



Independent University Bangladesh

An Internship Report

On

Information Technology Service (ITS)

Banking System

(AB Bank limited)

This Report Is Submitted By,

Farhan Abtahi

ID: 1630026

Under the Guidance of

Sabrina Alam
Lecturer

Department of Computer Science and Engineering
Independent University, Bangladesh.

In partial fulfillment of the requirements for the
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Department of Computer Science and Engineering
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Attestation

This spring semester I had the opportunity to do my internship in department of Information Technology Service (ITS) in AB Bank limited.

The purpose of my internship is to demonstrate the ability to apply what I have learned from the classroom to an actual work experience. The analysis of the theory taught in classroom and its application in practice also is showed in the internship paper. My internship paper was mainly composed of three parts: description of internship, policy analysis in, and recommendations.

The first part was the description of my internship in ITS. It included the organizational structure of ITS, the mission and statement, what I did during the internship, and the analysis of Strength, Weakness, Opportunity, and Threats (SWOT).

The second part was important one. In this part, I focused on the analysis of policy making and explained how the policies are being made in ITS. I took the Zimbra email system as a typical example to analyze the policy making in this department. There were some differences between the theory taught and the application in practice.

The last part included something special in the internship, the connections of public administration theory, some recommendations, and suggestions.

At the end of the paper, there is a conclusion to sum up what I learned from the internship.

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Farhan Abtahi

17/6/2021

ACKNOWLEDGEMENTS

First and foremost, I would like to thank Almighty Allah for giving me the endurance and the ability to work hard. It is my privilege that I had the opportunity to do an internship in The AB Bank Limited. I would like to thank all the people on whom I carry out my internship.

I express my deep gratefulness to my supervisor Sabrina Alam, Lecturer, Department of Computer Science and Engineering, Independent University, Bangladesh, for her invaluable instructions, continuous guidance, constructive criticisms, and thoughtful advice during pursuing this internship and preparation of this report.

I also want to express my deep gratefulness to Tanzeem Hasan Mahmud Sir (Head of ITS) Also, I express my deep gratefulness to all employees of AB Bank limited for cooperated to help me to complete this internship report.

Last but not the least, I would like to thank my parents for their eternal support given to me.

Farhan Abtahi

ID: 1630075

Letter of Transmittal

21st May 2021

To

Sabrina Alam

Lecturer,

Department of Computer Science & Engineering,

School of Engineering & Computer Science,

Independent University, Bangladesh

Subject: Submission of Internship Report for the completion of Graduation.

Dear Madam,

With due respect, I would like to inform you that I have completed my internship at AB Bank Limited. It was a great experience for me. I got the opportunity to work with the Information and Technology service Team. Throughout this journey I have learned about networking, Banking Email, and support work. In this report, I have tried to include my experience along with some relevant information to make the report informative and comprehensive. I am extremely grateful for your guidance and kind cooperation on this report. It would be great if you kindly go through the report and evaluate my performance.

Yours

Sincerely

Farhan Abtahi

ID- 1630026

Department of Computer Science & Engineering,

School of Engineering & Computer Science,

Independent University, Bangladesh

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INTRODUCTION

My internship took place in department of Information Technology Service (ITS) in AB BANK. ITS is responsible for providing information technology support for AB BANK. I worked in the ITS Department from August 2020 to present 2021. The Objective of my internship is to apply the knowledge which I learned from the class to the practice in public sector and compare their differences.

DESCRIPTION OF THE INTERNSHIP

ITS plays a very important role in AB bank, which is composed of nine divisions –Client-Server, Information Security, IT Inventory Management (ITIM), IT Lab, Networking, Business Operations, Service Desk, Technology Outreach and Telecommunications (Figure1).

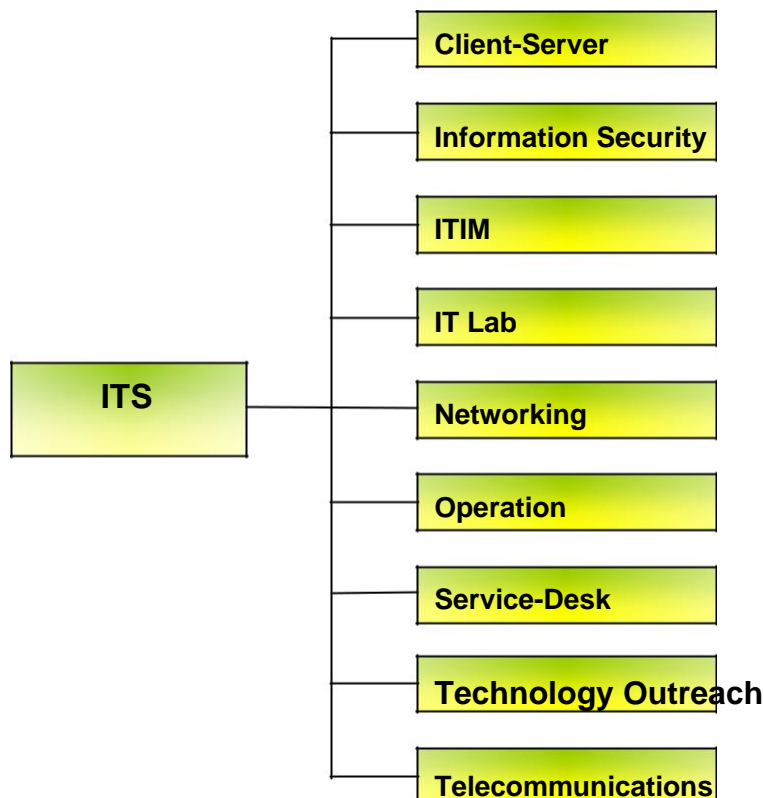


Figure 1

There are about 25 staff working in this department. The mission of ITS is to provide information technology leadership and support that enables AB Bank to fulfill its instructional and administrative functions in an efficient, effective, and timely fashion. Each division has different function in ITS.

which can be showed as follow:

1. Client-Server

The Client-Server group is one of many divisions within the Information Technology Services (ITS) department at AB Bank. The Client-Server group offers over 100 applications; administers over 70 different servers with Windows and Linux which supports staff and Customer email; and provides identity management, web development, and an enterprise backup solution.

This group also helps to make staff's everyday tasks easier and more efficient such as researching, testing, and implementing new technologies for future use.

2. Information Security

This is a special division in ITS department. The mission of the Information Security Office (ISO) is to assure the security of the Bank's Information resources and provide a safe computing environment.

This mission of ISO is achieved through the utilization of policy and procedures, security training and awareness, and technical controls.

3. IT Inventory Management (ITIM)

The ITIM Division is responsible for setup and installation, relocation, and inventory management of PC desktop computers and peripheral devices such as printers and scanners. This group supports staff and computer lab machines. For instance, if there is a request relocation of existing IT equipment, they will quickly response and sent technology assistant to solve the problem. This is a small division but it is the basic and key part of ITS department.

4. Networking

The Network Operations division is responsible for installing and maintaining the network infrastructure. AB bank has over 100 subnets supplied by over 600 switches and two core routers that relate to over five miles of fiber optic cable.

The switches provide access to numerous campus servers running on a variety of platforms and Operating Systems such as Windows XP, Windows 7, Windows 10 and Linux. This infrastructure also provides a link to the Internet for over 20,000 users.

Network Operations provides all the enterprise services to the campus. These services include Domain Name Services (DNS), Dynamic Host Control Protocol (DHCP), Network Time Service, and Windows Internet Naming Service.

6. Operations

The Operations division serves as a central hub of all the ITS divisions. It is also responsible for the main phone line.

Each Bank owned laptop will now have a STOP tag, embossed Bank decal, and a Bios Splash Screen and Screensaver (Windows Only) installed to deter theft. Each time the computer boots up, the BIOS will display 'Property of AB Bank'.

7. Services-

Staff	Customer
NetID & UID	Customer – Getting Started
Email	Customer Server
WebCT Vista	IT Intro.
Owl Express	File Storage
Track-It	Frequently Asked Questions
Viruses / Hoaxes / Spyware	Atlas Server
File Storage	Computing
New Hire Information	Wireless Network Access
Web Publishing	Software Downloads
Dreamweaver Update - Staff	
Kronos	
IT Training	
Network Requests	
Technology Equipment Purchases	
Moving Equipment	
Wireless Network Access	

Figure 2

8. Technology Outreach

The ITS Technology Outreach group is a cooperative team devoted to transferring technical knowledge. The mission of this group is to facilitate the transfer of knowledge from the people who implement technology on campus to the people who use the technology.

9. Telecommunications

Telecommunications is a division of Information Technology Services. This group is responsible for all telephone connectivity, excepting the apartments. This connectivity includes all moves, adds, changes and repairs, as requested by departmental personnel. Telecom is also responsible for the acquisition of pagers, as well as obtaining proper approval for purchases of cell phones.

Telecommunications is also responsible for all the voice and data cable installed throughout campus. Telecom works closely with Plant Operations Facilities - Planning and Design, to ensure that the proper wiring infrastructure is provided in

new and renovated buildings. Extensive time and effort have gone into cable.

2.Literature Review

2.1 Introduction

Working in an IT Department is not an easy day to day task. From setting up the environment to visiting different sites, sometimes managing a clients request on the run. It gets tough in every aspect. But still managing to provide support and building relationship in the key to success.

2.2 Relationship with undergraduate Studies

- **ENG 105 (Business English)**
- **CSE 104 (Electrical Circuit analysis)**
- **CSE 204 (Digital logic Design)**
- **CSE 214 (Computer Organization & Architecture)**
- **CSE 210 (Electronics 1)**
- **CSE 310 (Electronics 2)**
- **CSE 303 (Database Management)**
- **CSE 307 (System Analysis & Design)**
- **CSE 309 (Web Application & internet)**
- **CSE 316 (Data Communication & Computer Networks)**
- **CSE 408 (Advance Computer Network)**

2.3 Related works

- Installing and configuring computer systems and network
- Monitoring the Computer systems and network.
- Studying the system to understand better.
- Providing LAN support.
- Managing the client Database.
- Providing Online support.

3. The Hierarchy Structure of ITS

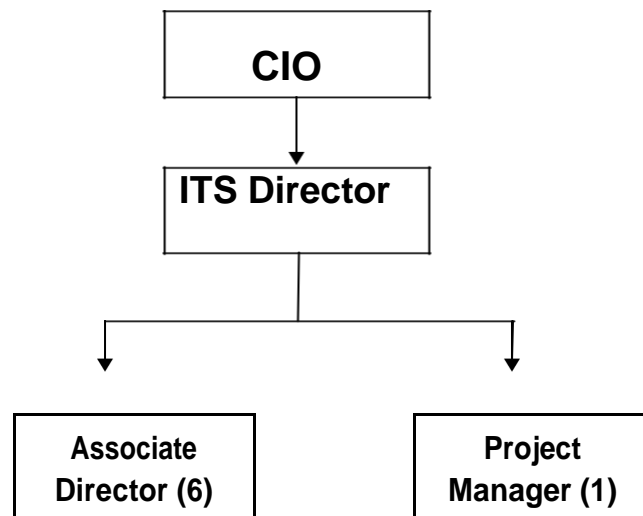


Figure 3

The Chief Information Officer (CIO) oversees Information Technology Service. The director of ITS has 6 associate directors and one project manager. Each associate director or manager is responsible for different divisions in ITS.

I interned in the Network Sector which is one division of ITS. There are 6 staff working there. The work mission in this division is offering the computer sources and network service for the and staff. The services include offering printing and faxing services.

My associate director oversees the section of Service Desk, Labs, Technology Outreach, and Technology Support.

As an IT Trainee, my main work is to assist the manager. I serve the people and try my best to help them.

Furthermore, if the staff have any problem with their laptops and networking, I can supply the technological help to solve the problems

My manager is Mr. Abdul-Hadi, whose daily job is to assist in the administration of the Help Desk and ITS. As a staff in ITS, he responds to phone calls and emails to the Help Desk as needed. As a manager, Mr. Abdul-Hadi assists with the implementation of new policies and procedures within the Sector and Help Desk. And he assists with the budgeting and forecasting needs of Labs and Help Desk. He also assists with the management with 6 full time staff. Sometimes he plays a role as liaison between ITS and other lab coordinators. He develops and maintains documentation for internal and external users. On some weekends, he must work in evening or early morning hours.

4. Methodology

4.1 A SWOT analysis in the Sector

SWOT Analysis is a strategic planning method used to evaluate the Strengths, Weaknesses, Opportunities, and Threats involved in a project or in a business venture. It involves specifying the objective of the business venture or project and identifying the internal and external factors that are favorable and unfavorable to achieving that objective. SWOT means Strength, Weakness, Opportunity, and Threats. SWOT is a tool to analyze the internal advantages and disadvantages of organizations. The external opportunity and threats also be analyzed by this method.

In the internal analysis, the strength includes many aspects, such as good environment for Working, the Service team work hard and seriously, good leadership and administration, etc. The weakness comprises lack of space for the Lab, printer sometimes not working,

Limitation of computer and printer sources. For the external part good reputation, and employment opportunities for students. Competition from other resource, and pressure comes from the public and the board of directors.

To improve the efficiency and effectiveness, the Sector needs to decrease the weakness and the threats. For example, make a new project plan for building some new labs to extend the space. It also needs to buy more new computers and printers. On the other hand, the staff need to improve their personal computer skills to help people. To improve the strength and seize the opportunity also can make the computer lab more efficient and effective on their services.

4.2 POLICIES ANALYSIS IN ITS

During my internship, I found that policy making was very important and could be seen in any section in ITS. Compared to the Policy Analysis theory, the policy making in ITS seemed quite different but still successes. The definition of one policy in ITS is a principle, a plan, or a course of action which is adopted and pursued by the ITS department.

As we learned from Public Analysis theory, the process of a policy making includes these steps: problem definition, stakeholders, assembling evidence, alternatives construction, outcomes projection, criteria selection, and trade-off, and

deciding. The procedure of policy making in ITS almost follow these steps but sometimes for some policy they do not need to follow all.



5 Body of the Project

5.1 Problem Definition

In recent years, The organization structure of AB bank is stronger than before. It illustrates the fact that there is more and more staff working in the bank. It illuminates that the numbers of user also increase rapidly.

Now the Groupwise email system has more problems, and it cannot meet more and more users' needs. A general consensus of users pointed to the emerging limitations of the existing email service. It cannot offer larger storage space for the users. For instance, as inboxes growing each Month, many users must spend valuable time filing and retrieving messages. Additionally, they must delete email messages frantically to stay under the set fifty-megabyte limit. Consequently, a new email service with key end-user benefits was selected to replace Groupwise.

Based on the above, the problem can be defined as -- the limitations of old email system affected the efficiency of staff.

5.2 Stakeholders

The stakeholders in this case are listed mainly as follows: Staff, Customers, ITS Department, Bank.

Board, Public, and the Company of Groupwise. As the Staff are the users

of this email system and the Customer have strong relationship with these users.

Consequently, Staff, Clients are the most important stakeholders in

this case.

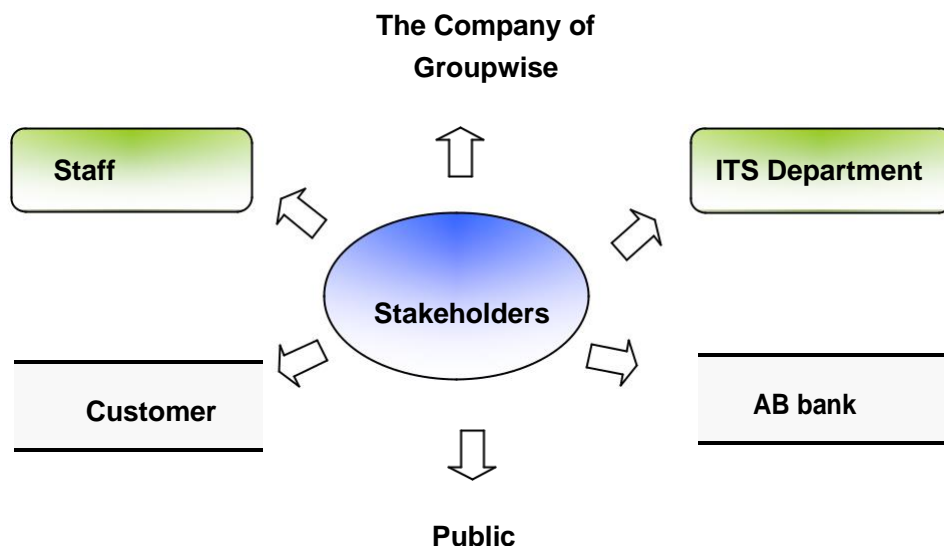


Figure 6

5.3 Assemble Evidence

According to the current situation, the data were collected in three perspectives:

- (1) Staff's information;
- (2) Customers' information; and
- (3) Data of current email system in ITS.

The more detail of this evidence can be showed as follow:

Firstly, staff's information is most important because they are the End-User for Groupwise email system. The information collected include the satisfaction survey for old email service; the defect of the old email system; the numbers of Groupwise users.

Secondly, we must attach importance to the Client information. The purpose of using Groupwise email system is to build a communicational bridge between the Client and customer care. Client opinions play an important role. These evidence which reflects the problem of Groupwise email system indirectly.

At last, ITS department has more authoritative and persuasive data in Groupwise email system. These data include: the data of messages of Groupwise in recent 10 years; the storage space of Groupwise; the error report of Groupwise; the information about the complaint from the end-users

5.4 Alternatives Construction.

After analyzed the data collected, we can construct two alternatives:

- (1) Use a new email system (Zimbra) instead of the old system.
- (2) Keep and improve the old mail system (Groupwise).

5.5 Outcomes Projection

According to policy analysis theory, the following factors were taken into consideration when they forecasted the outcomes of the options:

- (1) Forecasted the quantitative data of the email system condition for 10 years periods.
- (2) Forecasted the outcomes of the underlying factors affected such as the option was not implemented.
- (3) Forecasted each option as a policy was implemented, what was the outcome of the email system condition. Figure 7 shows the outcomes of each option we just forecasted:

Option	Option (1): Use a new email system (Zimbra) instead of the old system	Option (2): Keep and improve the old mail system (Groupwise)
Strongpoint & Shortcoming		
<p>Strongpoint</p> <p>Shortcoming</p>	<p> a. More efficient and effective b. A much larger storage space c. Powerful search tools that can quickly scan a user's email and pull up relevant content d. Support for mobile smart devices such as iPhone, Blackberry and Palm e. A rich interactive f. Ability to 'drag and drop' messages into new folders or the trash g. Group scheduling which recognizes and acts on certain text in messages. </p> <p> a. It takes time and cost on new users training b. May not be easy for users at first time c. Need to test the stability before using it. </p>	<p> a. Easy to use for staff b. Decline the budget on users' training c. more convenient for maintaining </p> <p> a. Not enough storage space b. It takes time on filing and retrieving messages c. Limitation at interaction d. Did not support for mobile smart devices e. It is difficult to update and improve the 10 years old email system f. It affect the communication between the staff and Clients </p>

Figure 7

5.6 Criteria Selection and Trade-off.

We can use efficiency, effectiveness, budget, feasibility, and acceptability as the criteria to evaluate these two options.

(Figure 8) was used to score those two options. Five stars representing the

highest score (5 points) and 1 star only gets 1 point.



Figure 8

As can be seen from Figure 8, the new email system is more efficiency, effectiveness and acceptability than the old email system. But it takes a lot of money to buy the new email system. The old email system saves money because they just spends little budget on the maintenance and update. These two options almost get the same score on feasibility. It means that all of them can be easily to be implemented.

Deciding

Basing on the consequences and tradeoffs (Figure8), the option (1) has the high score of 21 points while the option (2) only gets 15

points. It means that the option (1) should be the better choice for ITS. After finishing all the eight steps, we can decide to choose the option (1) as the new policy to implement.

6. Results and analysis

6.1 The organization structure:

The ITS department has a good longitudinal hierarchy structure. Every one in this department has a clear-cut assignment of responsibility. They can make work more effective and efficient.

6.2 The policy making:

The policy making process are that the director has more power and right in making a policy decision at the same time of learning from internship in ITS, I also have some personal views and recommendations:

(1) Simplify the process of policy making. It depends on the different situation; we may overstep some steps of policy making to make more efficient and effective in administration.

(2) Improve the efficiency on administrating the computers in the Department.

I suggest that the Lab using software for the unity of computers management. The staff assistant can easily open, shutdown, and monitor all computers in the Lab.

7. CONCLUSION

I experienced a signification internship in ITS and I benefited a lot from the internship. And I just focus on two parts in my internship. One is internship work description while the other one is policy making analysis in ITS department What I learned can apply to practice.

To sum up, to do internship in a department like ITS is very helpful. It can make the Undergrad students getting deeper understanding the knowledge they learned from the textbook.

