100	30	100	55	100	195	100		

(Source: Opinion Survey)

Table # 8.4 shows the opinions of the respondents regarding the understandability of accounting information produced by AIS of the selected companies and it is

evident that 37.95% of the respondents think that the accounting information is greatly understandable, 50.25% of the respondents opine that the accounting information is moderately understandable, 10.26% of the respondents state that the accounting information is slightly understandable, 1.54% of the respondents are neutral and none of the respondents opine that the accounting information is not understandable. Majority of the respondents think that the accounting information produced by AIS of the selected companies is moderately understandable. In order to see whether there is any significant difference of opinions among the respondents regarding the understandability of accounting information produced by AIS of the selected companies, researcher has conducted χ^2 test. It is found that the value of χ^2 is 11.174 which is significant at 0.264 levels. So, the null hypothesis is accepted which means that there is no significant difference of opinions among the respondents regarding the understandability of accounting information produced by AIS of the selected companies. From the foregoing discussion it is found that the accounting information produced by AIS and disseminated in annual report is understandable. In order to find out the difference between groups and within groups researcher has conducted ANOVA test and the results are given in the following Table:

Table # 8.4.A

Table showing the results of ANOVA test regarding the understandability of accounting information produced by AIS of the selected companies

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.373	3	0.124	0.253	0.859
Within Groups	93.812	191	0.491		
Total	94.185	194			

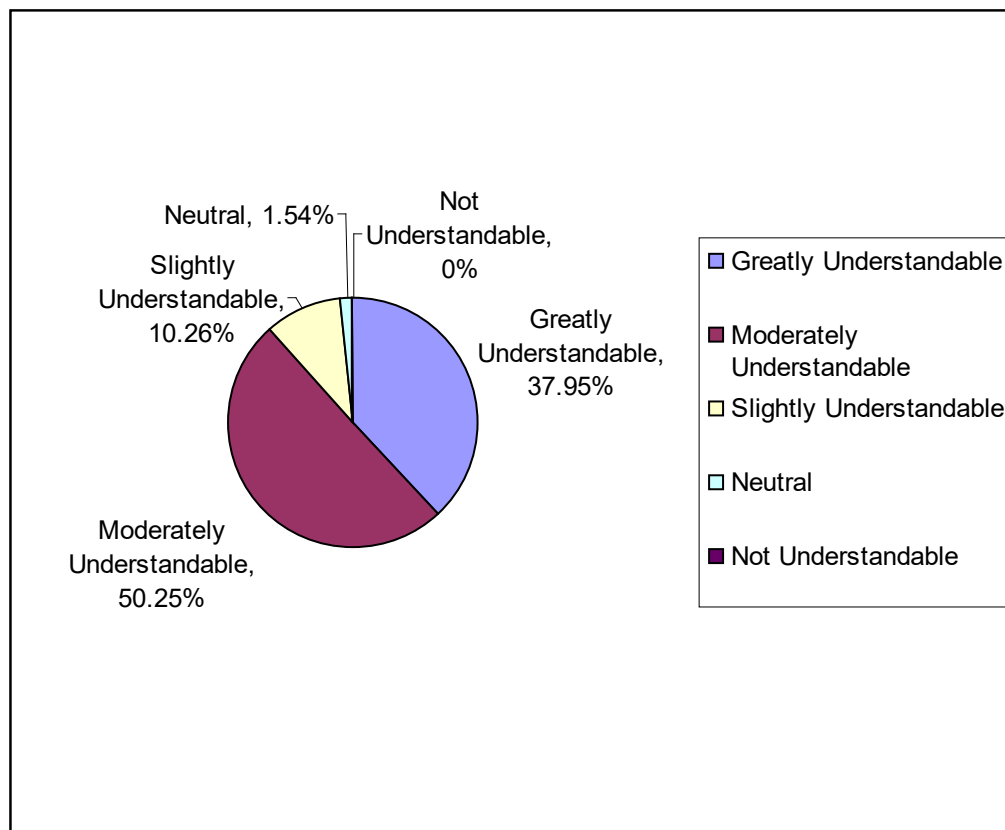
(Source: Opinion Survey)

From the above Table it is evident that there is no significant difference of opinions on the understandability of accounting information produced by AIS of selected companies among the different respondents groups. The following Pie-chart clearly

presents the opinions of the respondents regarding the understandability of accounting information produced by AIS of the selected companies.

Pie-chart # 8.4

Presentation through Pie-chart of the opinions of the respondents regarding the understandability of accounting information produced by AIS of the selected companies



(Source: Opinion Survey)

The Pie-chart shows the opinions of the respondents regarding the understandability of accounting information produced by AIS of the selected companies as 37.95% greatly, 50.25% moderately, 10.26% slightly and 1.54% neutral. From the above Pie-chart it is found that majority of the respondents think that the accounting information produced by AIS of the selected companies is moderately understandable.

8.6 Comparability

The quality of comparability posits that the information should be measured and reported in a similar manner for different enterprises. Comparability enables users to identify the real similarities and difference in economic phenomena (Kieso, Weygandt and Warfield, 2004). Comparability is one of the important qualitative characteristics of accounting information. The comparison of accounting information is possible only if the information is comparable. The comparison of the different financial statements prepared with the help of AIS of different companies is essential for the different users to take better decision about their own interest. The qualitative characteristic of comparability is important to the various users to know its compliance with accounting standards, what types of the accounting policies employed in the preparation of the different financial statements, any changes in those policies and accounting estimates and the effects of such changes of any organization at the end of every accounting period. Accounting information produced by AIS is more useful to the various users when it can be compared with other business enterprises (Patwary, 2005). The quality named comparability gives us a complete and total view of the financial reports which is used to evaluate the performance of any business organization. Comparability is only possible when two business enterprises apply the same accounting principle and accounting methods for recording and preparing the financial reports. Any kind of comparative study helps any business enterprise to analyze its financial activities and reports which help perform their business activities properly. It helps to find out the weakness of the business enterprise and ensures better reporting system that is helpful to produce the meaningful information to the interested users. So, comparability is very vital to ensure the better practice of AIS and preparation and presentation of financial statements of the selected companies. The following hypothesis has been developed to test the degree of comparability of accounting information produced by AIS of the selected companies.

Ho_{8.5}: There is no significant difference of opinions among the respondents regarding the comparability of accounting information produced by AIS of the selected companies.

Table # 8.5

Table showing the opinions of the respondents regarding the comparability of accounting information produced by AIS of the selected companies

	Respondent Groups										χ^2	Sig.
	CA		CMA		Acad.		SC		Total		10.827	0.288
Types of Opinions	No.	%	No.	%	No.	%	No.	%	No.	%		
Greatly Comparable	26	43.33	19	38.00	08	26.67	14	25.45	67	34.36		
Moderately Comparable	28	46.67	27	54.00	17	56.67	29	52.73	101	51.79		
Slightly Comparable	06	10.00	02	4.00	04	13.33	09	16.37	21	10.77		
Neutral	00	00	02	4.00	01	3.33	03	5.45	06	3.08		
Not Comparable	00	00	00	00	00	00	00	00	00	00		
Total	60	100	50	100	30	100	55	100	195	100		

(Source: Opinion Survey)

Table # 8.5 shows the opinions of the respondents regarding the comparability of accounting information produced by AIS of the selected companies and it is observed that 34.36% of the respondents opine that the accounting information is greatly comparable, 51.79% of the respondents think that the accounting information is moderately comparable, 10.77% of the respondents state that the accounting information is slightly comparable, 3.08% of the respondents are neutral and none of the respondents opine that the accounting information is not comparable. Majority of the respondents think that the accounting information produced by AIS of the selected companies is moderately comparable. In order to see whether there is any significant difference of opinions among the respondents regarding the comparability of accounting information produced by AIS of the selected companies, researcher has conducted χ^2 test. It is found that the value of χ^2 is 10.827 which is significant at 0.288 levels. So, the null hypothesis is accepted which means that there is no significant difference of opinions among the respondents regarding the comparability of accounting information produced by

AIS of the selected companies. From the previous discussion it is observed that the accounting information produced by AIS and disseminated in annual report is comparable. In order to find out the difference between groups and within groups researcher has conducted ANOVA test and the results are given in the following Table:

Table # 8.5.A

Table showing the results of ANOVA test regarding the comparability of accounting information produced by AIS of the selected companies

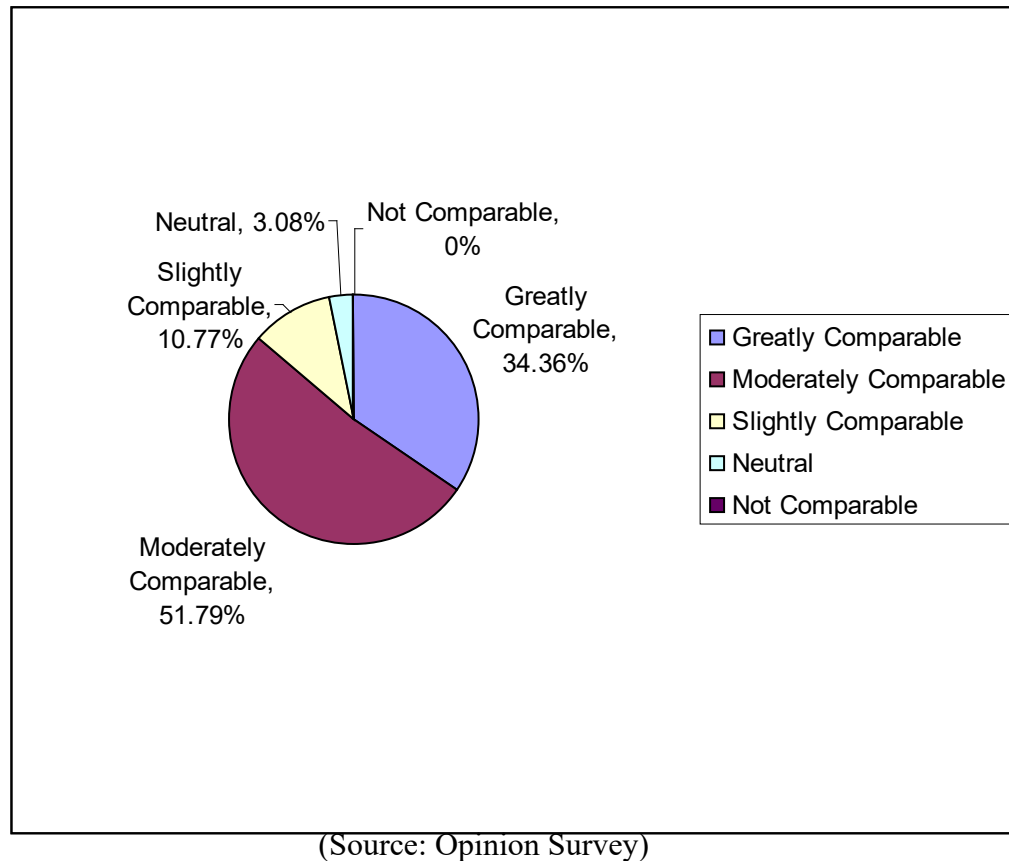
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.270	3	1.423	2.670	0.049
Within Groups	101.802	191	0.533		
Total	106.072	194			

(Source: Opinion Survey)

From the above Table it is evident that there is significant difference of opinions on the comparability of accounting information produced by AIS of selected companies among the different respondents groups. The following Pie-chart clearly shows the opinions of the respondents regarding the comparability of accounting information produced by AIS of the selected companies.

Pie-chart # 8.5

Presentation through Pie-chart of the opinions of the respondents regarding the comparability of accounting information produced by AIS of the selected companies



The Pie-chart shows the opinions of the respondents regarding the comparability of accounting information produced by AIS of the selected companies as 34.36% greatly, 51.79% moderately, 10.77% slightly and 3.08% neutral. From the above Pie-chart it is evident that the majority of the respondents think that the accounting information produced by AIS of the selected companies is moderately comparable.

8.7 Consistency

The qualitative characteristic of accounting information namely consistency is crucially important for any business organization for preparing and presenting the different financial statements. Consistency means that a company uses the same accounting principles and methods from year to year for providing accounting

information through preparing the different financial statements with the help of AIS for their interested users. When financial information has been reported on a consistent basis, the financial statements permit meaningful analysis of trends within a company. It is a kind of conformity from period to period with unchanging policies and procedures and it is very important for a company to prepare accurate historical records. A company can switch to a new method of accounting but should disclose the reasons and the effect of such change. Such disclosure makes users of the financial statements aware of the lack of consistency. In terms of business consistency, adherence to one standard or principle is good for progress (Weygandt, Kieso and Kimmel, 2005). So, it is very vital for generating meaningful information of the selected companies. The following hypothesis has been developed to test the degree of consistency of accounting information produced by AIS of the selected companies.

Ho_{8.6}: There is no significant difference of opinions among the respondents regarding the consistency of accounting information produced by AIS of the selected companies.

Table # 8.6

Table showing the opinions of the respondents regarding the consistency of accounting information produced by AIS of the selected companies

	Respondent Groups										χ^2	Sig.
	CA		CMA		Acad.		SC		Total		12.072	0.209
Types of Opinions	No.	%	No.	%	No.	%	No.	%	No.	%		
Greatly Consistent	22	36.67	21	42.00	15	50.00	12	21.82	70	35.90		
Moderately Consistent	30	50.00	27	54.00	12	40.00	36	65.46	105	53.85		
Slightly Consistent	05	8.33	02	4.00	01	3.33	04	7.27	12	6.15		
Neutral	03	5.00	00	00	02	6.67	03	5.45	08	4.10		
Not Consistent	00	00	00	00	00	00	00	00	00	00		
Total	60	100	50	100	30	100	55	100	195	100		

(Source: Opinion Survey)

Table # 8.6 shows the opinions of the respondents regarding the consistency of accounting information produced by AIS of the selected companies and it is found

that 35.90% of the respondents think that the accounting information is greatly consistent, 53.85% of the respondents state that the accounting information is moderately consistent, 6.15% of the respondents opine that the accounting information is slightly consistent, 4.10% of the respondents are neutral and none of the respondents opine that the accounting information is not consistent. Majority of the respondents think that the accounting information produced by AIS of the selected companies is moderately consistent. In order to see whether there is any significant difference of opinions among the respondents regarding the consistency of accounting information produced by AIS of the selected companies, researcher has conducted χ^2 test. It is found that the value of χ^2 is 12.072 which is significant at 0.209 levels. So, the null hypothesis is accepted which means that there is no significant difference of opinions among the respondents regarding the consistency of accounting information produced by AIS of the selected companies. From the foregoing discussion it is found that the accounting information produced by AIS and disseminated in annual report is consistent. In order to find out the difference between groups and within groups researcher has conducted ANOVA test and the results are given in the following Table:

Table # 8.6.A

Table showing the results of ANOVA test regarding the consistency of accounting information produced by AIS of the selected companies

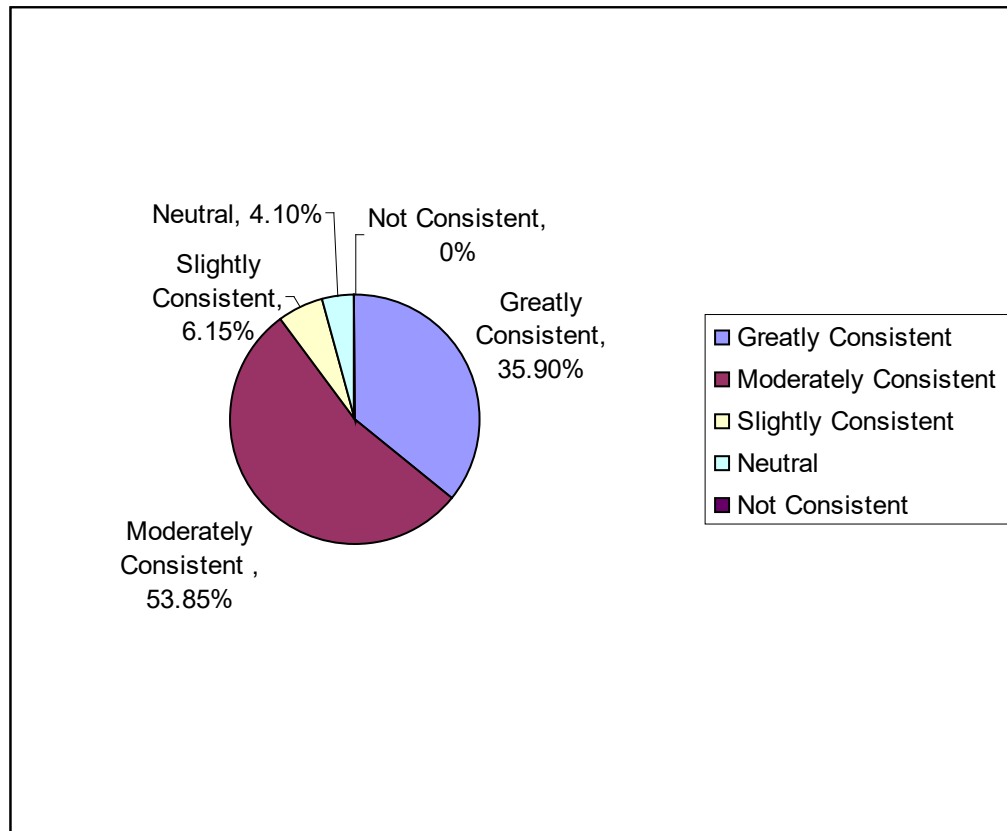
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.597	3	1.199	2.259	0.083
Within Groups	101.357	191	0.531		
Total	104.954	194			

(Source: Opinion Survey)

From the above Table it is evident that there is no significant difference of opinions on the consistency of accounting information produced by AIS of selected companies among the different respondents groups. The following Pie-chart clearly shows the opinions of the respondents regarding the consistency of accounting information produced by AIS of the selected companies.

Pie-chart # 8.6

Presentation through Pie-chart of the opinions of the respondents regarding the consistency of accounting information produced by Accounting Information Systems of the selected companies



(Source: Opinion Survey)

The Pie-chart shows the opinions of the respondents regarding the consistency of accounting information produced by AIS of the selected companies as 35.90% greatly, 53.85% moderately, 6.15% slightly and 4.10% neutral. From the above Pie-chart it is evident that the majority of the respondents think that the accounting information produced by AIS of the selected companies is moderately consistent.

8.8 Test of Reliability

The reliability test is used to find out the reliability of the results of the opinions of the respondents regarding the qualitative characteristics of accounting information produced by AIS of the selected companies. The Chronbach Alpha test has been used to test reliability and the results are given below:

Table # 8.7

Table showing the Cronbach Alpha test results of the opinions of the respondents regarding the qualitative characteristics of accounting information produced by AIS of the selected companies

Mean	Variance	Std. Dev.	Alpha Value
25.1385	16.9756	4.1201	0.9721

(Source: Opinion Survey)

For the purpose of testing reliability of results researcher has conducted the Cronbach Alpha test regarding the qualitative characteristics of accounting information produced by AIS of the selected companies. The result shows that the value of Alpha is above 0.7. So, it is evident that the reliability is ensured. Researcher has also conducted another test called Split-half reliability test and the results are given in the following Table:

Table # 8.8

Table showing the Split-half test results of the opinions of the respondents regarding the qualitative characteristics of accounting information produced by AIS of the selected companies

Mean	Variance	Std. Dev.	Alpha Value
12.5026	4.4059	2.990	0.9380
12.6359	4.2946	2.0723	0.9505

(Source: Opinion Survey)

From Table 8.8 it is found that the Split-half reliability coefficient of the first half is 0.9380 and that of second half is 0.9505 in case of qualitative characteristics of

accounting information produced by AIS of the selected companies. Since the two values are almost same. So, it is evident that the results regarding the opinions of the respondents are reliable.

8.9 Major Observations

- ❖ 54.36% of the respondents think that the accounting information produced by AIS of the selected companies is moderately relevant and the null hypothesis is accepted which indicates that there is no significant difference of opinions among the respondents regarding the relevance of accounting information produced by AIS of the selected companies.
- ❖ 55.39% of the respondents opine that the accounting information produced by AIS of the selected companies is moderately reliable and the null hypothesis is accepted which indicates that there is no significant difference of opinions among the respondents regarding the reliability of accounting information produced by AIS of the selected companies.
- ❖ 42.05% of the respondents reveal that the accounting information produced by AIS of the selected companies is moderately useful and the null hypothesis is accepted which indicates that there is no significant difference of opinion among the respondents regarding the usefulness of accounting information produced by AIS of the selected companies.
- ❖ 50.25% of the respondents think that the accounting information produced by AIS of the selected companies is moderately understandable and the null hypothesis is accepted which indicates that there is no significant difference of opinions among the respondents regarding the understandability of accounting information produced by AIS of the selected companies.
- ❖ 51.79% of the respondents think that the accounting information produced by AIS of the selected companies is moderately comparable and the null hypothesis is accepted which indicates that there is no significant difference

of opinions among the respondents regarding the comparability of accounting information produced by AIS of the selected companies.

- ❖ 53.85% of the respondents opine that the accounting information produced by AIS of the selected companies is moderately consistent and the null hypothesis is accepted which indicates that there is no significant difference of opinions among the respondents regarding the consistency of accounting information produced by AIS of the selected companies.

8.10 Conclusion

Providing and assuring qualities of accounting information are the primary objective of AIS. AIS discloses accounting information through preparing the different financial statements to the interested users who utilize this information in taking effective decision making process. The general purpose of financial statements is to provide accounting information to present and potential investors, creditors and others to assist them in making correct decisions. Every business organization uses accounting information to evaluate the financial position and conducts their business organization properly. Qualitative characteristics of accounting information include reliability, relevance, understandability, usefulness, comparability and consistency that ensure the meaningful financial statements. From the foregoing discussion it is evident that the majority of the respondents think that the accounting information produced by AIS of the selected companies is moderately relevant, reliable, useful, understandable, comparable and consistent and the null hypotheses are accepted which indicate that there is no significant difference of opinions among the respondents regarding the various qualitative characteristics of accounting information produced by AIS of the selected companies. The accounting information produced by AIS of the selected companies is used to take necessary decisions for achieving their specific goals of the interested users.

CHAPTER NINE

Conclusion, Suggestions and Recommendations for Further Research

9.1 Conclusion

The present study reveals the overall AIS of the selected companies. On the basis of the foregoing discussion it is apparent that the AIS of the selected companies is fully computerized and all transactions are processed by the computer using the accounting software. The use of computerized AIS gives opportunities for the selected companies to perform the accounting functions more efficiently because the use of computerized AIS breeds significant time and cost savings. The existing AIS records various accounting transactions, processing these transactions and preparing the financial statements like income statement, balance sheet, owners' equity statement, cash flow statement and others statement as desired by management for the decision making of the interested users. These financial statements are prepared in accordance with Generally Accepted Accounting Principles (GAAP), accounting standards, the Companies Act 1994, the Securities and Exchange Rules 1987 and other applicable laws in Bangladesh. The selected companies follow the provisions of IAS/BAS 1, 2, 7, 8, 12, 16, 17, 18, 21, 23, 24, 32, 34, 37 and 38 respectively and also follow the provisions of International Financial Reporting Standards (IFRSs)/Bangladesh Financial Reporting Standards (BFRSs) for preparing and presenting the different financial statements. The selected companies make financing decision, investment decision, capital structure decision, working capital decision, pricing decision, servicing decision and outsourcing decision with the help of AIS and performs various managerial functions such as planning, coordinating, controlling, directing, budgeting, motivating and decision making with the help of accounting information. In the evaluation of the operational results shown in the annual reports of the selected companies it is found that the operational performance of Company # 1 is better than that of Company # 2 because Company # 1 has been able to earn a good profit

and the Company # 2 has been continuously facing loss for the last several years with the exception of 2011. The operational performance of Company # 1 is better than that of Company # 2 during the study period. Some hypotheses have been formulated regarding the operational results of the selected companies and all hypotheses are rejected which means that there is significant difference between the operational results of the selected companies.

Accounting information produced by the AIS of the selected companies is used to meet the needs of decision makers for taking necessary decision. AIS provides information through preparing the different financial statements which supports all levels of management such as operational level, middle level and top level management in taking effective decisions. The general purpose of financial statements is to provide accounting information to present and potential investors, creditors and others to assist them in making correct decisions. In the evaluation of the opinions of the respondents it is observed that the 50.00% of the respondents think that the selected companies moderately apply legal framework for preparing the financial statements and the null hypothesis is accepted which means that there is no significant difference of opinions among the respondents regarding the application of legal framework for preparing the financial statements of the selected companies. It is also observed that the 65.00% of the respondents think that the selected companies moderately comply with accounting standards for preparing the financial statement and the null hypothesis is rejected which means that there is significant difference of opinions among the respondents regarding the degree of compliance with accounting standards for preparing the financial statements of the selected companies.

AIS is crucial for decision making in the selected companies. The present study has analyzed some indicators for judging the efficiency of AIS of the selected companies. From the analysis it is evident that 91.43% of the respondents opine effective internal control system, 62.86% of the respondents think proper security

measure, 65.71% of the respondents reveal good documentation, 60.00% of the respondents think separation of operation from accounting, 80.71% of the respondents state that extent of disclosure, 63.57% of the respondents think cost effectiveness, 56.43% of the respondents opine flexibility to meet future needs, 47.14% of the respondents think processing power of accountants and 79.29% of the respondents think independent internal and external audit as various indicators to judge the efficiency of AIS of the selected companies. It is also evident that 40.71% of the respondents think that the all indicators are important to judge the efficiency of AIS of the selected companies. In addition, 56.92% of the respondents think that the accounting information produced by AIS of the selected companies is moderately adequate and the null hypothesis is accepted which means that there is no significant difference of opinions among the respondents regarding the adequacy of accounting information produced by AIS of the selected companies. 60.00% of the respondents opine that the accounting information produced by AIS of the selected companies is moderately informative and the null hypothesis is rejected which means that there is significant difference of opinions among the respondents regarding the informativeness of accounting information produced by AIS of the selected companies. 57.95% of the respondents think that the accounting information produced by AIS of the selected companies is moderately conciseness and the null hypothesis is accepted which indicates that there is no significant difference of opinions among the respondents regarding the conciseness of accounting information produced by AIS of the selected companies. So, it is evident that the foregoing discussion factors increases the efficiency of AIS of the selected companies.

The study shows the different influence factors of the efficiency of AIS of the selected companies. It is apparent that 57.14% of the respondents opine that the size of the company greatly influences the efficiency of AIS and the null hypothesis is accepted which indicates that there is no significant difference of opinions among

the respondents regarding the size of the company as an influencing factor of the efficiency of AIS of the selected companies. 36.43% of the respondents think that the age of the company moderately influences the efficiency of AIS and the null hypothesis is accepted which indicates that there is no significant difference of opinions among the respondents regarding the age of the company as an affecting factor the efficiency of AIS of the selected companies. 44.29% of the respondents state that the earning of the company greatly influences the efficiency of AIS and the null hypothesis is accepted which means that there is no significant difference of opinions among the respondents regarding the earning of the company as an influencing factor of the efficiency of AIS of the selected companies. 78.57% of the respondents hold the view that the availability of trained accountant greatly influences the efficiency of AIS and the null hypothesis is accepted which indicates that there is no significant difference of opinions among the respondents regarding the availability of trained accountant as an influencing factor of the efficiency of AIS of the selected companies. 80.00% of the respondents opine that the internal control system greatly impacts the efficiency of AIS and the null hypothesis is accepted which indicates that there is no significant difference of opinions among the respondents regarding the internal control system as an influencing factor the efficiency of AIS of the selected companies. 52.86% of the respondents opine that the internal audit greatly influences the efficiency of AIS and the null hypothesis is accepted which indicates that there is no significant difference of opinions among the respondents regarding the internal audit as an influencing factor the efficiency of AIS of the selected companies. 47.14% of the respondents think that the internal check greatly influences the efficiency of AIS and the null hypothesis is accepted which means that there is no significant difference of opinions among the respondents regarding the internal check as an influencing factor of the efficiency of AIS of the selected companies. 72.86% of the respondents think that the attitude of management greatly influences the efficiency of AIS and the null hypothesis is accepted which indicates that there is no significant difference of opinions among

the respondents regarding the attitude of management as an influencing factor of the efficiency of AIS of the selected companies. 51.43% of the respondents reveal that the organizational structure greatly influences the efficiency of AIS and the null hypothesis is accepted which indicates that there is no significant difference of opinions among the respondents regarding the organizational structure as an influencing factor of the efficiency of AIS of the selected companies. 45.72% of the respondents opine that the resource of the company greatly influences the efficiency of AIS and the null hypothesis is accepted which indicates that there is no significant difference of opinions among the respondents regarding the resources of the company as an influencing factor of the efficiency of AIS of the selected companies. 42.14% of the respondents think that the rank of responsible executive moderately influences the efficiency of AIS and the null hypothesis is rejected which means that there is significant difference of opinions among the respondents regarding the rank of responsible executive as an influencing factor of the efficiency of AIS of the selected companies. 69.29% of the respondents reveal that the good use of information technology greatly influences the efficiency of AIS and the null hypothesis is accepted which means that there is no significant difference of opinions among the respondents regarding the good use of information technology as an influencing factor of the efficiency of AIS of the selected companies. In addition, majority of the respondents have given opinion that most of the influencing factors greatly impact the efficiency of AIS of the selected companies.

The study reveals that the qualitative characteristics of accounting information is produced by AIS and disseminated in the annual reports of the selected companies. The study has found that the 54.36% of the respondents think that the accounting information produced by AIS of the selected companies is moderately relevant and the null hypothesis is accepted which means that there is no significant difference of opinions among the respondents regarding the relevance of accounting information produced by AIS of the selected companies. 55.39% of the respondents opine that

the accounting information produced by AIS of the selected companies is moderately reliable and the null hypothesis is accepted which indicates that there is no significant difference of opinions among the respondents regarding the reliability of accounting information produced by AIS of the selected companies. 42.05% of the respondents reveal that the accounting information produced by AIS of the selected companies is moderately useful and the null hypothesis is accepted which indicates that there is no significant difference of opinions among the respondents regarding the usefulness of accounting information produced by AIS of the selected companies. 50.25% of the respondents think that the accounting information produced by AIS of the selected companies is moderately understandable and the null hypothesis is accepted which indicates that there is no significant difference of opinions among the respondents regarding the understandability of accounting information produced by AIS of the selected companies. 51.79% of the respondents think that the accounting information produced by AIS of the selected companies is moderately comparable and the null hypothesis is accepted which means that there is no significant difference of opinions among the respondents regarding the comparability of accounting information produced by AIS of the selected companies. 53.85% of the respondents opine that the accounting information produced by AIS of the selected companies is moderately consistent and the null hypothesis is accepted which indicates that there is no significant difference of opinion among the respondents regarding the consistency of accounting information produced by AIS of the selected companies. It is very interesting to note that most of the respondents have revealed moderate consequences of every aspect of qualitative characteristics of accounting information produced by AIS of the selected companies.

9.2 Suggestions

Based on the study findings, researcher suggests the following:

1. All the Bangladesh Accounting Standards should be made mandatory for both listed and unlisted companies.
2. Strict compliance with the Companies Act, 1994, the Securities and Exchange Rules 1987, the Income Tax Ordinance 1984 etc. should be monitored by BSEC.
3. The accounting information should be more timely and well structured for various interested users so that they can make effective and dynamic decisions.
4. Internal control activities, functions of audit committee, management control activities and corporate governance etc. should be coordinated.
5. ICAB and ICMAB may try to organize more seminars for developing AIS, MIS, Decision Support Systems, Executive Information System and Expert System etc. for our business organizations.
6. There should be a good liaison among the Professional Accountants, Auditors, Entrepreneur, Employers, Academician, Tax Authorizes and other related bodies to develop our AIS practices.
7. The accountants who are responsible for performing the various activities of AIS should be trained properly so that AIS can deliver relevant information for all concerned.
8. Latest softwares that meet the requirements of the day should be used.
9. The AIS should generate information based on both historical data and current cost information.
10. The transparency of financial statements shown in the annual reports issued by the selected companies should be ensured. The preparation of the

financial statements must ensure the various qualitative characteristics of accounting information.

9.3 Limitations of the study

Every research has some limitations and the present research suffers from the following limitations:

1. The present research study covers only a small time-span i.e. five years.
2. The study considered only two companies of service sector as sample.
3. The study could not compare the AIS scenario prevailing in Bangladesh with that of other overseas countries. This comparison could be carried out to investigate the significant differences in AIS among developing, developed and under developed counties.

9.4 Recommendations for Further Research

The present research study gives following recommendations for further research:

1. Specific study should be done covering large sample
2. Different models of AIS can be studied highlighting their feasibility in Telecommunication Sector
3. Limitations of AIS can be studied relating to inadequacies of existing regulatory framework
4. Compliance with Regulatory Framework can also be studied in details.
5. Limitations of Historical Accounting, need for Harmonization of accounting standards must be studied in details

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Appendix 1: Questionnaire for Company Executives

Please give a tick mark in the box provided at the right side of each alternative

Part – A: Respondent's Profile:

1. Name of the Respondent.....

2. Name of the Organization.....

3. Designation.....

4. Age Group of the Respondent:

Below 30.....☐

30-35.....☐

35-40.....☐

40-45.....☐

45-50.....☐

50-55.....☐

55 and above.....☐

5. Educational Qualifications:

(a) Graduate ☐ (b) Post-Graduate ☐ (c) M. Phil ☐ (d) Ph. D ☐ (e) Others ☐ (please specify):

6. Please State your Basic Discipline of Education:

(a) Arts ☐ (b) Science ☐ (c) Business/Commerce ☐ (d) Engineering ☐ (e) Others ☐
(please specify):

7. Professional Qualifications:

(a) ACA ☐ (b) FCA ☐ (c) ACMA ☐ (d) FCMA ☐ (e) Others ☐ (please specify):

8. Length of Service:

Below 5.....☐

5-10.....☐

10-15.....☐

15-20.....☐

20-25.....☐

25-30.....☐

30 and above.....☐

Part – B: Overall Aspects of Accounting Information Systems:

1. Please mention which regulatory framework is followed by your company for preparing the financial statements

- | | |
|--|--|
| (a) GAAP ☐ | (b) The Company Act ☐ |
| (c) SEC Ordinance and Rules ☐ | (d) Tax Ordinance ☐ |
| (e) All of the above ☐ | (f) Others (please specify) ☐ |

2. Do you follow accounting standards for preparing the financial statements of your company?

- | | |
|----------------------------------|---------------------------------|
| (a) Yes ☐ | (b) No ☐ |
|----------------------------------|---------------------------------|

3. What IAS / BAS do you follow to prepare your financial statement?

- (a) IAS / BAS 1 ☐
- (b) IAS / BAS 2 ☐
- (c) IAS / BAS 7 ☐
- (d) IAS / BAS 8 ☐
- (e) IAS / BAS 12 ☐
- (f) IAS / BAS 16 ☐
- (g) IAS / BAS 17 ☐
- (h) IAS / BAS 18 ☐
- (i) IAS / BAS 21 ☐
- (j) IAS / BAS 23 ☐
- (k) IAS / BAS 24 ☐
- (l) IAS / BAS 32 ☐
- (m) IAS / BAS 34 ☐
- (n) IAS / BAS 37 ☐
- (o) IAS / BAS 38 ☐
- (p) Others (if any) ☐

4. Which principle do you follow to prepare the financial statements?

- (a) Going on concern ☐
- (b) Historical Cost ☐
- (c) Realization Principle ☐
- (d) Others (please specify) ☐

5. Do you think that your Accounting Information System prepare financial statements on a consistent basis?

(a) Yes ☐

(b) No ☐

6. Does management use these reports for decision-making?

(a) Yes ☐

(b) No ☐

7. Who authorizes your purchase transaction?

(a) Purchase manager ☐

(b) General Manager ☐

(c) Store keeper ☐

8. Who authorizes your sales transaction?

(a) General Manager ☐

(b) Finance manager ☐

(c) Sales manager ☐

9. What documents do you use for authorizing payment for purchase?

(a) Voucher ☐

(b) Invoice ☐

(c) Purchase order ☐

10. What factors do you consider for authorizing credit sales?

(a) Past history of the customer ☐

(b) Credit worthiness ☐

(c) Payment record ☐

(d) Other factors (please specify) ☐

11. Who are involved in the receipt of money/cheques from A/R?

(a) Cashier ☐

(b) Mail receiver ☐

(c) Deputy Chief Accountant ☐

(d) Others (please specify) ☐

12. Who authorizes your payment of cash against vouchers?

(a) Designated authorizing officer ☐

(b) Treasurer ☐

(c) Chief Accountant ☐

(d) All of the above ☐

13. What Journals and Ledgers do you use to record of transactions?
- (a) Journal:
 - (i) General journal ☐
 - (ii) Special journal (purchase journal and sales journal) ☐
 - (iii) Cash receipt journal ☐
 - (iv) Cash disbursement journal ☐
 - (b) Ledger:
 - (i) General ledger ☐
 - (ii) Subsidiary ledger ☐
14. What types of reports are prepared by your company management with the help of Accounting Information System?
- (a) Balance sheet ☐
 - (b) Profit and loss account ☐
 - (c) Statement of changes in equity ☐
 - (d) Cash flow statement ☐
 - (e) Other statement (please specify) ☐
15. How do you process transactions?
- (a) Manually ☐
 - (b) By computer ☐
 - (c) Both of the options ☐
16. Do you use accounting software?
- (a) Yes ☐
 - (b) No ☐
17. Do you use password in your computer?
- (a) Yes ☐
 - (b) No ☐
18. Do you change password frequently?
- (a) Yes ☐
 - (b) No ☐
19. How do you codify your accounts?
- (a) By giving numbers ☐
 - (b) By putting letters ☐
 - (c) By putting symbols ☐

20. How do you link transaction processing elements?
 - (a) By using audit trail ☐
 - (b) Other methods (please specify) ☐
21. How do you prove accuracy of posted amounts?
 - (a) By preparing trial balance ☐
 - (b) By using audit trial ☐
 - (c) By rechecking ☐
22. How do you preserve your source documents?
 - (a) By preserving in an guard file at the initiating stage ☐
 - (b) By preserving at the office of the completion state ☐
 - (c) In hard disk of the computer ☐
23. Who authorize access to those documents?
 - (a) General Manager ☐
 - (b) Section Head ☐
 - (c) Department Head ☐
24. How do you assign responsibility for processing transactions?
 - (a) The person employed for processing transactions is assigned the duty of processing. ☐
 - (b) By describing responsibilities accordingly to previously prepared schedule. ☐
25. What coding system do you use?
 - (a) Mnemonic coding systems ☐
 - (b) Sequence coding systems ☐
 - (c) Block coding systems ☐
26. What type of processing system do you use?
 - (a) On-line processing ☐
 - (b) Off-line processing ☐
27. Do you have the followings objectives of data management?
 - (a) Capturing and storing relevant data ☐
 - (b) Occupying smallest possible space for storing data ☐
 - (c) Up-dating files timely and makings it accessible to uses ☐
 - (d) Satisfying a variety of information needs ☐
 - (e) Safeguarding from loss or unauthorized access ☐
 - (f) Economy ☐
 - (g) Others (please specify) ☐

28. Do you have the following checks in your computer system?
- (a) Parity check ☐
 - (b) Read after write check ☐
 - (c) Dual read check ☐
 - (d) Validity check ☐
29. Do you maintain distribution register of output?
- (a) Yes ☐
 - (b) No ☐
30. Do you maintain backup files?
- (a) Yes ☐
 - (b) No ☐
31. What approach did you use for system development?
- (a) The piecemeal approach ☐
 - (b) The bottom-up approach ☐
 - (c) The total system approach ☐
 - (d) The great leap forward approach ☐
 - (e) The evolutionary approach ☐
32. Does your company have a separate AIS department?
- (a) Yes ☐
 - (b) No ☐
33. What type of files do you maintain?
- (a) Master file ☐
 - (b) Transaction file ☐
 - (c) Reference file ☐
 - (d) History file ☐
 - (e) Others (please specify) ☐
34. In which area does your company use AIS?
- (a) Reporting to interested users ☐
 - (b) Decision making ☐
 - (c) Control ☐
 - (d) Above all ☐
 - (e) Others (please specify) ☐

35. Please give your opinion about the types of reports generated by your company through AIS for internal decision making and control purpose

- (a) Ratio analysis ☐
- (b) Working capital forecast ☐
- (c) Variance analysis ☐
- (d) Break-even analysis ☐
- (e) Others (please specify) ☐

36. Please give your opinion about the types of decision made with the help of AIS

- (a) Financing decision ☐
- (b) Investment decision ☐
- (c) Capital structure decision ☐
- (d) Working capital decision ☐
- (e) Pricing decision ☐
- (f) Servicing decision ☐
- (g) Outsourcing decision ☐
- (h) Others (please specify) ☐

37. For which of the following managerial function do you use accounting information?

- (a) Planning ☐
- (b) Coordinating ☐
- (c) Controlling ☐
- (d) Directing ☐
- (e) Budgeting ☐
- (f) Motivating ☐
- (g) Decision making ☐
- (h) Others (please specify) ☐

38. After how many months do you prepare this report?

- (a) Weekly ☐
- (b) Monthly ☐
- (c) Quarterly ☐
- (d) Semi-yearly and ☐
- (e) Yearly ☐

39. What are the main sources of information for decision-making?
- (a) Annual report ☐
 - (b) Market information ☐
 - (c) Government statistics ☐
 - (d) News paper ☐
 - (e) Information from competitor's annual report ☐
40. Do you follow HRA practice?
- (a) Yes ☐
 - (b) No ☐
41. Which methods do you follow for depreciation?
- (a) Straight line method ☐
 - (b) Diminishing balance method ☐
 - (c) Sum of the years' digits method ☐
 - (d) Others (please specify) ☐
42. Do you follow any methods for pricing material?
- (a) Yes ☐
 - (b) No ☐
43. What method of pricing material issues do you use?
- (a) First in First out (FIFO) ☐
 - (b) Last in First out (LIFO) ☐
 - (c) Average ☐
 - (d) Weighed average ☐
 - (e) Others (if any) ☐
44. Do you follow any methods for inventory control?
- (a) Yes ☐
 - (b) No ☐
45. Which methods do you follow for inventory control?
- (a) ABC analysis ☐
 - (b) Others (please specify) ☐
46. Is there any communication network in your information systems?
- (a) Yes ☐
 - (b) No ☐

47. If answer to question no (46) is yes, to which person the information flows?

- (a) Various managers in the firm ☐
- (b) Various employees in the firm ☐
- (c) Other interested external parities in the firm ☐
- (d) Stock holders ☐

48. What are the different stages of data conversion and task involves in your AIS?

- (a) Data collection ☐
- (b) Data management ☐
- (c) Data processing ☐
- (d) Data control ☐
- (e) Information generation ☐

49. Who are the users of accounting information produced by your AIS?

- (a) Internal users:
 - (i) Managers ☐
 - (ii) Employees ☐
- (b) External users:
 - (i) Creditors ☐
 - (ii) Customers ☐
 - (iii) Suppliers ☐
 - (iv) Trade unions ☐
 - (v) Stock holders ☐
 - (vi) Govt. agencies ☐

50. What types of resources are required by your AIS?

- (a) Data ☐
- (b) Supplies ☐
- (c) Equipment ☐
- (d) Personal ☐
- (e) Funds ☐

51. What are the purposes of Accounting Information Systems?

- (a) To provide information that supports decision-making ☐
- (b) To provide information that supports day-to-day operations ☐
- (c) To provide information that pertains to stewardship ☐
- (d) Others (please specify) ☐

52. Do you think that the AIS is an important system for decision- making and control?

- (a) Yes ☐ (b) No ☐

53. Do you think that the benefit of AIS exceeds the cost of AIS?

- (a) Yes ☐ (b) No ☐

54. Do you think that the AIS provide competitive advantages to your company?

- (a) Yes ☐ (b) No ☐

55. Does your Accounting Information Systems satisfy?

- (a) Data processing requirement ☐
(b) Operations requirement ☐
(c) Top-management control requirement ☐

56. Have your AIS been changed with the growth of business activities?

- (a) Yes ☐ (b) No ☐

57. If answer to question no (56) is yes, what additional documents and records do you prepare?

- (a) Sales invoices ☐
(b) Merchandise inventory record ☐
(c) New files ☐
(d) Printed sales analyses and payroll reports ☐

58. Is there any internal check system in your company?

- (a) Yes ☐ (b) No ☐

59. Do you have any internal audit in your organization?

- (a) Yes ☐ (b) No ☐

60. Do you have any internal control system in your company?

- (a) Yes ☐ (b) No ☐

61. What types of internal control measure you have adopted to ensure security and quality of accounting information produced by AIS?

- (a) Information system control ☐
(b) Information system audit ☐
(c) Both of the options ☐

62. What are the characteristics of existing internal control system of your company?

- (a) Functional responsibilities are appropriated segregated ☐
- (b) Day to day transactions and recording thereof are supervised by responsible officials ☐
- (c) Existence of a system of authorization procedure that is adequate to provide accounting control over assets, liability, revenues and expenses ☐
- (d) Existence of a system of periodic comparison of record with actual assets and liabilities and action to correct differences ☐
- (e) Existence of a recording procedure which check that transaction to be recorded and processed have been authorized ☐
- (f) Others (please specify) ☐

63 What types of internal control do follow of your company?

- (a) Physical check should be regularly done ☐
- (b) Routine of duties of officers should be made ☐
- (c) Duties and responsibilities should be clearly divided ☐
- (d) There should not be any loophole in the authorization process ☐
- (e) Others (please specify) ☐

64 What are the benefits of existing internal control systems of your company?

- (a) Assets are safeguard ☐
- (b) Transaction are properly processed and recorded ☐
- (c) Authority and responsibility become co-extensive ☐
- (d) Routine supervision of day to day transaction ☐
- (e) Assets are properly handled ☐
- (f) Others (please specify) ☐

65 Which factors do you consider to measure the effectiveness of internal control system of your company?

- (a) The internal control system is helpful for achieving entity's specify objective ☐
- (b) The internal control system ensures compliance with applicable laws and regulations ☐
- (c) The internal control system is properly designed to handle transaction process safe guarding of assets, prevention of errors and frauds and detection of errors and frauds ☐
- (d) The internal control system ensures separation of operations and custody of the assets ☐
- (e) Others (please specify) ☐

66. What is nature of your security measure?

- (a) Preventive ☐
- (b) Corrective ☐

67. What measures are there for safeguarding your assets?

- (a) Unauthorized access is restricted ☐
- (b) Prevent fraud ☐
- (c) Making a list of assets ☐
- (d) Physical verification of assets ☐

68. What type of security measures do you consider for proper security of information produced by AIS of your company?

- (a) Access to computers should be restricted ☐
- (b) Use file password ☐
- (c) Use of data backup and reconstruction procedure ☐
- (d) Unauthorized tampering of data should be prevented ☐
- (e) Others (please specify) ☐

69. Which indicators do you consider to judge the efficiency of AIS of your company?

- (a) Effective internal control systems ☐
- (b) Security measures ☐
- (c) Good documentation ☐
- (d) Separation of operation from accounting ☐
- (e) Adequate disclosure ☐
- (f) Cost effectiveness ☐
- (g) Flexibility to meet future needs ☐
- (h) Processing power of accountants ☐
- (i) Independent internal and external audit ☐
- (j) All of the above ☐
- (k) Others (please specify) ☐

70. What are your suggestions for developing the AIS of your company?

- (a) Trained manpower ☐
- (b) Training of the employees ☐
- (c) Market research ☐
- (d) Developing internal control ☐
- (e) All of the above ☐
- (f) Others (please specify) ☐

Appendix 2: Questionnaire for Experts in Accounting

Please give a tick mark in the box provided at the right side of each alternative

Part – A: Respondent's Profile:

1. Name of the Respondent.....
2. Name of the Organization.....
3. Designation.....
4. Age Group of the Respondent:
 - Below 30.....☐
 - 30-35.....☐
 - 35-40.....☐
 - 40-45.....☐
 - 45-50.....☐
 - 50-55.....☐
 - 55 and above.....☐
5. Educational Qualifications:
 - (a) Graduate ☐ (b) Post-Graduate ☐ (c) M. Phil ☐ (d) Ph. D ☐ (e) Others ☐ (please specify):
6. Please State your Basic Discipline of Education:
 - (a) Arts ☐ (b) Science ☐ (c) Business/Commerce ☐ (d) Engineering ☐ (e) Others ☐ (please specify):
7. Professional Qualifications:
 - (a) ACA ☐ (b) FCA ☐ (c) ACMA ☐ (d) FCMA ☐ (e) Others ☐ (please specify):
8. Length of Service:
 - Below 5.....☐
 - 5-10.....☐
 - 10-15.....☐
 - 15-20.....☐
 - 20-25.....☐
 - 25-30.....☐
 - 30 and above.....☐

Part–B: Evaluation of Different Dimensions of Financial Statements and Others:

1. Please give your opinion on the degree of application of legal framework for preparing the financial statements of the selected companies

- (a) Greatly applicable ☐
- (b) Moderately applicable ☐
- (c) Slightly applicable ☐
- (d) Neutral ☐
- (e) Not applicable ☐

2. Please give your opinion on the degree of compliance with accounting standards for preparing the financial statements of the selected companies

- (a) Greatly comply ☐
- (b) Moderately comply ☐
- (c) Slightly comply ☐
- (d) Neutral ☐
- (e) Not comply ☐

3. Please give your opinion on the degree of adequacy of accounting information produced by AIS and disseminated in annual reports of the selected companies

- (a) Greatly adequate ☐
- (b) Moderately adequate ☐
- (c) Slightly adequate ☐
- (d) Neutral ☐
- (e) Not adequate ☐

4. Please give your opinion on the degree of informativeness of accounting information produced by AIS and disseminated in annual reports of the selected companies

- (a) Greatly informative ☐
- (b) Moderately informative ☐
- (c) Slightly informative ☐
- (d) Neutral ☐
- (e) Not Informative ☐

5. Please give your opinion on the degree of conciseness of accounting information produced by AIS and disseminated in annual reports of the selected companies

- (a) Greatly concise ☐
- (b) Moderately concise ☐
- (c) Slightly concise ☐
- (d) Neutral ☐
- (e) Not concise ☐

6. Please give your opinion on the degree of relevance of accounting information produced by AIS and disseminated in annual reports of the selected companies

- (a) Greatly relevant ☐
- (b) Moderately relevant ☐
- (c) Slightly relevant ☐
- (d) Neutral ☐
- (e) Not relevant ☐

7. Please give your opinion on the degree of reliability of accounting information produced by AIS and disseminated in annual reports of the selected companies

- (a) Greatly reliable ☐
- (b) Moderately reliable ☐
- (c) Slightly reliable ☐
- (d) Neutral ☐
- (e) Not reliable ☐

8. Please give your opinion on the degree of usefulness for decision making of accounting information produced by AIS and disseminated in annual reports of the selected companies

- (a) Greatly useful ☐
- (b) Moderately useful ☐
- (c) Slightly useful ☐
- (d) Neutral ☐
- (e) Not useful ☐

9. Please give your opinion on the degree of understandability of accounting information produced by AIS and disseminated in annual reports of the selected companies

- (a) Greatly understandable ☐
- (b) Moderately understandable ☐
- (c) Slightly understandable ☐
- (d) Neutral ☐
- (e) Not understandable ☐

10. Please give your opinion on the degree of comparability of accounting information produced by AIS and disseminated in annual reports of the selected companies

- (a) Greatly comparable ☐
- (b) Moderately comparable ☐
- (c) Slightly comparable ☐
- (d) Neutral ☐
- (e) Not comparable ☐

11. Please give your opinion on the degree of consistency of accounting information produced by AIS and disseminated in annual reports of the selected companies

- (a) Greatly consistent ☐
- (b) Moderately consistent ☐
- (c) Slightly consistent ☐
- (d) Neutral ☐
- (e) Not consistent ☐

12. What types of internal control do you consider for the selected companies?

- (a) Physical check should be regularly done ☐
- (b) To examine the existence of assets ☐
- (c) Duties and responsibilities should be clearly divided and duties should rotate ☐
- (d) There should not be any loophole in the authorization process ☐
- (e) Others (please specify) ☐

13. Which factors do you consider to measure the efficiency of internal control system of the selected companies?

- (a) The internal control system is helpful for achieving entity's specify objective ☐
- (b) The internal control system ensures compliance with applicable laws and regulations ☐
- (c) The internal control system is properly designed to handle transaction processing, safeguarding of assets, prevention of errors and frauds and detection of errors and frauds ☐
- (d) The internal control system ensures separation of operations and custody of the assets ☐
- (e) Others (please specify) ☐

14. What type of security measures do you consider for proper security of information produced by Accounting Information Systems of the selected companies?

- (a) Access to computers should be restricted ☐
- (b) Use file password ☐
- (c) Use of data backup and reconstruction procedure ☐
- (d) Unauthorized tampering of data should be prevented ☐
- (e) Others (please specify) ☐

15. Which factors do you consider for increasing the efficiency of AIS of the selected companies?

- (a) Accounting Information Systems should be upgraded ☐
- (b) More control measures should be introduced ☐
- (c) More security measures should be installed ☐
- (d) The system should be more user-friendly ☐
- (e) Others (please specify) ☐

16. Which indicators do you consider to judge the efficiency of AIS of the selected companies?

- (a) Effective internal control system ☐
- (b) Proper security measure ☐
- (c) Good documentation ☐
- (d) Separation of operation from accounting ☐
- (e) Extent of disclosure ☐
- (f) Cost effectiveness ☐
- (g) Flexibility to meet future needs ☐
- (h) Processing power of accountants ☐
- (i) Independent internal and external audit ☐
- (j) All of the above ☐
- (k) Others (please specify) ☐

Part – C: Factors Influencing the Efficiency of AIS:

1. Please give your opinion on the degree of influence of size of company as an affecting factor of efficiency of AIS of the selected companies

(a) Greatly ☐ (b) Moderately ☐ (c) Slightly ☐ (d) Neutral ☐ (e) Not ☐

2. Please give your opinion on the degree of influence of age of the company as an affecting factor of efficiency of AIS of the selected companies

(a) Greatly ☐ (b) Moderately ☐ (c) Slightly ☐ (d) Neutral ☐ (e) Not ☐

3. Please give your opinion on the degree of influence of earning of the company as an affecting factor of efficiency of AIS of the selected companies

(a) Greatly ☐ (b) Moderately ☐ (c) Slightly ☐ (d) Neutral ☐ (e) Not ☐

4. Please give your opinion on the degree of influence of availability of trained accountant as an affecting factor of efficiency of AIS of the selected companies

(a) Greatly ☐ (b) Moderately ☐ (c) Slightly ☐ (d) Neutral ☐ (e) Not ☐

5. Please give your opinion on the degree of influence of internal control system as an affecting factor of efficiency of AIS of the selected companies

(a) Greatly ☐ (b) Moderately ☐ (c) Slightly ☐ (d) Neutral ☐ (e) Not ☐

6. Please give your opinion on the degree of influence of internal audit as an affecting factor of efficiency of AIS of the selected companies

(a) Greatly ☐ (b) Moderately ☐ (c) Slightly ☐ (d) Neutral ☐ (e) Not ☐

7. Please give your opinion on the degree of influence of internal check as an affecting factor of efficiency of AIS of the selected companies

(a) Greatly ☐ (b) Moderately ☐ (c) Slightly ☐ (d) Neutral ☐ (e) Not ☐

8. Please give your opinion on the degree of influence of attitude of management as an affecting factor of efficiency of AIS of the selected companies

(a) Greatly ☐ (b) Moderately ☐ (c) Slightly ☐ (d) Neutral ☐ (e) Not ☐

9. Please give your opinion on the degree of influence of organizational structure as an affecting factor of efficiency of AIS of the selected companies

(a) Greatly ☐ (b) Moderately ☐ (c) Slightly ☐ (d) Neutral ☐ (e) Not ☐

10. Please give your opinion on the degree of influence of resource as an affecting factor of efficiency of AIS of the selected companies

(a) Greatly ☐ (b) Moderately ☐ (c) Slightly ☐ (d) Neutral ☐ (e) Not ☐

11. Please give your opinion on the degree of influence of rank of responsible executive as an affecting factor of efficiency of AIS of the selected companies

(a) Greatly ☐ (b) Moderately ☐ (c) Slightly ☐ (d) Neutral ☐ (e) Not ☐

12. Please give your opinion on the degree of influence of good use of information technology as an affecting factor of efficiency of AIS of the selected companies

(a) Greatly ☐ (b) Moderately ☐ (c) Slightly ☐ (d) Neutral ☐ (e) Not ☐

Appendix 3: Questionnaire for Security Consultants

Please give a tick mark in the box provided at the right side of each alternative

Part – A: Respondent's Profile:

1. Name of the Respondent.....
2. Name of the Organization.....
3. Designation.....
4. Age Group of the Respondent:
 - Below 30.....☐
 - 30-35.....☐
 - 35-40.....☐
 - 40-45.....☐
 - 45-50.....☐
 - 50-55.....☐
 - 55 and above.....☐
5. Educational Qualifications:
 - (a) Graduate ☐ (b) Post-Graduate ☐ (c) M. Phil ☐ (d) Ph. D ☐ (e) Others ☐ (please specify):
6. Please State your Basic Discipline of Education:
 - (a) Arts ☐ (b) Science ☐ (c) Business/Commerce ☐ (d) Engineering ☐ (e) Others ☐ (please specify):
7. Professional Qualifications:
 - (a) ACA ☐ (b) FCA ☐ (c) ACMA ☐ (d) FCMA ☐ (e) Others ☐ (please specify):
8. Length of Service:
 - Below 5.....☐
 - 5-10.....☐
 - 10-15.....☐
 - 15-20.....☐
 - 20-25.....☐
 - 25-30.....☐
 - 30 and above.....☐

Part – B: Evaluation of Different Dimensions of Financial Statements

1. Please give your opinion on what types of information are you interested in?

- (a) Profitability of the company ☐
- (b) Liquidity of the company ☐
- (c) Growth of the company ☐
- (d) Dividend of the company ☐
- (e) Dividend payout ratio ☐
- (f) Cash flow of the company ☐
- (g) Information about new project ☐
- (h) All of the above ☐
- (i) Others (please specify) ☐

2. Please give your opinion on the degree of adequacy of accounting information produced by AIS and disseminated in annual reports of the selected companies

- (a) Greatly adequate ☐
- (b) Moderately adequate ☐
- (c) Slightly adequate ☐
- (d) Neutral ☐
- (e) Not adequate ☐

3. Please give your opinion on the degree of informativeness of accounting information produced by AIS and disseminated in annual reports of the selected companies

- (a) Greatly informative ☐
- (b) Moderately informative ☐
- (c) Slightly informative ☐
- (d) Neutral ☐
- (e) Not Informative ☐

4. Please give your opinion on the degree of conciseness of accounting information produced by AIS and disseminated in annual reports of the selected companies

- (a) Greatly concise ☐
- (b) Moderately concise ☐
- (c) Slightly concise ☐
- (d) Neutral ☐
- (e) Not concise ☐

5. Please give your opinion on the degree of relevance of accounting information produced by AIS and disseminated in annual reports of the selected companies

- (a) Greatly relevant ☐
- (b) Moderately relevant ☐
- (c) Slightly relevant ☐
- (d) Neutral ☐
- (e) Not relevant ☐

6. Please give your opinion on the degree of reliability of accounting information produced by AIS and disseminated in annual reports of the selected companies

- (a) Greatly reliable ☐
- (b) Moderately reliable ☐
- (c) Slightly reliable ☐
- (d) Neutral ☐
- (e) Not reliable ☐

7. Please give your opinion on the degree of usefulness for decision making of accounting information produced by AIS and disseminated in annual reports of the selected companies

- (a) Greatly useful ☐
- (b) Moderately useful ☐
- (c) Slightly useful ☐
- (d) Neutral ☐
- (e) Not useful ☐

8. Please give your opinion on the degree of understandability of accounting information produced by AIS and disseminated in annual reports of the selected companies

- (a) Greatly understandable ☐
- (b) Moderately understandable ☐
- (c) Slightly understandable ☐
- (d) Neutral ☐
- (e) Not understandable ☐

9. Please give your opinion on the degree of comparability of accounting information produced by AIS and disseminated in annual reports of the selected companies

- (a) Greatly comparable ☐
- (b) Moderately comparable ☐
- (c) Slightly comparable ☐
- (d) Neutral ☐
- (e) Not comparable ☐

10. Please give your opinion on the degree of consistency of accounting information produced by AIS and disseminated in annual reports of the selected companies

- (a) Greatly consistent ☐
- (b) Moderately consistent ☐
- (c) Slightly consistent ☐
- (d) Neutral ☐
- (e) Not consistent ☐