

INTERNSHIP REPORT

A Study on LankaBangla Finance's Online Credit Card Approval System



A STUDY ON LANKABANGLA FINANCE'S ONLINE CREDIT CARD APPROVAL SYSTEM

LankaBangla Finance Ltd.

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Submitted in Partial Fulfillment of the Requirements for the Degree
Bachelor of Business Administration



27 February, 2022



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LETTER OF TRANSMITTAL

27th February 2022

Ms. Lili Ping

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Dhanmondi 4/A, Dhaka- 1209

Dear Ma'am,

Subject: Internship Report Submission

I would like to take the pleasure to forward herewith my internship report titled “A Study On Lankabangla Finance’s Online Credit Card Approval System” in compliance with the pre-requisites to complete my graduation. I have tried to include my best efforts and learnings throughout the learning years in preparing this report. This report attempts to analyze the actual effectiveness of implementing an online credit approval process for LBFL’s Credit Cards. I hope this report stands out in terms of your expectations and judgment.

Thank you very much for your kind supervision throughout my internship journey.

Sincerely,

Cinderella Dhrupodi Munshi

ID – 181011040

ULAB School of Business (USB)

ACKNOWLEDGEMENT

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EXECUTIVE SUMMARY

For the first time in Bangladesh, LankaBangla Finance is considering implementing an Online Credit Card system that aims to increase efficiency in the process. The report measured whether it would be a feasible option for LankaBangla Finance Ltd.'s Credit Risk Management Division to go for an online integrated system called CAS. This is a descriptive study and combined both qualitative and quantitative measures. Therefore, the methodology of this study was a Mixed-Method. The quantitative data were used to identify the NPV value, IRR, and Profitability Index. The secondary data were mainly part of the qualitative approach to find out challenges and their solutions related to Online Credit Approval Process.

The qualitative approach identified that with an integrated online system, the card processing unit's work can be reduced to 25% approximately. On average, Businesses will be responsible for completing 40% of work while they accept credit applications online. Operations will be responsible for the rest 35%. The fewer workload at the CRM's end will fast pace the card processing process. As per the quantitative approach, this study found a positive NPV value of 28385903.38, Internal Rate of Return (IRR) of 14.33 % Profitability Index (PI) of 1.11, and a Payback Period of 3.4 years which makes the projects feasible. But there are challenges as well such as - an increased percentage of work that is time-consuming for the business end, employees' lack of technological know-how, scopes for initial malfunctions, and more CAPEX, etc. However, if the employee pool is given extensive training these challenges can be mitigated and the CAS project can be a boon.

Key Words: CAS, NPV, IRR, PI, Technological know-how, Online Integrated System, Feasibility, Credit Card Approval

PART A

Chapter 1: Organization Overview

1.1. Company Profile

Lanka Bangla Finance Limited is one of the largest private financial institutes in Bangladesh. Lanka Bangla Finance Limited started its journey back in 1997 as a joint-venture financial institution with multinational collaboration from Sri Lanka and other countries. Now Lanka Bangla is the country's leading provider of integrated financial services including corporate financial services, retail financial services, SME financial services, stockbroking, corporate advisory, and wealth management services. Lanka Bangla is a primary dealer of government securities since November 2009. Since 2006 Lanka Bangla has been listed in both DSE & CSE in Bangladesh. It is a financial organization that operates credit cards (MasterCard and VISA) and also provides third-party card processing services to other banks in Bangladesh.



Figure 1: Key Highlights of LBF

Currently, there are 4 subsidiaries of LankaBangla Finance -

- Lanka Bangla Securities Limited.
- Lanka Bangla Investments Limited.
- Lanka Bangla Asset Management Company Limited.
- Lanka Bangla IT Investment Limited

Lanka Bangla has widened its operational network by opening branches in Chittagong (Agrabad and Khatungonj), Sylhet, Narsingdi, Comilla and Jessore, Mymensingh, Bogra and a few more will open. All of the Branches are led by the corporate office of Banani.

1.2. Product & Services

The mainstream (revenue-generating) divisions of Lanka Bangla Finance Limited are Credit Risk Management Division (CRM) and Credit Card Division. LBFL mainly Operates in the following areas –

Corporate Financial Services	Personal / Retail Financial Services
Lease Financing	Auto Loan
Term Financing	
Revolving Financing	Home Loan
Project Finance	
Short Term loan	Personal Loan
Club Finance	
Bridge Finance	Short Term Loan Against Deposit
Factoring Finance	
Distributor Finance	Mortgage Loan (For any Purpose)
SME Finance	
Women Enterprise Finance	Credit Card
Commercial Vehicle Finance	
Preferred Stock	
Fixed Income Securities (Bond)	
Advisory Service	
	<ul style="list-style-type: none"> ▪ VISA ▪ MASTERCARD

Table 1: LBFL's Product & Services

LBFL is the only company among the Non-Bank Financial Institutions to launch the first indigenous credit card. Since this report is based on Retail Finance's Credit Card Department, the product and services of

Credit Cards are depicted in the following Table. All the cards issued by LBFL are only limited to Bangladesh and do not have any Dual Currency and other internationally interchangeable facilities.

Card Type	Limit Range (BDT)
Titanium Mastercard	1,50,000-10,00,000
Mastercard Gold	60,000-1,49,999
Mastercard Classic	20,000-59,999
VISA Platinum	1,50,000- 10,00,000
VISA Gold	60,000- 1,49,999
VISA Classic	20,000-59,999
Mastercard Shikha Titanium	150,000-1000,000
Mastercard Shikha Gold	60,000-149,999
Mastercard Shikha Classic	10,000-59,999

Table 2: LBFL Credit Card Types & Limits

1.3. Company Organogram

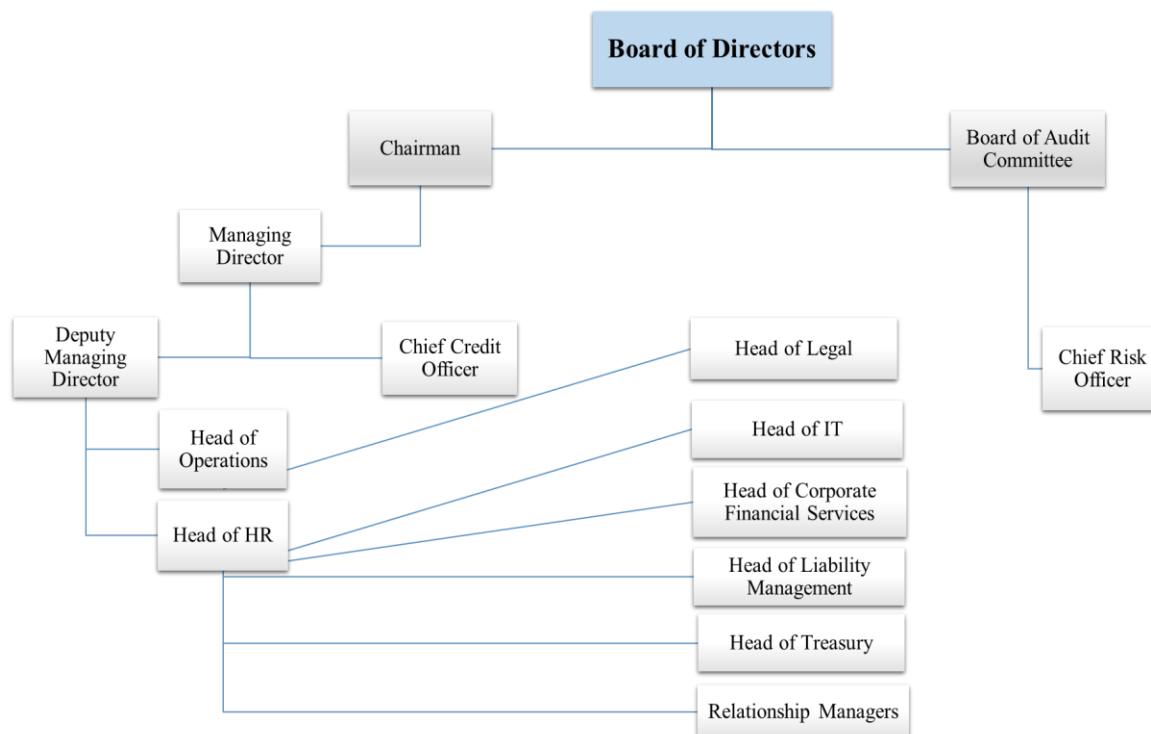


Figure 2: Company Organogram of LBFL

1.4. SWOT Analysis

The SWOT analysis for LankaBanla Finance Ltd.'s Credit Risk Management Division is given in the following.

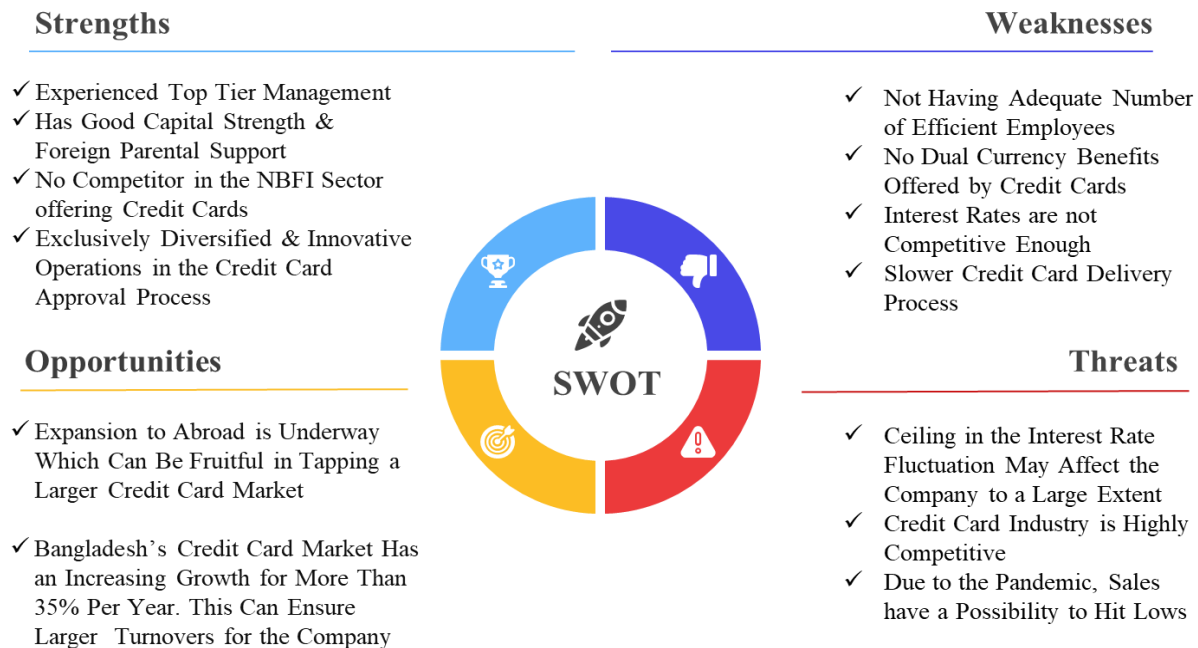


Figure 3: SWOT Analysis

1.5. Financial Performance Highlights

1.5.1. Liquidity Ratios

Current Ratio

The current ratios of this company imply that the company has 1.13 Tk. of Current Assets to pay off every 1.00 Taka of current liabilities in 2020. Compared to the previous 3 years, LBFL did pretty well in 2020 as it had the highest amount of current assets to pay off its liabilities. Since 2017, the trend showed a drastic fall in terms of the company's liquidity. In 2019 it had the lowest liquidity of 1.04 times. The reason was the pandemic. However, it improved a lot within a single year.

Year	2020	2019	2018	2017
Current Ratio	1.13	1.04	1.08	1.11

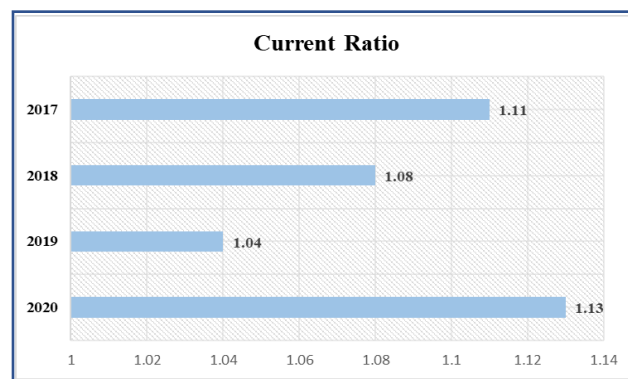


Table 3: Current Ratio

Capacity Ratio

The capacity ratio shows a bank's net loan and leases against its total asset. If the value is lower than the previous year or comparing other banks, then it's good for that particular bank. If the bank shows higher value, then it means it has a shortage of liquidity position. In terms of this ratio, the company had successfully decreased its negative liquidity to 71.45% in 2020 compared to other years. They had the highest ratio of 77.88% in 2017 which depicts a negative liquidity position for them. However, the ratios are quite high and risky for LBFL overall. So they should work on decreasing it more in future.

Year	2020	2019	2018	2017
Capacity Ratio	71.45%	77.19%	78.14%	77.88%

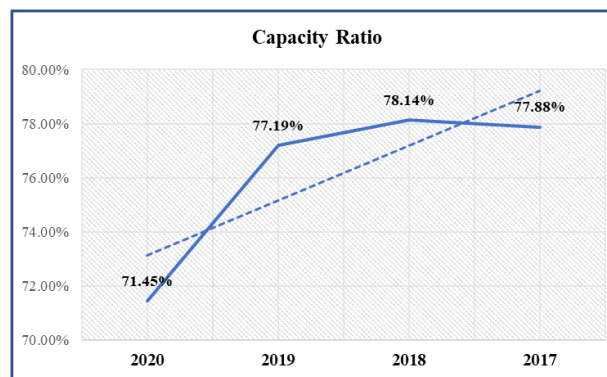


Table 4: Capacity Ratio

1.5.2. Profitability Ratios

Net Interest Margin

Net interest margin (NIM) reveals the amount of money that a bank is earning in interest on loans compared to the amount it is paying in interest on deposits. A positive and higher ratio shows the company operates

profitably, while a negative figure indicates losses. Compared to the years 2019, 2018 LBFL's Net Interest Margin had decreased to 2.66% which is not satisfactory. It indicates in 2020 LBFL operated less profitably and earned fewer interests compared to its paying interests compared to previous years.

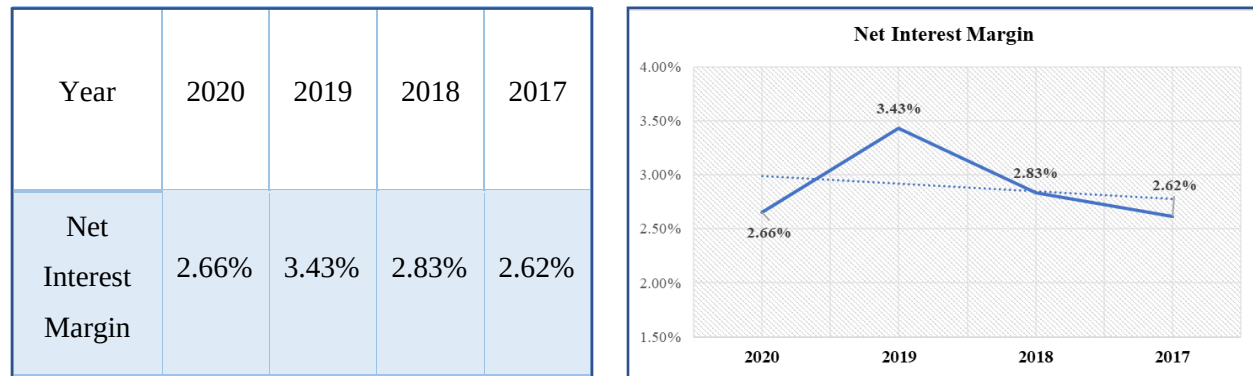


Table 5: Net Interest Margins

Return on Assets

ROA reflects how efficiently banks utilize their total assets to produce net income over a period of time. LFBFL does not have satisfactory performance in terms of ROA. They had the highest return by utilizing their total assets in 2017 with a percentage of 2.25. But it has decreased over the years. On average the return has decreased by 1.48% within 4 years. Though compared to the previous 2 years their performance slightly improved in 2020 with a positive value of 1.20% but still not adequate.

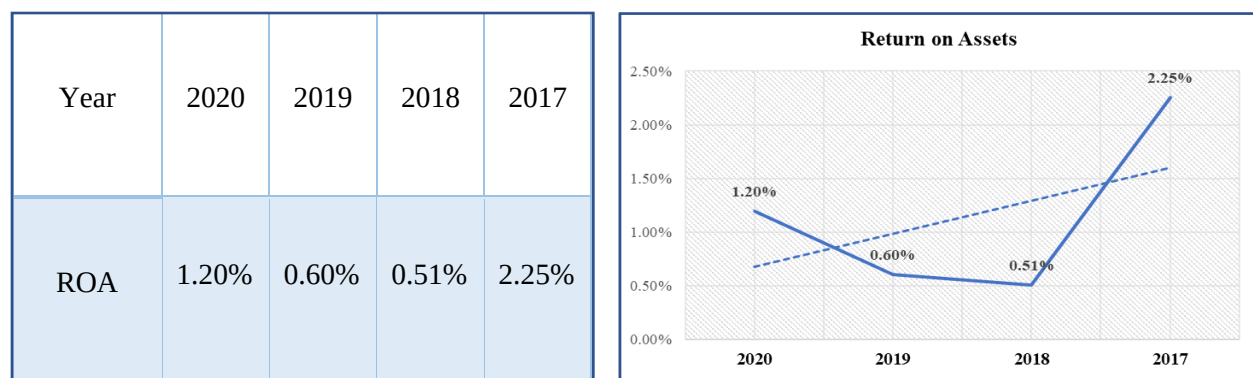


Table 6: ROA

Leverage Ratio

This ratio measures a bank's core capital to its total asset to find out how leveraged a bank is based on its assets since Tier 1 capital can be easily liquidated. In 4 years the company achieved its highest leverage in

2020 with a value of 13.33%. Also over the years, LBFL has been efficient in improving its leverage by 1.67% within 3 years. They might be able to withstand a negative shock to the balance sheet as they have improving leverage.

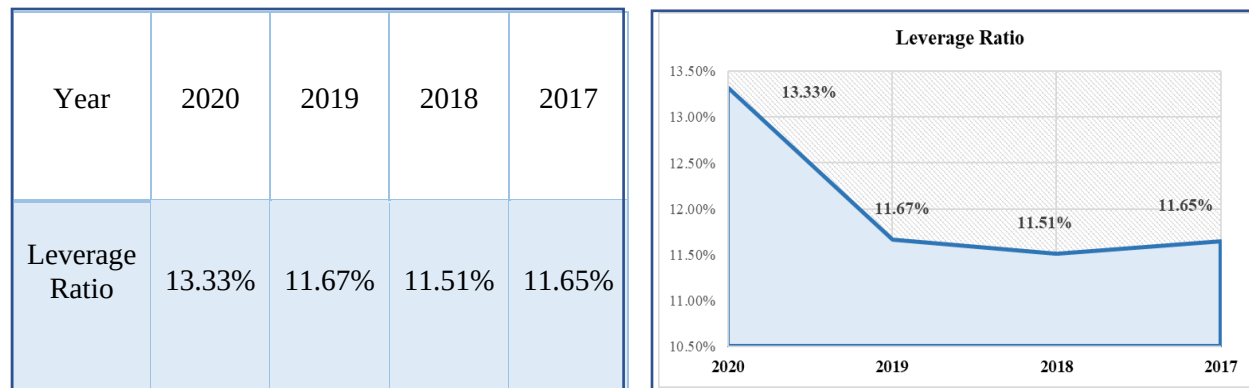


Table 7: Leverage Ratio

Chapter 2: Intern's Roles & Responsibilities

I have worked in the Credit Risk Management Division of this organization, under the direct supervision of Mr. MD. Hadiur Rahman Saki (Manager, Credit Cards).

My Job Responsibilities include the followings –

- Pre-screening of credit card files. Check all legal documents for verifying clients.
- Assist in file processing. Assist in Phone Verifications, Bank Statement evaluation, etc.
- Verify Client NID and update Excel Sheet for CIB.
- Download & Asses Client Credit History from or CIB from Bangladesh Bank's Website.
- Checking to Know Your Customer Profile. KYC form contains significant information about the background of the client. For this reason, I check all the valid information about the client if, there was any information missing I asked Relationship Officer to collect it.
- Assist in maintaining Credit Risk Management's MIS system.
- Update File status, Queries, and other information in the MIS system.
- Allocating Credit Card files to the Credit Analysts.

PART B

Chapter 1: Research Design

1.1 Introduction

The underlying principle of the whole credit card system has remained almost the same, from its actual manifestation as a “Cardboard Diner’s Club Card” to the hefty metal chip embedded ones we use today: the basic concept is issuing a tool to buy at present and make the payments later (Frankel, 2021). American Express was the pioneer in inventing bank credit cards. In 1958, American Express introduced its first charge card which let customers pay bills every month at the cost of an annual fee (Frankel, 2021). Later a California-based Bank of America introduced VISA card in 1976 in response to the rising popularity of a revolving credit card that carried forward a balance from month to month. This financial instrument was most popular as it offered convenience and instant personal loans. The second most popular credit card, MasterCard was launched by the Interbank Card Association (ITC) in 1979 (Frankel, 2021). To this day Visa remains to be the king of all credit cards. During the pandemic, Visa reported their total payment volume to be \$2.35 trillion in 2020, an increase of 6% year over year (Meola, 2022).

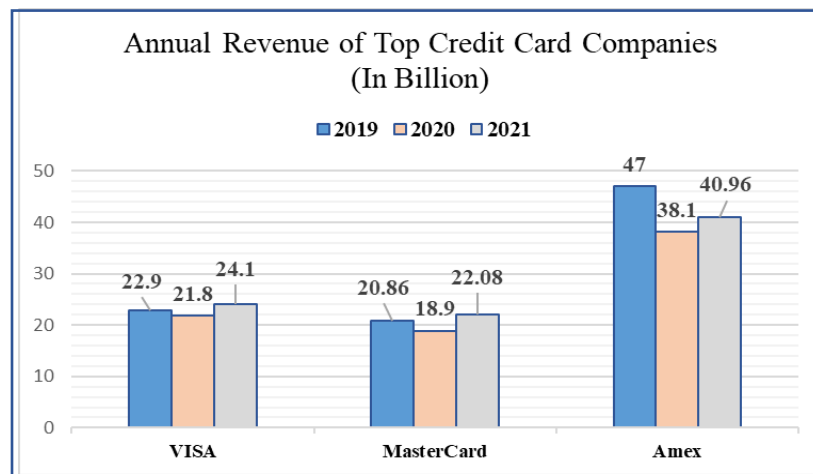


Figure 4: Revenue of Top Credit Card Companies (Source: VISA Financials, Companies Market Cap)

Standard Chartered Bank was the first Bank to provide credit cards in Bangladesh 10 years ago. In 1997 the bank introduced a full-fledged card program with a diverse client base. Now every private bank offers

credit card services. However, LankaBangla Finance is the only Non-Bank Financial Institution to operate a full-fledged credit card program across Bangladesh.

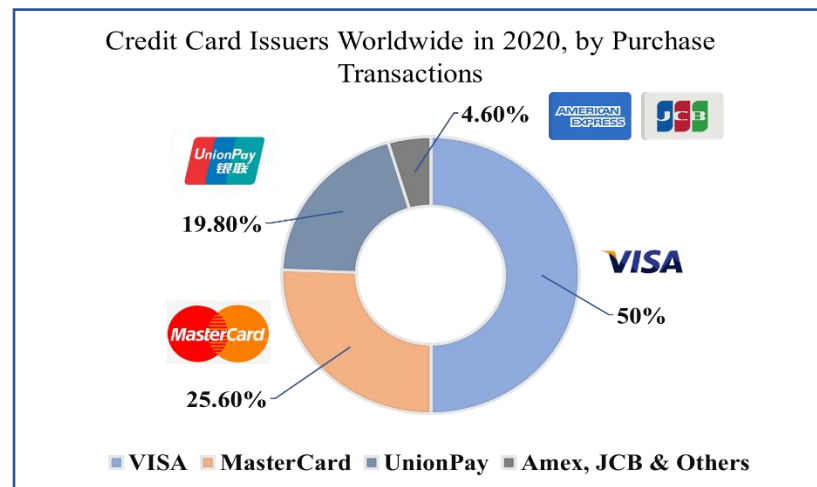


Figure 5:Worldwide Credit Card Issuers (Source: Statista)

The credit card is a rectangular-shaped, hologram-enabled piece of hard plastic with security features. A credit card has a magnetic tape strip on the backside that contains electronic data and cardholder information. The whole process of credit card transactions takes a fraction of seconds. A cardholder swipes a card and signs a receipt, a treasure of data is exchanged between the merchant which acquires bank, card network, and issuing bank to approve the card details and secure the purchase (Forbes Advisor , 2021). The approval process for credit cards might vary based on countries and their policies. The approval process is revolutionizing with fast-forwarding technological inventions and upgrades. Till these days a lot of credit card frauds are still being detected all over the world. Credit cards can be taken through insecure websites or acquired through an identity theft operation (FBI, 2022). To prevent these frauds and to minimize errors in the approval process developed countries have opted for automated approval processes around the world. Basic Credit Card processing involves a number of parties such as Cardholders, Merchants, Bank Acquiring, Card Networks, Issuing to Bank, etc. However, in developing countries like Bangladesh, the credit card approval and maintenance process still goes through manual processing in which frauds are more likely to occur.

This report tries to analyze whether automation in the existing credit card approval process will be a feasible option to minimize fraud and make the process more efficient from LankaBangla Finance’s current perspective.

1.2 Research Objective

The primary objective of this study is to fulfill the minimum requirement for completing the internship to achieve the Bachelor of Business Administration Degree under ULAB School of Business. The key research objectives of this study are –

- To find out whether opting for an automated process in the existing manual credit card approval system would be a feasible option for LankaBangla Finance Ltd.'s Credit Risk Management Division.
- To find out if the proposed automation in the existing process can decrease credit card fraud and minimize risks.
- Identify if the automated process is a cost-effective option for Lanka Bangla Finance Ltd.
- Recommend suitable alternatives and developments that can bring efficiency to the credit card processing system.

1.3 Methodology

This is a descriptive study and combines both qualitative and quantitative measures. Therefore, the methodology of this study is a **Mixed-Method**. The quantitative approach of this study helped to identify in numeric terms whether taking an online card processing system for credit card operations will be a profitable and efficient choice or not. The qualitative method has been used to look into works of literature to find out possible challenges, available scopes, and variables regarding this study. Both Primary and Secondary data sources have been used to complete this study.

1.3.1 Primary Data Sources

To collect the quantitative data primary data sources have been used. Key Informant Interviews were conducted to collect the quantitative data and to evaluate the project. The quantitative data were used to identify the NPV value, IRR, and Profitability. These were used to define the feasibility of undertaking an online credit approval process which is known as the “CAS” project in LankaBangla Finance Ltd. as well as express its results in financial terms. The study was done using Microsoft Excel Software.

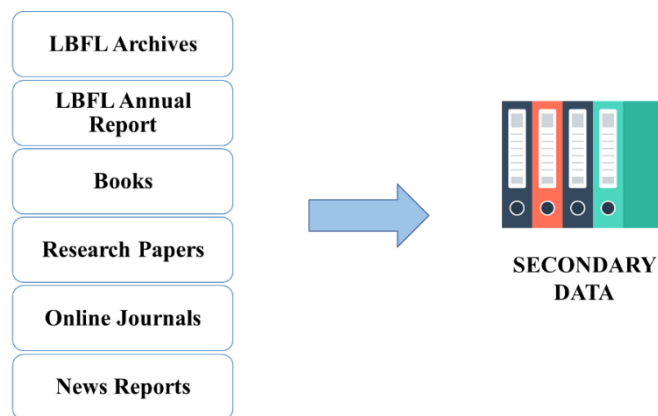
Key-Informant Interviews (KII)

The primary source of this study was KII or Key Informant Interviews. The interview personnel or the key informants were chosen based on a convenience technique. At least one person from every department was interviewed to scrutiny the diverse aspects of the CAS project under LankaBangla Finance's Credit Risk

Management Division. Key personnel from operations were interviewed to find out the existing credit approval process as well as the problems. Salespersons and field agents were interviewed to understand the customers' needs. Since they were the persons involved directly in handling the customers and acquiring applications, they were able to give specific insights about the automation process from the business end as well as the probability of customer satisfaction with a sales boost. The interviews were a crucial part of the study as they highlighted the industry perspectives as well. From Top Management, the Chief Credit Officer (CCO) and the Vice President of the Credit Department were interviewed. Their perspectives revealed the factors and outcomes that might affect their decisions in undertaking the project. The project head was interviewed to find out the estimated cost, maintenance cost, lifetime period, installation period, etc. related to setting up a new online-based system, CAS. All the interviews were done face-to-face on weekly basis and had a duration of 30 minutes.

1.3.2 Secondary Data Sources

This study has been completed with the help of some crucial secondary data too. The secondary data were mainly part of the qualitative approach to find out challenges and their solutions related to Online Credit Approval Process. The following sources comprised the secondary dataset.



1.4 Limitations

The limitations of this study include –

- Due to confidentiality, I did not have access to detailed datasets which could be very useful for the calculations in this study.

- I was not able to interview people from the branches outside Dhaka which could give us a more detailed overview of the credit card process.
- Due to lack of access customers were not interviewed for which this study is only limited to the company's perspective.
- The annual reports were not detailed and lacked crucial information.

Chapter 2: Literature Review

All of the banks and financial institutions offering credit card facilities in Bangladesh must adhere to Bangladesh Bank's guidelines for credit card issuance and operations (Abdin, 2008). Therefore, the process through which credit cards are issued and processed is similar to every bank. The Credit Card approval process must decide whether to approve or reject an application based on the applicant's personal details (Markova, 2021). Vincent, 2005 in his article on "*Credit Cards: Modern Payment System*" mentioned how credit cards operating in India with modern processes became a boon to both businesses and customers. Tahir & et al., 2018 found in their study that financial innovation had no substantial influence on bank efficiency in Pakistan, as measured by the value of transactions made through ATMs and Point of Sale (POS). However, it improved the volume of transactions in ATMs through credit cards. One of the most important jobs for banks and financial institutions is to develop an accurate, accessible, and simple to use credit card risk monitoring system for enhancing risk management levels of the merchants to an automated, appropriate, and automated extent (Chaudhary, Yadav, & Mallick, 2012). The need for automation in the existing credit process is essential as we embark on an age of Artificial Intelligence-based era. This can prove to be fruitful in terms of credit risk management-related objectives.

2.1 Credit Card Industry in Bangladesh

According to a report by the Financial Express, 2020 stated that within a year credit card usage in Bangladesh had boosted up to 50%. Another statistic by Bangladesh Bank reported that the credit card volume transaction stood to be at 15.52 billion till August 2019. According to the Bangladesh Bank Statistics, 1.73 million individuals in Bangladesh currently use credit cards. Since the beginning of the Pandemic, customers avoided physical presence at bank branches and there is rising popularity for bank customers to continue their applications and other works online (Kabir, 2020). Standard Chartered Bank holds the largest market share in the credit card industry (Rahman, Rahman, & Abedin, 2017). Standard Chartered is responsible for taking care of all transactions related to Visa & HSBC oversees all international

transactions. The majority of local banks and financial institutions do not provide dual-currency credit card services. BRAC Bank, Standard Chartered, City Bank offers Universal Card, which can be used both at home and abroad (Ahmad, Harun, & Sultana, 2012).

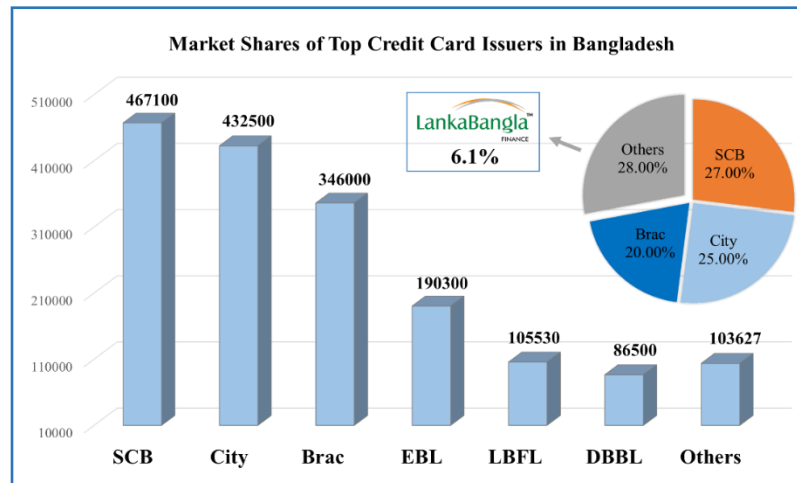


Figure 6: Market Shares of Credit Card Issuers in Bangladesh

According to the ABC (Association of Bangladesh Credit Card), there are 37.30 lac prospective credit card customers in Bangladesh with wages of more than 10000 Taka. Only 11% of the population has been reached, while the remaining 89 percent is untapped. In 2008, the entire market size was 722 crore, Taka, with foreign banks accounting for 44% and domestic banks accounting for 56% market cap. But the market cap increased to 15.52 billion in 2019. Most of the banks provide credit cards with an average interest rate of 30%, which is regarded to be extremely expensive when compared to interest rates paid by banks and credit card businesses in different countries (Islam, Karim, & Alam, 2019). Islam & et al., 2015 in their study found out that the majority 60% of people face financial problems with repaying credit card bills and are burdened with over-indebtedness. The reason behind this is a very high-interest rate. Rahman & et al., 2017 mentioned in their study that credit card offers a very insecure form of credit facility. Credit card issuing banks and companies take higher risks to approve credit card applications in Bangladesh. According to a report by Bangladesh Credit Association, credit card debt in Bangladesh amounted to 6,414 crores TK. by June 2021 of which 5% currently is in default. According to a report by the Daily Star, in 2022 Bangladesh's credit card industry is growing fast with a rate of more than 30% every year.

The credit card industry is substantially larger in developed countries compared to Bangladesh. As per American Bankers Association, 70% of the population have at least one credit card. Canada has the highest credit card penetration rate in the world, with 78 % of the people owning a credit card. The credit card penetration rate is also higher in nations like Japan, Luxembourg, and Norway. However, Bangladesh's

credit card penetration rate is nowhere like that of these modern-day countries. The reasons are - Bangladesh's lack of foreign investments, backdated credit processing systems, higher interest rates, a lower standard of living, and lack of information (Sohag, 2022).

2.2 Challenges of Credit Card Operations

Although the Bangladeshi credit card industry is expanding at a breakneck pace in terms of the number of cardholders and their credit card spending, this expansion may come to a halt if certain consumer concerns are not addressed. Extremely high charges are one of the biggest issues that credit card users face (Ahmad, Harun, & Sultana, 2012). To keep their clients delighted, credit card service providers should ensure competitive credit card charges, accurate monthly bills, and up-to-the-mark customer support (Ahmad, Harun, & Sultana, 2012). Vlasselaer, et al., 2015 mentioned in their studies that Credit card frauds have increased over the last few years with an increasing number of transactions. As a result, credit card issuers require an automated system that prohibits the investigation of an incoming transaction if it is particularly vulnerable to fraud (Vlasselaer, et al., 2015).

The filing of fake card applications is a well-known fraud scheme by applicants. In such circumstances, criminals gain true personal history and financial information and use it to fill out an application that includes a mailing address to which the card should be delivered. Credit card companies face challenges often in issuing cards to the right and authentic applicants (Ghosh & Reilly, 2000).

Sharma & Mehra, 2018 suggested in their study that Banks tend to frequently provide credit cards to unqualified applicants without proper background checks to grow their market shares. Furthermore, many customers overspend their credit limits resulting in significantly higher debts. So, the most difficult tasks for banks are identifying hazardous and non-risky customers (Sharma & Mehra, 2018). Rahman & et al., 2017 mentioned in their study that most banks have their unique target market reservations. HSBC only grants card applications for clients whose income is over 25,000 Tk to minimize credit default risks.

Unlike developed countries, it is harder to trace people in Bangladesh because there is no process to highlight when someone leaves an area. This is why defaulters in Bangladesh are very likely to elope and hide their identities. These traceability and mobility detection problems make it hard to approve credit card applications without valid accessible permanent addresses (Rahman, Rahman, & Abedin, 2017). Banks' credit bureau currently does not have an integrated client information database, therefore branch offices are unable to obtain accurate non-performing client data. The existing customer evaluation program is inadequate to minimize risks (Nugroho & Setiawan, 2016). According to the findings by Islam & Ahmed, 2012 a multinational bank of Bangladesh's credit card department's business procedure is needlessly long. It takes eight to nine days to complete the application process, create the final account, and do card issuance.

This has massively affected the satisfaction levels of the customers. The lengthy business process requires a lot of paperwork, higher costs of stationery, and a competent team of employees.

The existing credit application process is not sustainable enough. According to a study by Islam & et al., 2019, credit card issuers lack quality of services. The majority 45% people rated their respective credit card operational services below average. The credit industry is facing this problem as there is a lack of innovations and efficiencies in their systems. According to reports by the Business Insights back in 2018, Standard Chartered Bank tried to bring an automated system in their credit card processing division but the project was later dropped due to complex process flow. The credit card systems in 1st world countries are very much updated with advanced technologies because their manpower is equipped with higher technological know-how. But in Bangladesh, the technological know-how of people is very poor compared to other countries. Some of the key errors which lack in credit card processing unit's efficiency are depicted in the following diagram (Islam & Ahmed, 2012).

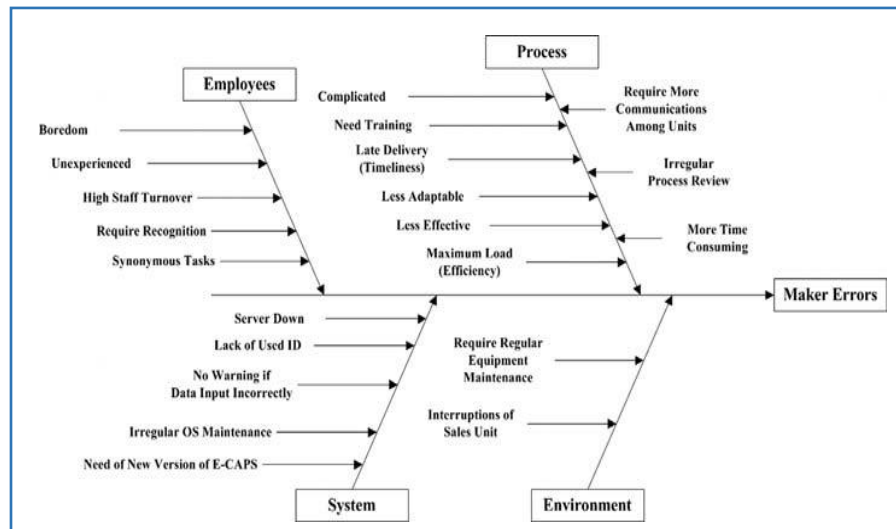


Figure 7: Cause and Effect Diagram

2.3 Advanced Technologies in Minimizing Credit Risks & Improving Efficiency

Islam & Ahmed, 2012 in their study related to business process improvements found that developed nations benefit from online credit card applications and processing facilities, as well as fast delivery in the shortest time possible whereas developing countries are still relying on manual processing and calculations due to a lack of infrastructure and knowledge development. However, several multinational banks in the 1st world

countries have begun processing online debit card applications, which is a significant step forward in the automation of the card business. It might be a promising field for future developments and research in the banking sector, to gain specific expertise and improve client satisfaction (Islam & Ahmed, 2012). The same study suggested an online system model improves customer satisfaction and assists the Bank's credit card unit to create a core competency. The suggested procedure contemplates reducing delivery time by four days. From the time an application is received to the time a card is printed, the procedure takes about eight to nine days. To reduce the waiting time to supply the service, the suggested model stresses reducing activities, passing over fewer applications, and optimizing task completion-related procedures. In the current process. The suggested approach promotes just the specifics of accepted applications to be recorded, and only the most basic information from rejected applications to be recorded. In the existing procedure, the Bank traces a declined application using many data parameters such as birth date, name, and passport number to cross-check any future applications from the same client. The proposed procedure will still allow for cross-checking, but the Bank will not store low-value data elements such as an address, phone number, or bank balances (Islam & Ahmed, 2012). As Bangladesh's ICT infrastructure does not facilitate high-speed data connections, the bank may find it challenging to execute such high-tech-based business procedures.

Sharma & Mehra, 2018 in their study of fraud detection techniques found out that employing various data mining approaches such as neural networks can evaluate true positive rates for predicting defaulters with accuracy. Suppose, if the ages of clients are different and fall into risky criteria, we may use binning (a data mining technique for removing useless data) to separate the clients by age range. This can undoubtedly assist us in determining what characteristics to distinguish a person classed as a defaulter. This can assist banks in making informed judgments such as what characteristics must be present in a person to determine eligibility or repayment capacity.

Raj & Portia, 2011 identified another technique in their study for fraud detection with 100% accuracy. Fuzzy Darwinian fraud detection systems are full proof and exhibit good performance in detecting fraudulent transactions. It explains how to categorize suspicious and non-suspicious credit card transactions using an evolutionary algorithm. Neural network-based fraud detection system also has a high accuracy and processing speed. However, it is restricted to one network per client. An artificial neural network is made up of a linked set of artificial neurons for pattern categorization. Through datasets, they can predict suspicious activities and profiles of clients (Raj & Portia, 2011).

An online integrated system can increase the efficacy of existing business operations in today's information and the technology-driven world (Nugroho & Setiawan, 2016). Currently, blacklisted consumers can apply for credit at other branches and go unnoticed as blacklisted customers. At Bank Credit, they have a distinct system for calculating or scoring consumer creditworthiness and a different manual process for credit

approval. Nugroho & Setiawan, 2016 referred to an integrated system that can streamline business processes called the waterfall model. The legitimacy of the customer's residential address map and geotag photographs may be checked and taken into account when making an approval decision. The surveyor's online contribution can save time and speed up the approval procedure.

In the literature review, we can see that there have been some crucial studies all over the world that mentioned about lack of efficiencies of credit card operations in developing countries. The literature suggests for an online processing system and AI-based integrated system can increase efficiencies. However, no study has been done in Bangladesh that explores the scope for online credit approval systems in Credit Card Issuing companies situated in the country.

Chapter 3: Findings & Analysis

3.1 LBFL's Existing Credit Card Process Evaluation

The credit card process flow of LankaBangla's credit card is described below.

Application Receipt & Distribution Channels

At the primary stage, RMs (Relationship Managers) from different branches of LBFL submit credit/loan application forms along with required supporting documents of the clients to the Credit Risk Management's DropBox.

Once the files reach the CRM department, a designated Business Support Officer from CRM receives them and keeps a submission tracker on an excel formatted file. Files that are received within 12 pm proceed on the same day and files received after that proceed on the following day.

Contact Point Verification Process

Once the files are received it is handed over to the CPV (Contact Point Verification) team. The team manages all the works related to third-party verifications. They vigorously monitor and deal with verifying key information and documents about existing and prospective clients before establishing any lending relationship.

The CPV team begins its operations by printing top sheets from the customer details from an excel formatted submission tracker. Once the top sheets are pinned to the files, those are sent for pre-screening or documentation check.

Pre-screening is a process where a client's documents are cross-checked. The CPV team checks the customer's information and ensures all necessary documents are submitted along with the application form. Some of the essential documents include – Clear Photo, Applicant & RM sign in KYC Forms, Client's NID & Passport Photocopy with the sign, Photocopy of E-Tin, Bank Statement, and Letter of Authorization, Updated LOI or Salary Certificate, Electricity Bill in case of own house, BMDC Certificates for Medical Officers or Doctors, Visiting or ID Card, etc. Files missing these important documents are noted as problem files and sent back to Business Team.

After the completion of the pre-screening process, the files are handed over to third-party verification agents. Third-party agents are required to submit CPV reports within 48 hours or 2 days for verifications taking place inside Dhaka City Corporation. In the case of outside Dhaka, the time is extended to 96 hours or 4 days.

Cards Origination Team

The CRM department has its own CMS system or portal where the status of each file is updated accordingly by the officials. An officer of the CPV team gives fresh file entries to the CMS system which includes each file's allocated third-party agent name, file received to date, status, and CPV report out date. Through this, the system automatically keeps track of each file's status. The incomplete files are sent for Re-CPV.

Credit Card Application Form

Card

Customer Information

File No.: [Text Box]

Applicant's Name: [Text Box]

Date of Birth: 26-10-1992

Designation: ASSISTANT PLANNING OFFICER

Mobile No.: [Text Box]

Supp Applicant's Name: [Text Box]

Company Name: [Text Box]

IPATDR No.: [Text Box]

ID/Passport No.: [Text Box]

Bank Information

Branch: [Text Box]

Product: Visa

Application Date: 24-11-2021 12:08:22

Source: CDD 2755

BUSINESS SEGMENT: SALARIED FILE

Remarks: [Text Box]

Sales Information

Sales Type: Direct Sales

Credit Risk Management

File Receiving Date: 2021-11-20 11:39:40

CPV Agent: Credit Card

Re-CPV Out Date: [Text Box]

Name of Analyst: [Text Box]

Current Status: Approved

Income: 24000.0

Meeting No: 2024

Sent In Date: 2021-12-11 16:4:33

UDC/OTDR: No

TDR Amount: 0.0

Remarks: SALARIED, UDC NOT REG AS PER AS BUSINESS REG @33.12.2021

CPV Out Date: 2021-11-20

CPV In Date: 2021-12-08

Re-CPV In Date: [Text Box]

Send to Analyst Date: 2021-12-11 17:02:00

Status Date: [Text Box]

Last Status Date: 2021-12-11 16:04:26:000

Approve By: [Text Box]

Sector Code: 811000

Exception: Choose option

Segment Code: 100001

Update

Flowchart:

User Applies For Credit Card → Application Sent to Sales Team → Performs Processing Tasks → Credit Card Approved / Declined → User's Credit Score Defined → Generates Credit Information Report

Figure 8: CMS System of LBFL Credit Card & Brief Process of Credit Card

The completed files are then handed over to the relevant officer of the MIS Team. The MIS team of the CRM department deals with the management information system-related tasks. The MIS team is mainly responsible for maintaining and updating the CMS database.

The completed files go to the **CIB unit** where the head of CIB inputs client data in Bangladesh Bank's Credit Information Bureau's Portal and downloads a CIB report which contains a client's whole credit history. The CIB Head draws data from that excel sheet and fills up the CIB Portal to download reports. They also check for black-list references.

Underwriting Unit

Credit analysts will check each client's CIB report. If CIB is found negative it will not be processed further. If the CIB report is good then the analyst will move on to further processing. The analyst also cross-checks a client's information over phone verification. There are also essential steps like De-Dupe checks and Debt Burden Ratio (DBR) calculations which have to be checked before a file is approved or declined. As per the outcome of the DBR Score and risk ratings, the Credit Analyst will propose a Credit Card Limit. This limit has to be aligned with the PPG Guideline. If the analyst has any queries, then he/she writes that on the file. Approved files are then handed over to the Card Supervisor or Manager for final approval with designated limits. The card supervisor goes through the files and their limits and gives final approval to each file. If any file does not meet the guidelines by PPG the file is declined.

Contacting Unit

The MIS team collects the query files and updates the queries in the CMS. Then they send the files back to the business for query meets. These files are processed further when the queries are met by the business on the following day.

Approved & Declined files further go to the MIS team again and the RP in MIS updates the decisions on CMS. Approved files are forwarded to the Credit Card Operation Team for further processing (account set up, card production, card delivery, etc.) Rejected files are then forwarded to the Business Team along with the reason for rejection. PINs are placed in envelopes and delivered to the cardholders by courier.

In the existing process, the work-span can be divided as – Sales/Business was responsible for 5% work, Operations did 15% of work and Credit Risk Management Did 80% of work on average. Due to excess load, it took more time for the Credit Risk Management (CRM) Team to process cards. Customers need to wait for at least 18-30 days to receive their cards. From the literature, we found out that a longer period in issuing cards decreases customer satisfaction. In the existing process, there was the repetition of work suppose filling up details twice to get CIB reports. Also, some files always had missing information which use to pile up in queries. Doing manual document checking for thousands of files only increases the error chances. An analyst only could process 18-25 files maximum per day as he has to go through every detail manually and do cross-checks, put up queries, go through card processing and verifications all over again

for query meted files, etc. So, the process lacked efficiency. Not to mention that there is a huge maintenance cost for stationery and printing which is not sustainable at all.

3.2 Proposed Online Credit Approval Process

With an integrated online system called CAS, the Card processing unit's work can be reduced to 25% approximately. On average, Businesses will be responsible for completing 40% of work while they accept credit applications online. Operations will be responsible for the rest 35%. The fewer workload at the CRM's end will fast pace the card processing process. applicant's information verification, NID verification, DE-Dupe checking, Blacklist Checking, CPV Reports, CIB Reports everything will be enclosed in the online portal. An artificial Intelligence-based system will automatically detect ineligible applicants as per product program guidelines and eliminate fraud applications automatically. The system will automatically generate the credit risk grading based on their debt ratios, income, age as well as different identified risk factors using the information and datasets uploaded in the system from the Business end. Applicants with good credit scores will be forwarded to the credit analysts to give the final decision. Applications with poor scores will not be forwarded and kept in the rejection directory. Through this, it would only take 2-3 minutes to process a single file for an analyst. An analyst would be able to process 100 files a day depending on the application volumes. Customer can receive their credit cards within 2 weeks through this process. So, efficiency can be maximized by almost 70% on average.

The CAS system is depicted in the following diagram.

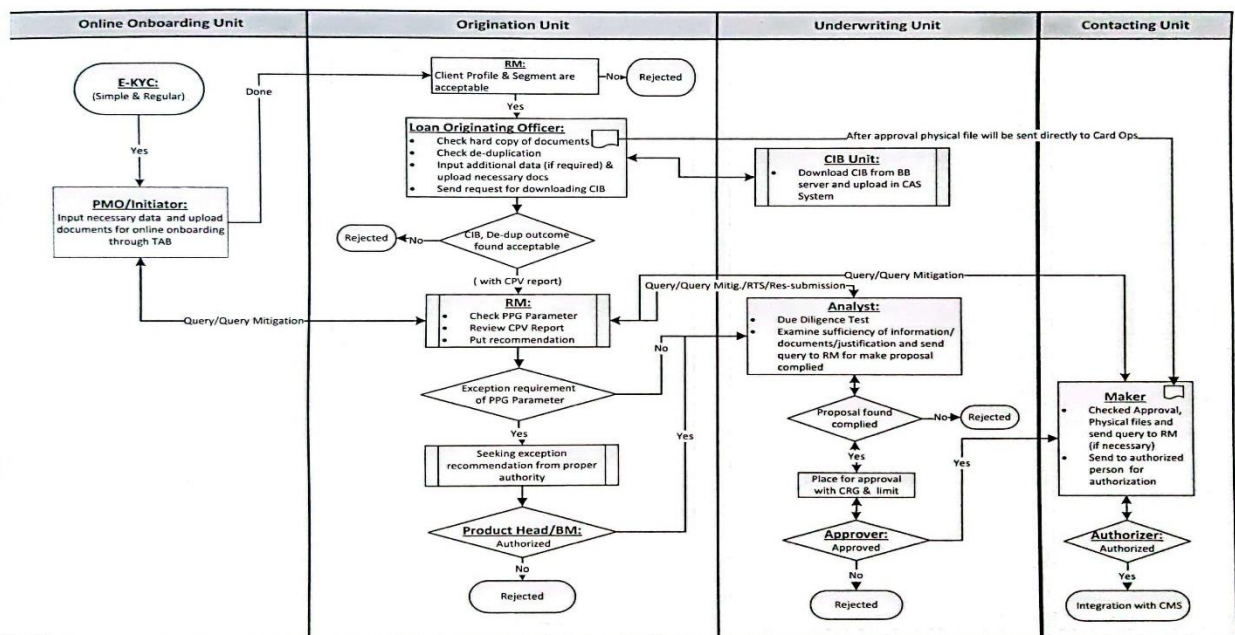


Figure 9: Online CAS Process Flow

3.3 Findings From KII

The table below includes all data received from the key informants' interviews. The following are the results of the interviews –

SL.	Details	Amount	Unit
1.	Number of Card Production	20,000 unit	Per Month
2.	Per Unit Cost of Production	1200	Taka
3.	The investment cost for CAS	25 crores	Taka
4.	Maintenance & Upgrade Cost for CAS	2 crores	Taka / Year
5.	IRR required	15%	
6.	Expected Payback Period	5 years	
7.	Revenue from Manual Process	37 crores	Approx. / Year
8.	Change in Total Cost in Online System	(25%)	Year
9.	Change in Sales after CAS implementation	15%	Annually

Table 8: Findings from KII

Results:

The Discounted Payback Period, Internal Rate of Return & Net Present Value (NPV), Internal as well as the PI or Profitability Index were calculated using the information obtained from the interview findings. For this study, Microsoft Excel has been used to generate results and their values.

Measure	Value
Net Present Value (NPV)	28385903.38 ₳
Internal Rate of Return (IRR)	14.35 %
Profitability Index (PI)	1.11
Payback Period	3.4 years

Table 9: Financial Results

- The NPV depicts a positive value of 28385903.38 which depicts that the project can be taken into account. A positive NPV indicates that the project is profitable.
- LBFL's preferred institution is AB Bank as they have one of the highest FDR interest rates to be 10% annually. The company, however, considering all the risk factors requires a return of 15%. However, for IRR or internal rate of return, even though the value showed a positive percentage of 14.35 %, it

did not meet the expectations of the top management of LankaBangla Finance. The required rate of return was 15% and the return is 1% less after 5 years which is not acceptable in this case.

- Profitable Index (PI) is calculated as the present value of future cash flows divided by the initial cost of the project. If the profitability index or ratio is greater than 1, the project should be pursued. If the profitability index or ratio is less than one, the project should be dropped. In this case, CAS had a PI value of 1.11 which is greater than 1. Therefore, the project could be pursued.
- The payback period on the other hand is attractive for this project. Within just 3.4 years the actual investment can be generated. For the company, their expectation was 5 years which means they expected to get back their initial investments within 5 years. But in this scenario, they could get their investments back before that.

3.4 Qualitative Findings

Literature suggested that automation in credit systems has great scope for developments in the future. It also suggested that card delivery time could be reduced by 4 days through online system integrations. But from the primary sources of this study, some drawbacks and comparative edges were found to be evident.

Increased Percentage of Work is Time Consuming for Business End

Two primary officers and field agents were asked about the possible difficulties they could face from the business end of the online project if continued. Their response indicated that even though the online system reduced the workload for credit analysts to process cards, the workloads in the business end would increase by 40% on average. They would still need to input a larger array of data of applicants through a computer. It was also found that for a PMO it would take 40 minutes on average to give inputs for a single application through an online system. Due to more time consumption, fulfilling the targets would be a difficult job. Lengthy required data fields are also a reason behind overtime consumption here.

Lack of Technological Know-How and Reluctancy Towards Change

The business team who solely will be responsible for 80% of the tasks if this project is implemented does not have adequate knowledge related to technology. In Bangladesh, people lack adequate technological knowledge for which implementing modern technological infrastructure here is a huge challenge as they do not know how to use them. SCB had to close its online credit processing venture due to people's difficulties in adapting to the system. In the interview, the people in the business team expressed that they struggled with the demo of the CAS system as it was confusing for them. When the process is manual there is no issue with the technological know-how of the people as it requires basic inputs with technology. So,

through manual process business team can perform better at their full efficiency. Their efficiency can be reduced for the online system due to a lack of technological knowledge. Not to mention internet troubleshooting is a huge factor here. It could highly impact the application process negatively if the internet connection has errors.

Scopes for Initial Malfunctions and More CAPEX

Every new system takes time to function at full capacity and needs improvements. The respondents of the study felt that it would take at least 6 months for the system to function at full capacity. There might be system errors and troubleshooting matters which can slow down sales of the credit card with slower delivery time. Again, this project will add a huge amount of capital expenditure of more than 2 crores annually. It would be more challenging to boost sales and cover such huge expenses.

With Proper Implication, CAS Project Can Be a Boon

Although, the online credit process has some crucial challenges, most of the respondents who were interviewed rated CAS “Good” compared to the manual process. On average CAS received an average rating of 4 out of 5. Out of 10 respondents, 7 scored CAS to be “Good” with a score of 4 out of 1–5 point scale.

The advantages that gave CAS an edge over the Online process are as follows–

- The accuracy of work is 99.99% whereas for manually there was a margin of error of more than 30%.
- There is no duplicity of work in the CAS System. For manual processes, most employees went through fatigue due to excessive, lengthy, and boring tasks.
- Decision-making through CAS will be 70% quicker compared to the manual process. Artificial Intelligence will generate automated credit scores and suggest the best possible action within a fraction of time. Manually, it required more time to make an informed decision for the analysts.
- Work efficiency can be boosted up to 75% with the help of technology. An analyst will be able to process up to 100 files in a single day where they process 18-23 files a day in a manual system.
- TDR service can be integrated into this system and will no longer require double paperwork for a credit card application in the CAS system. Otherwise in manual terms businesses needed to submit separate paperwork with the same applicant information.
- Since the pandemic is still not over, work from home opportunities for the employees can bring a lot of benefits for the company and the employees as well. During the lockdown, the credit card operations and processing were highly affected as employees could not process files and do verifications. But since that was not possible sales were drastically dropped during the lockdown. But in the CAS system, credit card processing can be easily done remotely.

- An online system is a sustainable approach as well. Since all the documentation and paperwork is done online there will be fewer paper consumptions and wastages. Otherwise, manually there was a huge scale of paper wastages and consumption which was not environment friendly at all.
- Credit Card defaults can be minimized through the online system. The computer can calculate and predict patterns in an applicant's behavior better than humans. So, CAS can easily eliminate clients with risk potentials by analyzing their income, spending patterns, age group, lifestyle, and other information. Fraud detection in the manual system is not up-to-the-mark.

Chapter 4: Recommendations & Conclusions

4.1 Recommendations

According to the feasibility study majority of the measures – NPV, PI & Payback Period depicts a positive picture towards undertaking the online credit card processing system. But IRR results lack by 2%. Since the advantages of the online system are much more considerable and there is a positive financial indication, LankaBangla Finance should implement the online process which will increase their productivity and profit margin in the future. Not to mention that there are challenges related to implementing the project but those can be harnessed by hiring a technologically affluent and educated employee pool. If the existing employees are given regular extensive training on the new system, they would be able to adapt to the new system quickly and bring efficiency to their work areas.

4.2 Conclusion

LBFL must steer innovative approaches to enhance client happiness through error reduction and faster service quality in Bangladesh's highly competitive credit card industry. The battle for Total Quality Management and Best Practices has already been won by developed countries. LankaBangla must implement online credit approval strategies to consistently enhance business processes. It may be challenging for the company to execute such high-tech business operations as the technical know-how is a big problem but it can be managed through extensive training facilities. In brief, due to its easy compositions and configurations, the new credit approval model makes data processing and monitoring faster and easier, and it can be used as an enterprise resource planning tool to enhance productivity and fair competition among employees.

5. References

- Abdin, M. J. (2008). *Credit Card Operations in Bangladesh*. Dhaka Chamber of Commerce & Industry (DCCI). Retrieved from <https://ssrn.com/abstract=1130704>
- Ahmad, F., Harun, M. Y., & Sultana, S. (2012). Assessing the Factors of Customers' Satisfaction on. *Metropolitan University Journal*.
- Chaudhary, K., Yadav, J., & Mallick, B. (2012, May). A review of Fraud Detection Techniques: Credit Card. *International Journal of Computer Applications*, 45(1), 0975 – 8887.
- FBI. (2022). *SCAMS AND SAFETY*. Retrieved from FBI: <https://www.fbi.gov/scams-and-safety/common-scams-and-crimes/credit-card-fraud>
- Forbes Advisor . (2021, November). *Credit Card Processing: How It Works*. Retrieved from Forbes : <https://www.forbes.com/advisor/credit-cards/credit-card-processing-how-it-works/>
- Frankel, R. S. (2021, July). *When Were Credit Cards Invented: The History of Credit Cards*. Retrieved from Forbes: <https://www.forbes.com/advisor/credit-cards/history-of-credit-cards/>
- Ghosh, S., & Reilly, D. L. (2000). Credit Card Fraud Detection with a Neural-Network. *Twenty-Seventh Annual Hawaii International Conference on System Sciences*. Nestor, Inc.
- Islam, S., & Ahmed, M. D. (2012). Business process improvement. *Business Process Management Journal*, 18(2), 284 - 303. doi:<http://dx.doi.org/10.1108/14637151211225207>
- Islam, T., Karim, M. R., & Alam, N. (2019). The Rising Trend in the Use of Credit Cards in Bangladesh and Its Implications on Over-indebtedness and Its Difficulties in Personal Finance. *Advances in Economics and Business*, 3(9), 371-382. doi:DOI: 10.13189/aeb.2015.030903
- Kabir, F. H. (2020). *Bangladesh sees surge in credit card use*. Financial Express. Retrieved from <https://thefinancialexpress.com.bd/trade/bangladesh-sees-surge-in-credit-card-use-1603423758>
- Mandell, L. (1991). The Credit Card Industry: A History. *The Journal of Consumer Affairs*, 25(2), 415-418.
- Markova, M. (2021). Credit Card Approval Model: An Application of Deep Neural Networks. *AIP Conference Proceedings*, 2321. doi:<https://doi.org/10.1063/5.0040744>

- Meola, A. (2022, February). *Here are the credit card networks and payment networks you need to know*. Retrieved from Business Insider : <https://www.businessinsider.com/credit-card-networks-payment-list>
- Nugroho, A., & Setiawan, A. E. (2016). Web-Based Credit Approval System At Bank. *International Journal of Computer Trends and Technology*, 39(2), 114-122. Retrieved from <http://www.ijcttjournal.org>
- Rahman, M. M., Rahman, M. N., & Abedin, M. Z. (2017). Credit Card Marketing Challenges, Strategies, Opportunity and Management Process in Bangladesh. *International Journal of Advanced Engineering and Management Research*, 2(3).
- Raj, S. B., & Portia, A. A. (2011). Analysis on Credit Card Fraud Detection Methods. *International Conference on Computer, Communication and Electrical Technology*, (pp. 152-156).
- Sharma, S., & Mehra, V. (2018). *Default Payment Analysis of Credit Card Clients*. Retrieved from <https://www.researchgate.net/publication/326171439>
- Sohag, S. (2022, January). *Why Bangladesh has Less Credit Card Users*. Retrieved from Business Inspection: <https://businessinspection.com.bd/why-bangladesh-has-less-credit-card-users/>
- Tahir, S. H., Shah, S., Arif, F., Ahmad, G., Aziz, Q., & Ullah, M. R. (2018). Does financial innovation improve performance? An analysis of. *Journal of Innovation Economics & Management*, 27(3), 195-214. Retrieved from <https://www.cairn-int.info/journal-of-innovation-economics-2018-3-page-195.htm>
- Vlasselaer, V. V., Bravo, C., Caelen, O., Eliassi-Rad, T., Akoglu, L., Snoeck, M., & Baesens, B. (2015). *APATE: A Novel Approach for Automated Credit Card*. doi:10.1016/j.dss.2015.04.013

APPENDICES

Details	TK	Tk
Initial Investments	-250000000	
Sales from Manual Process		370000000
Change in Sales after CAS implementation		15% Annually
Cash From Sales		425500000
Production Costs		288000000
Maintanance & Development		20000000
Total Expenses		-308000000
EBT		117500000
Tax @ 37.5%		-44062500
Annual CashFlow		73437500

Year	CF	Cumulative Cashflow
0	-250000000	
1	73437500	-176562500
2	73437500	-103125000
3	73437500	-29687500
4	73437500	43750000
5	73437500	117187500
NPV		278385903.4
		28385903.38
IRR		14.35%
PI		1.11
Payback Period		3.40
Interest Rate (AB Bank)		10%

LankaBangla Finance Ltd.

Details	2020	2019	2018	2017
Interest Income	8,146,213,389	10,172,730,417	9,095,252,849	7,076,089,286
Interest expense	5,972,102,383	7,275,494,160	6,605,746,998	4,838,840,868
Net Income	978,518,451	508,228,283	444,444,099	1,926,289,159
Current Assets	61,658,000,000	58,403,000,000	44,980,000,000	35,318,000,000
Total Assets	81,835,446,136	84,362,952,106	87,888,680,706	85,442,715,174
Current Liabilities	54,511,000,000	56,368,000,000	41,741,000,000	31,959,000,000
Total Liabilities	71,564,124,066	74,707,922,739	77,954,222,415	77,014,195,343
Net Loans & Leases	58,472,232,776	65,117,083,059	68,676,032,831	66,544,357,447
Tier 1 Capital	10,907,652,461	9842139544	10112510975	9951188396

Bank Interest Rates 2020 (FDR)

Bank Name	1 Month	3 Months	6 Months	1 Year	2 Years	3 Years
AB Bank	8.00 %	10.00 %	10.25 %	10.50 %	10.00 %	N/A
Credit Rating: AA3	(₹ 100,667)	(₹ 102,500)	(₹ 105,125)	(₹ 110,500)	(₹ 120,000)	
Agrani Bank	N/A	5.25 %	5.50 %	5.75 %	N/A	N/A
Credit Rating: AA1		(₹ 101,313)	(₹ 102,750)	(₹ 105,750)		
Bangladesh Development Bank	4.50 %	5.50 %	5.50 %	6.00 %	6.00 %	6.00 %
Credit Rating: AAA	(₹ 100,375)	(₹ 101,375)	(₹ 102,750)	(₹ 106,000)	(₹ 112,000)	(₹ 118,000)
Bank Asia	5.50 %	6.75 %	7.00 %	7.50 %	8.50 %	9.00 %
Credit Rating: AA3	(₹ 100,458)	(₹ 101,688)	(₹ 103,500)	(₹ 107,500)	(₹ 117,000)	(₹ 127,000)
BASIC Bank	4.25 %	5.00 %	5.25 %	5.50 %	6.00 %	N/A
Credit Rating: A2	(₹ 100,354)	(₹ 101,250)	(₹ 102,625)	(₹ 105,500)	(₹ 112,000)	
BRAC Bank	3.00 %	3.00 %	4.50 %	5.00 %	N/A	N/A
Credit Rating: AA2	(₹ 100,250)	(₹ 100,750)	(₹ 102,250)	(₹ 105,000)		
City Bank	6.00 %	7.25 %	7.75 %	8.25 %	7.75 %	7.75 %
Credit Rating: AA2	(₹ 100,500)	(₹ 101,813)	(₹ 103,875)	(₹ 108,250)	(₹ 115,500)	(₹ 123,250)
Commercial Bank of Ceylon	3.00 %	5.00 %	5.50 %	N/A	9.00 %	9.00 %
Credit Rating: AAA	(₹ 100,250)	(₹ 101,250)	(₹ 102,750)		(₹ 118,000)	(₹ 127,000)

LANKABANGLA FINANCE LIMITED AND ITS SUBSIDIARIES
CONSOLIDATED BALANCE SHEET
As at 31 December 2020

	Notes	Amount in Taka	
		31.12.2020	31.12.2019
PROPERTY AND ASSETS			
Cash		631,529,281	877,735,689
Cash in hand (including foreign currencies)	3	1,341,797	777,880
Balance with Bangladesh Bank and its agent banks (including foreign currencies)	4	630,187,484	876,957,809
Balance with other banks and financial institutions	5	11,704,566,493	8,332,124,314
Inside Bangladesh		11,704,566,493	8,332,124,314
Outside Bangladesh		-	-
Money at call and short notice		-	-
Investment	6	6,261,562,085	5,392,515,912
Government securities		229,908,878	-
Other investments		6,031,653,207	5,392,515,912
Leases, loans and advances	7	58,472,232,776	65,117,083,059
Loans, cash credit and overdraft etc.		58,472,232,776	65,117,083,059
Bills discounted and purchased		-	-
Fixed assets including land, building, furniture and fixtures	8	2,777,288,742	2,861,198,566
Other assets	9	1,988,266,759	1,782,294,566
Non-Banking assets		-	-
TOTAL PROPERTY AND ASSETS		81,835,446,136	84,362,952,106
LIABILITY AND SHAREHOLDERS' EQUITY			
Liabilities			
Borrowings from Bangladesh Bank, other banks and financial institutions	10	14,816,088,224	18,672,238,771
Deposits and other accounts	11	47,130,343,890	46,894,962,510
Current deposits and other accounts etc.		-	-
Bills payable		-	-
Saving bank deposit		-	-
Term deposits	11.1	46,946,884,814	46,750,813,434
Bearer certificate of deposits		-	-
Other deposits	11.2	183,459,076	144,149,076
Other liabilities	12	9,617,691,952	9,140,721,458
TOTAL LIABILITIES		71,564,124,066	74,707,922,739
Shareholders' Equity		10,094,194,892	9,482,329,484
Paid up capital	13	5,388,386,230	5,131,796,410
Share premium		1,090,888,800	1,090,888,800
Statutory reserve	14	1,927,779,298	1,762,635,872
General reserve		45,409,424	49,919,671
Retained earnings	15	1,641,731,140	1,447,088,731
Non controlling interest	16	177,127,178	172,699,883
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY		81,835,446,136	84,362,952,106
Net Assets Value (NAV) per share- (restated : 2019)	35	18.73	17.60

LANKABANGLA FINANCE LIMITED AND ITS SUBSIDIARIES **CONSOLIDATED PROFIT AND LOSS ACCOUNT**

For the year ended 31 December 2020

	Notes	Amount in Taka	
		2020	2019
Operating Income			
Interest income	17	8,146,213,389	10,172,730,417
Less : Interest expenses on deposits & borrowings	18	5,972,102,383	7,275,494,160
Net interest income		2,174,111,006	2,897,236,257
Income from investment	19	315,533,440	340,733,579
Commission, exchange and brokerage income	20	496,354,278	452,973,525
Other operational income	21	731,521,223	791,252,947
Total operating income		3,717,519,947	4,482,196,307
Operating Expenses			
Salary and allowances	22	1,275,224,475	1,504,636,741
Rent, taxes, insurance, electricity etc.	23	42,372,349	64,208,220
Legal and professional fees	24	31,362,343	39,269,011
Postage, stamp, telecommunication etc.	25	23,365,252	28,788,937
Stationery, printing, advertisement	26	31,586,394	47,830,780
Managing director's salary and allowance	27	15,479,000	15,479,000
Directors' fees and expenses	28	2,329,800	2,638,900
Auditors' fees	29	1,112,050	1,086,750
Repairs, maintenance and depreciation	30	390,836,291	412,630,098
Other expenses	31	574,540,370	756,063,216
Total operating expenses		2,388,208,324	2,872,631,652
Net Operating Income		1,329,311,623	1,609,564,656
Provisions for loans, investments and other assets	32	151,027,084	884,805,175
Provisions for leases and loans		121,432,439	586,870,691
Provision for margin loan		168,636,136	116,083,141
Provision for diminution in value of investments		(140,741,491)	181,851,344
General provision for other assets		1,700,000	-
Profit before tax and reserve		1,178,284,539	724,759,481
Provision for tax	33	199,766,087	216,531,197
Current tax		199,660,429	214,235,553
Deferred tax		105,659	2,295,644
Net profit after tax		978,518,451	508,228,283
Attributed to			
Shareholders of the Company		974,090,749	503,883,570
Non-controlling interest	38.4	4,427,702	4,344,713
			98,228
Appropriations			
Statutory reserve			07
General reserve			20
			3,129
Retained surplus		813,457,569	359,810,060
Earnings Per Share- (EPS) (restated : 2019)	34	1.81	0.94

The annexed notes form an integral part of these consolidated financial statements.


Director


Director


Managing Director


Company Secretary


Chief Financial Officer

This is the Consolidated Profit and Loss Account referred to in our separate report of even date.

Dhaka,
10 March, 2021
DVC No. : 2103100452AS243902


Hussain Farhad & Co.
Chartered Accountants

LANKABANGLA FINANCE LIMITED AND ITS SUBSIDIARIES **CONSOLIDATED PROFIT AND LOSS ACCOUNT**

For the year ended 31 December 2018

	Notes	Amount In Taka	
		2018	2017
Operating Income			
Interest income	17	9,095,252,849	7,076,089,286
Less : Interest expenses on deposits & borrowings	18	6,605,746,998	4,838,840,868
Net interest income		2,489,505,851	2,237,248,418
Income from investment	19	434,031,094	914,222,486
Commission, exchange and brokerage income	20	707,627,576	1,136,001,530
Other operational income	21	824,252,786	854,466,614
Total operating income		4,455,417,307	5,141,939,047
Operating Expenses			
Salary and allowances	22	1,366,869,763	1,300,145,142
Rent, taxes, insurance, electricity etc.	23	251,069,443	220,562,073
Legal and professional fees	24	27,864,545	33,424,026
Postage, stamp, telecommunication etc.	25	26,774,472	28,819,579
Stationery, printing, advertisement	26	51,789,343	66,035,302
Managing director's salary and allowance	27	15,479,000	10,726,667
Director fees and expenses	28	2,271,200	2,387,300
Audit fees	29	1,155,750	1,092,500
Repairs, maintenance and depreciation	30	209,094,554	183,401,905
Other expenses	31	817,637,739	824,585,567
Total operating expenses		2,770,005,810	2,671,180,060
Net Operating Income		1,685,411,497	2,470,758,986
Provisions for loans, investments and other assets	32	976,337,321	206,948,220
Provisions for leases and loans		368,767,746	248,441,162
Provision for margin loan		261,083,418	36,766,605
Provision for diminution in value of investments		342,286,156	(76,109,546)
General provision for other assets		4,200,000	(2,150,000)
Profit before tax and reserve		709,074,176	2,263,810,766
Provision for tax	33	264,630,078	337,521,607
Current tax		259,278,400	334,274,885
Deferred tax		5,351,678	3,246,722
Net profit after tax		444,444,099	1,926,289,159
Attributed to			
Shareholders of the Company		434,308,867	1,898,845,450
Non controlling interest	38.4	10,135,232	27,443,709
		444,444,099	1,926,289,159
Appropriations		145,012,574	274,657,522
Statutory reserve		142,831,326	270,558,101
General reserve		2,181,248	4,099,421
Retained surplus		289,296,292	1,624,187,928
Earnings Per Share- (EPS) (restated: 2017)	34	0.85	4.15

The annexed notes form an integral part of these consolidated financial statements.


Director


Director


Managing Director


Company Secretary


Chief Financial Officer

This is the Consolidated Profit and Loss Account referred to in our separate report of even date.

Dhaka,
12 February 2019


S. F. Ahmed & Co.
Chartered Accountants

A Study on LankaBangla Finance's Online Credit Card Approval System, Cinderella Dhrupodi Munshi, ID-181011040

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Interview Questionnaire

Section 1: Demographic Information

1. Name -
2. Mention your email address / phone number –
3. Mention your designation at LankaBangla Finance LTD.
4. How long have you been working in Lanka Bangla?
☐ 0-1 years ☐ 2-3 years ☐ 4-5 years ☐ 5 + years

Section 2: Knowledge

5. In terms of productivity, which system do you think has the best process?
☐ CAS ☐ The Manual Process ☐ A Blend of Both ☐ None of them
6. On a scale of 1-5, how much would you rate the Online System based on trials?

(1)	(2)	(3)	(4)	(5)
Poor				Excellent

7. On a scale of 1-5, how much would you rate the Existing Manual System?

(1)	(2)	(3)	(4)	(5)
Poor				Excellent

8. Which area of work has the highest need for improvement?
☐ The business sector ☐ Card Operations ☐ Processing Unit

Section 3: Experience

9. What are the key challenges of the Online system?
10. What are common problems faced in the existing process?
11. What changes the new system will bring to sales or customer satisfaction?

Section 4: Finance

12. What is the total number of card production per month?

13. What is the per-unit cost of production?
14. How much investment is needed for CAS initially?
15. Is there any Maintenance & Upgrade Cost for CAS?
16. What are the current sales of Lanka Bangla's Credit Card?
17. What changes in costs will the new online system bring?
18. What is the preferred investment return by the company?
19. Approximately how much increment in sales CAS will have if implemented?
20. What is the preferred payback period of the Top Management for CAS?