A Study on Management Information System (MIS) and Interface Design for the Parliamentary Standing Committee of the Bangladesh Parliament on Information and Communication Technology Division

by

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The Thesis is Presented in Partial Fulfillment of the Requirements for the Degree of Master of Science in Management Information System (MIS).

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DAFFODIL INTERNATIONAL UNIVERSITY DHAKA, BANGLADESH 12 December 2018

DECLARATION

I do hereby am declaring that, this *Thesis* has been done by me under the direct supervision of Mr. Md Zahid Hasan, Assistant Professor, Department of CSE, Daffodil International University. I also declare that neither this *Thesis* nor any part of this *Thesis* has been submitted elsewhere for award of any degree or diploma.

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APPROVAL

This Thesis titled "A Study on Management Information System (MIS) and Interface Design for the Parliamentary Standing Committee of the Bangladesh Parliamenton Information and Communication Technology Division" submitted by Ehsanul Parvez (ID:172-17-357) to the Department of Computer Science and Engineering, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of M.Sc. in Management Information System (MIS) and approved as to its style and contents.

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ABSTRACT

This thesis on "A Study on Management Information System (MIS) and Interface Design for the Parliamentary Standing Committee of The Bangladesh Parliament on Information and Communication Technology Division."

Each and every company or organization is a functional body of the Chair/ CEO, Managers, Executives, employees and many other general participants. For each of these functional bodies event especially management of information and function of like the Parliamentary Standing committee becomes very crucial for healthy and effective management. The MIS creates impact in such organization which relates to the understanding of the committee functions itself and development of any decision process. The MIS begins with the definition of data, entity and its attributes. It uses a dictionary of data, entity and attributes, respectively, designed for information generation in the organization. Since all the information systems use the dictionary, there is common understanding of terms and terminology in the organization bringing clarity in the communication and a similar understanding of functioning in the organization.

The MIS calls for a systematization of the business operations for an effective system design. This leads to streaming of the operations which complicates the system design. It improves the administration of the business by bringing a discipline in its operations as everybody is required to follow and use systems and procedures. This process brings a high degree of professionalism in the business operations.

The design of the proposed system was done as per the user requirement. The thesis is organized as, brief introduction followed by literature review. Next background and description of the subject of organization- Parliamentary Standing committee on ICT Division, has been discussed. Next the System Requirements for MIS are analyzed in detail with direct and indirect data analysis, construct the outline of the proposed MIS, find out the challenges against system implementation.

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Chapter – 01

Introduction

1.10bjectives

A parliamentary system is a system of democratic governance of a state where the executive derives its democratic legitimacy from its ability to command the confidence of the legislature, typically a parliament, and is also held accountable to that parliament. In a parliamentary system, the head of state is usually a person distinct from the head of government.

-Wikipedia

The Constitution of the People's Republic of Bangladeshoffers the legislative assembly the name Jatiyo Shangsad in Bengali and House of the state in English. It'sordinarilycalled Parliament. Parliament of Bangladeshis aunicamerallegislative assembly consisting of 350 members of thatthree hundred Members from three hundred territorial constituencies that's one from everybody. As per provision of clause (3) of article seventy two of the Constitution, the term of a Parliament is 5 years. The President has the authority to dissolve the Parliament earlier, if at any time hedecides that there's no Elected Members of Parliament. The term of Parliament will be extended on the far sidefive years by as Act of Parliament by less than one year at time once the Republic is engaged in war.

In a democratic country like Bangladesh the parliament plays a vital role in establishing and in preservation of citizen's rights and interests. To ensure these more effectively the Parliamentary Standing committee plays a vital role. To conduct the Committee function more efficiently I would like to suggest the MIS system to design and implement for the Parliamentary Standing Committee of ICT Division. Because, Information system and Information technology have become a vital part of any successful organisation and business and are considered major useful spaces a bit like the other useful area of a business organisation like planing, R&D, marketing, finance, production and

Human Resources. Soit'snecessaryto graspthe spaceof information system a bit likethe otheruseful area within the business. MIS is very importantas a result of all businesses have a requirement for dataconcerning the tasks that are to be performed. Data and technology is employed as a tool for problemsolving and providing opportunities for increasing productivity and quality.

Information has invariably been vitalhoweverit's never been so available, thus current and so overwhelming. Efforts are created for assortment, inputs and retrieval of information. However, challenges still stayin the choice analysis and interpretation of the datathat will further improve decision making process and productivity.

Study of Management Information System's requirement analysis and interface design for Bangladesh Parliamentary Standing Committee is the right are of research for me to improve my knowledge and to gain a lot in this field. It was one of my dreams to be a student of **Management Information System** at the **Daffodil International University.**

1.2Rationale of the study

The role of the MIS in an organization will be compared to the role of heart within the body. the datais that the blood and MIS is that the heart. In the body the heart plays the role of supply pure blood to all the weather of the body together with the brain. The heart work quicker and supplies additional blood when required. It regulates and controls the incoming impure blood, processed it and sends it to the destination in the amount required. It fulfils the requirements of blood offer to physical body in normal course and conjointly in

The MIS will playsexactly the same role in modern parliamentary system that has 3 functions: representing the voters, creating laws, and overseeing the govt. via hearings and inquiries. The system ensures that anappropriate information is collected from the various sources, processed and send anyto any or all the necessitous destinations. The system is expected to fulfil the informationwants of an individual, a bunchof people, the management functionaries, the managers and top management.

The role of MIS

In this era ofInformation technology (IT), Management information system or Management Information System can play a great role in parliamentary committee system. These are as follows-

- i. The MIS satisfies the variouswants through selection of parliamentary meeting and minutes management, systems likequery system, analysis system, modelling system and decisionsupport system.
- ii. The MIS helps in strategic planning, internal control, operational functions and parliamentary meeting. The MIS helps in the clerical personal within the decision writing and answers the queries on the information regarding the discussion, the standing of a specific record and reference on a range of documents.
- iii. The MIS helps the junior parliamentary committee members by providing the

operational information for planning, programming and control, and helps them more in decision-making at the implementation level.

- iv. The MIS helps Parliamentary Standing committee of ICT Divisionin short term planning, target setting and dominant the business functions. It's supported by the utilization of the management tools of planning and management.
- v. The MIS helps the highest level management, here as parliamentary committee chair, in goal setting, strategic planning and evolving the business plans and their implementation.
- vi. The MIS plays the role of information generation, communication, drawback identification and helps within themethod of decision-making. The MIS, therefore, plays an important role within the management, administration and operation of an organization

Master of Science in Management Information System (MIS) is a specialized course. The course is designed with excellent combination of practical and theoretical aspect. As a part of Master of Science in Management Information System I have to complete an in-depth study for the thesis in a field of Management Information System (MIS) as out of my interest. I have tried my best to use the opportunity to enrich my knowledge. I have tried my level best to present my practical experience in this report.

1.3Objectives of studying the organization

In this study of designing MIS for Parliamentary Standing committee on ICT Division I have the most important objectives those are as follows-

- The main objective of this research about the requirements analysis for implementation of MIS
- Theother objectives of choosing this topic is to understand the activities of several parliamentary committees.
- Study of organizational structure of the Parliamentary Standing Committee of Bangladesh Parliament.
- Finding the usefulness of Management Information System for the Parliamentary Standing Committee..
- Implementation ofInformation technology (IT) and recent change management initiated by the parliament IT division.
- Identify the challenges and problems in operation of MIS Interface.
- Recommendations of in Management Information System (MIS) for Bangladesh Parliament.

1.4 Methodology of the study

I have collected all the relevant information from my working experience and in depth study with the committee of ICT Division and Financial Oversight Committee (FOC) of Bangladesh Parliament. I have collected all the materials and databy -

- ✓ Study of different committee functions.
- ✓ Interview with structured questioners of Stakeholders
- ✓ Several committee reports, general reports, official documents.
- ✓ Data available with the Parliament's website.
- ✓ Data from previous Parliamentary Standing committee report.
- ✓ Direct observation.
- ✓ Interaction with the IT section official of the Parliament.
- ✓ Related books, journals, blogs, articles, minutes, reports and annual reports etc.

For preparing this report, some graphical representations of the MIS interface have been used to find out different types of analytics and interpretation.

1.5Report layout

The report has been organized in a professional manners. The reports starts with brief introduction followed by literature review. Next background and description of the subject organization- Parliamentary Standing committee on ICT Division, has been discussed. Next the System Requirements for MIS are analyzed in detail with direct and indirect data analysis, construct the outline of the proposed MIS, find out the challenges against system implementation. Finally concluded by summary, conclusion and recommendations.

Chapter 2

Background - The organization and MIS development

2.1 The Organization

After 9 month's blood-sheding of the braves we got the country of our proud- Bangladesh. In a democratic country like Bangladesh the parliament plays a vital role in establishing and in preservation of citizen's rights and interests.

২০. ডাক, টেলিযোগাযোগ ও তথ্যপ্রযুক্তি মন্ত্রণালয় সম্পর্কিত স্থায়ী কমিটি

ক্ৰমিক	সদস্যগণেৰ লাম	निर्वाहनी अनाका	পদবী
লং			
5	জলাব ইমরাল আহমেদ	২৩২ সিলেট-৪	সভাশতি
"	ভারশ্রাপ্ত মন্ত্রী, ডাক (টেলিযোগাযোগ ও		সদস্য
	তখ্যপ্রস্কৃতি মন্ত্রণালয় (যদি সংসদ সদস্য		
	হল)		
v	জনাব জুনাইদ আহ্মেদ পলক	৬০ লাটোর-৩	সদস্য
8	জনাব এ (ক এম রহমভূল্লাহ	7.5-1학년 8년	সদস্য
Œ	জলাব (মায়াজ্বম (হাসেল রভল	২২৪ সুলামগন্ধ-১	সদস্য
Ą	জনাব শওকত হাচানুর রহমান (রিমন)	১১০ বরগুলা-২	সদস্য
9	জনাব শরীফ আহমেদ	১৪৭ ময়মলসিংহ-২	সদস্য
B	(শথ আফিল উদ্দিন	৮৫ যশোর-১	সদস্য
9	কাজী ঝিরোজ রশীদ	১৭৯ ঢাকা-৬	সদস্য
70	বেগম হোসলে আরা লৃৎফা ডালিয়া	৩০৩ মহিলা আসন-৩	সদস্য

Figure-01:Parliamentary Standing committee on ICT Division

To ensure these more effectively the Parliamentary Standing committee plays a vital role. In this era of technological world,Information technology and Information system have become a vital component of any successful organization and business and are

regarded as major functional areas just like any other functional area of a business organization like Planning, R&D, marketing, finance, production and HR.So in procedural functioning of Parliamentary Standing committee on ICT Divisionthe MIS to play a vital role in several aspect. These are as follows-

Support the Committee Business method: Treats inputs as an information from the client and outputs as services to client. Supports current operations and use the system to influence moreapproach of operating.

Support Operation of a business organisation: MIS supports operations of a business concern by giving timely info, maintenance and improvement that provides flexibility within the operation of an organizations.

To Support decision making: MIS supports the decision making by executives in their daily operations. MIS additionally supports managers in deciding satisfy the goals and objectives of the organization. In this case Completely different mathematical models and IT tools are used for the purpose evolving waysto satisfy competitive wants.

Strategies for an organisation: Nowadaysevery business is running in a very competitive market. MIS supports the organization to evolve acceptableways for the business to assented in a very competitive atmosphere.

2.2Related Works

At present in the parliament Secretariat there are 300 nodes/ PC/ Laptops connected with LAN supported by a Native Server. But *there is no Management Information System Parliamentary Standing committee on ICT Division*. For installation and implementation of the MIS more 30 PC / Laptop, Hub, Switches, sufficient power supply system and Ethernet cable are needed. Then system software to be installed and a interface

/ button of MIS interface to be added to the Website of the parliament Secretariat that exists.

At present in the parliamentary Standing Committee-

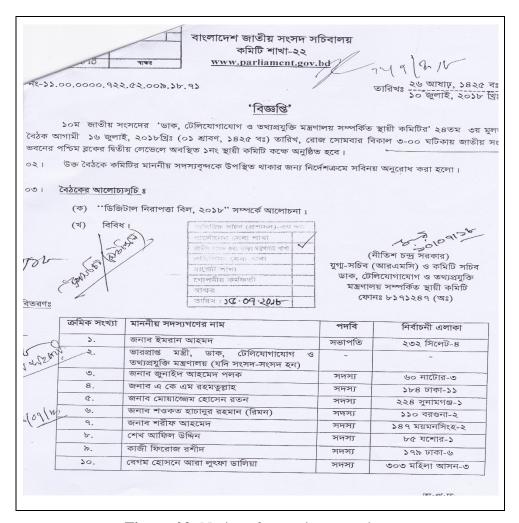


Figure-02: Notice of committee meeting

Working Paper at present / manual system-

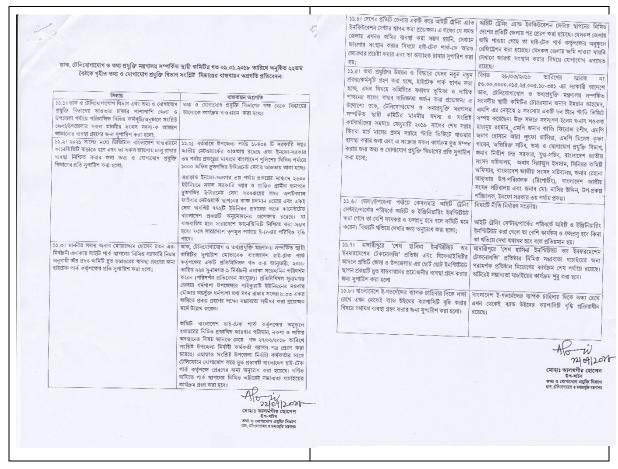


Figure-03: Working Paper

At present/ Manual system: Minutes of the meeting (hard copy)

বিষয় ৪ 'ভাক, টেলিংবাগাবোল ও ক্ষয়প্রমূতি মন্ত্রালয় সম্পর্কিত স্বামী সমিটি'র <u>এইতন নৈঠকের কার্যবিষয়ণী</u>।

১০ম বাকীয় সংগদের 'ভাৰ, টেলিবোগাবোৰ ও কথ্যসমূচি মম্বালয় সম্পর্কার স্থারী কমিটিয় ২২৬ম বৈঠক বাক ৩৯ আমুনানি ২০১৮ হিন্দান (২৫ পৌৰ, ১৯২৪ সমাস) যোগ মম্বালয়র বিভাগ ও-০০টায় কমিটির সভাপতি কমান ইবানো আবালে (২০২ সিম্পেটন) এর সভাপতিক্রে জাতীয় সংগদ কানের ২৪ লেকেনে অবহিত ১মং হারী কমিটি কংগে অনুষ্ঠিত হয়।

ক্তমিক মং	যালনীয় সদস্যগণের শাম	পদবী	বিৰ্বাচনী এলাকা
(2)	যদোব জুনাইদ আহমেদ পলক	234212	৬০ নাটোর ৩
(%)	জনাব গোগ্রাঞ্জেন হোলেন রাজন	হাদ্স্য	২২৪ সুনামণ্ঞ-১
(%)	বেগম হোসনে আরা মুৎফা ডালিয়া	সদস্য	৩০৩ মহিলা আসন-

ত। কমিটিম নিশেষ আমগ্রণে ৩াক, টেলিযোগাযোগ ও তথ্যপ্রসূক্তি মসী জনাব মোজকা জকার কোঁকে উপস্থিত ছিলেন।

।। কমিটিছ আমন্তাৰে অধ্য ও যোগাখোল পথুতি বিভাগের গঢ়িব জনাব সুবীধ কিশোল চৌদুটা, বাইটোক গার্চের নিজ্পপনা পরিচালক বেগন ফোলচে আনাসহ মন্ত্রণালা একে অধ্য ও যোগাযোগ একুজি বিভাগ ও বিভিন্ন ব্যৱস্থাহার সমৃত্যিক কর্মকর্তাগণ নৈটকে উপস্থিত হিলেন ।

৫। তৈতিক সামিনিক সভাঙা দালের জন্ম বছেলালেশ জাজীর কলেন সহিদালরের ফুর্ব-সর্কিন (জায়য়র্বারি)। ও করিটি সভিত কলার দীর্কিশ চন্দ্র সক্ষেত্র করিটি অধিলার জনার নিয়ার্ক্তর ইনলাম, উপ-সন্মিলালর (মিলাটি), কেনে রেষলা মন্ত্রের, সংক্রমী পরিচালক (শং-সহবোগ) ঘনার মোচ এমসুম হক্তমহ মন্ত্রীয় কর্মজ্জান্ত উপস্থিত হিলেন।

৬.২। মাননীয় তাক, টেলিযোনাযোগ ও অগ্যন্তমূঠি মন্ত্ৰী সভাগভিষে ধনাবাদ জানান। ভিনি এ মাৰণালনের সন্ত্ৰী হিসেনে নিযুক্ত করাম মাননীয় ধানিনন্ত্ৰীন প্ৰতি কৃতজ্ঞান্ত কলা কলে। একংক 'এ৫ এয় ১৯ই আদেট ছাজি দিলা ব্যবস্থা পোষ্ট যিন্তান্ত নামনালয় কৰি কৰিবলৈ বাবা নামীন কৰেছেন। উপনাৰ বাতি কৰিছা কানান চাই নামে মানাল মৃত্যিক্ত মায়োমালসক্ত্ৰিত ত সাক্ষ পত্তীক ধানিও দল উনিয়াভিত মানিবানেন অবায়নত কথা 'নৱল' কৰেন। তথাস্থানিক

পাঁঠিনাৰ বঁজ আছে। খালোনা, আন্ধান বিল্লো মৃত্যুল কৰা । গাড়েয়া ও এছবালো এবং তথা ও যোগালোৰ বাটুলি চিনালোৰ বাটু

1 খালাকাৰ্যনি (ক) ঃ একম ইঠাকৰ ফাৰ্ডবিৰ্ধানি নিশিক্তকাৰ)
১) নালাক্ষিক একক ইঠাকৰ ফাৰ্ডবিৰ্ধানি উপন্যালন বৰ্তনা থকে এতি পাছৰ কেন্দ্ৰ নিশ্বনিক আৰ্থিনিক আৰ্থিনিক আৰ্থিনিক আৰ্থনিক আৰ্থ

ভালাচ্যসূচি (খ) : বিগত (২০৩ম) হৈঠকে গৃহীত সিদ্ধান্তসমূহের অল্লগাতি পর্যালোচনা।

৮.২। যাইটোক পাতেই বাবপ্রাগলা পরিচালক ৮.২ নিভাৱের উল্লেখ করে থালান, মাননীয় সদায় ক্লান সোধাক্ষের প্রেটালন ক্রতনন গুলির অবস্থান প্রকৃতি প্রত্যক্তে, তাই সেখালে বাইটোক পার্ক না করে ক্রিনিং সেনিক করেন ভালো ব্যবং মাননীয় সদায়া স্থনার মোয়েক্ষেন হোচেন ওকা তাঁত এলানায় দ্রান্ত কার্যক্রমন মধ্যের মাকেন সর্বভারি নিয়ম

১,১) নজপাতিত আহানিকাৰে হাইটেক কাৰ্ম-এর স্বাস্থাপনা পাট্টাচানক কাৰ্যান যে, হাইট কাৰ্টিক ১২৬ল কৈছেক, কৰাত্ৰ কাৰে ক্ষেত্ৰিক এনৰ বৰবন্ধ শেষ কুৰিছে হাইটেক এথনা তেনোছিলাৰ ট্ৰিচ এব অনুযোগকতাৰ "আন্তাচানক হৈছে ইটিকে পানি-এন আন্তামৰ "বৰবাছ প্ৰটিইটেন চিটি পৰা হাইটো কিট কাৰ্য্যক অধ্যানক হাইট উটিকে পানি-এন আন্তামৰ পৰিক্ৰাইটিক কিট কাৰ্য্যক সংগ্ৰামৰ অনুযোগিক ইয়াৰে কিট বাইকি বাইকি কৰে। বাগালিকা উল্লেখনিক কিট কাৰ্টিক (ছিছ ১২৮) সৰবাৰ কাৰ্য্যক আন্তাচ কাৰ্য্যক কাৰ্য্যক কৰিছে কিট না আন্তাচিক কৰা কৰিছে ছিল ১২৮) সৰবাৰ কাৰ্য্যক কৰাৰ আন্তাচন কৰিছে কৰিছে

৯.১০। খাদদীয় ময়ী বিশেট খাইটেক পার্ক প্রকার বাবধারকের বিষয়ে মাদদীয় সভাপতির পরাবর্ণ অনুবায়ী কর কাজ সক্ষয় কয়ার ড়য়। হাইটেক পার্ক কর্কৃপককে নির্দেশনা প্রদাম কয়েয়।

১০,১। সভাপতির আহ্বানত্তমে নিবাই। পরিচালক, বাংলাদেশ কম্পিউটার কতিনিল মৈঠকে উপস্থাপিত কার্যপত্ত অনুখায়ী ফোর টারায় ভাটা সেন্টারের কার্যক্রমের সর্যনেষ এপ্রগতি সম্পূর্কে অবহিচ্চ করেন।

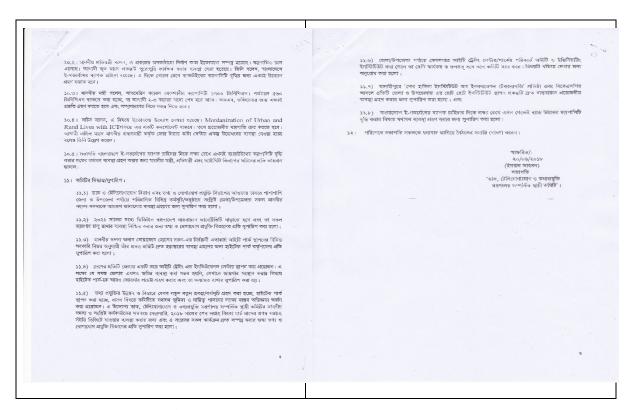


Figure-04: Minutes of the meeting (hard copy)

Follow up Report



বাংলাদেশ জাতীয় সংসদ সচিবালয় কমিটি শাখা - ০২ www.parliament.gov.bd কমিটির রিপোর্টের অপ্রগতির প্রতিবেদন

nia-Technis-sess সরকারী প্রতিষ্ঠান কমিটি অগগতির প্রতিবেদন নং অগ্রগতির প্রতিবেদনের শিরোনাম বাংলাদেশ রেলওয়ের স্টোর বিভাগ কতৃক মালামাল ক্রয়, মজুদ ও বিতরণ ব্যবস্থা (রাজস্ব) সংক্রান্ত ২০০৬-০৭ হতে ২০০৮-০৯ অর্থ বছরের হিসাব সম্পর্কিত মহা হিসাব নিরীক্ষক ও নিয়ন্তকের ইস্যু ভিত্তিক অডিট রিপোর্ট পর্যালোচনা। Farhana সংসদে রিপোর্ট পেশের তারিখ : ৩১-ডিসেম্বর-২০১৫ বাংলাদেশ রেলওয়ের স্টোর বিভাগ কর্তৃক মালামাল ক্রয়, মজুদ ও বিতরণ ব্যবস্থা (রাজস্ব) সংক্রান্ত ২০০৬-০৭ হতে ২০০৮-০৯ অর্থ বছরের হিসাব সম্পর্কিত মহা হিসাব নিরীক্ষক ও নিয়ন্তকের ইস্যু ভিত্তিক অডিট রিপোর্টের অডিট আপত্তির অনুছেদ নং-১ ও ২ এর উপর বাভবায়ন বাজনার দর যাচাই, প্রকাশন প্রভুত ৩ অন্তর্ভাবন সংক্রার আগাবি গ্রহনযোগ্য। এই বিষয়পুলো করে দেখা হচ্ছে। সংশ্রিট ডিলেন, তাদের বিষয়ে জনধিক ৩০ দিনের ভিতরে একটি তদন্ত করে তাদের नेकांड श्रेरण ক্রাট্রিক্রিক মিক্রিক করে এবং ভার দাস, দায়িত নির্ধারণপর্বক যথায়থ পদক্ষেপ গ্রহণ করে আগামী ৩০ দিনের মধ্যে কমিটিবে অবহিত করতে বলা হয়েছে কিছু ৩০ দিনের মধ্যে করা সঞ্জব হয়নি। আরও সময় প্রতিষ্ঠানের মূলবা

Figure-05: Follow up report (Hard copy)

2.3 Terminology

Information Technology

Information technology (IT) is that the use of PC/ Laptop/ Tab/ computers to store, retrieve, transmit, and manipulate information or data, usuallywithin the context of a business or different enterprise. It isthought-about to be a set of data and communications technology (ICT). Humans are storing, retrieving, manipulating, and communicating the information since the Sumerians in mesopotamia developed writing in regarding 3000 before Christ, however the term information technology in its trendy sense first appeared during 1958, an article revealed in the Harvard Business Review; authors Harold J. Leavitt

and Thomas L. Whisler commented that "the new technology doesn'tnevertheless have one established name. We tend to shall decision it data technology (IT)." Their definition consists of three categories: techniques for process, the applying of applied math and mathematical ways to decision-making, and also the simulation of higher-order thinking through computer programs.

The term is usually used as a equivalent word for computers and computer networks, however it conjointly encompasses alternativedata distribution technologies like Cellphone and telephones. manyproduct or services amongan economy are related toinformation technology, together withcomputer hardware, software, electronics, semiconductors, internet, telecommunication equipment, and e-commerce.

Management information system

Management information system or MIS, generally refers to a computer-based system that gives managers with the tools to arrange, measure and with efficiency manage departments inside company. In alternative words it's a system that uses the informationcollected by the functional process system and uses this data to create reports in an exceedinglymethod that managers will use it to form routine business decisions in response to issues. A number of the reports that this information system creates are outline, exception and ad hoc reports. All this is often done to extend the efficiency of operational activity.

In orderto provide past, present and prediction info, a management information systemwillembodysoftware package that helps in decision making, information resources like databases, the hardware resources of a system, decision support systems, individuals management and meeting-decision management applications, and any computerised processes that enable the Standing Committee to run with efficiency.

The Parliament

In simple words, the group of people who are responsible for making the laws in some kinds of government. In modern politics and history, a parliament is a legislative body of government. Generally, a modern parliament has three functions: representing the electorate, making laws, and overseeing the government via hearings and inquiries.

The term is similar to the idea of a senate, synod or congress, and is commonly used in countries that are current or former monarchies, a form of government with a monarch as the head. Some contexts restrict the use of the word parliament to parliamentary systems.

The Standing Committee

Parliamentary standing committees are permanent committees for concerning any Ministry, Department or Issues our Parliament, committees can be set up by two ways: elected or nominated. In electing way, the committees are elected by house members and in nominated way, these are nominated by the speaker or deputy speaker. To monitor regular work of a Ministry. The committee is formed to guide the Ministry, to ensure the public interests, to ensure the accountability of the Ministry, for supervision of development work of the Ministry, to recommend for taking new development project, review and Justify the draft of new law and presenting the achievement and requirements of the Ministry, in Parliament Session. They submit their report to Parliament and most of the times, Parliament accepts their recommendations and formulate act.

2.4Types of Information Systems

With the rapid advancement of Information technology (IT) the evolvement and changing dimension of Management information system or MIS based on increasing needs of the organization, there are several information system evolved. These are-

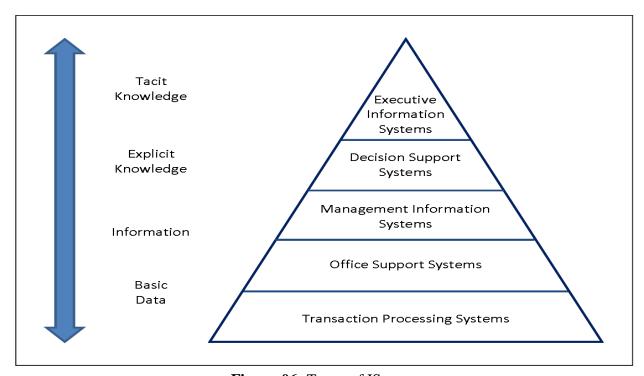


Figure-06: Types of IS

1. Transaction Processing Systems

A transactionprocess system provides the simplest wayto gather, process, store, show modify or cancel transactions. Most of those systems enable multiple transactions to require place at the same time, the information that this technique collects is typicallystored in databases which might be used toproduce reports likebilling, wages, inventory summaries, producing schedules, or check registers.

2.Management information Systems

A management information system is the system that uses information|the info|the information} collected by the transactionprocess system and uses this data to form reports

in a verymethod that managers will use it to create routine business decisions in response to issues. a number of the reports that this system creates are outline, exception and ad hoc reports. All this can be done to extend the efficiency of management activity.

3. decision Support Systems

A decisionsupport system helps tocreatedecisions by operating and analyzing datawhich will generate statistical projections and information models, this technique provides support instead of replacement of a managers judgement whereas improving the standard of a managers decision. A DSS helps solve issues while exploitation external information.

4. expert Systems and Neural Networks

Anexpert system, conjointlyreferred to as a knowledge-based system, could be an automatic information processing systemthat's designed to research data and produce recommendations, diagnosing and decisions that are controlled. A neutral system uses computers to foster the methodan individual's brain mightprocessinfo, learn and recollect that structured and classified information.

5. Special information Systems in Organizations

This information system collects, stores and processes information provide the organisation real time useful and accurate information. This system encompasses information gathering data from the people and machines that collect, process, output and store information. Conjointly within the networks that transmit and receive information and also the procedures that govern the method of data processing for target information is handled.

2.5Important functions of MIS

Management Information System is set up by Parliamentary Standing committee on ICT Divisionwith the prime objective to get management info to be utilised bythe committee in decision-making. Management Information System should perform the subsequent functions so asto fulfill its objectives.

1) information Capturing:

MIS captures information from numerous internal and external sources of Parliamentary Standing committee. information capturing could also be manual or through pc terminals or scanning by Bangla OCR. End users, usually record information regarding the procedure and decision on some physical medium like paper form or enter it directly into a computing system.

2) Processing of data:

The captured information is processed classified on agenda and decisionbased to convert it into the specified management information. processof informationis completed by such activities as comparison, sorting, classifying and summarizing.

3) Storage of information:

Management Information System of Parliamentary Standing committee stores processed or unprocessed information for future use. If any informationisn'tinstantlyneeded, it's saved as anorganisational record. during this activity, informationand data are maintained in an organized manner for later use. On the basis of agenda and decisionshold oninformationis often organized into fields, records, files and databases.

4) Retrieval of information:

Management Information System retrieves necessary info from its stores as and onceneeded by varied users Parliamentary Standing committee. As per the necessities of the Committee users, the retrieved info is either disseminated intrinsically or it's processed once moreto satisfythe exact demands of the committee members.

5) Dissemination of necessaryInformation:

Require based information, that could be a finished product of Management Information System, is disseminated to the users within the Parliamentary Standing committee users or stakeholders. It can be periodic, through reports or on-line through pc/laptop terminals.

2.6 Steps of Management Information System Design

For effective Management Information Systemdesigning for Parliamentary Standing committee on ICT Division, abstractstyle in itself isn'tthe final end of the designingmethod, rather it servers as a basis for the detail MIS designing. The performance necessitiesspecified by the conceptual designing become inputs to the detaildesigning phase, within which these are further refined, detailed and finalised to be known as the system specifications.

Thus, the most objective of the detail system designing is to arrange a blue print of a system that meets the necessities of the Parliamentary Standing committee on ICT Division. The goals of the abstract system designing requirement. Designing the system involves the subsequent phases-

- 1. Project planning and control.
- 2. Involve the user
- 3. Define the detailed sub-system.
- 4. Input/Output design.

- 5. Feedback from the user.
- 6. Database design.
- 7. Procedure design.
- 8. Documentation of Designing

1. Project planning and control

In order to make surea goodand efficient style of an Management Information System for Parliamentary Standing committee on ICT Division, it'svital that an, in depthdesignmethodshould in itself be considered for a complete project. Therefore, the primary step within theelaborated design process, is planning and controlling, so standards could also be established and a proper follow-up is created. A number of the most points, that are vital in planning and management of an in depth style, are given below.

a) Project planning

- I. Formulate the project objectives.
- II. outline the project tasks.
- III. Prepare a network diagram of all events and activities therefore to specify successive and parallel events.
- IV. Schedule the work as per the necessities of the user.
- V. Prepare a budget for the project.

b) Project management

- I. Get a feedback of the particular performance of the project with reference to time, value and work of the project and compare it with schedules, budgets and technical plans.
- II. Take corrective action whereverneededsoon maintain management.

2. Involve the user

System designers should inform the user relating to the new system being developed and gain their support and acceptance. in this part, users are assured that changes can profit them or that they're going to not be at disadvantage due to the new system.

3. elaborated sub system definition

In elaborated system design, each system has to be broken downto establish all activities needed and their various inputs and outputs. In a number of the cases, sub systems are generally defined within the conceptual style phase, however at this stage they're specifically outlined to work out each detail regarding the sub-system.

Decomposition of the system to operational activities normally is dispensed as follows.

- System
- Sub System
- functionalpart
- Task
- Sub Task
- Operation component

4. Output/Input design

Having outlined the subsystem well, by approach of flow diagrams and a through discussion with the users of MIS, the system designers currently define the specifications of outputs and inputs for every sub-system, in additional detail. These specifications can later be utilized by programmers to develop programs to reallymanufacture the output/input.

5. Feedback from the user

Having specifically outlined sub-system, output and inputs, the designers all over again involve the user to induce feedback. This step can increase the acceptance of the MIS being designed. The system analyst ought to demonstrate the projected MIS to the users of the system/sub-system. This step also will reassure the top management of the user organization that the elaborateddesign project is process as per plans.

6.Database design

A database is an orderly arrangement of all the records associated withone another. It servers as an information resource for the MIS of a company, to own optimum performance, storage and quick retrieval of information, databasestyle is a vitalphase in the elaborated tyle of a system. For planning a database, the designer ought to keep the subsequent points in mind.

- Determine all information tables and record types.
- Determine fields for each table, the key fields for every table and relations between varied tables.
- Verifythe informationtype and breadthfor every field of the tables.
- Normalize the data tables.
- Properly documentation of informationwordbook.

7. Procedure design

Procedures are the principles, standards or ways designed to extend the effectiveness of the data system. The procedures detail concerning the tasks to be performed in using the system. They function the prepared recovers for the designers additionally as for the users, typically they perform the task of a supervisor over operators.

There are a goodsort of procedures, that include:

- Information entry procedures.
- Run time procedures.
- Error handling procedures.
- Security and back up procedures.
- Software system documenting procedures.

In planning procedures, designers should:

- Perceivethe aim and quality standards of every procedures
- Develop a bit-by-bit direction for every procedure, and
- Document all the procedures.

8. design Documentation

Elaborateddesign starts with the performance specifications given by the abstractdesign and ends with a collection of design specifications for the development of MIS. The outputs from the elaborateddesign, i.e. design specifications, are handed over to the programmers for writing codes to translate system specifications into a physical MIS. Therefore, the system analyst ought tofastidiously document the elaborateddesign. In fact, design documents ought tocontains comprehensive details of all the planning phases. design documentation of elaborateddesign report, generally, consists of-

- System objectives,
- Design constraints,
- Inputs/outputs,
- Information files.
- Procedures (manuals)
- Planned system (a summery and elaborated flow charts),
- Input/ Output specifications,
- Program specifications,
- Information specifications,
- Price of installation and implementation, and
- System check conditions.

2.7Factors Responsible for the development of MIS

Factors liable forthe event of Management Information System design are various and area first-rate concern for several Researchers and Practitioners. eachinternal and external factors should be taken under considerationoncemaking an attempt to know and organization's criteria for deciding regarding technology. the subsequent are the factors that are liable for development of MIS: 1. External factors 2. Internal factors and 3. other factors.

1. External Factors :

External Factors are conditions that exist in organization's external atmosphere.

The factors will be found at the business level or in national policies.

a) industry level: At the industry level, we tend to are staring at characteristics as degree of diffusion of certain technologies, the provision of external ability, as an example, technology suppliers, the degree of innovativeness of the business, the wantsimposed by major customers and external markets and overall levels of competition and technology sophistication within thebusiness.

b) National Policies: For the external factors the national policies conjointlyhave an effect on the organization that obliquely affects the subsystems of the organization.

2. Internal Factors:

Internal factors arises from the firm which willhave an effect on he event of Management Information Systemmay besorted into 3 categories:

- **a) Past experience :** The organizations past expertiseregarding the technology in terms of exposure and organizational learning ultimately affects its future in developing technology.
- b) Organizational(functional, business & corporate) Characteristics: An organization's characteristic like size, influence the adoption of MIS application in organization. The adoption of certain technologies mightseema lot ofacceptable for massive|the massive|the big}r companiesdue to the large capital investments and therefore themasterful human resources involve within the implementation and operation of such technologies. Smaller corporations are less plagued byorganizational inertia and that they show a larger degree of involvement of organizational member's particularlytop management throughout implementation. ready to use software systemand fewercostly equipments of MIS application are a lot ofattractive to smaller companies.
- c) Organizational Pursued strategy: Internal factors cope with the organizations pursued strategy on each orientation and technology policy. an organization's strategy reflects its

action with market and technology, that ultimately modify its expertise and consequently its overall characteristics and capabilities. the requirement for a robust technology has been advocated by a number of authors and investments in MIS ought to thus be closely aligned with overall company strategy.

3. other common factors:

- **a) client Satisfaction :** Development of MIS is tormented byclient satisfaction. client of the services ought to be satisfied by the conferred system.
- **b) Effectiveness :** Development ought to be effective in terms of organizational profit & user satisfaction.
- **c**) **efficiency**: Development ought to use all the resources, organization values with efficiency.

2.8Resistance and challenges

Resistance to altercould be atraditional human tendency. Management Information Systemonceenforced, changes plenty of things among the Parliamentary Standing committee on ICT Division. It changes power structures, the methodpeopleasses their work, changes skillnecessities of staff, processes and additionallythe completeorganizational culture. This change will cause issues within the implementation method, as there could also be resistance to the currentmodification from staff. Moreover, the implementation of Management Information System involves migration of associated at a system from a controlled surroundings of design and development to a 'real' atmosphere of a company. Sometimes, info systems that functions fine during a controlled atmosphere fail to deliver within the 'real' surroundings.

Management ought to have a mature view that such issuesaren't expected within the implementation method, making certain such technical issue remains a technical issue solelyand don't seem to be blown up into an organizational issue. A robust message from the top management proceeding to the new system thwarts such tries at maligning the new system and thus is advocated. However, in spite of the most effective efforts some factors cause issueswithin the implementation method. The most important factors that determine the degree of resistance that organizations face in implementing Management Information Systemshould be considered.

The degree of Management Information System driven modification in departmental boundaries-any major amendment that changes the functioning of departments drastically is probably going to be challenged or resisted by the department functionaries because it changes their manner of operating. This resistance ought to be anticipated at the design stage. Typically, if a BPR exercise is conducted together withthe necessity analysis of the system then such exercises results in recommendations of modification in business processes that again results in changes within the organization structure or functioning of Parliamentary Standing committee on ICT Division.

Lack of organization culture supporting Management Information System, some organizations don't have a culture of informationbased decision-making. Implementation of Management Information System in such organizations are perpetually a challenge, because the staffmust be trained to understand the importance of information system. They become wont to judgment based decision-making that such conception has little impact. In some cases, it's been noted that even when implementation of MIS the organization culture has not modified which managers still resist changes brought on by installation of Management Information System. The degree of worker involvement within the implementation of amendment together with MIS for Parliamentary Standing committee on ICT Division, could be a major issue. If the management uses a participatory approach towards Management Information System implementation then resistance to MIS is a smaller

The degree of MIS driven changeswithin the informal system-if MIS changes the informal communication system fully then resistance is a lot. This informal information communication channelcould be asource of power for a fewpeople. They resent their loss of power because of emergence of Management Information Systembecause the sole authority for communication.

Chapter 3

Literature Review

3.1 Nature of the Organization

In a parliamentary sort of government the Parliament could be a multifunctional organ of the state, though and however its functions are seldomoutlined in any Constitution or other document anyplacewithin the world. One has got togo through in between the lines of a Constitution to findthe precise functions of Parliament, if there exists a written Constitution. Parliament of People's Republic of Bangladeshisn'tan exception to the present nearly universal phenomenon. This document restricts itself solely to the subsequentfour functions of Shangshad:

- 1.Enactmentoflaw for the land.
- 2. Consent to taxation and control of public expenditure.
- 3. Reviewing the activities of the ministries/divisions by the Parliamentary standing committees and providing counsel/recommendations/instructions to the concerned ministries/divisions
 - 4. Ensuring accountability of the Government.

The elective functions of Parliament, which include the election of the President and the exercise of its constituent power for amendment of the Constitution, along with several other functions have not been discussed.

3.2Committee System of Bangladesh Parliament

The growth of committees in parliament is a global phenomenon in the varying degree of success, irrespective of the form of government-Parliamentary or Presidential.

Effective parliamentary committee can enhance legislation, management of public expenditure and general oversight of the executive. Committees serve as extended hand of parliament. For this reason committees can be said as the "mini parliament". Much of what committees can do depends upon nature of the powers granted to them which varies from parliament to parliament depending on the kind of political culture in each case.

Bangladesh parliament's committee system derives its power from the constitution and the rules of procedure. The article 76 of the constitution provides for the following standing committees of Parliament:

- a) Public Accounts Committee
- b) Parliamentary standing committees of the Ministries
- c) Committee on privileges
- d) Such other standing Committee based on Rules of Procedure of the parliament required.

According to the rules of procedure some standing committees are appointed or elected by the house and others are nominated by the Speaker from amongst its members according to the principles of proportional representation. Every committee submits its report to the house or to the Speaker. The term of office of every committee is five (5) years but it can be re-constituted at any time.

Rules of procedure provide the following committees:

- 1. Business advisory committee
- 2. Committee on the private members Bills and Resolutions
- 3. Select Committee
- 4. Committee on Petitions
- 5. Committee on Public accounts
- 6. Committee on estimates
- 7. Committee on Public undertakings
- 8. Committee on Privileges
- 9. Committee on Government assurance
- 10. House Committee
- 11. Library Committee
- 12. Standing committee on Rules of Procedure

- 13. Special Committee
- 14. Standing Committees on each Ministry/ Division.

3.3Functions of the Committee

The core processes of the Committees revolve around sittings at which they take and consider evidence to develop their findings. The primary purpose of **Parliamentary Standing Committee** is to investigate issues through specified types of Inquiries. This makes the Inquiry the fundamental basis of all Committees processes. The important functions are as follows:

- a. To monitor regular work of a Ministry.
- b. To guide the Ministry.
- c. To ensure the public interests.
- d. To ensure the accountability of the Ministry.
- e. Makes transparent of expenditure procedure of the Ministry.
- f. Supervision of development work of the Ministry.
- g. Recommendation for taking new development project.
- h. Review and Justify the draft of new law.
- i. Presenting the achievement and requirements of the Ministry in Parliament Session.
- j. To perform all the activities the Committee needs to sit for regular meeting nearly in every month.

3.4Power of the Committee

In the parliamentary system of Bangladesh Government the Parliamentary Standing committee on ICT Division poses the following inherent powers-

- a) A witness coul'd be summoned by any order signed by the Secretary and shall produces such documents as are needed of the utilization of a committee. It shell be within the direction to treat any proof given before it as secret or confidential.
- b) A committee shall have power to order persons, paper records, on condition that if any question arises whether or not the proof of an individual or to produce of the documents has relevancy for the needs of the committee, the question shall be referred to the speaker whose decision shall be final.
- c) Government could decline to provide a document on the ground that its revelation would be prejudicious to the security or interest of the state.
- d) A committee shall have the powerto control its own procedure. A committee couldacquire co-operation and recommendation from any skilled in its respective field, if deemed necessary.
- e) All queries at any sitting of a committee are determined by a majority of votes of the members present and balloting.

3.5 Importance of MIS for Parliamentary Standing Committee

The Management Information System (MIS), of the Parliamentary Standing Committee provides support for the key Committee operations. The MIS creates and manages information from the start of the meeting conducting process, Inquiry process through sittings, reporting and the final follow up of decisions taken and recommendations. The system assists Secretariat Officers to carry out various tasks related to managing Inquiries and their related Sittings, and provides information to Members on the status and focus of their work.

The MIS is a web based application and access is controlled through various User permissions. What a User can see and do on the system is determined by their User Profile which relates to their responsibilities within the FOC. On a daily basis, Secretariat Officers of the FOCs will use the MIS to assist them in producing documentation and tracking the progress of Inquiries. Certain Officers, or Chairs of the Committee, will have rights in the MIS to 'approve' documents before they can be disseminated.

3.6 Limitations of the study

While preparing this report I have faced some problems. As Bangladesh Parliament is one of the constitutional bodies of our country, it might have negative impact on their business revealing confidential data and report. Some of the problems are:

- Time constraint.
- Confidentiality of reports.
- Not having full access to the target organization.
- Non preservation of minutes of few years back.
- Less awareness of value of information and MIS.
- Managerial reluctance.
- Bureaucratic constraint.

Chapter – 04

Data Processing and workflow Analysis

4.1 Committee Business Processes model

There are **four** stages in the committee business processes, these are as follows-

a) Planning:

During this stage the Chair, Members and Secretariat work to identify the Agenda to discussed by the Committee in the meeting to be held in Parliamentary Committee Room. This is not a restrictive list, but is indicative for the Committees' work programmers for regular functioning and an indication to outside stakeholders (i.e, Ministry / Departments /Attach Department / Organization)of the workload they can expect to be involved in. Normally the agenda includes the activities of the Ministry, progress of development projects, public interests, suggestions for improvements, changes as well as inquiry regarding complain, if there any.

b)Preparation for Meeting and Inquiry:

The committee Chairperson approves the agenda and sets the date, time of the meeting. Then the committee Secretariat or concern official to prepare a notice mentioning the agenda and venue. The notice includes instruction to produce the evidence, papers, witness if it is inquiry against any complain regarding functionality or financial anomalies. They to prepare working paper by collecting the report from the Ministry and organizations. For every meeting or inquiry a notice and a briefing note should be issued at least one week in advance of each meeting.

c) Conduct of Meeting / Inquiry:

During this stage the Chair of the Committee assumes primary responsibility for the processes with support from the Secretariat. The purpose of the processes at this stage is to ensure that individual meetings are well organized, allow for effective discussion and questioning regarding the agenda (or witnesses in case of inquiry) so that the Committee can hold useful deliberations. Each topic of agenda is discussed broadly and a decision is taken against that agenda. There is an option for open discussion against an agenda called 'Sundry'. In the meeting Committee can suggest the Ministry to adopt a functional process, to take an action or to initiate a new development project for the public interest.

d) After meeting:

At this stage 'Minutes' prepared, which includes details of the discussion and the decisions made there on. If it is inquiry the findings and recommendations are mentioned only after the overall Inquiry is ended; which may take several sessions. The key purpose of these processes is to review the activities, functions for decision making and recommendations and to monitor the implementation of the recommendations.

4.2 MIS: Requirement analysis and design

a) Hardware / infrastructure

At present in the parliament Secretariat there are 300 nodes/ PC/ Laptops connected with LAN supported by a Native Server. For installation and implementation of the MIS more 30 PC / Laptop, Hub, Switches, sufficient power supply system and Ethernet cable are needed. Then system software to be installed and a interface / button of MIS interface to be added to the Website of the parliament Secretariat that exists.

b) The users/ nodes

The Chairperson of the Committee

The Members of the Committee

The Minister of the Ministry

The Officials of the Ministry

The Officials of the Parliament Secretariat

The Committee Staffs

c) Software

For the best use of Management Information System by the Parliamentary Standing committee on ICT Division I have used Python IDE- django to design front-end which has the flexible and user-friendly input menu. I have also used Sql lite-3 for back-end data processing, classification and saving.

Administrator of the system: An administrator should be defined with the approval from the Committee Chair. He will add all the users and the operator for data entry.

4.3Implementation

At first stage any programming could be done decisions needed to be made on which Programming language, IDE or technologies should be used to program the project with. The following is a critical evaluation of the different programming languages that could be used to program such MIS.

a)Python using django IDE

Python is a multi-paradigm programing language. Both bject-oriented programming and structured programming are absolutely supported, and plenty ofits options support purposeful programming and aspect-oriented programming (including by meta programming and meta objects) .

Python uses dynamic typewriting, and a good combination of reference enumeration and a cycle-detecting garbage man for memory management. It additionallyoptions dynamic name resolution (late binding), that binds methodology and variable names throughout program execution. it's filter(), map(), and reduce() functions; list comprehensions, dictionaries, and sets; and generator expressions. the standard library has 2 modules (itertools and func-tools) that implement functional tools borrowed from Haskell and normalmilliliter.

I have select Python as because, instead of having all of its functionalitydesigned into its core, Python was designed to be extremelyextensile. This compact modularity has created it significantlypopular as a way of adding programmable interfaces to existing applications.

b) Back-end Design

For the best use of Management Information System by the Parliamentary Standing committee on ICT Division I have used Sql lite-3 for back-end data processing, classification and saving.

4.4 Logical Data Model

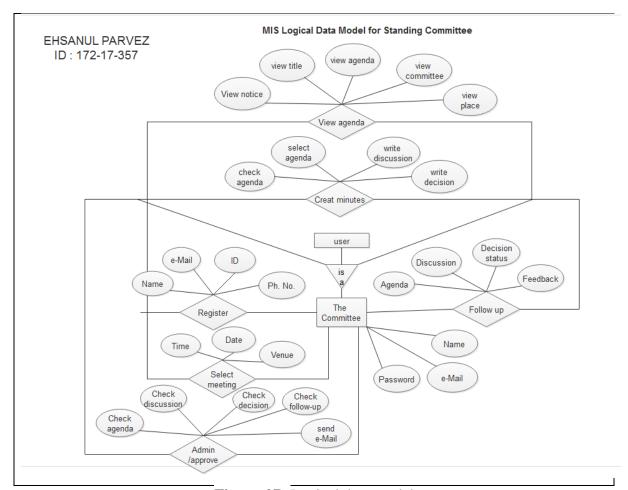


Figure-07: Logical data model

Figure 07 describes the Logical DataModel or ER Diagram of this MIS which representing the relationship among the entities. They are: Create Agenda, Edit agenda, Input decision follow up, Select agenda/ decision, Approve and Publish minutes. Each entity has its own attributes.

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Chapter 5

Design Specification

1.1 System Environment

The system environment for Parliamentary Standing committee-

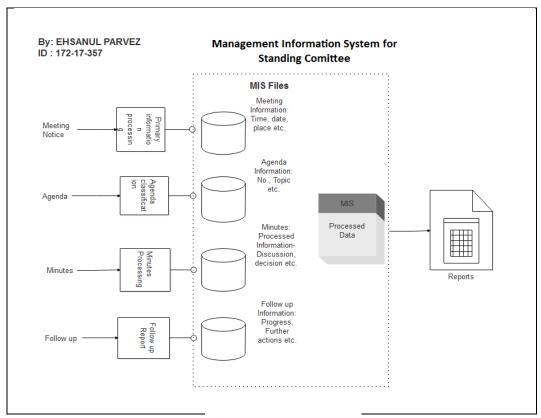


Figure-08: MIS process

After setting up the system the following data, information and documents (In some cases as pdf. version) should be uploaded to make the system functional:

- ✓ Gazette of Committee Formation and Circulars
- ✓ Notice of the meeting
- ✓ Working paper based on each agenda

- ✓ Minutes: Record of Decision is produced with discussion in details
- ✓ The decisions
- ✓ Follow up report of the decision

The Committee Secretariat or concern official to prepare a notice mentioning the agenda and venue. The notice includes instruction to produce the evidence, papers, witness if it is inquiry against any complain regarding functionality or financial anomalies

Uses of the system

- 1. The users and stakeholders will be able to know about the upcoming meeting and the agenda.
- 2. Working paper will be disclosed can be seen by the users and stakeholders.
- 3. In the meeting room the Chair, the Members and the participant will be provided a monitor/ Laptop, those are connected to the system by Ethernet or Wi-Fi.
- 4. The Committee Staffs also will be ready with the PC/ Laptop connected to the system.
- 5. During each meeting, a record of discussion and decision is produced using the proposed template and this is reviewed and approved by the Committee at the end of the meeting.
- 6. The Record of Decision provides a short summary of the subject of the meeting, any decisions made, and any follow-up action required.
- 7. It will be an excellent mechanism for disseminating information about the work of the Committee and will provide an update on the progress/ actionbased on the decisions / recommendations. Those should be published on the website.
- 8. Subsequently, the Committee will consider the Government Response, together with any observations by the stake holders or other interested parties.
- 9. The Committee may then choose to publish a follow-up report that examines not only how the Government/ ministry has responded but also whether any recommendations that were accepted or actually being implemented.
- 10. A provision will be available in the system to disclose the progress report in the parliament session.

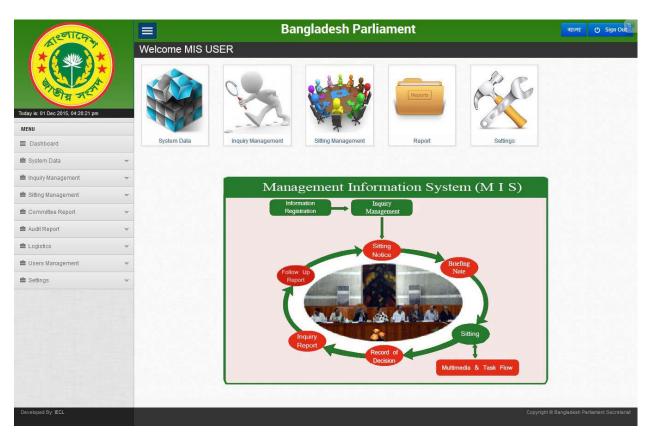


Figure-09: MIS Processfor Parliamentary Standing committee

1.2 Front-end Design

Home page - Log in

User needs to log into the website of the Parliament by a link/ button of the proposed MIS to be included in that page. After that the login window will be appeared. There are various types of user in Parliament. Applications such as Admin, the Chair Committee User etc. After Creating as an Admin, Admin login information such as User Name and Password will be send by email or SMS. Log in process as Committee User (User, User Name and Password will be created and provided by), Please type User Name and Password and then click on Button.

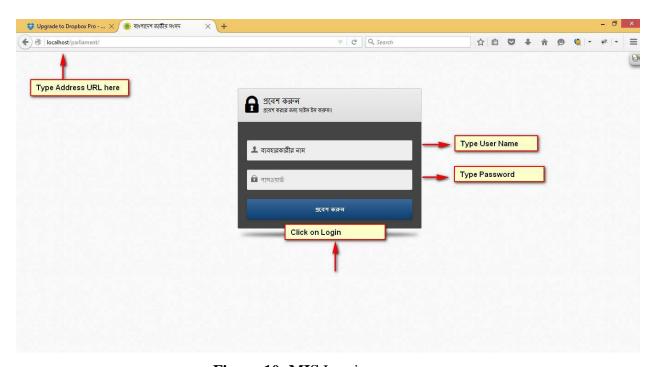


Figure-10: MIS Log-in page

5.3 The Interfaces

User Dashboard: After login user can see the MIS User Dashboard.



WELL COME TO MANAGEMENT INFORMATION SYSTEM Meeting title Date

Start time - End time

Meeting called by Name
Agenda: Agenda list

Working Paper: Pls. read W. Paper attached

Annexure: Attached Paper

Start time – End time Agenda 1
Topic 1 | Presenter

Discussion | discussant Decision 1 | The Chair

Topic 2 | Presenter

Start time – End time Agenda 2 Path

Discussion | Discussant Decision 2 | The Chair

Start time – End time Agenda 3 Path

Topic 3 | Presenter Discussion | discussant Decision 1 | The Chair

Start time – End time Follow up Path

Meeting No. | Presenter Decision No. | Presenter Progress/ Action | The Chair

Conclusion

Use this section for additional instructions, comments, or directions.

Figure-11: MIS home page

System Data:

System data is treated as information pool. Here user has to insert information; i.e. the agenda, the discussions, the decisions taken against each agenda item and follow up of action taken as per decision. These data input will be arranged and catagorised on agenda basis as well as decision basis so that these can be used later in the whole application as supporting information and for the preparation of periodic report.

Committee Button

User needs to click on 'Committee' button to enter into Parliamentary Standing Committee's MIS

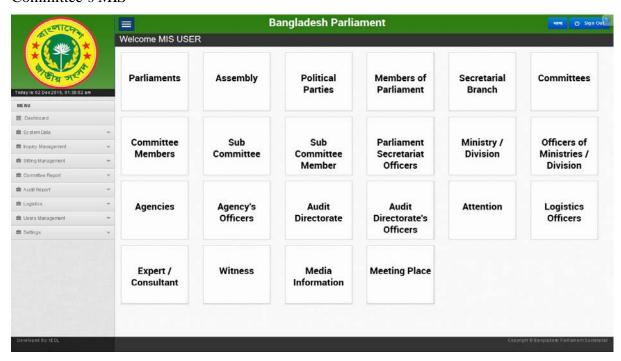


Figure-12: Several interfaces of Committee and departments

Committees:



Figure-13: Committee list

Committee List:

After clicking parliament from left menu under system data. Showing the list of Committee (Parliament name, Committee, Committee no, secretarial Branch, Status). If an user wants to see the next page, then needs to click next. If helikesto see previous page, then click on previous. If you want to see end then click last page. If you would like to see first page, then click on first.

Committee edit button:

For editing a new committee clicks on edit button. Edit of committee (committee, if need add/edit the ongoing session, Start & End Date). After editing data click on the charge click on the click of the click of the click click click of the click click click click of the click c

button. Usually seen in active . For change status click on button

After inactive status shown as .

Media Information

After clicking Media Info from left menu under system data. Showing the list of Media Info (media info type & name, audit directorate name/designation, phone & cell, email, communicator name & designation, phone & cell, email, address, Status).



Figure-14: Interface for Media and publication

Meeting Places:

After clicking Meeting Place from left menu under system data. Showing the list of Meeting Place (serial no, meeting place, Status).



Figure-15: Information of meeting place



বাংলাদেশ জাতীয় সংসদ সচিবালয় কার্যবাহ

প্রীক্ষণ :০০১২০১৫০০০০১

লম্ব

প্রীক্ষণ :বাংলাদেশ রেলওয়ের স্টোর বিভাগ কর্তৃক মালামাল ক্রয়, মজুদ ও বিভরণ ব্যবস্থা (রাজস্ব) সংক্রান্ত ২০০৬-০৭ হতে শিরোলাম ২০০৮-০৯ অর্থ বছরের হিসাব সম্পর্কিত মহা হিসাব নিরীক্ষক ও নিয়ন্ত্রকের ইস্যু ভিত্তিক অডিট রিপোর্ট পর্যালোচনা।

বৈঠক :

লম্ব

তারিখ :২৫-নভেম্বর-২০১৫ বৈঠক :১০:০০ পূর্বাহ্ন

শুক্র সম্ম

বৈঠক স্থল:স্থায়ী কমিটি কক্ষ - ০১ (পশ্চিম ব্লক, লেভেল-২)

কমিটি :সরকারী হিসাব কমিটি

श्रावृश्चिक कार्यावनी

প্রারম্ভিক : প্রারম্ভিক কার্যাবলী

মেয়াদ	আলোচ্য বিষয়	
55:00-77:@0	কোরাম এবং বৈঠক শুরু;	
	কমিটির কার্যক্রম সম্পর্কে সভাপতির সূচনা বক্তব্য;	
	গণ-কার্যক্রমের বিশেষভ্য উপদেষ্টা ও সাক্ষীর তালিকা;	
	প্রশ্নের ধারার বিষয়ে সিদ্ধান্ত গ্রহণ।	

গৰ কাৰ্যাবলী

ক্রমিক লং	প্ৰশ্ন কৰ্তা	<u> </u>	উত্তর দাতা	উত্তর
2	জনাব ডঃ মহিউদ্দীন থান আলমগীর	মহা হিসাব-নিরীক্ষক ও নিম্ন্তুক –পিগ আমরন কেনার ক্ষেত্রে দরপত্র প্রক্রিয়ায় কোন ক্রটি ছিল কি?	সিএজি	টেস্ট উত্তর ১
3	জনাব ডঃ মহিউদ্দীন থান আলমগীর	মহা হিসাব-নিরীক্ষক ও নিম্ন্তুক - বাজার দরের বিষ্য় ব্যতিরেকে ক্রম প্রক্রিয়ায় কোন অনিয়ম হয়েছিল কি?	সিএজি	টেস্ট উত্তর ২
9	জনাব মোঃ জিল্লুল হাকিম	সচিব- পিগ আয়রণ বাংলাদেশে উৎপাদিত পণ্য না হওয়া সত্ত্বেও কেন আন্তর্জাতিক বাজার দর যাচাই করা হলো না?	সচিব	টেস্ট উত্তর ৩
8	জনাব এ, কে, এম মাঈদুল ইসলাম	সচিবি-আন্তর্জাতিক বাজারে মূল্য বৃদ্ধির সপক্ষে কোন প্রমাণক আছে কিন এবং থাকলে বা নিরীখকে কেন যথাসময়ে সরবরাহ করা হয়নি?	সচিব	টেস্ট উত্তর ৪
¢	জনাব মোঃ আফছারুল আমীন	নিরীক্ষকালে ক্রমকালীন দেশীয় আন্তর্জাতিক বাজার দর যাচাই করা হমেছিল কি?	মহা পরিচালক	টেস্ট উত্তর ৫
৬	বেগম রেবেকা মোমিন	নিরীক্ষা অধিদপ্তরের মহা পরিচালক-ভৎকালীন ভেলের বাজার যাচাই না করে কেবল পূর্ব ক্রয়ের দর বিবেচনায় আপত্তি প্রদানের বিষয়কে কেন অগ্লাহ্য করা হবে না?	মহা পরিচালক	টেস্ট উত্তর ৬

মেয়াদ	আলোচ্য বিষয়
05:07-7:00	অনুচ্ছেদ-১: আপত্তির শিরোনাম: প্রকৃত বাজার দর অপেক্ষা অতিরিক্ত বেশি দরে ৩১৫ মেঃ টন
	পিগ আ্মরন ক্রম্ করাম সরকারের ১,৪৯,৮১,৪০০/- টাকা ऋতি।
	অনু(চ্ছেদ-২:
	আপত্তির শিরোনাম: ২৩০ মে: টন ক্রিয়োস্ট অয়েল অযৌক্তিকভাবে দাপ্তরিক প্রাঞ্চি মূল্যের চেয়ে ১১৪% অধিক দরে ক্রয় করায় সরকারের ১,০৩,৭২,৭৫০/-টাকা স্কণ্ডি

আগলোডক্রিত ফাইল সমূহ

ক্ৰমিক লং	কাৰ্যবাহ ফাইল
2	1_0_Tom and Jerry Cartoon - Solid Serenade (1946) - YouTube (480p).mp4

Figure-16: Working Paper(Print copy)



বাংলাদেশ জাতীয় সংসদ সচিবালয় সংসদীয় স্থায়ী কমিটি কার্য বিবরণী

Meeting title: Date:

Meeting No: Number Pdf copy

Agenda No : Agenda No Subject : Topic

Discussion : Discussion

Decision 1: Decision 1. a), b),c), etc.

Agenda No : Agenda No Subject : Topic Discussion : Discussion

Decision 2: Decision 2.a), b),c}, etc.

Agenda No : Agenda No Subject : Topic Discussion : Discussion

Decision 3 : Decision 3, a), b),c), etc.

Agenda No : Agenda No

Subject : Topic

Discussion : Discussion

Decision 4: Decision 4. a), b),c), etc.

Follow up : Follow up

Conclusion

Use this section for additional instructions, comments, or directions.

Figure-17: Minutes of meeting

Press Release

After clicking Press Release from left menu under system data, showing the list of Press Release (date, Information, Status)

5.4 Back-end design

For the best use of MIS by the Parliamentary Standing committee on ICT Division I have used Sql lite-3 for back-end data processing, classification and saving.

5.5 Integration and Testing

In the software systemdesignmethod Integration testing, conjointlycalled integration and testing (I&T). it's a software system development methodthat program units are combined and tested as teams in multiple ways that. At this context, a unit is definedbecause the smallest testable a part of an application. Integration testing will expose issues with the interfaces among MIS for the Parliamentary Standing committee, parts before problem may arises in real-world program execution. For that reason I have designed an integration process conjoining the components such as front-end, database and back-end etc. Integration testing may be apart of extreme Programming (XP), a realisticmethodology of software system development that takes a meticulous approach to assembling a product by means that of continual testing and revision

Chapter – 06

Analysis and Discussion

6.1Analysis

The Parliamentary Standing Committee MIS Interface mainly works as business intelligence purposes in Parliamentary committee function, to ensure that data can be extracted by dedicated reporting systems without impacting the core operation of Committee. The MIS Interface is comprised of the following:

- Snapshot Logs of Live data.
- Each agenda and decision taken
- Regular follow up report
- Sample processes for building a Data Warehouse.
- Sample MIS Reports.
- Generation of customized reports for time bound parliamentary queries.
- Other relevant information as necessary during the meeting time.

6.2 Discussion, Challenges and Issues

6.2.1 Discussion

The impact of MIS on the functions is in an organisational management with a decent MIS supports the management of promoting, finance, production and personnel becomes additionalefficient. The monitoring functions and supervision of the organisational targets becomes simple. The functional Authority is enlightenedregarding the progress, achievements and shortfalls within the activity and also the target organisation. The Authority/ corporate executive is kept alert by providing certaininfo indicating and probable trends within thenumerous aspects of business. This helps in prediction and long-run perspective planning. The Authority's attention is bought to a

scenariothatis anticipated in nature, inducement him to require an action or a choicewithin the matter. Disciplined inforeporting system creates structuredinformation and a knowledge domain for all the people within the organisation. The information is available in such a type that it will be used right away by mixing and analysis, saving the manager's valuable

The MIS creates another impact within the organisation that relates to the understanding of the business itself. The MIS begins with the definition of systematic retrieval of information, entity and its attributes. It uses a wordbook of information, entity and attributes, respectively, designed for info generation within the organisation. Since all the information systems use the wordbook, there's common understanding of terms and wordwithin the organization bringing clarity during communication and a similar understanding of an occasion within the organization.

The MIS calls for a systematisation of the business operations for an efficient system design. This results in streaming of the operations that complicates the functional system design. It improves the administration of the business by bringing a discipline in its operations as everyone is needed to follow and use systems and procedures. This method brings a high degree of expertisewithin the business operations.

The goals and objectives of the MIS are the product of business goals and objectives. It helps indirectly to dragthe whole organization in one direction towards the company goals and objectives by providing the relevant info to the organization. A well designed system with a spotlight on the manager makes an impression on the managerial potency.

6.2.2 The challenges

But during the time of my visit and study i have found some lacking, irregularities and shortfalls within the existing manual procedures of notice issue system, arrangement of

agenda, writing of discussion and decision, follow up report and making ready the periodical reports.

Maintenance:

A key drawback for management info systems is that the provision of the data input and also the maintenance of up-to-date information. The committee already generates information on each sitting, discussion and creating decision, committee recommendations, audit reports, logistics and different elementary business info. The organisational management information systemwill use this information in either its current type or import it in a verytype of standard format. During this method, the information within the system is usually the same data because the organization operating level is using and generating.

Usability:

Usability may be a major drawback for management info systems. A robust system is ideal for the information of any organization is wasted if its workersdo not use it. Abscent of Management info systems of bangladesh Parliament creats result of their manual procedure, it's too laboriousto induceuseful results or the results don't seem to bein a veryusefultype. So we need to emphasise on automation by using MIS. Before choosingthis system, it'srequired to test for these issues. The reports must be easyto know and relevant for the organization. Users must be able to generate the reports they need with a minimum of training and with very little effort.

Changes:

A very important management information system characteristic is that the ability to adapt to changes in any organization. The available infomight change, any reports that the committee needscould vary and sometimes the personnel using the system changes. The system one place in situhas got toyield revisions within the inputs and outputs, either simply enough through own IT employees, or at agreed rates by the provider. There must

be an easytechnique of adding and deleting user accounts that one will handle internally, as a result ofprevious, active accounts will be a security drawback.

Lack of consensus:

If one fails to induceeverybody on board with the organisational changes, one is probably to face barriers throughoutthe process. The decision to implement changes ought tocome back from the highest level of the organization. All management level employeesmustget on board and able tocope with the changes otherwise onemight face dissension within the employees. The management will not have everybody on board right from the start. Showing managers however the changes canhave an effect onthe corporate and also the steps for implementing the changes helps get them on board if they at the start have reservations.

Employee Resistance:

In some cases, workers resist modification. They become comfy with the means at present the business is run. They understand the expectations and their role insidethe company. Once significant change disrupts their familiarity, some staff become upset, they do notwish to learn their jobs or amendment the meansthey are doing things. Supporting your staff and providing training for any new responsibilities will facilitate ease the transition.

Difficult to develop and high price:

A new system with goodinterfacedesign are toughto createand shouldconjointlycosts highlyfor new software, hardware and training support.

6.2.3 The issues

Security issues

Another issue encompassing MIS processes involves information security. Hackers, identity thieves target sensitive information as Parliament keeps a lot of national sophisticatedinfo. Several national level security threats can arise if information leak or hack happened inside this MIS. As several users have the access to this interface, there's an opportunity of dataleak or get information out of Parliament.

Planning

Withoutstepwiseplanning, modification in an organizationis probably going to fall aside or cause additionalproblems than advantages. One needsto knowspecifically what changes canhappenand the way those changes will occur. For instance, if one transitioning to a brand new content management system, one'll needto understand if the new system is compatible with the previous system, howeverone'll transmit the previousinfo to the new system and if there'll be limited access during the transition. One conjointlyneeds to assign roles to individualswho are liable for the changes thus all duties are covered. The time line for the changesis additionally a key element. One has toplan for downtime or difficulties in finishing regular work tasks whereas the amendmentoccurs.

Internal Communication

Failing to communicate with all staffinvitations rumors and worry into the geographic point, particularly if organisation is facing major changes, likedownsizing or a merger. Staffwishesto understandwhat is going on, whether or notit's positive or negative news. The sensation of uncertainty when management does not communicate disrupts work and makes staff feel as if they are notan element of the decision. Keep staff updated frequentlyregarding the plans and progress toward the change implementation. Involve all staffas many as possible through conferences or brainstorming sessions to assistthroughoutthe implementationphase.

6.3 Findings of the study

MIS plays awfully avital role within the organization; it creates an impression on the organization's functions, overall performance and productivity. With a decent MIS supports the management of the committee functions becomes additional efficient. The following and monitoring system of the functional targets becomes simple. The committee is advised concerning the progress, achievements and shortfalls within the activity and also the targets. The committee is kept alert by providing certaininfo indicating and probable trends within the numerous aspects of Ministries business. This helps in setting of methods and semi-permanent perspective planning.

The committee's attention is bought to a situationthatis predicted in nature, inducing that to require an action or a decision within the matter. Disciplined inforeporting system creates structure information and a knowledge domain for all the people within the committee and also the Ministry/ organization. The information available in such a type that it will be used right away by compiling and analysis, saving the committee members/ stakeholders valuable time.

The MIS creates another impact within the organization that relates to the understanding of the business itself. The MIS begins with the definition of systemetic information, entity and its attributes. It uses a wordbook of data/ decisions, entity and attributes, respectively, designed for info generation within the organization. Since all the information systems use the wordbook, there's common understanding of terms and wordwithin the organization bringing clarity within the communication and an analogous understanding of an eventwithin the organization.

Some of the improvements are as follows-

- I. Maintenance can be easier.
- II. Complication in terms of usability should be reduced.
- III. Digital documentation is ensured.

- IV. Systematic achieving is ensured.
- V. Communication gap between users can be minimized.
- VI. Enough training can minimize employee resistance.
- VII. Information can be retrieved within short time.
- VIII. High cost should take into consideration in terms of development.
 - IX. Security Issues and identity theft should be checked.

The MIS calls for a systematization of the committee/ business operations for an effective system design. This leads to streaming of the operations which complicates the system design. It improves the administration of the standing committee by bringing a discipline in its operations as everybody is required to follow and use systems and procedures. This process brings a high degree of professionalism in the organizational operations.

Chapter – 07

Summary Conclusion and Recommendations

7.1Summary

The implementation of Management information System in the Standing Committee business process is a catalyst in terms of report generation as it reduces time, complexity and put a lot of task into a simple form. The MIS interface of Parliamentary Standing committees helps the government to ensure more connectivity with the concerned ministries and also uphold the accountability of the committees of Bangladesh parliament.

The goals and objectives of the MIS are the synchronized product of the Committee's goals and objectives. It helps indirectly to dragthe whole organization in one direction towards the corporate goals and objectives by providing the relevant info to the organization.

Anelegant Management data system with a spotlight on the manager makes an effect on the managerial efficiency. The fund of data motivates an enlightened decision maker to use a range of tools of the management. It helps him to resort to such exercises as experimentation and modelling. The utilization of computers allows the committee to use the tools and techniques that are not possible to use manually. The ready-made packages build this task easy. The impact is on the organization inmanagerial ability to perform and improves decision-making ability significantly high.—

7.2 Importance

It goes withoutexpressionthat every managerial functions are performed through decision-making; for taking rational decision, timely and reliable infois important and is procured through a logical and well structured methodologyof datacollection, process and disseminative to decisionmakers. Such a waywithin the field of management is widein use of MIS. In today's world of ever increasing complexities of business moreover as business organisation, in order to service and grow, should have a properly planned, analysed, designed and maintained MIS so it provides timely, reliable and usefulinfo to enable the management to require speedy and rational decisions.

7.3 Conclusion

This study has bidirectional benefit to me as this was also a in depth study of a organizational functioning, stakeholder interview, system requirement analysis, system designing, constraints and challenges of MIS implementation. After completing the study and writing the thesis, it will push me a more ahead to complete MS in MIS degree. This also helps me to understand the activities of Standing Committees of Bangladesh Parliament as it will help to enrich my career as an efficient official of Bangladesh Government.

Life consists of a number of transactions and the transaction from the education life to that of a professional career is quite a significant one. Speaking for myself, I have always wanted to work in such organization where I can apply my acquired knowledge and also gain knowledge which I am in lacking. Study of MIS requirement analysis and interface design for Bangladesh Parliamentary Standing Committee is the right are of research for me to improve my knowledge and to gain a lot. It was one of my dreams to be a student of **Management Information System**at the Daffodil International University. Finally, the dream comes true when I get admitted myself for the *MS in Management Information Systems* program. At the end of this program this particular research and thesis writing program is a blend of hard work and satisfaction.

7.4 Recommendations

From in-depth study of MIS design and committee business procedures I am submitting some recommendations for effective MIS and its interface for parliamentary Standing Committee; Those are as follows-

- 1. To establish a modern IT infrastructure as described in *chapter-5*, *Design Specification*.
- 2. Ensure a user friendly MIS interface.
- 3. Develop MIS compatible process that provides strategic decision making process for committee functions.
- 4. Launch MIS for every Standing Committees business process.
- 5. To establish campus-wide IT priorities.
- 6. Maintain all the LAN Team nodes active.
- 7. Ensure that information security and privacy concerns are addressed throughout the governance process.
- 8. Doing the post-implementation stage maintenance of the System Life Cylce methodology.
- 9. To allocate budget for the committees to empower the strategic, operational and technical decision-making required to ensure the committee to excel in its mission and accomplish the priorities, goals, and initiatives set forth by parliamentary standing committee leadership.
- 10. Provide an annual report to the National Parliament regarding progress in addressing the Ministry function using MIS for public interest to strengthen the democratic process.

The End

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