Management Information System in Foreign Commercial Bank in Bangladesh

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Abstract

Management information system (MIS) provides a new way to construct foreign commercial banks’ agility. This paper briefly introduces the principle, characteristics, and applications of MIS in the context of foreign commercial Bank in Bangladesh. It also elaborates the defects of conventional bank’s policy due to lack of proper information system infrastructure and explores the innovative applications of MIS in banks. The importance of MISs is identified in influencing the service quality. A model interrelated to these constructs in the banking industry is proposed. Primary data have been collected from the bank employees in state-owned, private, and foreign commercial banks such as Sonali Bank, Rupali Bank, Janata Bank, Dutch Bangla Bank Limited, National Bank Limited, HSBC (The Hong Kong and Shanghai Banking Corporation Ltd.), Standard Chartered Bank, Al-Falah Limited, and Commercial Bank of Ceylon Limited. The collected data were used to test the model using regression and path analysis methodology. The result reveals that the important elements of MIS are system quality, information quality, employee information system characteristics, and technical support, whereas the identified consequences are service quality and employee IS performance.

Keywords: Management Information Systems; Foreign Commercial Bank; Information Quality; Decision-making Process; Enterprise Resource Planning; Financial Supply Chain Management

1. Introduction

The commercial banking system dominates Bangladesh’s financial sector. 9 foreign commercial banks are operating in Bangladesh now. The management information system (MIS) plays a key role, especially in service sectors such as commercial banking, which they build their competitive advantage on credibility and information. A huge amount of capital has been invested on MISs. MIS is a system used by most of the commercial banks in Bangladesh nowadays to provide information at high quality and precision needed to manage the bank efficiently and ensure fast and secured service to the management and customer as well. MIS provides the necessary reports and summarizes these bank’s basic operations to the senior administrators in the bank and support decision-making process. Other benefits of MIS are transparency of information provided for bank’s clients. Investors need for authentic and efficient information before they decide to invest in these banks, and they need quality in information, which can only be provided using MISs.

1.1. Objective of the study

Following objectives are set for this paper:
1. To evaluate the advantages of using MIS in banking sector
2. To identify the challenges of implementing MIS in banking
3. To assess the existing scenario and to detect the problems and prospects related to the implementation of MIS in traditional and foreign commercial banks in Bangladesh
4. To identify the operational process and the implementation of MIS in banking sector in Bangladesh in comparison to other developed nations
5. To identify the major obstructions, those impede the implementation of MIS in banks in Bangladesh
6. To focus the pros and cons of executing MIS in the foreign commercial bank.

2. Methodology

This paper is a study of the scope of MIS in the banking sector in Bangladesh. Our main purpose of this paper is to analyze find out the problems and hassles that customers are facing in traditional banking sectors and how the execution of MIS can make this faster, hassle-free, accurate information, and better service. For less time and opportunity, this article does not carry on any direct survey or research. We tried to collect data from primary and secondary sources. Primary sources: We met branch manager, executive officer, and customer manager in different public and foreign commercial bank and interviewed them to find out more about the system. Secondary sources: We have gone through some published information from different sources. We have taken information from various textbooks, blogs, and websites.

The questionnaires aiming to identify:
• The reasons behind to switch to E-banking from traditional banking
• How they facilitate agile service?
• How they maintain the central database and enterprise resource planning (ERP)?
• Is this ensuring accountability?

2.1. Limitation
• For data confidentiality, banks are not cordial to share all information
• Validity of information.

2.2. Services provided by foreign commercial bank in Bangladesh
• Internet banking
• Phone banking
• Online fund transfer
• Salary remittance package.

2.3. Resources of foreign commercial bank in Bangladesh

2.3.1. System software
• Windows and Linux for PC’s
• Windows and Linux Server for maintenance.

2.3.2. Application software
• MS office, Kaspersky Internet Security, Adobe Reader, FlexCube, and Open Office.

2.3.3. Hardware resources
• Dell mainframes
• Multi-processor clustered servers
• PC (HP/Compaq)
3. ERP Trends in Foreign Commercial Bank

Banks are switching from the homegrown solutions to third party vendors such as core banking systems providers to help them with changing technology demands. This trend will let the banks focus on their operations to deliver banking services as their key offering to afford a better credibility with customers. The major IT products on the offering for banking applications include Accenture’s Alnova, Oracle’s Flexcube, Infosys’s Finacle, CSC’s Hogan, Polaris’s Intellect, and a most recent entrant in the market - SAP’s industry solution (IS) for Banking, financial supply chain management, and loan management. It is projected that SAP will lead in market penetration due to the flexibility of its system architecture and the company’s dedication to web services through its NetWeaver platform. Major banks such as Commercial Bank of Ceylon, HSBC (The Hong Kong and Shanghai Banking Corporation Ltd.), Standard Chartered Bank already introduced pilot implementations of SAP’s best-known software product ERP application systems and management (SAP ERP).

4. Trends and Challenges in Implementing MIS in Banking

Financial institutions are facing numerous challenges in terms of increasing customer expectations on ease of product use, integrated customer information management, and long-term data sustainability. The customers require the banks to focus on products that provide them with customer profitability analytics, relationship pricing, and dynamic pricing (pricing based on specific market and/or customer factors). Therefore, the banks need to adapt to enhanced content management and business process management centric technologies to automate their decision-making processes.

   It is projected that the banks will continue to focus on service-oriented architecture (SOA) (Note: SOA is a software design and software architecture design pattern based on distinct pieces of software providing application functionality as services to other applications. This is known as service orientation. It is independent of any vendor, product, or technology). This will help them to ensure data integrity, single view of customer information, reduce application redundancy, ease of data sharing, and reduce maintenance.

5. Areas for Implementing of MIS

Banks use technology in several areas such as cash management, securities lending, and customer master management. Technology products help to avoid check frauds, electronic bill payment, credit management, collections management, liquidity management, and treasury management. These products also support a full range of treasury derivatives and cash instruments involving foreign exchange, money markets, full back office processing capabilities, general ledger, and limits management. The challenge is to support continuous 24 × 7 trading across various geographical regions.

   Banks are adapting to newer IT-based products to reduce the high cost of ownership. The thrust is to migrate to newer web-based systems. These products enable the banks to have a centralized database and the capabilities to interact with external data sources and interfaces. Banks also need to support varying reporting formats within their payment portals to cater to different client segments and to comply with regional reporting formats, for example, CODA for Belgium, Norma for Spain, and so on.

   Advanced technologies such as touch screen panels, laptops, and smartphones are transforming
the customer interface at the branch by enhancing capabilities to browse and will quicken access to their banking information. Interestingly, SAP has bought Sybase Inc., during May 2010, a capability that will provide its ERP offering with technology to deliver accounting software and other programs through smartphones. The evolving ERP offering will enable more consumer analytics and will support the branch’s customer service representatives to readily identify profitable customers, expedite account applications, and offer relationship pricing such as fee waivers.

6. Relevance of Data Warehousing and Data Mining for Banks in Bangladesh

Banking being an information intensive industry, building the MIS within a bank or industry is a gigantic task. It is more so for the public sector banks which have a wide network of bank branches spread all over the country. At present, banks generate MIS reports largely from periodic paper reports/statements submitted by the branches and regional/zonal offices. Except for a few banks which have been using technology in a big way, MIS reports are available with a substantial time lag. Reports so generated have also a high margin of error due to data entry being done at various levels and the likelihood of varying interpretations at different levels. Though computerization of bank branches has been going on at a good pace, MIS requirements have not been fully addressed to. It is on account of the fact that most of the total branch computerization software packages are transaction processing oriented. They have been designed primarily for day-to-day operations at the branch level and day-end balancing of books.

7. Implementation of MIS Ensures Accountability

This paper is intended to highlight that the practical and systematic ways MIS practices to mitigate risks by strengthening control and accountability mechanisms. And how to evaluate and mitigate operational risks originating from running the MIS. The findings of the paper are based on the review of several management data sheet of different banks.

The paper presents a framework for the implementation of MIS that is based on banking sectors. This framework can be applied both to programs that make use of information and communications technology and programs that are paper based. It includes examples of MIS practices that can strengthen control and accountability mechanisms present a roadmap for the design and implementation of an MIS in these programs. The paper concludes with some considerations and recommendations for task managers and government officials in charge of implementing CCTs and other safety nets program, and with a checklist for the implementation and monitoring of MIS.

8. Implementation of MIS Reduces Corruption

MIS play a key role to reduce corruption in the banking field. The bank who properly apply the MIS in their organization get lots of satisfaction by avoiding corruption such as:

Bank satisfaction:

v Help to integrate a number of procedures and transactions
v Detail representation of bank notes and coins
v Movements and vaults
v Sorting and withdrawal.

Customer satisfaction:

v Enable customers to pay and receive electronically
v Can get reconciliation update at any point, if time.
8.1. Backup system

- Restores transactions, balances, and statements, etc., from the data backed up by the user
- Control of branches, ATMs, POS terminals, Internet banking service, SMS, and alert banking system
- Online synchronized DRS.

9. Findings

From the field level study, we observe that still nationalized commercial banks and specialized banks are lagging behind of online banking services. Moreover, customers are not satisfied with the quality of the services. They are not also very happy with the behavior of the bank personnel. However, it reveals that e-business, especially with the help of online banking, can manage the economy of Bangladesh in a far better way as customer relationship management increases.

Local banking software should be developed properly and must have greater accessibility within the country and outside the country. Moreover, to produce hardware especially computer and its accessories, local entrepreneurs are not taking any sort of strategic planning. Bangladesh Bank should adopt the latest technology but due to lack of vision, they are adopting old technology, i.e. introduction of MICR for Bangladesh Bank automation procedure. MICR system should be substituted by check truncation system.

The shortage of technology-based human resources and poor telecommunication infrastructure needs to be overcome to break low equilibrium trap. Bridging the digital divide would provide technology-based human resources, who can contribute to raise gross domestic product, national savings, investment, creation of employment, and moving out from the vicious circle of underdevelopment.

Numerous problems have been identified from the field survey online banking system in Bangladesh. Some of them are in the followings:

- Inefficiency and inadequate knowledge of the bank management about the online banking
- Lack of proper strategic plan to gain and retain market share of the indigenous banks
- Lack of international standard communication channel
- High cost of establishing online banking system
- Inadequate back and front office management
- Lack of integrated plan among the banks and the central bank authority
- Inefficient clearing house facilities
- Inappropriate software and less trust by the bank authorities on local software
- Biased-ness of the management of bank toward foreign software
- Legal barriers and appropriate policy framework.
10. Recommendation

After analyzing the study variables in the context of the banking industry of Bangladesh, the following issues were found to be recommended for the study:

First, the result of stepwise regression, it was revealed that only overall service quality is significantly related to bank reputation; thus, it seems very important drivers for bank reputation for the clients. Hence, overall service quality should be taken special care for the benefit of the bank.

Second, although different kind of banking produces and schemes has been introduced by foreign banks in Bangladesh, still most people are not aware of their activities in different areas. Hence, management of such banks should take effective measure so that they can bring their product to people mind and make them understand about their products attributes. Beside that management should ensure that all of their branches are operating in a similar fashion and providing similar product choices (such as savings, cards, and personal loans) so that clients of any location have a similar perception about the bank. Furthermore, managers of such banks should improve the quality of their product overtime with the changing environment.

Third, the survey result of this study indicates that the main reason for customer to switch over to a new bank is that new bank provides a greater variety of bank products. Therefore, if managers were to become convinced that product quality plays an important role in the process of positive reputation building, they could identify the key antecedents and take measure to improve it.

Fourth, each and every bank should contribute in nonprofit social welfare activities which could build a positive image in people mind, and thus, the reputation of bank increased to an acceptable level. Corporate social performance represents their belief, values, behavior, culture, etc., and can also be considered as promotional activity.

Finally, it is very important for any retail bank in Bangladesh to take effective measures to improve service quality, product quality, and corporate social performance if they are to build and enhance their reputation and thus attract a large share of profitable customers and maintain a sustainable competitive advantage in the long run.

11. Conclusion

MIS assure a high level of service quality and efficient information sharing between all the departments in the bank and provide precise information to the senior management inside the banks that help to make precise strategic decisions. This article concluded that the previous experience and awareness of managers and employees was not potential about the function and efficiency of MIS on the overall performance of the bank and the service quality provided to the clients. It is obvious that training on using the functions of MIS will improve their experience and ability to deal with these functions and good practicing on using these functions. In addition to that, the perception and willingness of managers in the bank are very important to ensure swift implementation of MIS. Moreover, the perception and willingness of managers to use and adopt MIS in the traditional bank were not encouraging and weak, according to this study, the perception of managers is one of the main obstacles that hinder swift implementation to MIS in the banks in Bangladesh.

References
