

Report On

An Analysis of before and after Situations of CRM

(Customer Relationship Management)

Implementation in the Banking Sector

BY
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An internship report submitted to the **Brac Business School** in partial fulfillment of the requirements for the degree of Bachelor of Business Administration (BBA)

Brac Business School
Brac University
September, 2022

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Declaration

It is hereby declared that

1. The internship report submitted is my/our own original work while completing degree at Brac University.
2. The report does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing.
3. The report does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution.
4. I/We have acknowledged all main sources of help.

Student's Full Name & Signature:

**AL WAKIL AHMED
ID-18104192**

Supervisor's Full Name & Signature:

**SHIHAB KABIR SHUVO
Lecturer, Brac Business School
Brac University**

Letter of Transmittal

SHIHAB KABIR SHUVO

Lecturer,

Brac Business School

BRAC University

66 Mohakhali, Dhaka-1212

Subject: **Submission of internship report on “An Analysis of before and after scenarios of the introduction of CRM (Customer Relationship Management) implementation in the Banking Sector”**

Dear Sir ,

I'm so happy to be able to turn in the internship report I wrote as part of the Bachelor's degree program at BRAC Business School of BRAC University .I have worked in the General Banking section at NCC Bank LTD . Which Was a very fantastic learning opportunity.

I did my best to make the report as short and complete as possible while still including all of the important information and suggestions.

I trust that the report will meet the desires.

Sincerely yours,

AL WAKIL AHMED

18104192

BRAC Business School

BRAC University

Date: 13 th September, 2022

Non-Disclosure Agreement

This agreement is made and entered into by and between NCC BANK LTD and the undersigned student at

BRAC University

Acknowledgement

Many people should be credited for the project's success, but notably those who provided feedback on the report and offered suggestions for how to strengthen it. To begin, I want to thank God for the opportunity to perform well under intense time constraints. No one can be singled out for discussion at this time. Thank you to everyone who has contributed, whether directly or indirectly.

To be employed by Shihab Kabir Shuvo, professor at BRAC's School of Business, is a great honor. His help on my research assignment is much appreciated. With his suggestions, I was able to better structure this work.

Management at NCC Bank Limited gave me the green light to put in my internship hours there. Having a job at The NCC Bank Limited benefited my learning. Finally, I'd like to express my gratitude to everyone who has provided feedback on my writing. I can't thank them enough for what they added to this report. Indeed, I adore the whole lot of them.

Executive Summary

Internships are essential to offer students with work experience and the opportunity to apply their theoretical knowledge to the real world. This program can establish a greater equilibrium between theory and application. There have been three stages of growth for the Bangladeshi banking system: nationalization, privatization, and financial sector reform. Since 1993, the National Credit and Commerce Bank has been the largest private commercial bank with a renewed commitment to serving the residents of the nation. This report consists of three components. The first section describes my practical experience as an intern at the Principal Branch of NCC Bank Ltd., as well as my thoughts on the bank's administration and structure. Information management Practice at NCC Bank Ltd. is the subject of the third part.

This report is the result of a three-month internship at NCC Bank. On my route to finishing my training, I was familiar with a variety of financial operations and standard banking procedures. In this paper, I have presented the most nuanced description of my multi-department real-world experience.

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Chapter 1

Overview of Internship

1.1 Student Information

NAME: AL WAKIL AHMED

ID: 18104192

Program: Bachelor of Business Administration

Major: CIM

1.2 Internship Information

1.2.1 Company Information

Tenure: June 8, 2022 to September 8, 2022, A total tenure of 3 months

Company Name: NCC Bank LTD

Department: General Banking

Address of the Branch: 140/141 Nawabpur Road , Dhaka

1.2.2 On-site Supervisor's Information

Name: Md Anisur Rahman

Designation: Asst Vice President & Deputy Manager

1.2.3 Job scope

I was assigned the following tasks as an intern:

- Helped Clients to create multiple types of accounts
- Provided general information
- Received Check book requisitions
- Delivered check books with proper verification
- Delivered Debit cards to the clients

1.3 Internship Outcomes

1.3.1 Student's Contribution to the Company

As an intern, I made the following contributions to the organization: During our bachelor's program, we were mostly forced to learn through theoretical tactics; nevertheless, the internship exposed us to the real-world business culture. My Job opportunity included helping the clients with multiple information, receiving Check book requisitions, Delivering check books also delivering debit cards Every thing which I have done went through the strict supervision of on site supervisor. From receiving the check requisitions to delivering the check books Every things are done with proper verification.

1.3.2 Benefits to the student

During my internship, I was exposed to a wealth of information and gained valuable experience. It was somewhat different from the atmosphere of the academic setting I had become accustomed. During the course of three months, My internship experience provided me with numerous advantages. Among the essential lessons are the following:

- **Experiencing the corporate environment:**

During my four years as a student, I had limited corporate exposure. environment. But the internship gave me the chance to put myself in a certain situation. This environment and training equipped me for the arduous corporate work

At first, I had a lot of trouble finding job appropriate clothes to wear from 9 am until 5:30 pm. There were times when I had to sneak out of the office late because of the demands of my job. However, as time passed, I was able to regain control of the situation and thrive in my responsibilities.

- **Mastering business etiquettes and interaction:** I was needed to keep frequent internal and external connection with the organization as an intern. Due to the nature of my employment, I was able to network with many influential people in my field. All of my contacts with clients and industry professionals have provided me with invaluable business etiquette and communication skills that will serve me well for the remainder of my career.

- **Understanding the procedures of Banking Industry :** An essential part I have learned from the internship program is the procedures of the banking industry and how transaction security works in the banking industry. My main goal was to learn about the information management system in the banking industries view. In my opinion, I was able to achieve my goal.

Chapter 2

Company Description

2.1 Background of NCCBL

"National Credit limited" founded National Credit and Commerce Bank. The National Credit Limited (NCL) was founded on November 18, 1985 as an investment company prior to its transformation into a scheduled commercial bank. It began operations on November 25, 1985, with an authorized capital of 30 billion taka at its registered office and first branch located at 7-8, Motijheel Commercial Area, Dhaka-1 000. It was primarily concerned with accumulating suitable assets and making profitable investments. This investment business managed to get its commercial bank charter in record time. When it ran into trouble getting money in and out of the business as an investment firm, it changed its legal status to that of a bank.

For the next fourteen months, commencing on April 22, 1992, all business was halted because of the changeover. NCL was officially transformed into a commercial bank on May 17, 1993, after receiving government and Bangladesh Bank approval. The new name of the bank was National Credit and Commerce Bank Limited. With a paid-up capital of Tk.39 crores and 16 branches around the country, Under the Company Act of 1913, it was incorporated as a private commercial bank.

NCCBL operates in accordance with company regulations and without government intervention. In 1994 and 1995, the bank was fully functional. During this time, institution-related concerns and the expansion of business operations were prioritized. NCCBL has established a solid reputation over the past 29 years by providing its customers with genuine personalized service in a technologically-driven environment.

2.2 Goals of the NCCBL

Profit maximization through customer satisfaction is the primary objective, which is comparable to the marketing strategy. NCCBL has maximized profits by avoiding best practices and enhancing customer service, in addition to the following corporate goals:

1. To deliver such high-quality service to its customers that they pick NCCBL over any other bank.
2. Provide a high return on investment and a range of services with a focus on profitability.
3. Managing annual profit expansion and making profitable investments
4. Maintain market dominance through business diversification and automation of banking procedures.

2.3 Vision

To become one of the most adorable commercial bank in serving the nation as a progressive and socially responsible financial institution by bringing credit & commerce together for increased shareholders value and sustainable growth .

2.4 Mission

Delivering Excellent financial Service to our communities based on strong customer relationship

Providing long lasting solutions that combining our cutting edge technology , experience and financial strength to our clients and stakeholders.

Creating a cohesive nd friendly environment where customer and our people can excel.

2.5 Fundamental Values of NCC Bank

Professionalism: We are dedicated to exceeding the expectations of our clients by delivering timely solutions and efforts.

Integrity: We will demonstrate our honesty, accuracy, moral convictions, and professional ethics.

Accountability: We are responsible for our actions.

Confidentiality: We keep customer and personal banking information private throughout its lifecycle

Commitment: We are responsible, devoted, and committed to continuous improvement.

Individual Respect: Respect for the Individual: We treat our customers and coworkers with dignity and respect.

Regard For Nature: We are environmentally conscious and engage in green banking.

2.6 Profile of NCC Bank Ltd

National Credit Limited (NCL) begins operations in the country's financial sector in 1985 under the name "National Credit Limited." In 1993, National Credit and Commerce Bank Limited becomes a schedule bank in order to have a greater impact on the financial market. The bank's authorized capital was Tk before the swap. Its paid-in capital was Tk. 75,000.00 crores. The original estimate was Tk.19.50 c. but the latest data put it at Tk. Twenty-six (26) founders and original directors backed the new bank. The financial demands of NCC Bank's clients can now be better met, and the bank's customers can be transformed into forward-thinking partners.

2.7 Organizational culture of NCCBL

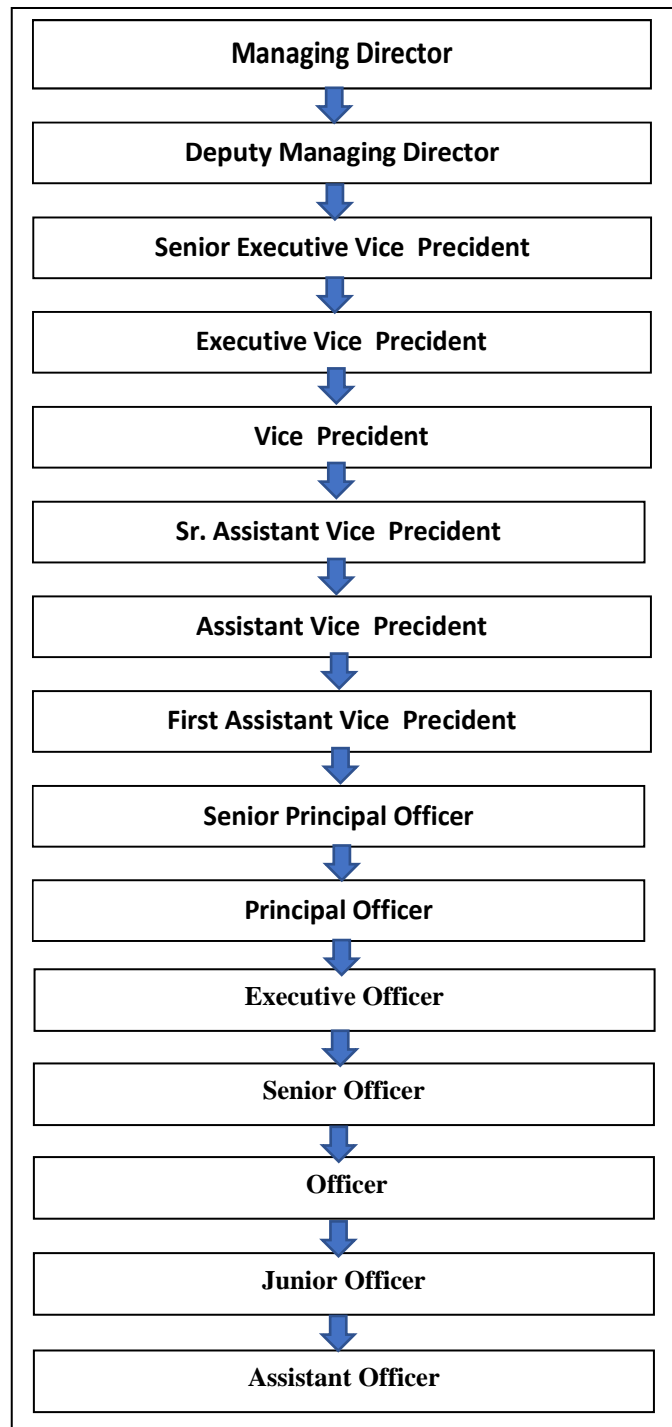
NCC Bank is a very orderly institution with a one-of-a-kind culture among financial institutions. The financial institution places a premium on mutual understanding, interpretation, and decision-making. Those working at the bank could have divergent perspectives on what goes on around them. Individuals are shaped in terms of their manners, etiquette, and personalities to better serve the bank's goals and those of its customers. The bank's employees see themselves as a tight-knit unit that works best when moving forward as one. The company's values weren't hammered into their heads; rather, they developed organically from the way people interacted with one another on the job.

2.8 Administration of the NCCBL

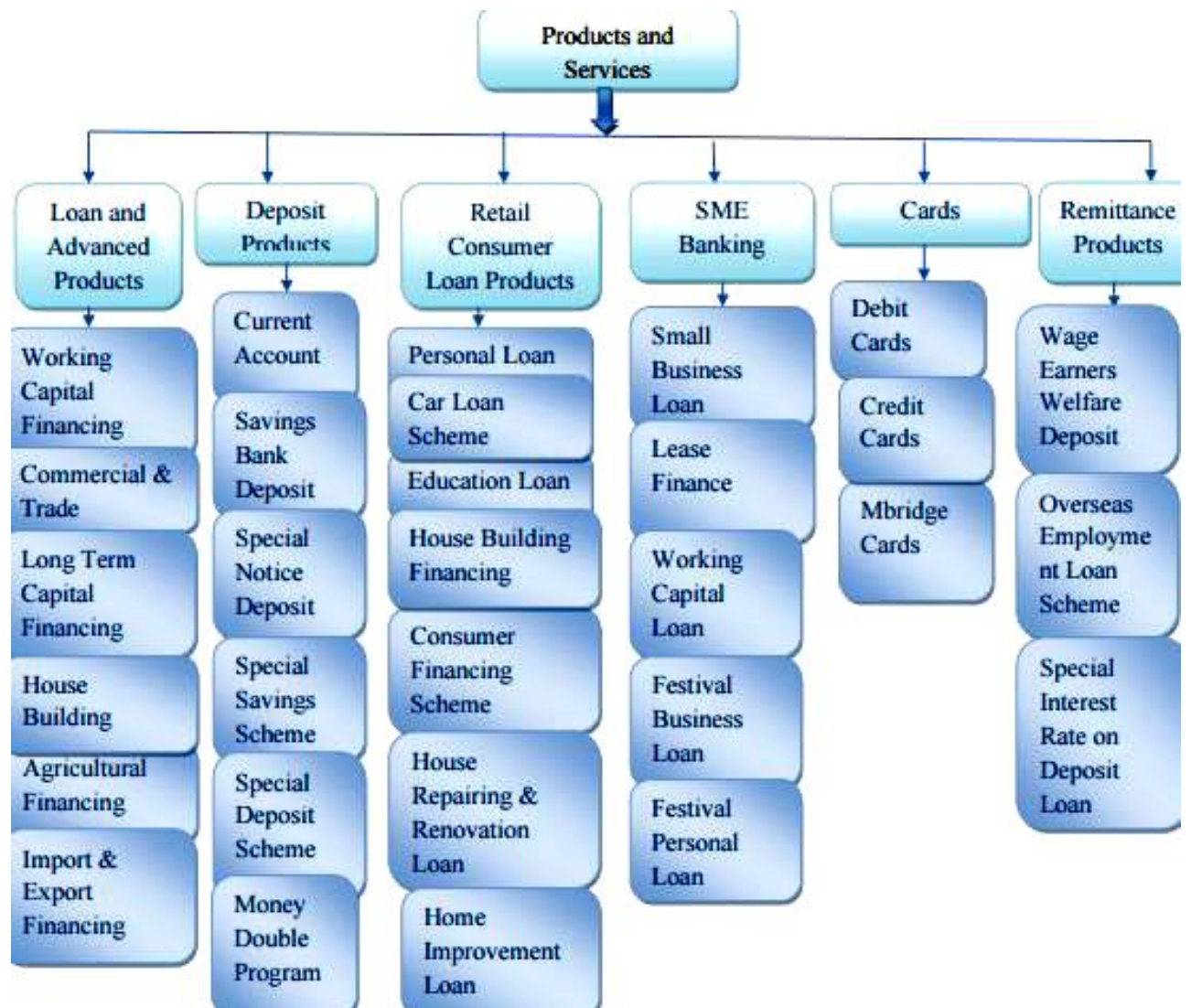
The administration of NCCBL is experienced and competent. The Board of Directors is accountable for the Bank's executive management and policy formation. There are 26 people on the governing board, to which a chairman acts as head. Most board members are extremely wealthy CEOs of significant firms. The bank's executives and officers implement the board's initiatives and policies. He has a team of capable executives backing him up. This bank has nine departments and one training facility.

2.9 Management Chart of NCCBL

A layout of Management Structure and Legitimate Hierarchy of Management of NCCBL is presented as follow:



2.10 Product & Services of NCCBL

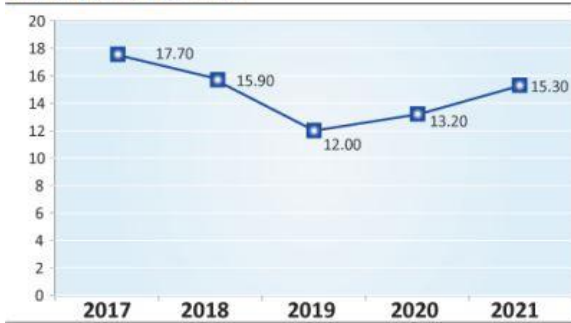


2.10 Financial Performance and Accounting Practices

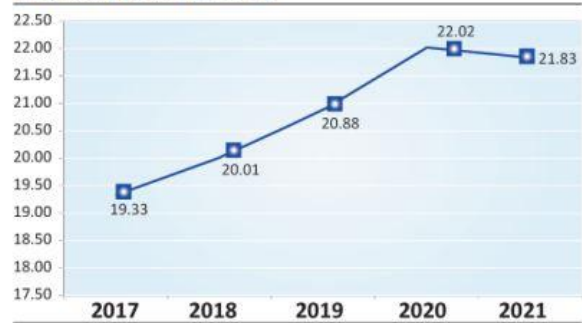
NCCB Securities and Financial Services Limited		
Statement of Cash Flows		
For the year ended on 31 December 2021		
	2021 Taka	2020 Taka
A. Cash Flows from Operating Activities:		
Brokerage Commission Received	216,776,021	120,075,267
Interest Received	27,457,322	59,944,425
Received from Operating Income	3,283,286	1,615,200
Cash Paid to Service Provider	(76,547,575)	14,172,089
Cash flows in Operation	333,175,193	37,857,737
Interest Paid	(52,849,917)	(98,623,139)
Income Taxes Paid	(40,061,041)	(21,295,973)
Net Cash Used from Operating Activities	411,233,290	113,745,607
B. Cash Flows from Investing Activities:		
Fixed Assets Acquisition	(1,380,381)	(7,232,537)
Sale Proceeds of Fixed Assets	76,950	38,499
Purchase of Shares	(505,077,544)	(171,971,547)
Sale of Shares	450,820,621	279,532,058
Dividend Received	15,915,867	11,955,010
Margin Loan Payment to Customers	(178,228,698)	(67,093,539)
Margin Loan Recovery	863,015,348	450,198,994
Net Cash Used from Investing Activities	645,142,163	495,426,939
C. Cash Flows from Financing Activities:		
Short term loan	(346,424,828)	(510,949,779)
Net Cash Used from Financing Activities	(346,424,828)	(510,949,779)
D. Net Cash Increase/ (Decrease) (A+B+C)	709,950,623	98,222,768
E. Cash and Cash Equivalents at Beginning of the Year	334,057,628	235,834,859
F. Cash and Cash Equivalents at End of the Year	1,044,008,251	334,057,628
Closing Balance Represents		
Cash in Hand	-	-
Cash at Banks	1,044,008,251	334,057,628
	1,044,008,251	334,057,628

Graphical Representation of The Financial performances

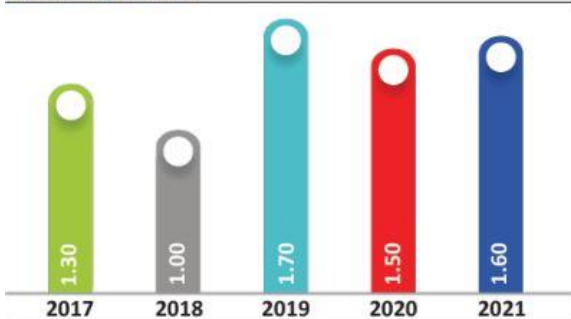
Market Value Per Share



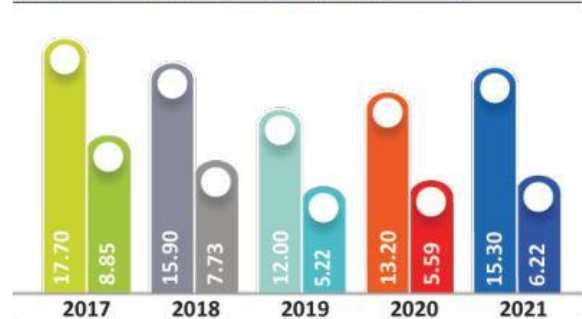
Net Asset Value Per Share



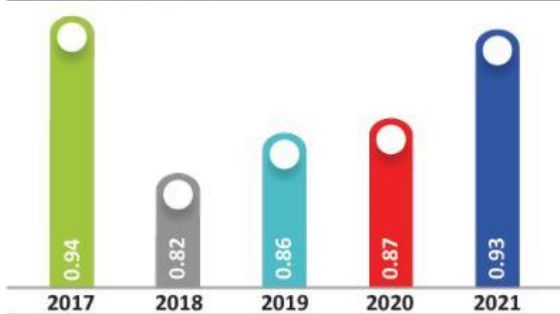
Dividend per Share



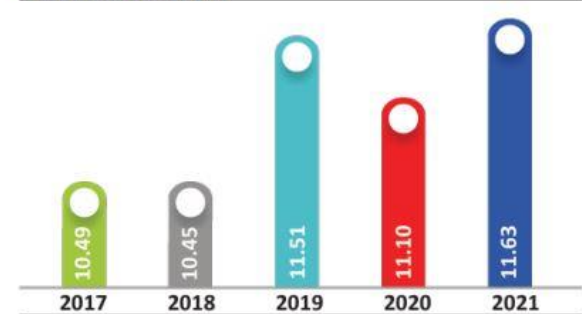
Market Value Per Share (in BDT) & PE Ratio (in Times)



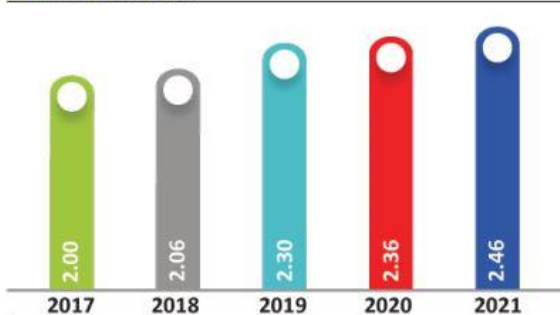
Return on Assets (%)



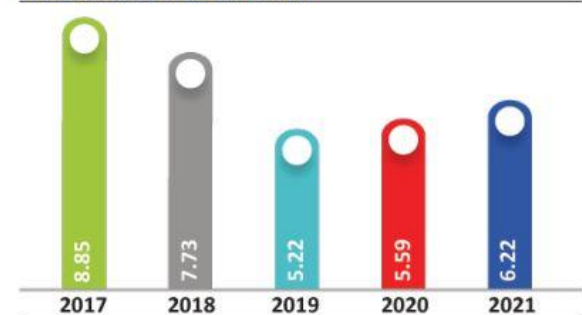
Return on Equity (%)



Earnings per share



Price Earning Ratio (in Times)



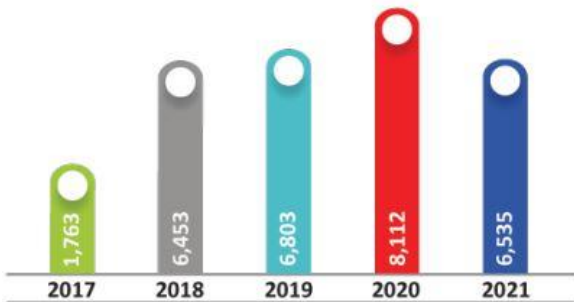
Total Capital (Figure in million)



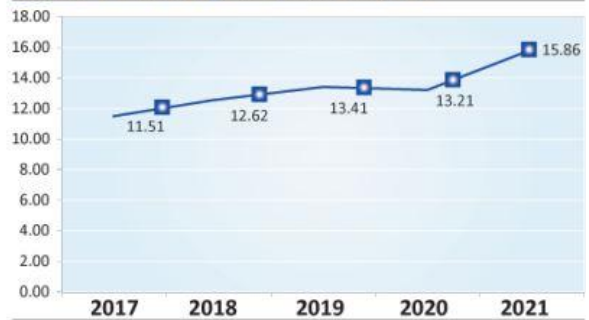
Tier-1 Capital (Figure in million)



Tier-2 Capital (Figure in million)



Capital to Risk Weighted Assets Ratio (%)



Investments (Figure in million)



Deposits & Loans (Figure in million)



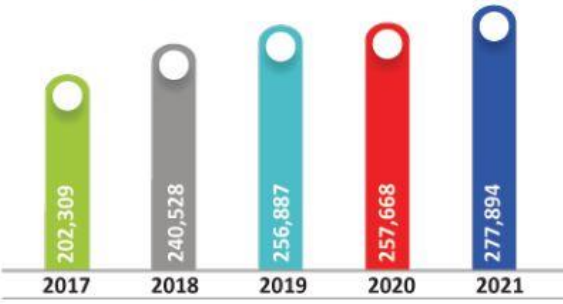
Deposits (Figure in million)



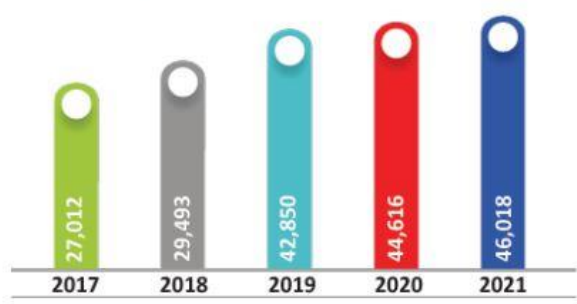
Loans & Advances (Figure in million)



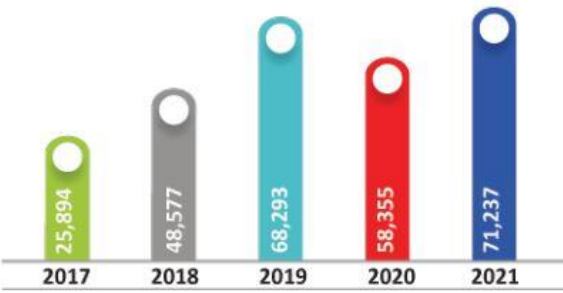
Total Assets (Figure in million)



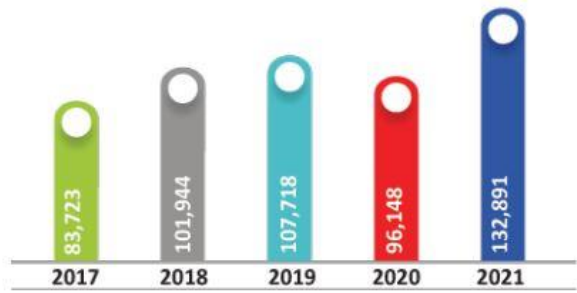
Remittance (Figure in million)



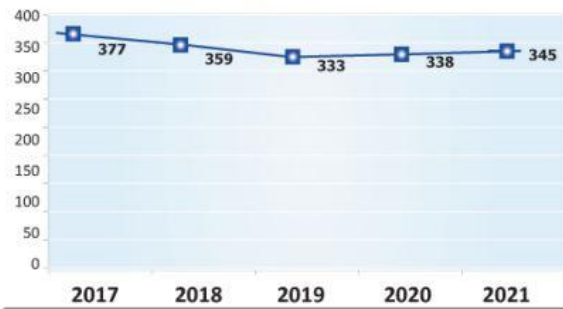
Export (Figure in million)



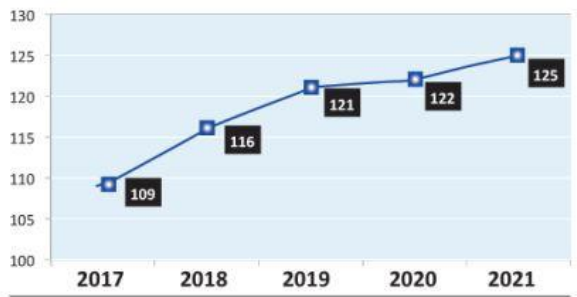
Import (Figure in million)



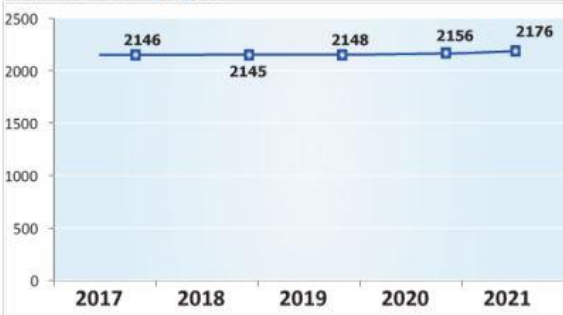
Number of Foreign Correspondents



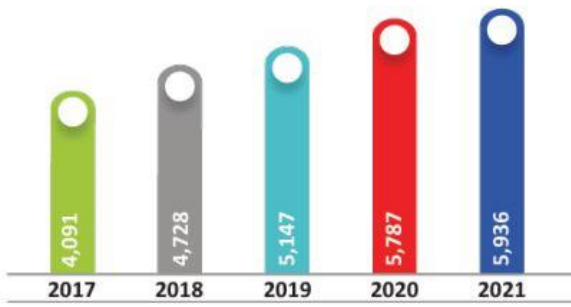
Number of Branches



Number of Employees



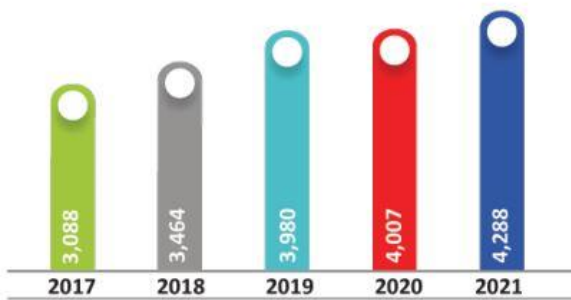
Non-Interest Income (Figure in million)



Operational Profit & Net Profit (Figure in million)



Profit before tax (Figure in million)



Net Profit after tax (Figure in million)



2.11 Information System Practices Of NCCBL

Customers' utilization of technology-based services was a priority for the bank. In accordance with this, the Bank's IT Division is designing various software to facilitate service delivery. Several Branches have already been brought under On-Line Banking through this Division, and additional Branches will be brought under this umbrella shortly.

Chapter 3

An Analysis of before and after Situations of CRM (Customer Relationship Management) Implementation in the Banking Sector

3.1 Introduction

Information systems are crucial to the development and survival of corporate organizations in the modern era. For the management of crucial information and data, all sectors of the industry are fully dependent on these. Small to large, strong companies, such as high street banks and the national and local government, utilize information systems to manage their data. This article will cover the different benefits of using information systems in the banking sector. We will do a comprehensive analysis of the requirements of information systems at all levels and assess the security requirements for these functions. Banking system is the outcome of Information Systems Which has brought one of the biggest revolutions in Banking sector . From Account creation of a new customer to delivering the foremost services , the central banking information system plays a very vital role. We are Going to discuss about the implementations of Information systems in banking sector but before that we shall indoctrinate ourselves about the information needs in Banks .

The banking industry was the first to grasp the need for information. Being in the service industry, banks required information storage to enhance their services and acquire a competitive advantage over their rivals. Luxurious services provide an IVR (Interactive Voice Recording) through which clients can receive responses to their frequently asked questions. Developing an information system necessitates colossal investments, accountability for the non-leakage of information (system robustness), and numerous other security measures. Therefore, banks want information at every conceivable level. There are numerous benefits to information. Today, banks also use decision making tools for the promotion of novel lending programs.

Information systems for banks have evolved from simple DBMSs developed on personal database management systems (for example, Clipper, dBase, Foxpro) to modern ones based on client/server solutions of industrial DBMSs (Oracle, Informix, Sybase, MS SQL Server), which

automate the entire spectrum of banking business processes: liquidity, personnel, banking risk management, etc. The growth of communication tools, faster information processing, and network technology allowed banks to automate their activities, establish remote client support, and offer new services. Automation has changed bank technology implementation.

The market for bank software includes a variety of functional and technically different systems. 50% of banks develop their own software (Indian Institute of Banking & Finance, 2017). The qualitative progression of banks' activities, requirements, and financial capacities will influence methods to organizing banking technology software and choosing an IS or software developer. Banks can focus on their main business rather than infrastructure scalability with cloud computing.

In NCC Bank, From where I am doing my internship , they generally use the FLORA BANKING SYSTEM as their Main information management system. This system not only helps the authorized personnel's to entry new customers information but also assist them with providing best services with the foremost securities .

3.2 Activities Of Flora Banking System In Daily Banking

- **CIF Module:**

FloraBank's CIF manages customer information (Islamic Version). CIF modules include Loans & Advance, Deposits, Remittance, Swift and Foreign Exchanges.

This system generates unique customer codes. This client code is used wherever necessary.

- **Retail and Corporate Banking:**

Both Corporate Banking and Retail Banking provide access to banking services and products via a number of delivery mechanisms. Features unique to Retail and Corporate Banking maximize best-fit, efficient solutions across all core banking functions. Because of this innovation, financial institutions may now provide their business and consumer clients with integrated data in real time.

- **Deposits**

Many different kinds of retail deposit accounts and services are available through the FLORA BANK Deposit System, which supports multiple currencies. Parameter tables allow users to define account criteria while creating new account types.

- **Loans And Advances**

The Loans Sub-Module streamlines the procedure of obtaining a loan.

- **Collateral management**

Florabank can seize loan-secured collateral. It also includes collateral category, value, force value, description, and location.

- **Bills and remittance**

The banking software automates these modules. The system administration module has a remittance issue parameter. Parameter defines commission, VAT, and tax. Define GL integration and inter-branch Transaction account number for GL module. In a transfer transaction, the customer's account is automatically deducted. During remittance issuing (DD, TT, etc.), auto-12 vouchers are generated. Local and overseas remittances are supported.

- **Foreign exchange**

FLORA BANK's Foreign Exchange Module is a powerful and adaptable module that supports rapid messaging format. Due to swift alliance interface, Foreign Exchange module uses swift standard. Front office, back office, and rapid alliance all handle foreign exchange. LC (Letter of credit) opening, voucher generation, and 700-message format.

- **Credit Information Bureau (CIB)**

The CIB offers banks with a timely source of information to evaluate the repayment history of prospective borrowers. The CIB has done an outstanding job establishing and maintaining the database used to preserve loan history records. With current regulations, it is generally discouraged to extend fresh credit to any borrower who is in default on a loan or whose directors have categorized loans. Banks and financial organizations will be able to physically or digitally collect CIB reports from the central bank. Bangladesh Bank will begin offering financial institutions with online access to Credit Information Bureau (CIB) records.

- **Head office module (General ledger)**

Line-by-line transactions are processed in real time, and the consolidated statement and verification are then generated by this module. Importing information via a floppy disk, dial-up connection, CD-ROM, or email would be the norm in a decentralized system. Through our system, branches may download their transaction data to the aforementioned medium for transmission to headquarters for consolidation and inter-branch reconciliation.

- **Vault management**

The Vault Management system is an integral part of Flora Bank. The day begins with the vault officer handing out cash to the teller. At the conclusion of the day, the vault officer collects the remaining cash from the teller and puts it into the vault.

- **Loans tracking and report**

The Loans, Tracking, and Report Module is a workflow management component that computerizes the whole loan process, from application to discharge. All network locations are able to perform all functions online.

- **Charges and rates management**

The charges module defines, selects, calculates, and applies fees, charges, and interest on financial transactions. The FloraBank Software automates fees and charges system-wide.

- **Head office reconciliation**

Banks' chief executive officers place a premium on tying up loose ends. The advice's origin and resolution may be tracked, located, and reconciled by FLORA BANK. Diskette, dial-up, CD, and email are all ways in which data may be loaded into a decentralized system. Through our technology, branches can retrieve inter-branch transaction data for head office reconciliation.

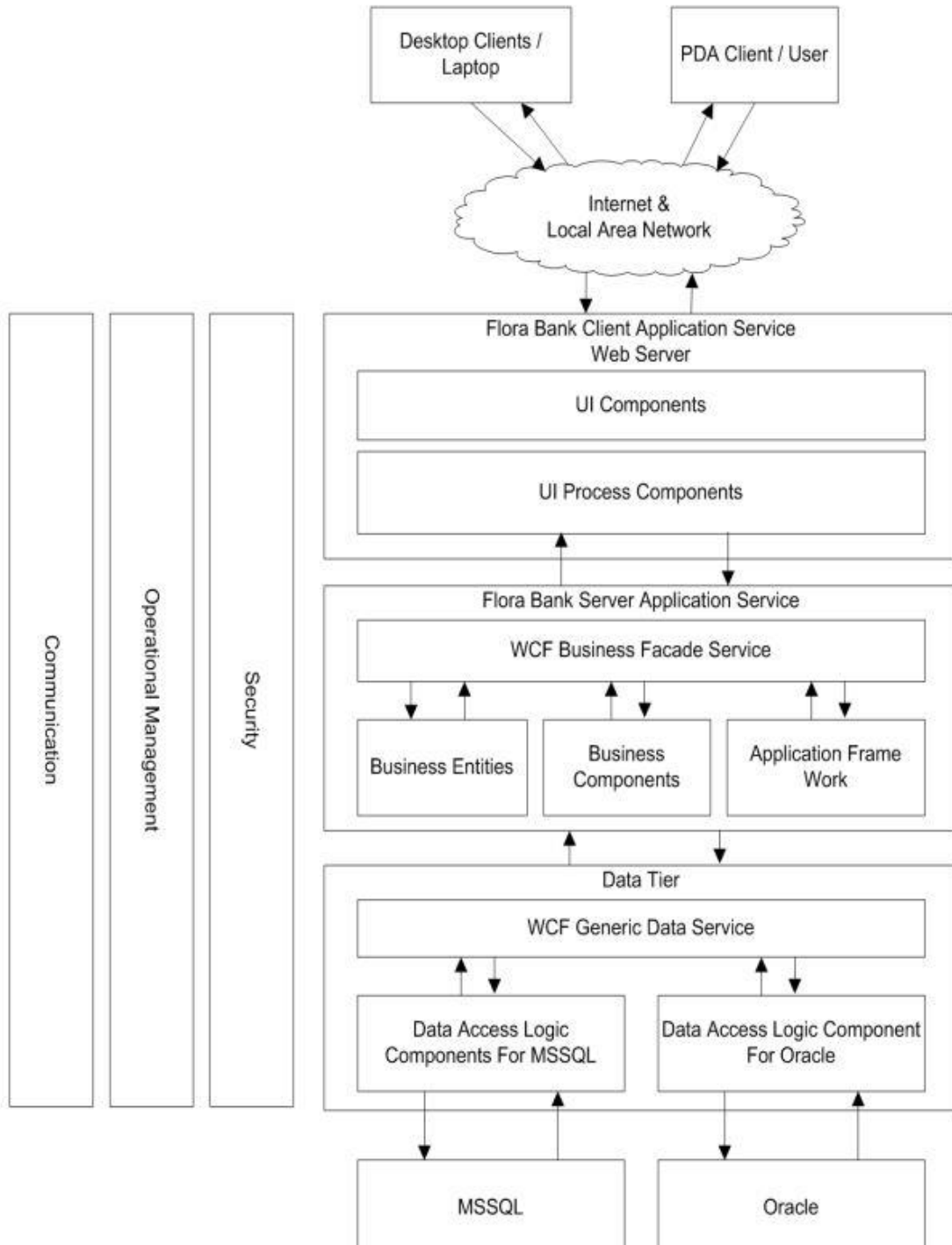
- **International division reconciliation (Nostro reconciliation)**

ID Reconciliation is a vital part of Flora Bank. Statements such as local book outstanding, foreign book outstanding, daily exchange position, and reconciliation statements are automatically generated when local and foreign book transactions are compared based on reference number, amount, and date 14. The ID department can offer guidance to other departments about Nostro Account Dealings.

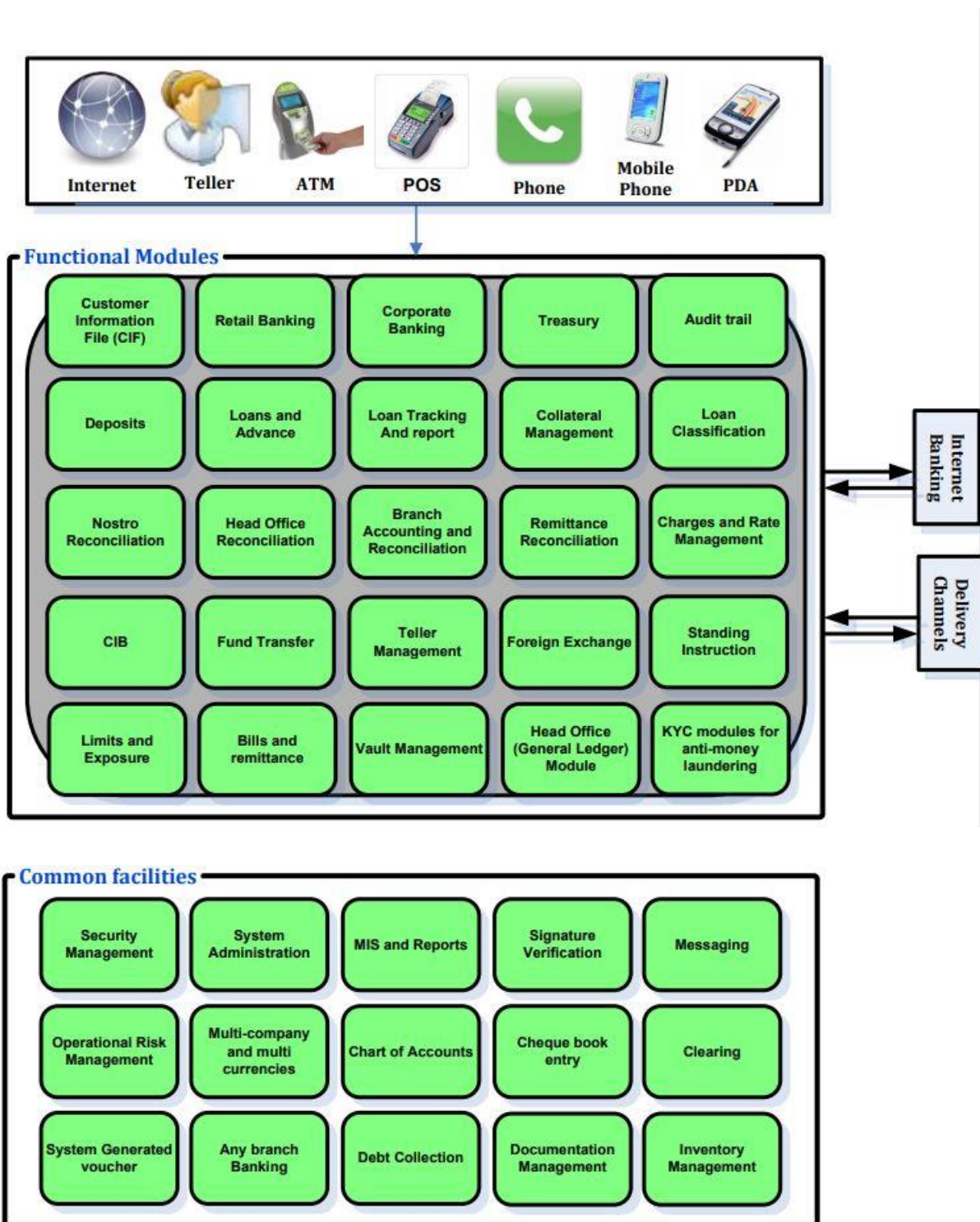
3.3 Architecture of Flora Bank Software

3.3.1 Process and Technical Architecture

Proposed Service Oriented Architecture of Flora Bank Web Application



3.3.2 Functional Architecture



3.4 Definition Of CRM

CRM, also known as the Customer Relationship Management section, is FloraBank's way of keeping track of customer information. The other modules, like Deposit, Loans and Advance, Bill and Remittance, Foreign Exchange, and Swift Module, are connected to CIF.

This system gives each customer a unique code that can be used to identify them. This customer code is used in all of the customer functions where it is needed. CRM is a very crucial part of the very first phase of banking. First, one of a bank's most essential and primary operations starts from creating a person's account. And to create a new account, information gathering and storing is very crucial. There are mainly several types of accounts, For example, Personal savings, Current, SND, Kids savings, or young star. But for each of these accounts, one thing in common is creating a central profile. In a significant profile, the client is identified with a unique code, Which is the primary key. For individual personnel, only one personal profile or unique code is given. With that particular code, they can open as many accounts as they want, but that profile remains the same. And this profile is created when a client approaches the bank to create an account for the first time. There are mainly two types of CRM or Customer relationship management profiles.

They are-

- Individual Profile
- Entity profile

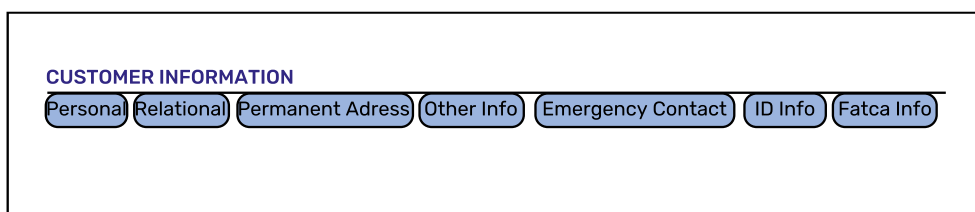
Regarding profile creation, it depends on the type of account the clients are willing to open. Because if an individual wants to open a savings account, only the Individual Profile is created for them. But If a client wants to open a current account for their business organization, An entity profile also gets created alongside their profile. The Entity profile

contains the information of the business entity, For instance, its office dress. Entity Basics, Business related Information Etc.

On the Other hand Personal profile collects personal information of an individual like Personal Section, relational Section, parents' Information, present address, Permanent address, etc. If a joint account exists, considerable amounts of a personal profile are being created against that account. At last, in terms of the Kids' or Young star accounts, both fathers' and mothers' personal profiles get created alongside the children.

3.5 Activity Of CRM

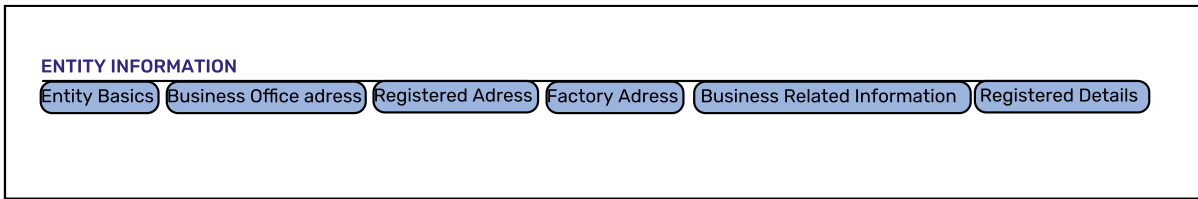
Customer relationship management, or CRM, is an integral aspect of traditional financial institutions. CRM Is mainly a database that stores organized information about a person. First Of all, Logging in to the Flora Banking Software, There is a section called Customer Information. On the Main thread of the area, there are many subsections like Personal, Relational, Present Address, professional Address, Other Information, Emergency Contact, ID Information, and FATCA Information.



After Fulfilling all the Criteria, the system gives the operating officer a unique customer code. But before that, another person who has the authorization power should accept the Customer Information by authorizing it. It is for the safety of the system.

On the Other hand, there is a separate section in Customer Relation Management for Entity Information Where the business organization's information is being collected For the current account creation. In the Entity Information sections Main thread, there are some sub-sections

like Entity Basics, Business office address, Registered Address, Factory or Industry address, Business related information, and at last Registered Details.



After completing the Entity Information, another person with the authorization authorizes it. After that, the procedure of account creation starts.

Another essential addition to the Customer Relationship Management database system is the Signature card addition, where the Initial signature of a client is recorded. The signature of a person is one of the most essential and critical subjects which will distinguish them. With that signature card addition, it will help the bank personnel identify the client before giving any service.



3.6 Structure Of CRM

3.6.1 Data Entries Of CRM

The important fields Data Entry of the CRM database System is given below .

Customer Information

CUSTOMER INFORMATION

Personal Relational Permanent Adress Other Info Emergency Contact ID Info Fatca Info

Personal

Customer No:

Customer Type:

Customer Title:

First Name:

Middle Name:

Last Name:

Date of Birth:

Place Of Birth District:

Marital status:

Religion:

Gender:

Nationality:

The personal section of Customer information contains the basic information of a client. Providing The Basic information of the Customer information is very essential and it is the first step of the account opening.

CUSTOMER INFORMATION

Personal Relational Permanent Adress Other Info Emergency Contact ID Info Fatca Info

Relational

Father title

Father Name:

Mother title:

Mothers Name:

Spouse Title:

Spouse Name:

The Relational section of Customer information contains the data of Parents and Spouse. This Also interacts with the Nominee information.

CUSTOMER INFORMATION

Permanent Address

Country Code:

Address:

Division:

District:

Upazila or Thana:

Union:

Village:

Postal Code:

Phone:

Mobile:

Email:

The address section of customer information contains the Permanent and present address of a client

CUSTOMER INFORMATION

Other Information

Source Of Fund:

Sector Type:

SBS Sector Code:

CIB Sector Code:

BB Occupation Category:

Occupation details:

Customer Nature:

Monthly Income:

Relationship manager ID:

Communication Address:

Rural/Urban:

Other information section contains the earning information of a client. For Instance the source of fund, clients Job sector type at last the Monthly income of the client.

CUSTOMER INFORMATION

Personal Relational Permanent Address Other Info Emergency Contact ID Info Fatca Info

ID Information

National ID:

Old National ID:

E-TIN:

Passport No:

Passport Issue Date:

Passport Expiring date:

Driving licence No:

License Issue Date:

License Expiring Date:

Birth certificate no:

Certifying authority:

ID information contains the national id card information of a client. It carries the information like National ID card number , E-TIN Number, Passport Number , Birth Certificate Number.

Entity Information

ENTITY INFORMATION

Entity Basics Business Office address Registered address Factory address Business Related Info

Entity Basics

Customer Type

Name

Country of Incorporation

Date of Incorporation

Business Commencement date:

Legal Form

Nature of Business:

Entity Basics contains the information of the business organization for example name, country of incorporation, date of incorporation, Business commencement date etc. These are the main and essential part of the business entity account creation .

ENTITY INFORMATION

Entity Basics Business Office address Registered address Factory address Business Related Info

Business Office Address

Country

Address

Division

District

Upazila

Village

Postal Code

Phone

Mobile no for SMS

Email

Business Office address contains the basic address information of clients business entity

ENTITY INFORMATION

Entity Basics Business Office address Registered address Factory address Business Related Info

Business Related information

SBS Sector Code

Sector Type

CIB Sector Code

Customer Code

Annual turnover

Net asset of the entity

Communication address

Walk in customer

Rural/ Urban

Business Type

Business Related information contains the sector type of the business, the annual turnover of the business organization also the net asset of the entity.

ENTITY INFORMATION

Entity Basics Business Office address Registered address Factory address Business Related Info **Registration Details**

Registration Details

E TIN	<input type="text"/>
Vat Registration No	<input type="text"/>
Trade license No	<input type="text"/>
Trade license Authority	<input type="text"/>
Trade license Issue Date	<input type="text"/>
BIN (Business identification Number)	<input type="text"/>

Registration details contains the vat registration , trade license no of a business organization .

These are the Primary level data entries required to open a persons personal and business account.

Context Level Data Flow Diagram

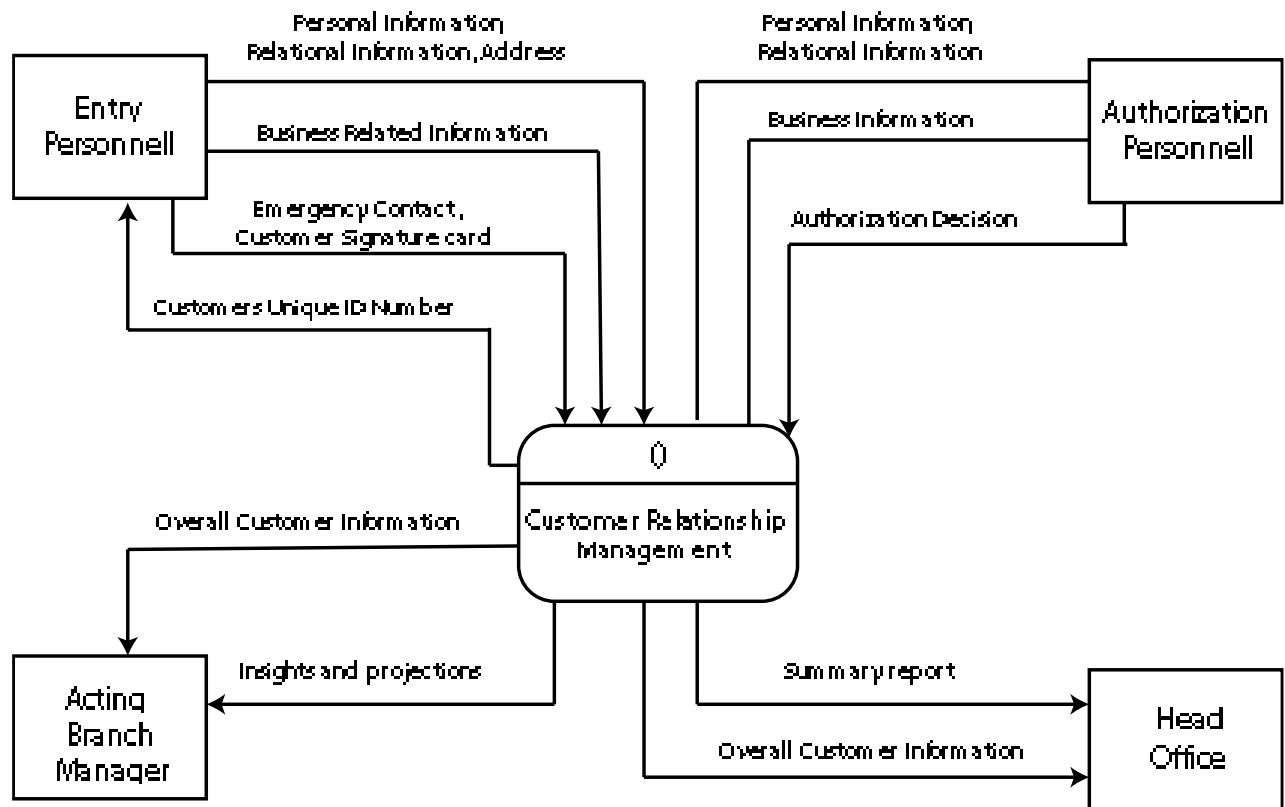


Figure 1: Context Level data flow diagram of CRM system

Context level Data flow diagram indicates the data inflow and outflow of every factor connected with the main system. In the Context level data flow diagram of CRM system there are entities like Entry personnel, Authorization Personnel, Acting Branch manager at last The Head office personnel Who are directly connected with the system. This diagram shows us the specific information coming in and going out from the system. For instance , The Personnel who entries the information send the data of personal information , Business information , Personal and permanent address etc. On the other hand the CRM system provides the customer Unique number to the officer . The Head office personnel only receives the summary report and overall customer information.

Use Case Diagram Of Customer relationship management's system

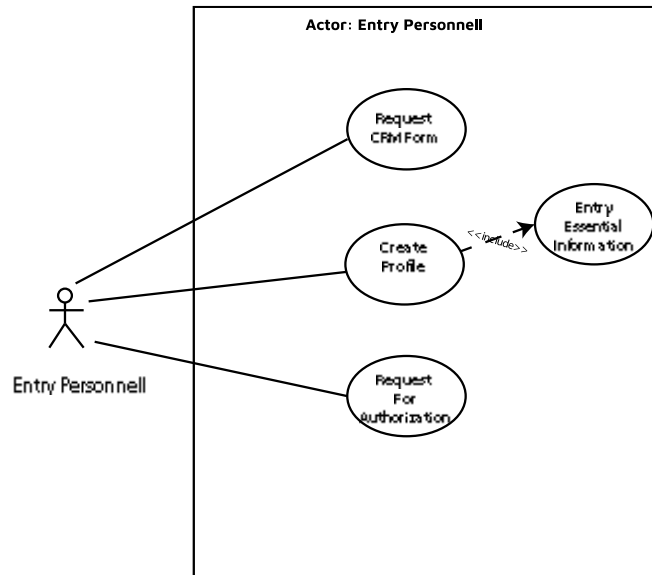
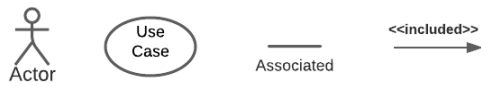


Figure 2: use case diagram of Entry personnell

Use case diagram is a kind of diagram which divides the original system in some parts. And provides the overview of the precautions the entity takes. In figure 2 which is the diagram for Entry personnell They At first requests the CRM form from the main system. After that create the profile .At last they request for the authorization from the system.

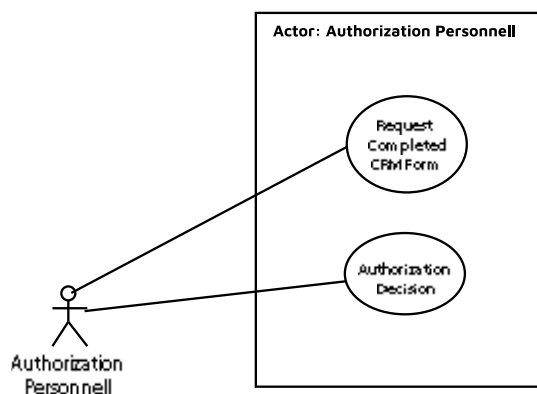


Figure 3: use case diagram of Authorization personnell

From figure 3 or the use case diagram of the authorization personnel we can understand the procedure they undergoes. At first they requests for the completed CRM form. After that They Provides the authorization decision.

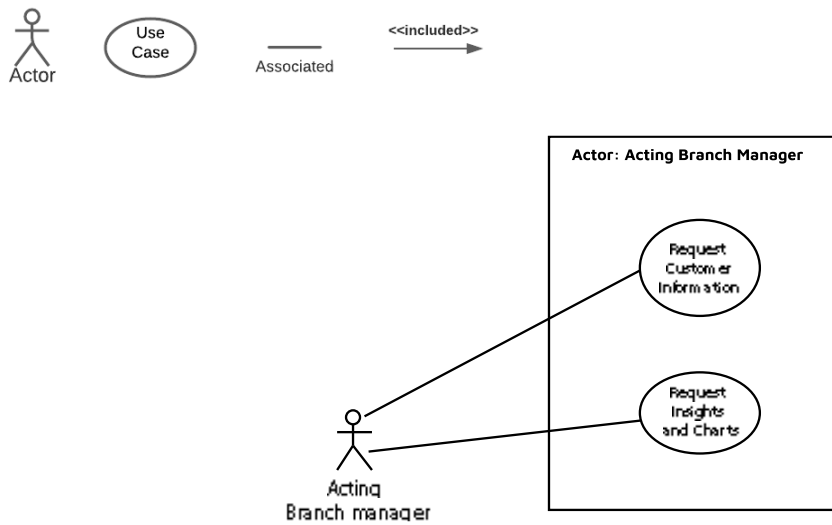


Figure 4: use case diagram of Authorization personnel

From the use case diagram of Acting Branch Manager they requests the customer information which was fulfilled earlier. They can also request for insights and charts.

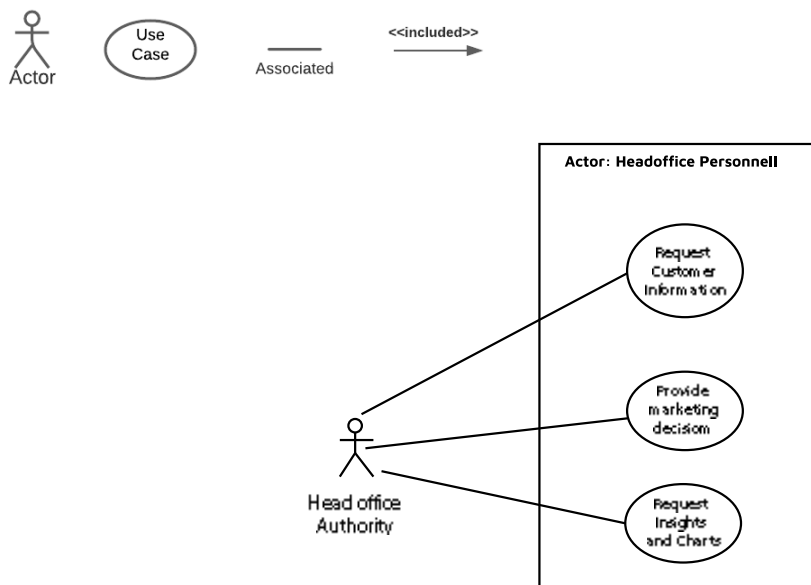


Figure 5: use case diagram of Head office personnel

From the use case diagram indicating the head office authority we can see that at first they requests for the completed customer information then they provides some marketing decision at last they can see the charts and insights from the system.

3.7 Database Structure Of CRM

Schema Of CRM Database

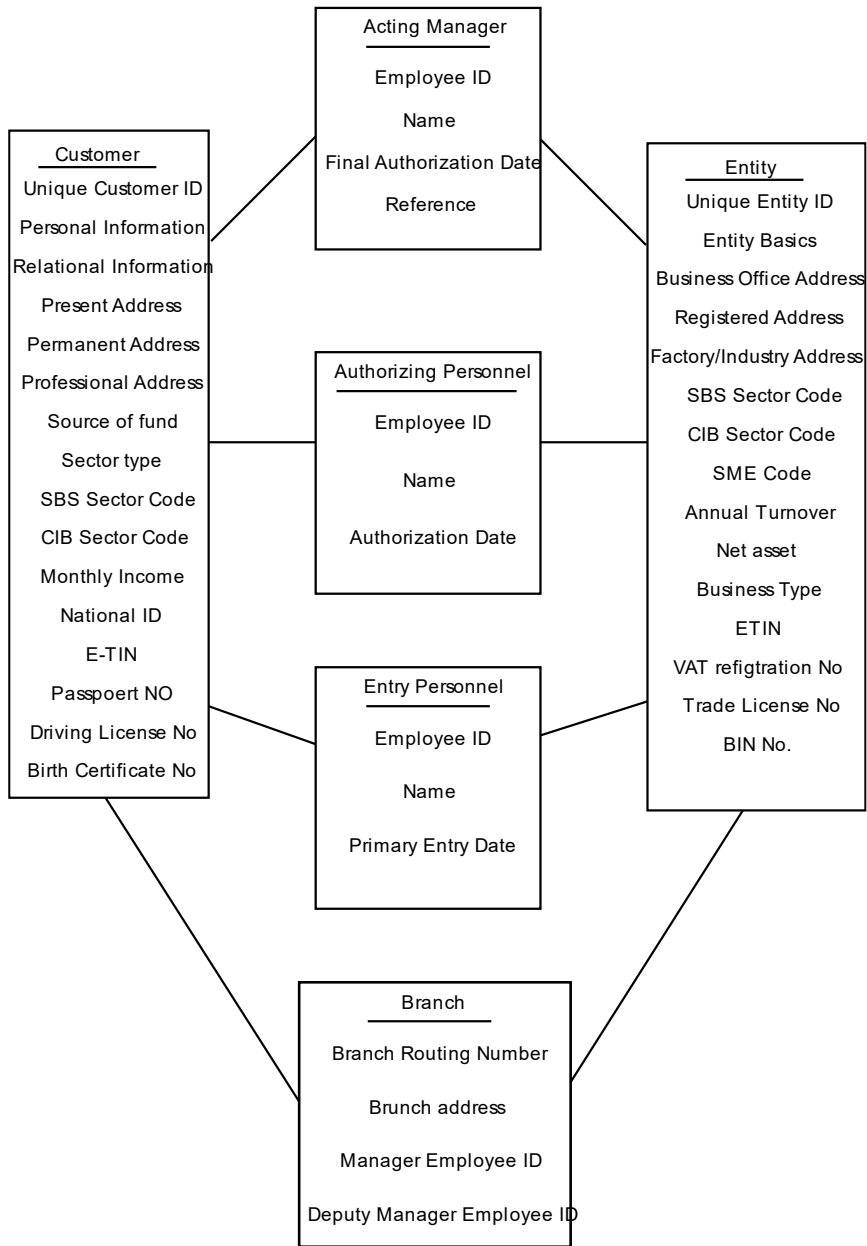


Figure 6: Database schema of CRM

On the figure 6 which indicates the database schema of the CRM database we can understand the essential fields the systems. Also the relationship among the entities. overall its just a basic overview of how the systems database is going to look like.

Entity Relationship Diagram Of CRM Database (Customer)

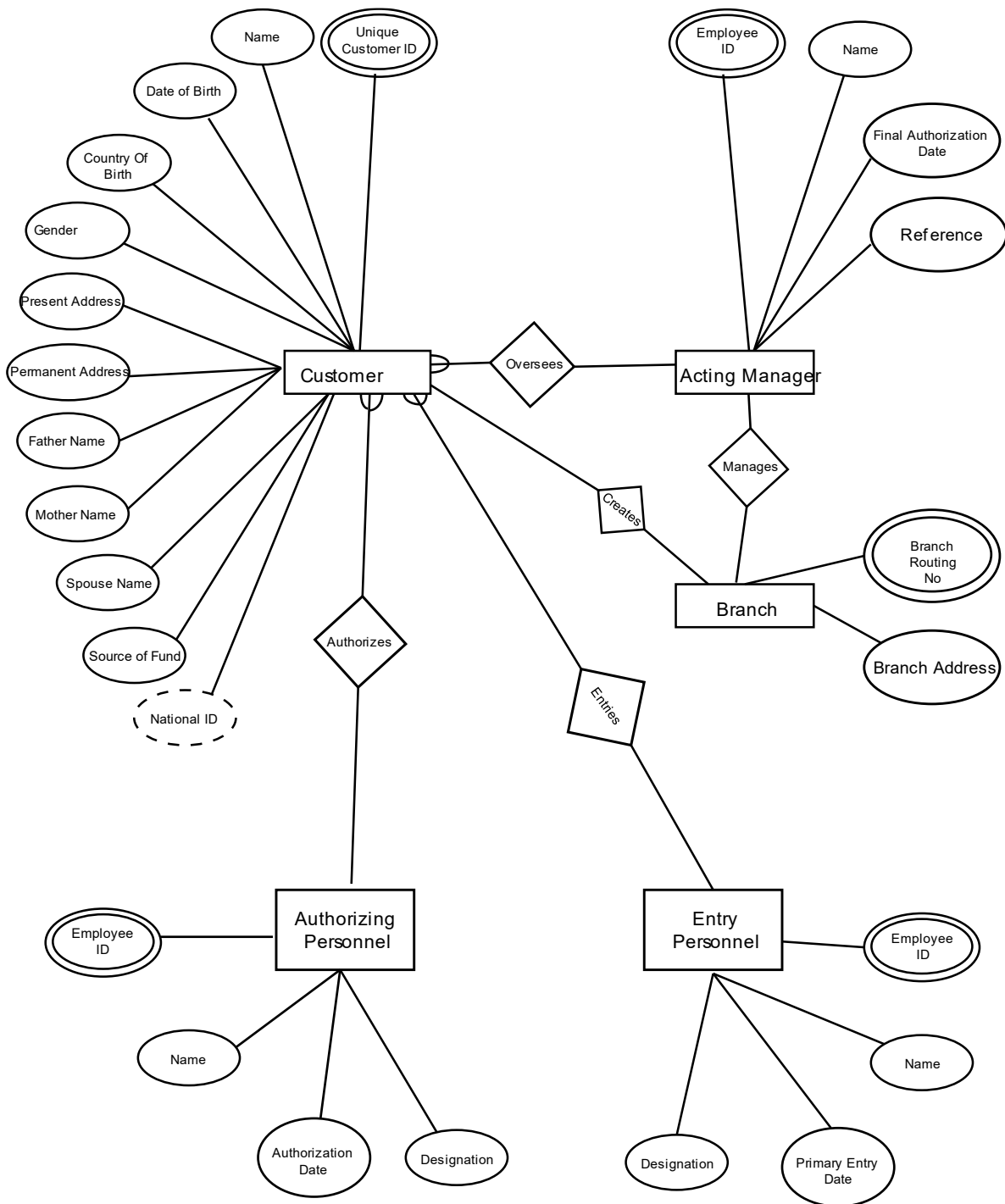


Figure 7: Entity Relationship Diagram Of CRM Database (Customer)

Figure 7 shows us the Entity relationship diagram which mainly provides us the information about various keys which are essential for the database , In this system there is only one primary key for each entities for instance , the entity like customers primary key will be customer id, for Branch the key will be Branch route number .Also thus entity relationship diagram will also indicate us about the foreign key which is basically a primary key of another entity. At last we can see the unique key of this systems database . which can be basically the phone number of customer or an employee .

Entity Relationship Diagram Of CRM Database (Entity)

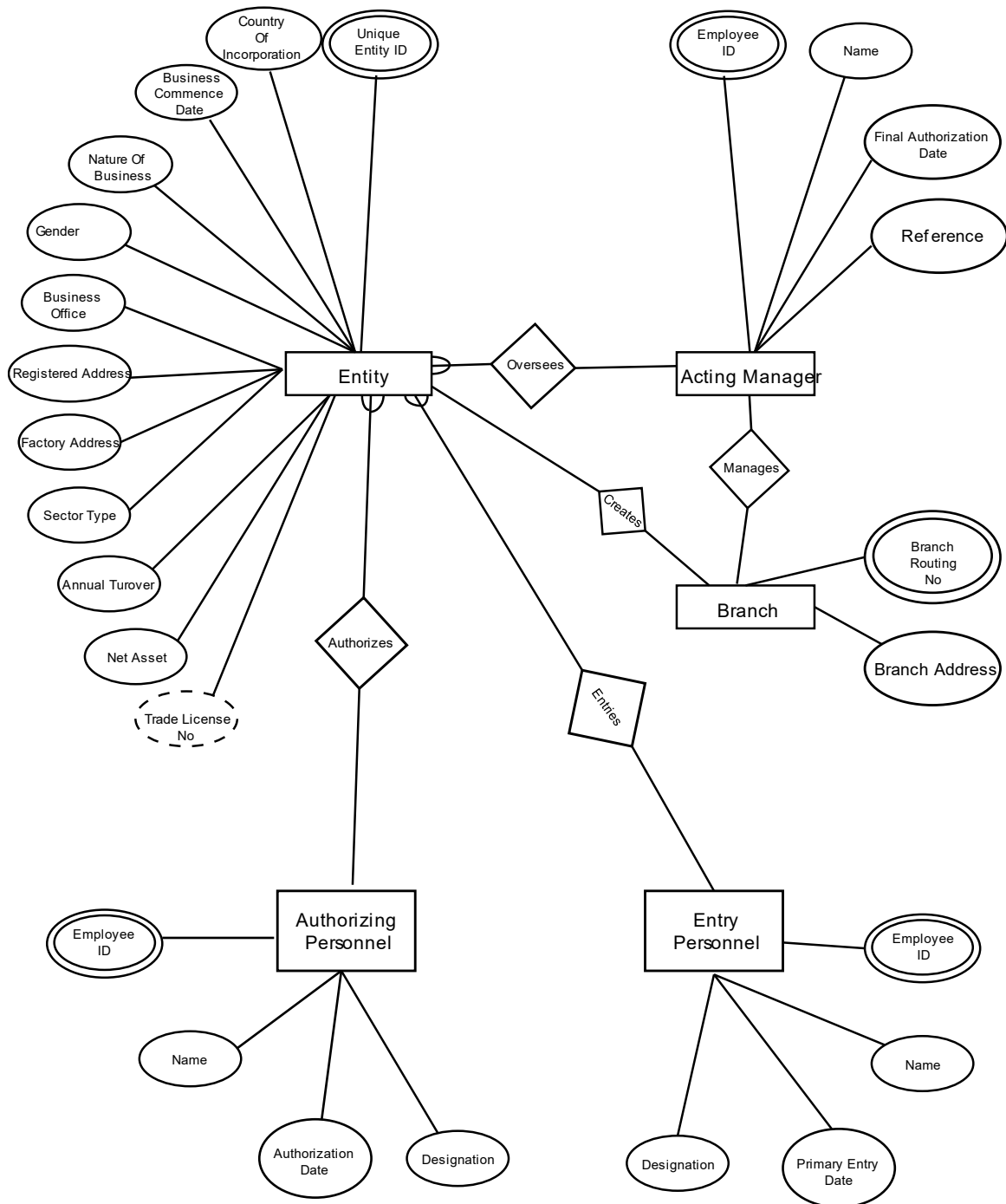


Figure 7: Entity Relationship Diagram Of CRM Database (Entity)

From the figure 7 we can see another version of the entity relationship diagram which also contains the factor of entity information . Where there is Business entity and for creating a business account the authority needs to entry the business entities information identifying the entity id as the primary key

3.8 Facilities Of CRM

- Signature Verification module of FLORA BANK with the Customer Relationship management system is an international standard, online, a real-time banking system that is comprehensive, fully automated, and highly adaptable to new banking products. It is a very effective and failproof system by which a person's signature is being recorded, and in the future, it will help the authority to identify them
- In a CRM, there is only one unique customer ID Given to each one of the customers. So, Suppose a client opens multiple accounts. In that case, The bank authority will not face any adverse situations identifying them because the Unique Customer ID will be the same in all their existing accounts. This Unique customer ID can be called the Primary key of this database
- There will be other ID no's which will act as the Foreign key, For Instance, Mobile No, National ID card no, Birth Certificate No, Driving License No, etc. If a person Forgets their Account, no authority can search with their mobile no or national Id card no.
- In terms of Entity, the operation is almost the same; there is a designated Entity No for each Business organization. And In terms of the foreign key, Trade License, ETIN no works as the secondary query field.
- At last, this CRM system works as the link of various banking procedures; for example, If a person comes to the bank for a loan, the first thing the authority will check is his CRM.
- Even If a person closes his Account, their data will be archived, not erased. So, If the person returns to the bank again, he doesn't have to face hassle.

3.9 Scenarios before the introduction of CRM

Information management was there in the bank sector For a long time, but the database management system was not appropriately structured, and there were many limitations. For Example, bank officials could not find proper records of a person before opening an account. Before Introducing the structured database called Customer Relation Management, when a client wanted to open a new account separate database for each statement was created, where the primary key was account no. And it was not connected with any external database and data. The Primary key did not act as the foreign key of any other data table. Furthermore, there was less scope for security because there were fewer implications of authorizations. As a result, some incidents were unpleasant for the client and Bank authority.

Before the introduction of CRM, there were not too many fields that the client needed to fill. So, there were fewer some in identifying and introducing them. The database design was much more different than today's database.

3.10 Database Structure Of Old Database

3.10.1 Schema Of Old Database (Individual Account)

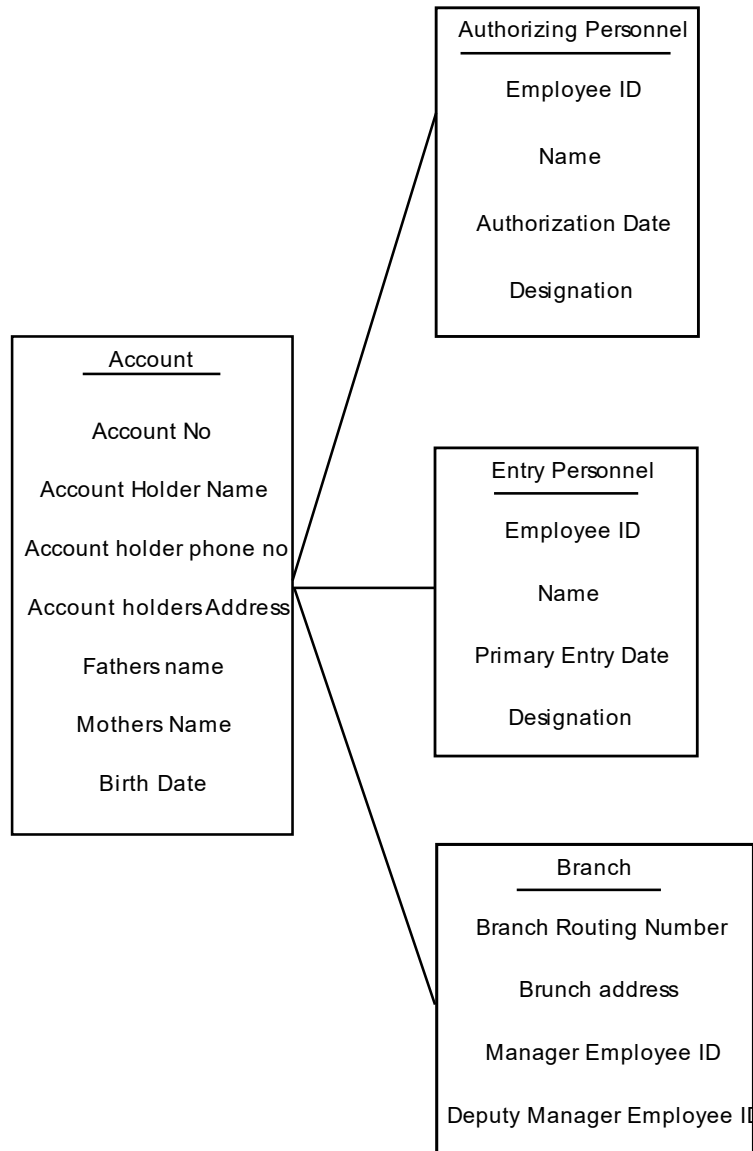


Figure 8: Schema Of Old Database (Individual Account)

Figure 8 Provides us an over view on Schema of old database. Where in each new account a whole new set of clustered information were entered by the Bank personnel. And looking at this schema we can see that it is disconnected from outside factors . there is no connection between old systems data with other data.

3.10.2 Schema Of Old Database (Business Account)

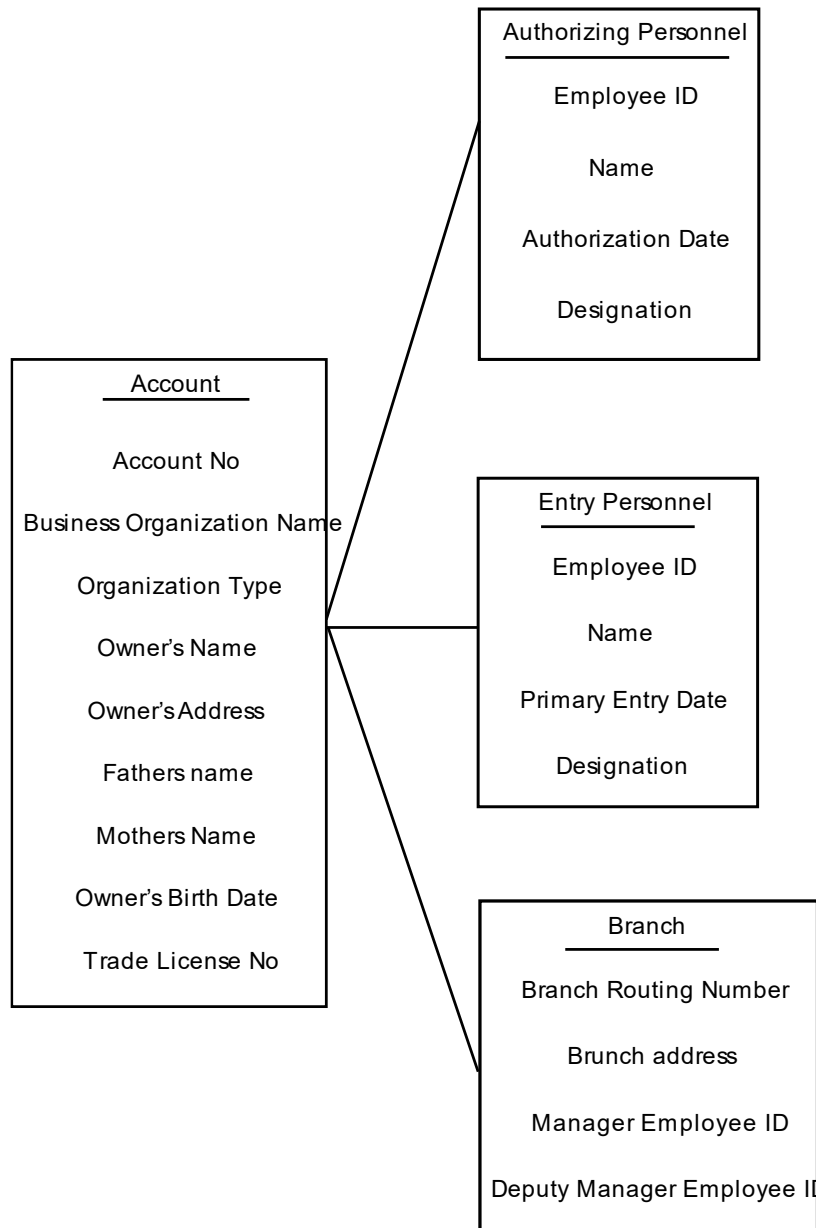


Figure 8: Schema Of Old Database (Business Account)

Figure 8 is more or less similar with the previous figure. Because it gives us an overview on the old system database where for each business account separate business entity data collection were required.

3.10.2 Entity Relationship Diagram Of Old Database (Personal Account)

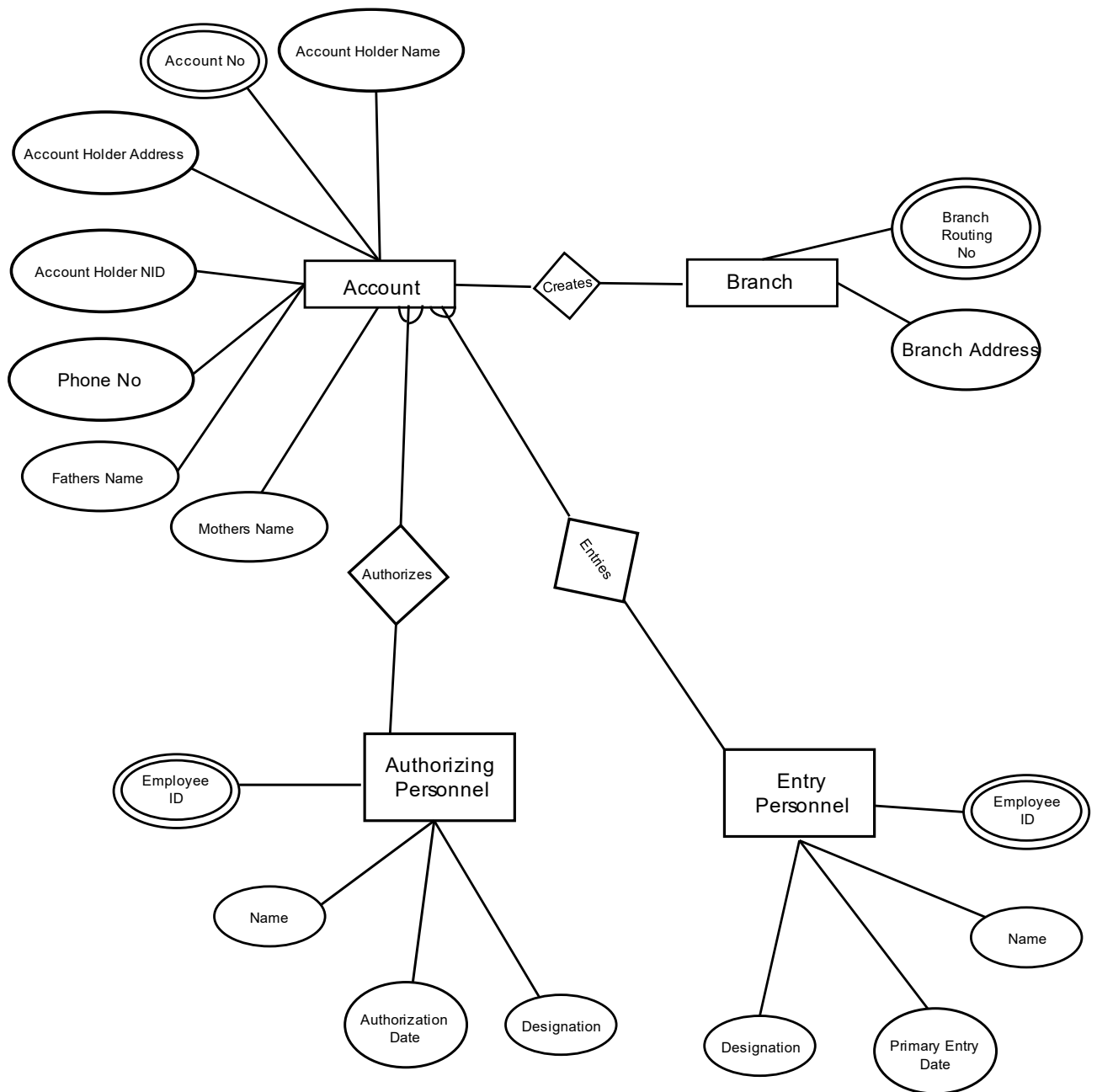


Figure 9: Entity Relationship Diagram Of Old Database (Personal Account)

Figure 9 sums up the entity relationship diagram of the old system where we can clearly see the primary key was the account number not the customer id. This is what differs the new CRM system with the old account number based database system.

3.10.3 Entity Relationship Diagram Of Old Database (Business Account)

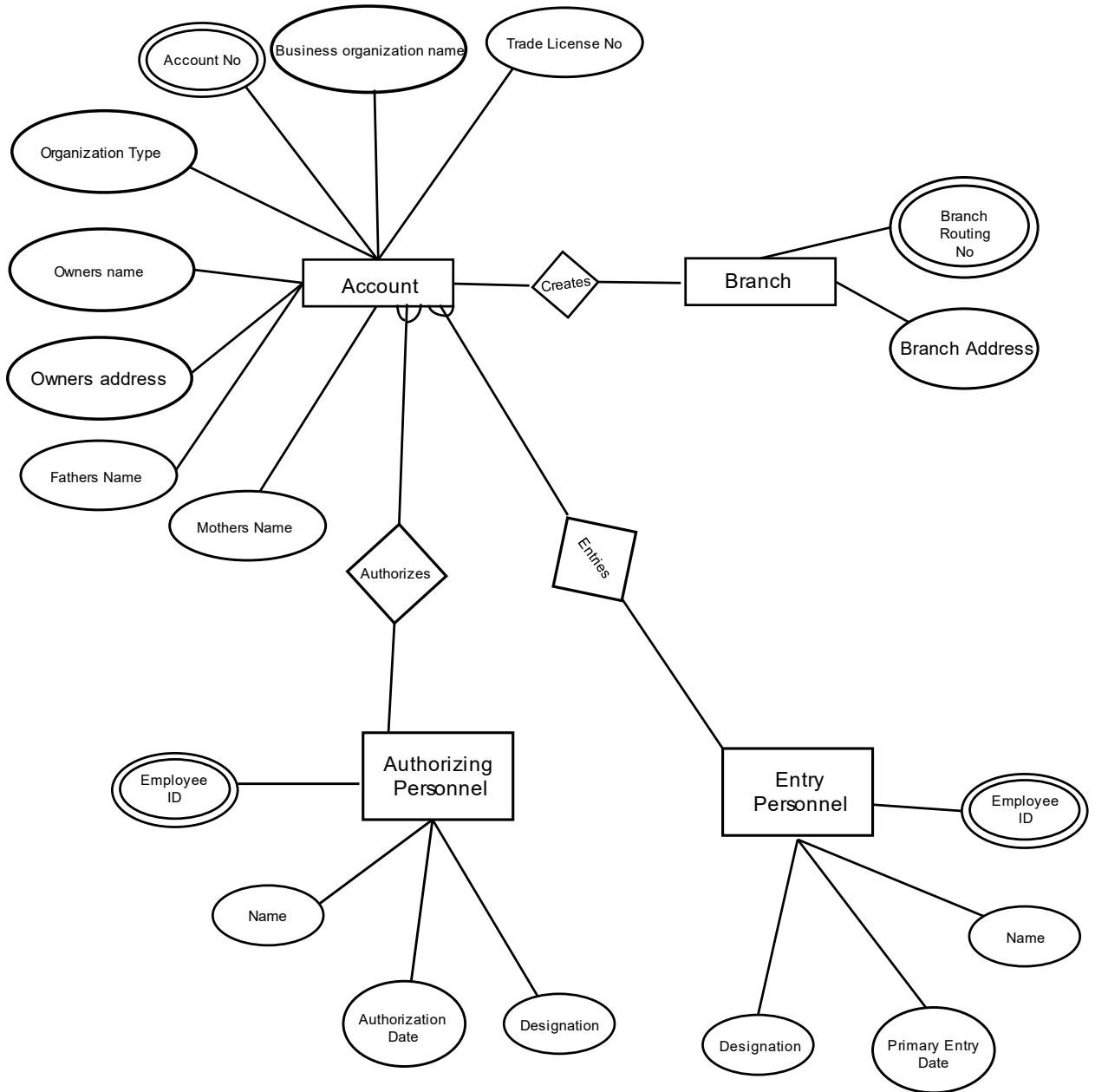


Figure 9: Entity Relationship Diagram Of Old Database (Business Account)

3.11 CRM system vs Old database system

CRM system is the outcome of modern information management in the banking sector, where before the introduction, the database was more straightforward and less effective

First, the CRM database system is better than the old account-based database system in terms of data flexibility. Because in CRM or customer relationship management, there is a unique customer code, which plays a significant role in identifying the customer. It helps the authority discover the natural history of a person's banking. They can access the number, the statement, and the condition of every account they have created in that bank.

But in terms of the Old account-based database management system, there were some limitations in identifying the individuals as the data were based on individual account information. Only accounts were not used as primary keys, and no foreign key was appropriately used. As a result, the authority could not trace the banking history of that person because the data were not connected with other accounts' data. Generally, they were not internally connected.

Before the introduction of a CRM, the checkbook requisitions, delivery, Card delivery, and Requisition were done manually; also, the verification process was not up to the mark, Because the authority did it manually. But now, after a specific person gives a Requisition to the bank for a card or Checkbook, the authority verifies their signature with the help of the CRM database. So, a non-authorized person can't order for an account holder's card and Checkbook without their concern.

At last, Specifying a person, whether he is a citizen of this country or not, has become available in terms of the new database system. Because NID verification is a must in the new database system, Both NID card number and PIN are needed to open a person's CRM. So, the

authenticity of a citizen's identification has been restored. On the other hand, in the old data storing system.

The authority didn't emphasize verifying a person's National ID card through the Bangladesh Election commission's official website.

To sum up, we can express that the CRM system has helped organize customer data and strengthen the security of confidential data.

4.0 Recommendation

The Flora Bank is a very effective management system in the Bank industry Because it has changed the view of the banks, assisting them in capturing their goal with the help of their superior after-sales service. It has a perfect structure with a very easy-to-use interface. But the employees sometimes find difficulty accessing the information for some specific reason. For Example-

- **Server Latency:** Server latency can sometimes create a threatening situation in the Banking sector. Even when an employee is giving the Entry in the CRM system, for the latency or disconnection, there is a huge possibility of data loss and incorrection. So, the case of server disconnection should be reduced.
- Another problem arising from the emergence is the nonfulfillment of some customers' data because those accounts were created before the introduction of the modern banking information system. As today's implemented system needs more verified information, employees face errors when operating the account created in the past before the introduction of a new system. So for the betterment of the daily operation, the head office authority should start a campaign where the employee will encourage the customers to provide the verified information which they could not collect in the past.

- The last recommendation for the system will be making available the graph and chart-like insights of a person's banking frequency for the General banking section. It will help them to calculate the amount of potential a customer has.

4.0 Reference

- *Flora Telecom*. (n.d.). www.floratelbd.com. Retrieved September 23, 2022, from <http://www.floratelbd.com>
- *Free College Essays, Term Paper Help, and Essay Advice - TermPaperWarehouse.com*. (n.d.). www.termpaperwarehouse.com. <http://www.termpaperwarehouse.com>
- *Handle Proxy*. (n.d.). hdl.handle.net. <http://hdl.handle.net>
- *UIU DSpace Home*. (n.d.). dspace.uiu.ac.bd. Retrieved September 23, 2022, from <http://dspace.uiu.ac.bd>
- *BracU IR*. (n.d.). dspace.bracu.ac.bd. <http://dspace.bracu.ac.bd>