**Introduction:**

System Analysis and Design is a process of analyzing a system’s behavior that deals with planning the development of information systems through understanding and specifying the objectives and the components of a system to improve its efficiency and overall performance. It is used to analyze, design & to implement improvements in the support of users and to eliminate the specified problems in an optimal way. Dutch Bangla Bank Limited is one of the leading commercial private bank in Bangladesh that is fully automated. Here, we demonstrated an assessment of analyzing, specifying and improving the system and requirements of Dutch Bangla Bank Ltd. Noapara Branch, Chattogram.

**Problem Statement:**

The overall problem statements can be outlined in the following way:

* To study the banking management operations of Dutch Bangla Bank Ltd. Noapara Branch.
* To be familiar with the bank’s lending and other advanced systems.
* Understanding the system's management hierarchy and the requirements for each level of management.
* To determine the requirements and current issues in different managing departments.
* Making recommendations for improvement.
* To develop a suitable information system by analyzing the current banking scenario.

**Purpose:**

Analyzing the system with its components and their inter-relationships allows us to understand the structure and behavior of the system properly. It is necessary for not only understanding the system, but to find out the associated limitations or requirements to develop a suitable information system, This approach is important for modifying or changing a system to meet the objectives. The purpose of the system analysis is as follows:

* A system can be better, expanded, replaced & improved by the help of system analysis.
* We can discover different methods for designing or modifying the banking system or similar subsystem to find out the appropriate one.
* By specifying the requirements of the users or workers, we can identify the constraints of the existing system and can offer a better environment.
* We can get a better understanding on the complex management system and structure.
* Applying system analysis techniques to an organization can improve our practical understanding.

**Scope:**

The study is on the problem analysis and requirement specification of the Dutch-Bangla Bank Ltd, Noapara Branch, Chattogram . The study will concentrate on certain fundamental issues, such as how banks operate, how they assist those in need, how loans are supervised and tracked, how businesses perform, and how to analyze finances and operations. We are able to identify their system's shortcomings and suggest ways to fix them.

**Overview of the organization :**

Dutch-Bangla Bank is one of the Bangladesh's most innovative and technologically advanced private bank. It stands to give the most innovative and affordable banking products to the customers. It is associated with helping Bangladesh as well as being a leader in the country's banking sector. With that motive it has opened 234 branches all over the country and has over 45 million+ customers. We are studying the system of Dutch Bangla Bank, Noapara branch.

**Organization structure:**

Dutch Bangla Bank,Noapara branch is divided into 4 departments for carrying out different functions. Departmental structure of this branch is given below –

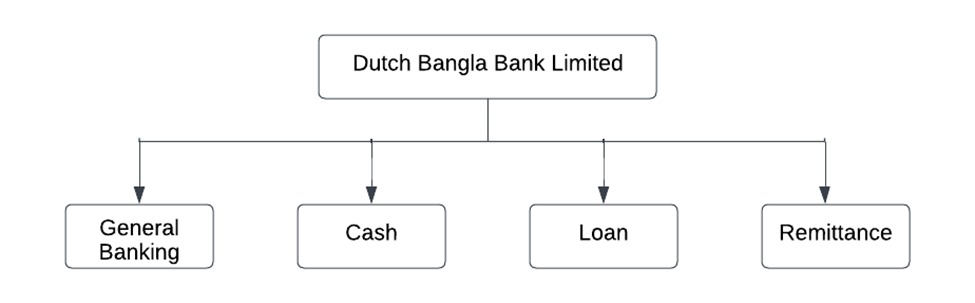


Figure 1: Organization structure of DBBL

**1. General Banking:**

This department is the busiest department of a bank. All types of account-related jobs are done here. Some major tasks are done here, as Opening an account, Closing the account, Issuing Cheque-Book, Card Facilities, Keeping the account statement, User information, bills, and other documents, etc.

**i) Opening Account:**

The bank creates ("opens") an account in the name of the depositor or a name directed by the depositor in which the amount received by it is recorded as a transaction. To become the client of the bank a person need to open an Account. After opening of an account a person becomes a client of a bank. It is a legal contract between the bank and the client.

Types of Accounts:

Savings Account

Current Account

Special Notice Deposit Account

DBBL School Savers Account

The deposit account is an asset of the depositor (the account holder) and a liability of the bank.

Types of regular deposits:

Savings Deposit Account

Current Deposit Account

Short-Term Deposit Account

Resident Foreign Currency Deposit

Foreign Currency Deposit

Exporter's FC Deposit(FBPAR)

**ii) Issuing Cheque-Book:**

After the completion of some formalities, the bank provides the client a Deposit Book and cheque book. It will depend on the type of the account. The client has to fill up the Requisition Slip for cheque book. Then the officer will take a new cheque book with filling up account number of the client and the branch name in each page of the cheque book.

**iii) Closing the account:**

When a depositor decides not to run the account anymore, he will go to the general section and can close the account permanently by following some formalities.

**2. Cash Section:**

This department provides day to day service to the customers. Along with general banking department this department is also the busiest one and most important one. It handles all kind of transactions of money. This department further divided in 2 sections – Deposit and Withdrawal. In this department, each officers hold cash counter which is used to count cash. At the starting of the day an opening balance sheet is provided to the officers, then after every transaction officers update the balance. Everyday after working hours accounts officer create a cash flow statement and report it to the head office.

**i) Deposit section :** In this section, account holders deposit money in their accounts, some pay bills such as current bill, gas bill, water bill, office bills etc. All type of depositions are received here.

**ii) Withdrawal section :** In this section, users withdraw their money from account. Cheque is issued in this section and after confirming the validity of cheque and user officer provide cash.

**3. Loan Section:**

A Loan facility is an agreement between a Bank and a public or private lender that allows the business to borrow a particular amount of money for different purposes for a short period of time. The loan is for a set amount require collateral. The borrower makes monthly or quarterly payments, with interest, until the debt is paid in full.

Dutch Bangla Bank Limited provides these types of loans:

1. Personal Loan

2. Home Loan

3. Car loan

4. Business Loan

5. Service Holder Loan

6. Agriculture Loan

7. Women Entrepreneur Loan

8. Corporate Loan

**4. Remittance:**

Two type of remittance (Inward, Outward) is provided by Dutch Bangla Bank Limited. They have been exerting much emphasis on inward remittance mainly. Remittance is provided by money exchange companies and banks. These is done in two way – One is bio-metric account based and the other is pin based.

**i) Bio-metric account Based:** For this service money exchange house needs following information – Beneficiary’s Name, Bank Name(Dutch Bangla), amount and DBBL biometric account number. Beneficiary can withdraw money from any DBBL authorized agent.

**ii) PIN Based:** This is the easiest way to send money. When customer provide money in exchange house, they provide him/her a pin. Then he send the PIN and Exchange house information to beneficiary. Beneficiary can withdraw money from any DBBL authorized agent by providing NID and PIN number. Agent provide cash after getting verification message.

**Other functions:**

**Queue Management:**

Due to large number of users, the bank maintains queue management to avoid inconvenience and issues. Customer’s counter number, token number and routing number are called in the Counter call system so the customers can avoid maintaining a line in front of the counters. The client can obtain services when his/her counter number is called. Huge number of customers now can avoid long queues in front of the branch counters and can save their valuable time which they can utilize for their development, official or personal life.

**Database System:**

The client’s information is kept in a Computer-based database system in Dutch Bangla Bank Ltd. It is ensured by their database system that they have the copy of the most recent customer data. They have EKYC (Electronic Know Your Customer) check system, a paperless system for identifying and verifying the client’s identity to make sure their clients are genuinely who they claim to be. Besides any kind of information of the customers are saved and updated in their computer based system on a regular basis

**Mobile banking :**

Dutch Bangla Bank Ltd. developed the mobile banking system by offering banking facilities through a wide range of mobile phones. ‘Rocket’ is a banking process that provides financial services to unbanked communities efficiently and in an affordable cost. Ensuring real time online banking, convenient & secure way to send & receive money, faster way to access the banking has made mobile banking more popular.

**Online banking :**

Dutch Bangla Bank’s Online banking facilities allows a user to conduct financial transactions via the Internet. Its ground breaking Two Factor Authentication Security solution guards against illegal access by an unauthorized person so the customer’s identity and account information will be safe. It's quick, usually free and allows clients to do tasks, such as paying bills and transferring money, without having to visit or call the bank.

**Card Facilities:** The bank’s debit and credit card provides a variety of advantages to match the client’s lifestyle needs.The Noapara, Patherhat branch also provides the facilities through card system like Visa card, NEXUS credit card, Master-card debit etc. through which a client can obtain many services utilizing a secret pin number (Debit) or just their signature (Credit) including withdrawing cash at ATM. The bank also provides Hajj card which can be used and accepted in any ATM and outlets in the kingdom of Saudi Arabia. Besides it has Campus Card for students to allow them to spend through POS, ATM, domestic & international web transactions. Travel card, an all-purpose multicurrency prepaid card can be used all over the world for purchasing & withdrawing cash.

**Management Structure :**

Branch Top Manager  
 Managers

Deputy Manager, Middle Manager  
 Senior Officer

Officer, Cashier, Guard, Line Manager

Peon

Figure 2 : Management Structure

Branch Manager

Office Staff

Officer

Deputy Manager

Security Guard

Figure 3 : Position Hierarchy

**Types of information :**

**1. Operational Information :**

i) Information about entering and exiting time of employees.

ii)Opening and closingdifferent catagories of accounts.

iii)Deposit and withdrawal in cash counter.

iv) Issuing and clearing cheque

v) Creating balance sheet of transaction and sending to head office.

vi) Estimate an amount for ATM.

**2.** **Tactical Information:**

i) Branch manager grant leaves on the basis of paid leave and availability of other employees.

ii) Department Head Checks the equipment needed by the department.

iii) Grant loan requests after fulfilling all the requirements.

iv) Make transaction statement of ATM and Mobile banking of this branch.

**3.** **Strategic Information:**

i**)** Set an interest rate by analyzing the cash flow statement by head office.

ii) Strategies to accomplish the target set by head office.

iii) Adopt latest technologies for better and faster service.

iv) Necessary steps are taken after analyzing market values of other branch.

v) Recruiting new employees on the basis of density of work.

vi) Provident fund (PF) is given to each employees after retirement.

4. **Statutory information:**

This branch has no statutory information. Because it is entirely handled by head office.

**Information Gathering:**

• Brief idea on the organization structure.

• Description of the organization hierarchy.

• Information about opening accounts.

• How the information about the activities are stored.

• Facilities for the students.

• Do you give any discount on several occasions to the customers?

• Debit and Credit card facilities.

• Brief idea on money transaction, SME banking, mobile Banking.

• How remittance is processed?

• Do you have pension facilities?

• Is this a one-stop service?

• Impacts of COVID-19 on the bank policy.

• Way to receive complaints.

• Do you feel any lacking in your current banking system?

• Do you think that your bank is the best among all banks? Then why?

• Long-term plan for the continuing success of the branch in the future.

• Do you provide tax to the government?

**Requirements Specification:**

The requirements must be given in enough depth to allow for analysis and design before a system is created and put into operation. For the organization's development, the needs specified in the requirements specification document are vital. After interviewing the bank's manager and staff of bank, the following improvements are identified as being required to make the bank's system run more quickly:

i. Recruiting receptionists who are up to date on the latest technologies and systems.

ii. Online account accessing with proper verification from any place of the world.

iii. Upgrading software and hardware to ensure privacy and security.

iv. Providing online bill-payment facility like Electricity, WASA, Gas, Broadband or any Super Shop using the Android App.

v. Improving response to new technologies**.**

vi. Increasing automated data analytic capabilities using machine learning and AI functions.

**Conclusion:**

Our Task was to analyze the structure and management system of any organization. So, we choose Dutch Bangla Bank, Patherhat Branch, Chattogram which is currently working to fulfil customers’ needs and satisfaction without any discrimination. So far, we got to know about the organizational hierarchy and information about different sections of this bank. We examined how data is processed for obtaining different types of information in the management. We will continue analyzing the system of this Bank in future.