

Report On  
**Robi's LEAP initiative: Treasury's automated fund  
management activities in the Workflow**

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

BRAC Business School  
Brac University  
May, 2023

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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:**

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**Mahin Tasnim**  
19104186

**Supervisor's Full Name & Signature:**

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**Saif Hossain**  
Assistant Professor & Program Director, BRAC Business School  
Brac University

## Letter of Transmittal

Saif Hossain  
Assistant Professor,  
BRAC Business School  
BRAC University  
66 Mohakhali, Dhaka-1212

Subject: Submission of internship report

Sir,

I am pleased to present my report ‘Robi's LEAP initiative: Treasury's automated fund management activities in the workflow’ based on my finance internship at Robi Axiata Limited. I have tried my best to write the report succinctly and comprehensively, including necessary details and proposed corrections.

I sincerely hope the report lives up to your expectations. Thank you for your valuable time and suggestions throughout the course.

Sincerely yours,

---

Mahin Tasnim  
19104186  
BRAC Business School  
BRAC University  
Date: May 10, 2023

## **Non-Disclosure Agreement**

This is a Non-Disclosure Agreement between intern Mahin Tasnim, appointed to Treasury & Investor Relations, Finance and Robi Axiata Limited.

I understand that any confidential information provided to me while I am an intern at Robi Axiata Limited is confidential. I thus agree to treat such price sensitive information as confidential and to refrain from disclosing it to third parties without the company's prior written approval. I will continue to carry out this responsibility when the internship period is over.

### **Intern's Full Name & Signature:**

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Mahin Tasnim

Intern- Robi Axiata Limited, Finance (Treasury & Investor Relations)

### **Supervisor's Full Name & Signature:**

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S.M. Jahangir Kabir

General Manager, Treasury Operations

## **Acknowledgment**

First and foremost, I want to thank Allah for providing me with the chance to finish the internship and report on schedule and in perfect health. I am grateful to my family for giving me the support to complete the internship and the report. I want to start by expressing my gratitude to my academic supervisor, Saif Hossain, for guiding me throughout the report writing process. Furthermore, I want to thank S.M. Jahangir Kabir, my on-site line manager at Robi Axiata Limited, for his assistance and for providing me with the direction and information I needed to complete my project.

## **Executive Summary**

The report provides an overview of the Robotic Process Automation (RPA) automation process in Robi, under the company's LEAP initiative. Robi Axiata Limited is Bangladesh's second-largest mobile network operator, excelling in technological innovations both in service and in its office environment. To further take a leap towards its technological advancement, it has followed the LEAP framework which is popular across the globe in this aspect. Under this framework, Robi is on its way to automate its operations through Robotic Process Automation (RPA). This report particularly emphasizes on RPA in Treasury Department's fund management activities. The objective of this report is to understand Robi's Treasury Department's automated fund management process along with the User Acceptance Testing (UAT) and the challenges. The analysis done on the process and information about the work portal are collected from the annual reports, Robi officials and my own observation. Robi has already developed its own portal to automate the activities. However, it is still working on the issues that are yet to be perfectly automated till now. To sum up, Robi is successful on its fund management automation project and is looking forward to improving the minor issues lying in the system.

**Keywords:** Treasury; Fund Management; Robotic Process Automation; Workflow; User Acceptance Testing

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## List of Acronyms

API	Application Programming Interface
BEFTN	Bangladesh Electronic Funds Transfer Network
CAGR	Compound Annual Growth Rate
CAPTCHA	Completely Automated Public Turing test to tell Computers and Humans Apart
E-Sim	Embedded SIM
GPRS	General Packet Radio Service
HSPA+	High Speed Packet Access Plus
IoT	Internet of Things
IPO	Initial Public Offering
LC	Letter of Credit
LEAP	Learning, Evaluation and Planning Framework
LTL	Long Term Loan
OTP	One-Time Password
RPA	Robotic Process Automation
RTGS	Real Time Gross Settlement
SAP	System, Applications & Products in Data Processing Software
UAT	User Acceptance Testing
UI	User Interface
VAT	Value Added Tax
VOIP	Voice over Internet Protocol

## Glossary

API Connectivity:	API is the tool that allows two components of software to connect with one another by establishing and maintaining a set of protocols, like how Robi Workflow connects with Bank portals.
Daily Fund Positioning:	Daily Fund Positioning is monitoring and reporting the daily fund inflows and outflows of a business.
Fund Forecast:	Monthly Fund Forecast is creating a forecasted budget of the business's monthly inflow and outflows beforehand. It is similar to the accounting statements.
Fund Management:	Fund management is keeping records and managing the overall funds or cashflow of a company, which includes fund positioning, fund forecast, cash payment, fund pulling etc.
Fund Pulling:	When the company pulls its funds back or withdraws cash from bank accounts, is called fund pulling.
Letter of Credit:	LC is a bank-issued paperwork that ensures the buyer's payment to the seller in full and on time.
Robotic Process Automation:	RPA is a user friendly software system that automates digital operations by building robots that learn, imitate and conduct rules-based operations.
Treasury:	Treasury manages a firm's funds, ensuring that every day obligations are fulfilled alongside of developing long-term financial strategies and policies.
Workflow:	Robi's own portal through which all the financial activities are being automated.

# **Chapter 1: Overview of Internship**

## **1.1 Student Information**

Name: Mahin Tasnim

ID: 19104186

Program: Bachelor of Business Administration

Major: Finance

Major: Computer Information Management

## **1.2 Internship Information**

### **1.2.1 Period, Name, Department, Address:**

Period: 02/01/2023 - 30/04/2023

Company Name: Robi Axiata Limited

Department/Function: Treasury & Investor Relations

Address: Robi Corporate Office, 53 Gulshan South Avenue, Gulshan-1, Dhaka-1212

### **1.2.2 Line Manager**

Name of Supervisor: S.M. Jahangir Kabir

Position: General Manager, Treasury Operations

### **1.2.3 Job Description:**

Through primary selection and interview, I was selected as the intern of the Treasury & Investor Relations Department, Finance Division. During the last two weeks, I was offered to participate in a small project at the Admin and Modern Facility team of Human Resources Department as well.

The major responsibilities of Finance department are treasury and fund management, Banking, Investor Relations, IPO, Dividend and other cash disbursements, LC etc. Robi is taking a few projects regarding automating tasks via its Workflow portal. I was involved in the fund management project for Treasury.

The main responsibility at Admin and Modern Facility team was to collect Robi centre employee data for the database.

### **1.3 Internship Outcome:**

I have become accustomed with how different functions are done in the Finance division, to be specific the Treasury and Investor Relations daily operations by the end of my internship. By taking part in the share unblocking, fund management forecasting, financial data management in Robi portal, bank statement generating I have got a somewhat practical experience of the daily operations and environment of a multinational company work culture. In the last two weeks besides Treasury team, I have also got the opportunity to work with the Admin team regarding its Robi Centre database management project. Working with two department's has been a great kickstart to the corporate world.



## **1.4 Contribution of the Student:**

In the finance division-

- Upload bulk of monthly financial data like LC, Cash, Forecast, Budget, Expense etc.
- Go through trial-and-error method to see if the workflow is working well and solve issues by discussing with Robi's IT team.
- Generate bank account statements daily from bank portals and send them to the server for updating to the Workflow.
- Review and verify bulk of Share unblocking documents submitted by employees to unblock the shares that they received during Robi's IPO. Take approval and sign from the Corporate & Regulatory affairs team and then give out the documents to the employees again.
- Bank credit rating report for all the banks that Robi currently operates with.
- Regular work in Excel, review Tax certificate and LC applications etc.

During the last 2 weeks, along with the Treasury team, I worked with the Admin and Modern Facility team of Human Resources Department, regarding their Floor Marshal database update. I was responsible for calling and emailing over 100+ Robi centre employees to collect their pictures and other information in a short deadline.

## **1.5 Difficulties:**

- In the first month of the internship, I had learnt using photocopy and printer machines after a few failed attempts. I also faced difficulty while using Robi's workflow portal at first. But with the help of my seniors, I was quick to learn these things.
- In case of short task briefings for quick tasks, I had difficulty remembering the instructions correctly. Then I started taking notes of the briefings. Within a month I had a good grip on how the tasks were done.

## **1.6 Recommendations:**

- An intern training session at the beginning of the internship can help the interns learn the usage of basic tools efficiently and avoid communication gap issues.
- The first month task briefings for the interns can be little more elaborated for their better understanding of the work process.

## **Chapter 2: About the Company**

### **2.1 Introduction:**

Robi Axiata Limited is a public limited company in which Axiata Group Berhad of Malaysia owns 61.82%, Bharti Airtel of India owns 28.18%, and the remaining 10% is owned by public. It was established in 1997 named Telekom Malaysia International (Bangladesh) and was rebranded as "Robi" in 2010. Robi is now the second largest mobile network provider in Bangladesh, with 54.5 million subscribers, 26.3 million 4G subscribers, and 65.1% 4G users among all data users. Following the merger with Airtel Bangladesh, the consolidated company Robi Axiata Limited (Robi), began commercial operations on November 16, 2016. Robi is the first telco in Bangladesh to offer 4.5G service in all districts, reaching the milestone on the first day of the service's commercial launch which was on February 20, 2018. Robi as a mobile operator, has established the delivery of mobile financial services to underprivileged groups in rural and semi-urban areas. It is the only mobile operator to complete successful 5G trial runs and is the first 4.5G network to launch Voice over LTE (Robi Axiata Limited, 2022).

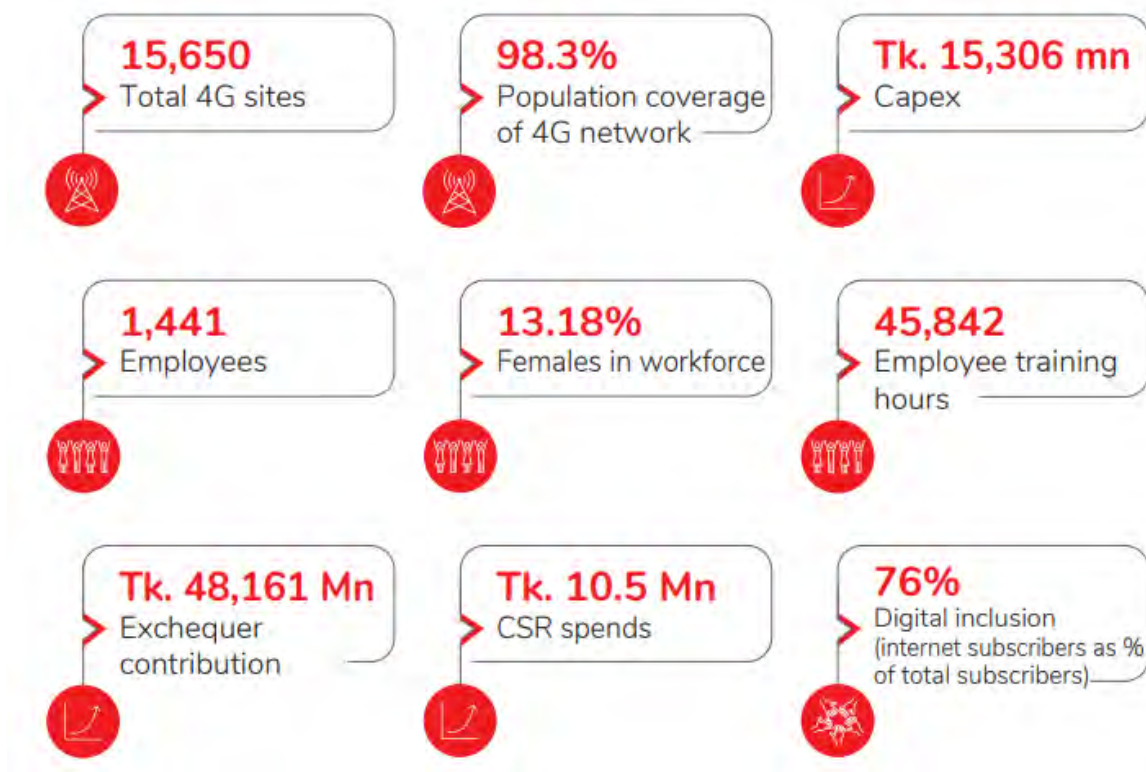


Figure 1: Robi overview

Robi is heavily involved in socioeconomic development, having established the largest online school, installed safe drinking water facilities in railway stations, and set up the National Call Center in cooperation with Aspire to Information (a2i). Robi has also introduced novel digital solutions, such as Noor, Binge, My Sports, and My Health. In January 2020, Robi debuted with a new brand appeal, promising to bring fresh experiences into the lives of its clients with cutting-edge digital products and services. To improve every area of its business, Robi has taken a notable industry lead in deploying data analytics, artificial intelligence, IoT, cloud solutions, and other digital technologies (রবি).

## **2.2 Overview of the company**

### **2.2.1 Services:**

Bangladeshi clients expect data and digital bundles that provide excellent value for money. Affordability is crucial in the purchase decision. This is where Robi's special capability comes into play, as the company is able to build practical feature-rich packs and solutions at affordable prices, thereby ensuring product market-fit. Robi provides a diverse range of services, being the most unique in the industry.

#### **Telecommunication services-**

- Sim services: Sim card and E-sim with internet & minute offers
- Network: 4.5G service, 4.5G network, successful 5G trial run, first to introduce Voice over LTE on a 4.5G network
- Roaming: Sim roaming solutions
- Customer services: My Robi app, Robi Alpha app, Pandemic helpline 333

#### **Digital solutions-**

- Noor: the first comprehensive Islamic lifestyle app in the nation
- DigiCure: Digital solution for for medical health services
- My Drive: Personal cloud storage solution.
- Health Plus: Healthcare solution
- Shadhin music app: Largest collection of Bangla songs
- Robi Cash App: Payment solution
- Bdtickets: Online ticket platform
- Robi Tracker: Vehicle tracker

- Robi Screen: Entertainment services
- My Sports: Live sports app
- Splash: Comprehensive audio-visual digital music platform
- AdReach: Targeted SMS to Robi-Airtel subscribers
- Binge: Web streaming service

Furthermore, Robi has many significant collaborations such as- nation’s first successful Ed-Tech startup Robi-10 Minute School. Also, with Aspire to Information (a2i) to establish the National Call Center. It has started health insurance service by partnering with Green Delta (The Business Standard, 2023). Robi also provides data analytics, artificial intelligence, IoT, cloud solutions, and other digital technology services (রবি).

### 2.2.2 Market Situation:

Robi is maintaining a healthy market position throughout the years. It is right now amongst the top-2 telecom companies of Bangladesh. Robi has a subscriber CAGR of 2.24% over 3 years, making Robi amongst the fastest growing entities in Bangladesh’s telecom market (Robi Axiata Limited, 2022).

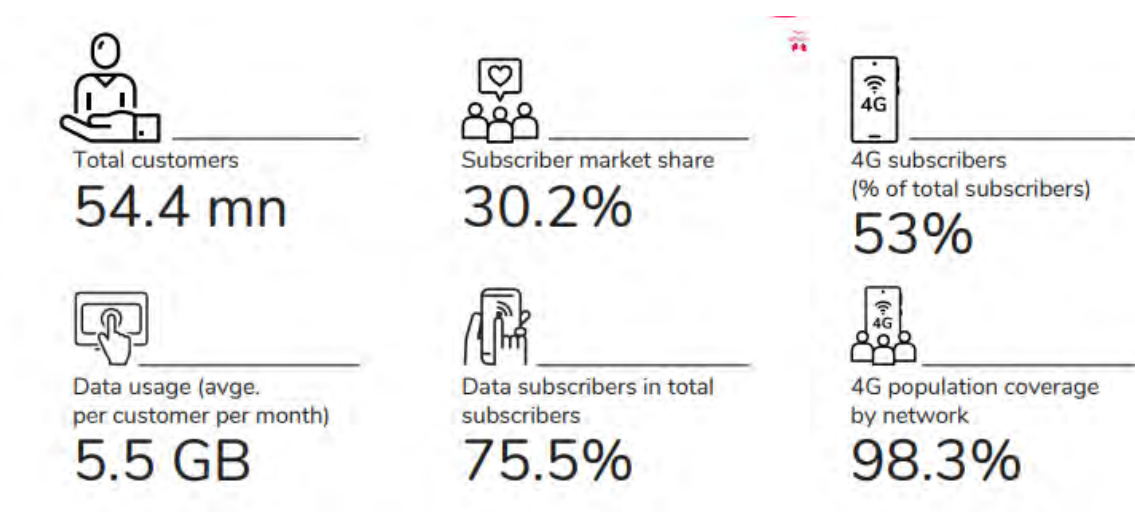
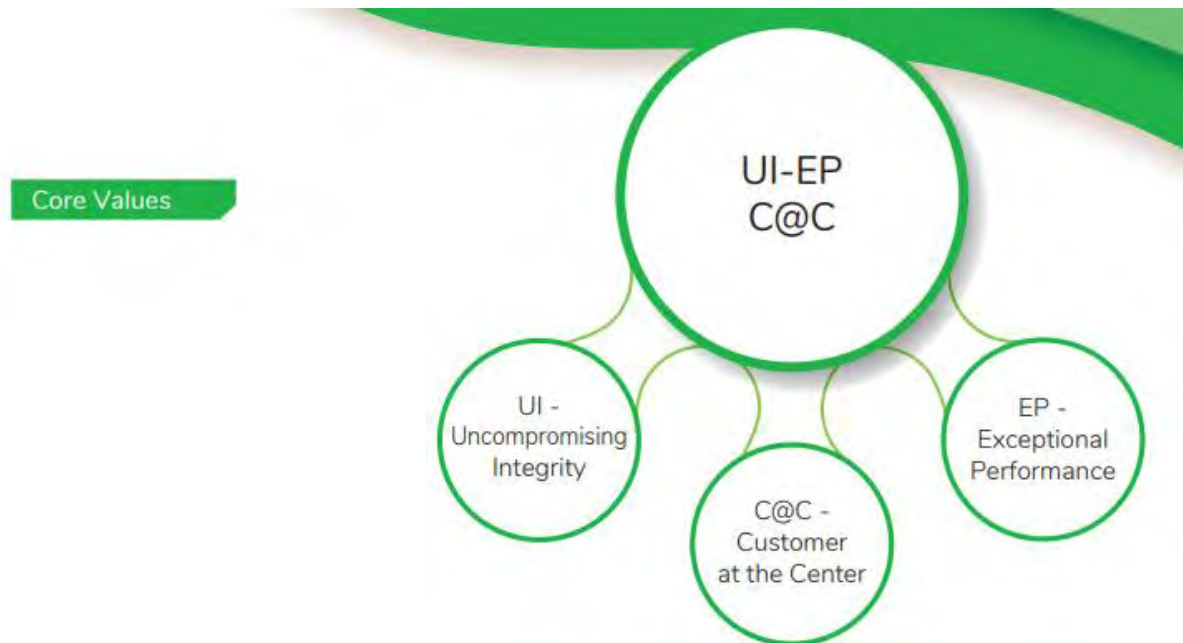


Figure 2: Robi's Market Situation

## 2.3 Management Practices:

**Core Values:** “Robi practices Uncompromising Integrity and Exceptional Performance (UI,EP) to assure value creation while putting the customer before anything else” (Robi Axiata Limited, 2022).



*Figure 3: Core Values of Robi*

**Corporate Strategy:** The company strategy is to focus on delivering customer value while working with industry partners. It is comprised of three main components:

1. **Customer Value:** Keep pushing for smooth connectivity and a better video experience for everyone. Ensure that the clients' customer offerings are simplified and preferred across all touchpoints.
2. **Profitability Resilience:** Continue to drive growth, affecting the lives of the customers while bringing maximum synergy and cost efficiency through digitization and analytics.
3. **Sustainability:** To drive long-term growth, continue to build a vibrant digital ecosystem throughout the business areas in collaboration with the shareholders and partners. The primary

objective on the ESG (Environmental, Social, and Governance) agenda is to be at the forefront of creating a better future (Robi Axiata Limited, 2022).

**Ethical Conduct:** Robi is dedicated to operating their business in a committed, righteous, and legal manner. To achieve this, they adopted an Ethics code, Corruption prevention policy, Gift, Donation and Sponsorship policy, and whistleblowing regulations. In 2022, they achieved 100% ABAC training for the employees and adopted the team's Gift, Donation and Sponsorship (GDS) Policy for regional business (Robi Axiata Limited, 2022).

**Beliefs and Values:** Robi is certain that its operations are built on its core values of Uncompromising Integrity and also Exceptional Performance (UI.EP), which enables it to offer responsive, high-quality services and conduct business with honesty and openness (রবি).

### **2.3.1 Leadership:**

Robi's Management Council includes professionals with specialized skills and broad experience in technology and telecommunications. They bring a unique combination of domain experience, long-term thinking, solid execution, and a focus on performance to the table. Members of the Management Council have a combined expertise of 194 years (রবি).



#### BOARD OF DIRECTORS

- ▲ Rajeev Sethi, Chairman
- ▲ Dr. M. Sadiqul Islam, Independent Director
- ▲ M. Riyaaaz Rasheed, Director
- ▲ Mohammed Shahedul Alam, Director
- ▲ Ruhul Amin, Director
- ▲ Md. Adil Hossain Noble, Director
- ▲ Hasib Mustabsir – Managing Director

#### Board Audit committee

- ▲ Dr. M. Sadiqul Islam, Chairman
- ▲ M. Riyaaaz Rasheed, Member
- ▲ Ruhul Amin, Member

#### Board Remuneration and Nomination committee

- ▲ Dr. M. Sadiqul Islam, Chairman
- ▲ M. Riyaaaz Rasheed, Member
- ▲ Hasib Mustabsir, Member

#### Management Team

- ▲ Hasib Mustabsir (Managing Director and CEO)
- ▲ Syed Md. Ziaul Haider, Chief Platform Officer
- ▲ Rajshekhar Debnath, Chief Financial Officer
- ▲ Md. Shahidur Rahman, Company Secretary

*Figure 4: Robi Board of Directors & Management*

Robi's leadership overview:

- Strong leadership
- Robust senior management with specialist experience
- Relatively high tenure of association
- Strong execution with ability to deliver on ESG and 3P targets

### **2.3.2 Human Resources:**

Robi's human resource strategy entails embracing technology and its effects on the employees. This includes investing in staff upskilling and reskilling programs to adapt to changing technological needs, promoting an innovation and continuous learning culture, and establishing flexible work arrangements that allow for collaboration and hybrid work. Furthermore, the company focuses on diversity, equity, and inclusion (DEI) programs in order to foster a diverse and inclusive workforce that mirrors the consumer base and encourages creativity and diverse perspectives. Finally, it continues to prioritize employee well-being initiatives such as mental health assistance and work-life balance, which are critical to retaining top talent and maintaining a productive and engaged workforce in a fast-paced and high-pressure digital world. Creating, recommending, and analyzing the Company's human resources and training on an annual basis. RedDot's human resource system offers a complete end-to-end HR solution, including recruitment management, talent and development, performance management, and payroll (Robi Axiata Limited, 2022).

### **2.4 Marketing Practices:**

“Despite fierce market competition, Robi manages to stand out in terms of innovation. That, in my opinion, is the company's most significant strength as it transitions to a digital future via a smooth transformation journey. Our stable and consistent market progress has been built on excellent governance procedures.” – says Thayaparan Sangarapillai, Chairman of Robi Axiata Ltd (Robi Axiata Limited, 2022).

### 2.4.1 Marketing Strategy:

**Covering Bangladesh Robi Red:** Robi provides a 360-degree customer experience through their digital product strategy, which is supported by a vast range of products and solutions. This has proven useful in its client acquisition and network expansion efforts throughout the years.



Figure 5: Robi's Marketing Strategy

### 2.4.2 Market Segmentation:

Over the last decade, the mobile market in Bangladesh has risen steadily, with the number of unique users increasing from 47 million in 2010 to 97 million in 2022, representing a 106% growth. By the end of 2022, Bangladesh had 180.2 million connections, a unique subscriber penetration of 57.54%, and a total connection penetration of 103.1%, with some users holding

multiple connections. The total number of mobile internet subscribers is 112.55 million, with a penetration rate of 64.3%, while unique mobile internet penetration is 31.6% (Robi Axiata Limited, 2022).

### **2.4.3 Targeting and Positioning:**

**Robi** - Robi targets to serve the whole Bangladesh and beyond, despite the age, region, gender;

**Airtel**- Airtel mostly targets for youngsters.

### **2.4.4 Marketing Channels:**

- **TV advertisements:** One of the biggest channels of Robi's marketing is the TV advertisement with popular celebrities. It has its own popular OTT web platform 'Binge'.
- **Email and Messaging:** During service promotions and holidays, Robi communicates with prospective and existing customers through tailored emails and mobile SMS.
- **Social Media Marketing:** Robi maintains a robust social media presence across all significant networks, including Facebook, where it has more than 10 million followers. It has laboriously connected with its target audience through Facebook groups, pages, campaigns, and live discussions. Other than Facebook, it has active business accounts on Instagram consisting 400K+ followers and TikTok with 27K likes.
- **Sponsors & Events:** Robi sponsors & collaborates with companies like 10 Mintue School, arrange seed funding competitions like r-ventures, arranges events to make its market position stronger (Hasan, 2023).

#### **2.4.5 Critical Marketing Issues and gaps:**

**Market condition:** Market price volatility, such as foreign exchange rates and interest rates, will affect Robi's earnings and its financial asset investments values.

**Market competition:** Bangladesh's telecom market is very competitive, with three major operators: Robi, GrameenPhone, and Banglalink. This competition may result in price wars and other competitive pressures, reducing Robi's profitability.

**Regulatory & legal changes:** The government of Bangladesh has the authority to control the telecom industry, and any changes in rules, such as imposing taxes or additional fees on telecom businesses or amending regulations for new spectrum licenses, might have a substantial influence on Robi's operations.

**Economic condition:** Bangladesh's overall economic condition affects Robi's business. For instance, an economic downturn would cause fewer people to spend on telecommunications services, which would be unfavorable for Robi's financial position.

**Technological change:** As the telecom sector is continually evolving, new technologies such as 5G can destabilize the market. To remain competitive, Robi needs to make investments in new technology, which might be exorbitant.

Although Robi is vulnerable to market risks in general, it has numerous market risk mitigation techniques in place. For instance, the organization has a large customer base and an enviable track record for providing high-quality service. To stay ahead of the competition, Robi continues to invest in emerging technologies and extend its network.

#### **2.5 Financial Performance & Accounting Practices:**

Financial Analysis on Robi's Annual Report-

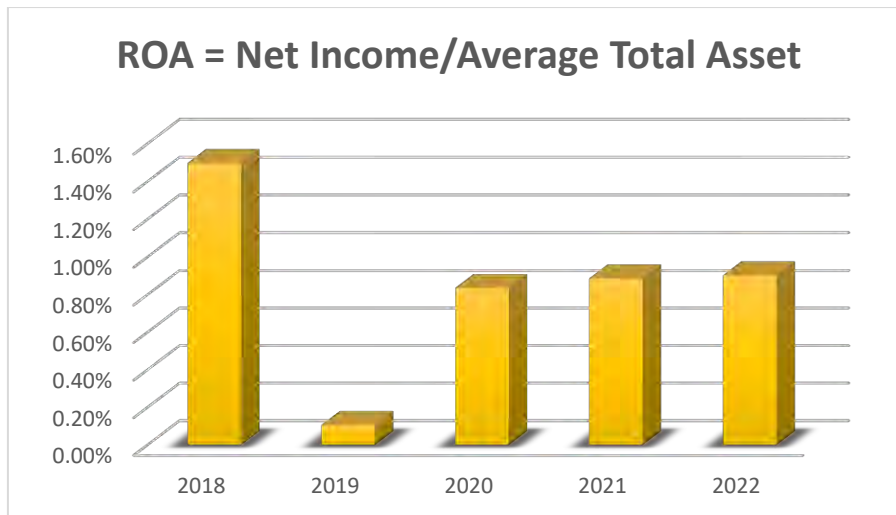
**Profitability Ratios:**

	2022	2021	2020	2019	2018
Return on Equity = Profit After tax / Total Shareholder's Equity	2.72%	2.72%	2.36%	0.28%	3.54%
Earnings Per share = Net Profit / Total no of shares outstanding	0.0035	0.0003	0.0003	0.0000	0.0005
Return on Assets = Net Profit / Total Assets	0.93%	0.91%	0.78%	0.10%	1.48%
Gross Profit = Gross Profit / sales * 100	38%	34%	37%	37%	29%
Net Profit = Net Profit / Sales*100	2.13%	2.21%	2.05%	0.23%	3.16%

The profitability ratios have increased, showing good financial stability.

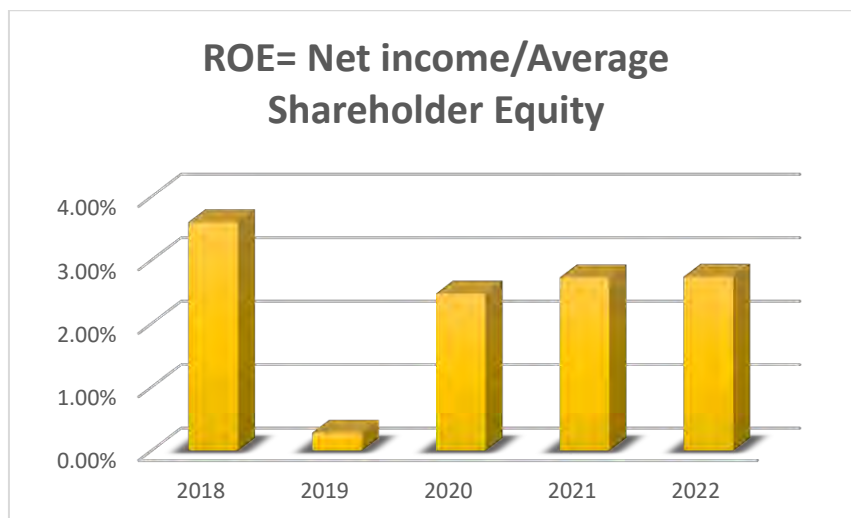
**ROA & ROE:**

	2022	2021	2020	2019	2018
ROA = Net Income/Total Asset	0.90%	0.89%	0.84%	0.11%	1.50%
ROE= Net income/Shareholder Equity	2.74%	2.73%	2.47%	0.28%	3.60%



*Graph 1: ROA for 2018-2022*

In 2019, Robi experienced a drastic decline in its return on asset. This suggests that it may have higher operational costs and a decrease in investment income. The drop could be attributed to the fragile economic environment caused by COVID. But after that in 2020, return on asset had a decent rise showing that it utilized all of its assets successfully to make a profit. This rise is quite stable for the last 3 years.



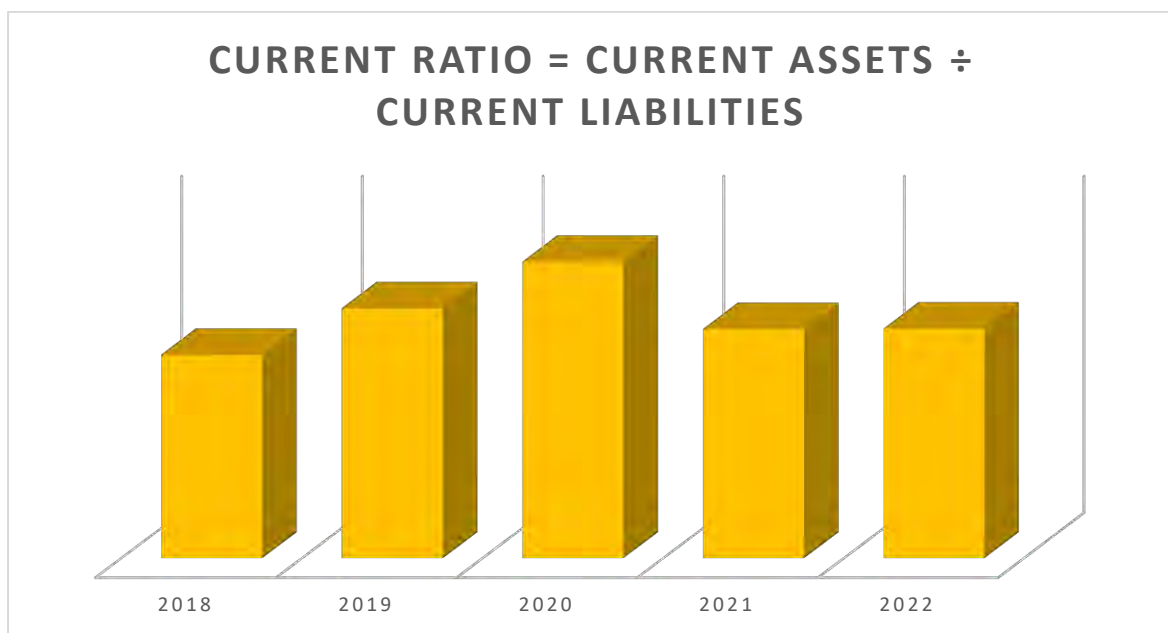
*Graph 2: ROE for 2018-2022*

Just similar to that of ROA, the return on equity has also dropped significantly during the year 2019, presumably due to the Covid-19 effect. After that, it has increased again, showing

that it has been profitably earning for its shareholders and is stable in this position for the last 3 years.

**Current Ratio:**

	2022	2021	2020	2019	2018
Current ratio = Current assets ÷ Current liabilities	20.53	20.49	26.47	22.34	18.20



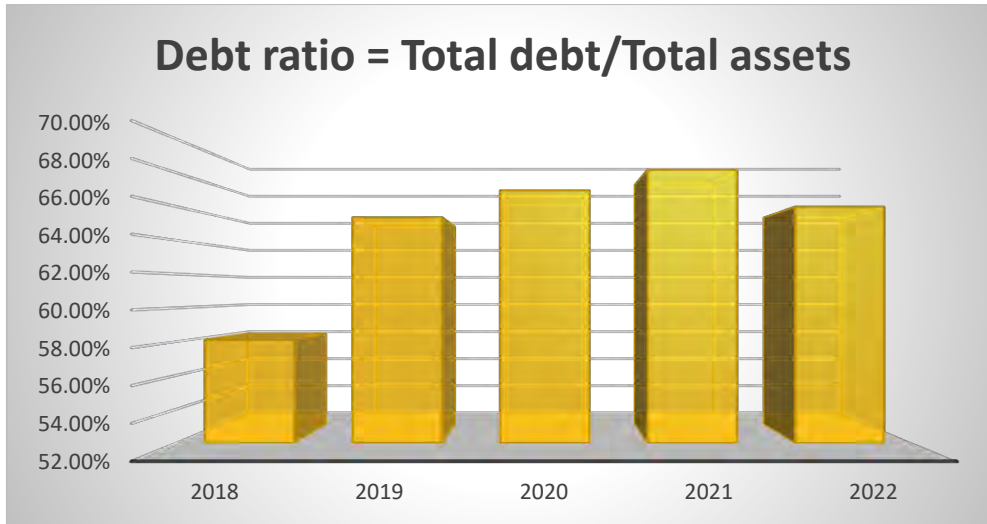
*Graph 3: Current ratio for 2018-2022*

Maintaining a healthy current ratio for the last 5 years, with a rise in 2020, Robi has showed that they have enough current assets to cover its current liabilities.

**Debt Ratio:**

	2022	2021	2020	2019	2018
Debt ratio = Total debt/Total assets	65.97%	68.17%	66.93%	65.35%	58.10%



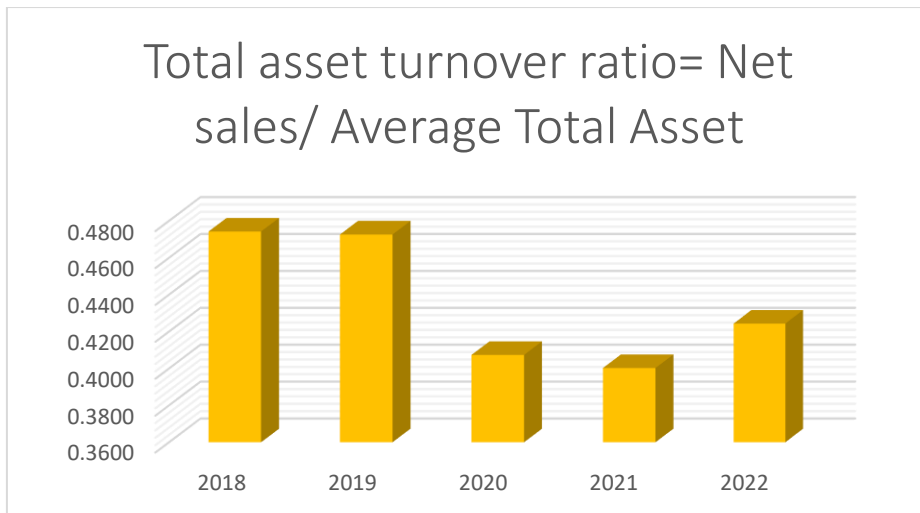


*Graph 4: Debt Ratio for 2018-2022*

Debt ratio was low in 2018, demonstrating that it had used less debt to finance its business activities and investments compared to equity. But after that, the company's operations are growing increasingly dependent on borrowing money since the ratio has increased. It again decreased by 2022, which in my opinion is a good indicator.

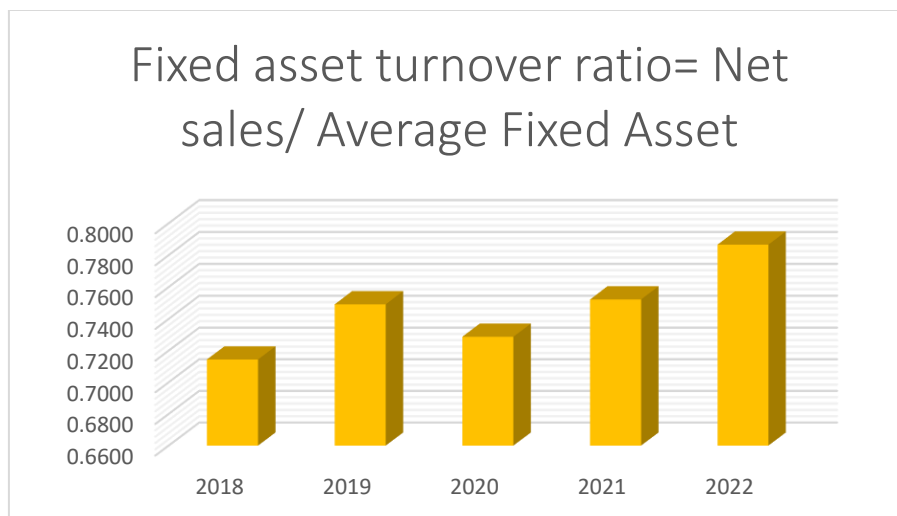
**Asset Management Ratio:**

	2022	2021	2020	2019	2018
Total asset turnover ratio (Net sales/ Average Total Asset)	0.424308	0.400242	0.407301	0.472621	0.474215
Fixed asset turnover ratio (Net sales/ Average Fixed Asset)	0.786611	0.752207	0.728788	0.749158	0.714436



*Graph 5: Total asset turnover ratio 2018-2022*

The total asset turnover ratio has decreased drastically in 2020, illustrating that the company is making less money than it had invested in its assets. However, there is a slight improvement in the ratio in 2022.



*Graph 6: Fixed asset turnover ratio 2018-2022*

The gradually rising fixed asset turnover ratio indicates that the investment Robi has put for its technology and infrastructures, is generating a good profit on that.

This year in the first quarter, Robi's revenue had increased by 5.52%, showing that the company is keeping up with its financial position even better in 2023 (The Financial Express, 2023).

Therefore overall, Robi Axiata Ltd.'s financial health is well balanced and stable.

**Accounting Practices:** Robi's accounting practices, as indicated in its annual reports-

- Revenue: Revenue is recorded when it is earned and realized, which is after providing the service to the customers and receiving payments.
- Cost of Goods Sold: For Robi, the COGS is mainly the cost of supplying its telecom services. It includes the cost of communication networks, equipment, and staffs. COGS is a significant part of Robi's expenses.
- Expenses: Operating expenses like sales and promotion, administrative expenses, depreciation, amortization etc. are part of company expenses. Non-operating costs include interest expenses. The company's expenses are recorded after incurring them.
- Financial statement: Robi's financial statements are consolidated with its subsidiary companies' financial data. It presents an accurate picture of the company's financial position and performance.
- Asset valuation: The company values its assets at historical cost if the fair value is undeterminable.
- Liability: Robi evaluates its debts based on the present value of the future cash flow needed to pay the debt.

The accounting practices of Robi Axiata comply with Bangladesh Financial Reporting Standards (BFRS) (Robi Axiata Limited, 2021).

## **2.6 Treasury & Investor Relations Practices:**

The Treasury division mostly focuses on payments, billings, bank communications, money transfers, LC etc. Investor Relations (IR) division represents Robi's effective governance standards and ensures that the company's duties to shareholders and investors are met. Robi has the most shareholders in the Bangladesh stock market, and its specialized investor relations staff enables excellent bi-directional engagement with the local and international investor communities. This unit's primary job is to communicate with capital market participants about the company's performance, management decisions, and regulatory developments. In turn, it connects investors, analysts, and other stakeholders in the relevant markets with the firm's decision-makers, which aids the company in calibrating its plans. The Investor Relations area on Robi's website contains financial data, annual reports, quarterly presentations, price sensitive information disclosures, critical corporate policies, and other information (Robi Axiata Limited, 2022).

## **2.7 Industry & Competitive Analysis**

### **2.7.1 Porter's Five Forces analysis**

Porter's Five Forces analysis is one of the most comprehensive approaches for studying any industry and understanding what drives profitability and competitiveness. In terms of the telecom industry in Bangladesh, the analysis is below.

**Customer bargaining power:** As the Bangladeshi telecom users have similar options like switching sims to Banglalink, GP or Teletalk, they sure have the strong bargaining power. But given that Robi Axiata Ltd. owns Robi and Airtel, 2 of the 5 renowned telecom companies, Robi sure has a better position than the other telecoms.

**Supplier bargaining power:** The telecommunications industry currently has a large number of suppliers. However, to ensure quality, the companies work with a limited suppliers and vendors like edotco. Therefore, the suppliers have various degrees of bargaining power due to the service-based structure of telecoms like Robi Axiata Limited.

**Competitive rivalry:** The rivalry is too high as there are 5 active telecom companies in Bangladesh- GrameenPhone, Robi, Banglalink, Teletalk & Airtel. They all have very similar offerings and packages, making the competition to provide better service consistent. Nowadays telco customers are allowed to switch sims without incurring the costs. So, naturally, the rivalry is way too strong.

**Threat of new entrants:** Given the enormous existing telecommunications, the threat of new entrants is quite low. The entry barriers are very high. Because they will face severe competition from established organizations, new entrants must create strong client relationships, have adequate financing, and use readily available technologically advanced tools.

**Threat of substitutes:** Since the industry currently do not have any diverse offerings than sim cards and bundle offers to communicate via phone, the substitutes are VOIP, PSTN service, Messenger etc. But these are not nearly competing in the Bangladeshi telecom market currently. Therefore, the threat is very weak.

### **2.7.2 SWOT Analysis**

Analyzing the telecom industry and keeping our focus on Robi Axiata Ltd, the following traits are prominent as the strengths, weaknesses, opportunities and threats of the company.

## Strengths:

- **Broad network coverage:** Robi has the most extensive network coverage in Bangladesh, encompassing over 99% of the population.
- **Robi & Airtel merger customer base:** The 2016 merger of Robi and Airtel established a new telecom powerhouse with a combined customer base of over 40 million users. Robi now has a substantial market share and a solid platform for future expansion.
- **Good financial standing:** Robi is in good financial status, with a stable balance sheet and an efficient cash flow. Robi's financial strength enables it to invest in novel services and goods, grow its network, and gain new consumers.
- **Brand recognition is high:** Robi is an extremely popular and trusted brand in Bangladesh. It gains a competitive edge in the market as a result of this brand recognition, making it easier to acquire new customers.
- **Management team with substantial expertise:** Robi's management team is comprised of individuals with extensive experience in the telecom business. This knowledge has assisted Robi in growing and succeeding in a highly competitive market.
- **Novel product solutions:** Robi is continually innovating and developing new product solutions in order to satisfy the needs of its consumers. It has invested in EdTech solution, OTT platform, Digital Solutions, AI & IoT services, Cloud services and a lot more till date. This dedication to innovation has enabled Robi to remain competitive and maintain its market share.
- **Customer loyalty:** Robi has a dedicated & stable customer base that believes in the brand. This customer loyalty demonstrates Robi's dedication to quality and customer service.

## Weaknesses:

- **High operational expenses:** Robi Axiata Limited's high operational expenses are attributed to a variety of factors, including the cost of network maintenance, marketing and promotion, and employee wages. These high costs may result in less profits, making it challenging for the company to invest in new technology and services.
- **Airtel's dependency on a limited number of customers:** Airtel is reliant on a small number of consumers, making it sensitive to market fluctuations. For example, if a big number of customers switched to a competitor, Robi Axiata Limited's income could suffer significantly.
- **Network issue in remote area:** Robi has few but existent network challenges in remote areas, which may make it difficult for users to access the services in those locations. This may cause customer dissatisfaction and make it harder for Robi Axiata Limited to compete with other telecommunications carriers that are not experiencing these issues.
- **Insufficient global presence:** Robi has a lack of global presence to compete with other telecoms firms. For example, if a corporation wants to expand its operations into a new country, it must first establish a strong network in that country. Robi Axiata Limited's lack of worldwide footprint may make it challenging to enter new markets.
- **Regulatory issues:** Recent regulatory concerns may make it difficult for telecoms to conduct business independently. For example, the employees are having a hard time unblocking their IPO shares at this moment. Additionally, the company could end up restricted from offering new products and services due to restrictive government regulations.

## Opportunities:

- **Rising demand for mobile services:** Due to the growing demand for smartphones and other mobile devices, the need for mobile services in Bangladesh is booming. This gives Robi the opportunity to expand its business by providing novel and innovative services.
- **Entrance into diverse sectors:** Robi may expand into new markets such as digital payments, financial services, AI tools and e-commerce. This could assist the firm in diversifying its revenue streams and decreasing its reliance on traditional mobile services.
- **New technology development:** The advancement of new technologies, including as 5G and artificial intelligence, creates opportunity for Robi Axiata Limited to innovate and provide customers with new and distinctive services.
- **Government initiatives for the IT services and telecom industry:** Bangladesh's government is supportive of the IT and telecom industries. This allows Robi Axiata Limited to take advantage of government policies and programs such as tax reductions and subsidies.
- **Acquisition of other businesses:** As it has already entered many industries like EdTech, OTT Media, NGO services, App based digital solutions etc., Robi has the opportunity to acquire a diverse range of companies in these sectors, like mobile virtual network operators (MVNOs), media suppliers etc. This could help the company grow.

## Threats:

- **Highly competitive industry:** The telecommunications sector is extremely competitive, with numerous competitors competing for market share. This may result in pricing wars and other aggressive practices that harm Robi's bottom line.



- **Price competition among competitors:** In order to draw in customers, Robi's competitors are continually cutting their pricing. This may make it harder for Robi to keep its profit margins stable.
- **Innovations in communication technology:** The telecom business is always evolving, with new technologies being developed on a regular basis. This can make it difficult for Robi to stay up with the latest trends, potentially costing it market share to more innovative competitors.
- **Heavy natural disaster:** Recent frequent major natural disasters, such as a flood, cyclone or earthquake, might cause significant damage to Robi's infrastructure and halt operations. This could result in revenue loss and customer unhappiness.
- **National-level financial crisis:** The current economic downturn like high foreign exchange rate caused LCs to be halted for a period that disrupted Robi's financial operations and infrastructure purchase. Such crisis could also reduce customer spending, impacting sales. This might also reduce investment in the telecommunications business, making it difficult for Robi to grow its network and services.
- **Political instability:** Upcoming political upheaval could lead to turmoil, disrupting Robi's business and activities along with harming its reputation. This could also contribute to a drop in consumer spending, reducing Robi's sales.

The overview from the SWOT is that, no matter the common telecom industry weaknesses and opportunities existent in Robi as a part of the telecom industry in Bangladesh, its strengths and opportunities are solely its own to keep and achieve. This depicts quite a good position for Robi in the upcoming days.

## **2.8 Summary & Recommendations:**

To sum up, Robi is doing an excellent job with good financial health and technological advancement in business. However, due to its highly competitive industry, the company has to keep up strong with the performance along with its skilled management team.

In my opinion, to stay ahead of its rivals, Robi should come up with innovative solutions like it is doing now, understand its customer base better and ensure a secured environment for the employees as it is one of their valuable strengths in this competition.

## **Chapter 3: Robi's LEAP initiative: Treasury's automated fund management activities**

### **3.1 Introduction**

The project is based on the Robotic Process Automation (RPA) by Robi, under LEAP framework. I have focused on Treasury department's fund management activities for this project. The automation is being in done on the Robi Workflow Portal. During my internship, I was responsible for the project 'Treasury management & Investor Relations data update project', which required me to solely work on the Workflow. In this chapter I have discussed the RPA initiative, activities under the initiative, their processes in detail and lastly the observations & issues of the automation portal with possible solutions.

#### **3.1.1 Background:**

- What is RPA?

Robotic Process Automation (RPA) refers to software that can be easily programmed to do basic tasks across applications just as human workers do. RPA is like a virtual employee. Robi Axiata Limited is on its way to automate most of its financial data and activities under the LEAP initiative.

- What is LEAP?

LEAP is an internationally-acclaimed framework to assess an organization's adaptation of big data landscapes. For Robi, RPA is a part of this initiative. Under this framework, Robi is thriving to do well in technological aspect and already has won awards.

### 3.1.2 Objectives:

- **Objective 1:** To learn about the Robotic Process Automation (RPA) initiative by Robi
- **Objective 2:** To understand how Treasury's 5 fund management activities are automated in the Robi Workflow
- **Objective 3:** Identify the challenges of the project and possible solutions

### 3.1.3 Significance:

I have tried to study and picture the automation initiative at Robi by focusing on the fund management RPA at the treasury, both from the project planning end and the user end. The significance of this initiative-

**Increased performance:** The automation initiative will automate manual tasks connected with bank portfolio management, such as reconciliation, reporting, and forecasting. This will allow bankers to concentrate on more strategic tasks like risk management and budgeting.

**Risk reduction:** The program will assist in risk reduction by automating several manual operations that are now error-prone. An automated integration system, for example, will ensure that all transactions are accurately documented and that there are no conflicts between bank statements and bank records.

**Cost reduction:** By automating most of the activities, Robi is able to cut the cost of hiring and keeping employees for those activities. It can also reduce the cost of fixing manual task errors.

**Transparency:** It will increase transparency by giving employees and clients real-time access to data and reports. This is crucial to make better financial decisions for the organization.

**Improved compliance:** The initiative will assist the organization in meeting regulatory standards by automating many of the operations required. For example, an automated reporting

system will assist the company in submitting correct and timely reports to the appropriate authorities.

Besides these, LEAP's RPA initiative has the potential to improve the company's financial operations significantly. It will contribute to greater transparency, improved customer service, and future growth. It will free up time for employees to focus other valuable tasks, enhancing customer service and satisfaction by automating manual operations. Furthermore, the automation process will aid future growth by making the fund management activities easier to handle. Overall, the project is a significant initiative with the potential to benefit the company and its stakeholders tremendously.

### **3.2 Methodology:**

- **Objective 1:** To learn about the Robotic Process Automation (RPA) initiative by Robi

**Method:** Annual reports of the last 4 years, In person interaction with officials

**Justifying the method:** Firstly, the RPA project under LEAP initiative is briefly discussed in Robi's annual reports of 2019 - 2022. Secondly, my supervisor in Robi is one of the officials related to the development of the Robi workflow portal to automate financial treasury activities as soon as possible. He had briefed me on the project as well.

- **Objective 2:** To understand how Treasury's 5 fund management activities are automated in the Robi Workflow

**Method:** Internal data, Observation

**Justifying the method:** The background process of the activities was collected from my on-site supervisor. Furthermore, as I have worked on various activities and updated

LC, Payment, Cashflow, Vendor etc. data in the workflow during my whole tenure, I had a good observation on how the activities work in the portal.

- **Objective 3:** Identify the challenges of the project and possible solutions

**Method:** Internal data, Observation, In person interaction with officials

**Justifying the method:** The official data collected and my own observations of directly working in the workflow portal helped to identify the current and potential issues in the new RPA. I had to weekly report any issues in the workflow to the respective IT team over a meeting. The possible solutions were discussed in those meetings with the team.

### **3.3 Findings & Analysis:**

#### **3.3.1 Robotic Process Automation (RPA) initiative by Robi**

During 2020, Robi made remarkable progress in terms of its LEAP score. It is still involved in the RPA project, which includes the digitization of the Treasury. Robi's goal is to create a Touchless Treasury by 2024. Activities to be automated are-

- Bank's RPA Detection tools
- OTP/Password/Apps based log in
- Statement Conversion
- Banks Firewall and website development
- Developer knowledge about banking

**Robi Workflow:** To go forward with the automation initiative, Robi has developed its own portal called 'Robi Workflow'.



*Figure 6: Robi Workflow login page*

The Workflow portal has hundreds of activities listed inside the primary sections. The main activities have numerous sub-activities. For instance, in Fund management (Main activity)> Monthly Fund Forecast (Sub activity) > LC Payment tab, all the records of monthly LC Payments are recorded automatically. To use Workflow, each user has to login to their own workflow account and run specific allowed tasks, like initiate the auto update of the bank statements, cash payments, budgets etc., or even schedule a payment for future.

### **3.3.2 RPA in Treasury's Fund Management:**

Based on the Treasury activities digitization project, Treasury's 5 automated activities in process for fund management:

- 1) Daily Fund Positioning
- 2) Fund Forecasting
- 3) Payment by RPA
- 4) Fund Transfer
- 5) Fund Pulling

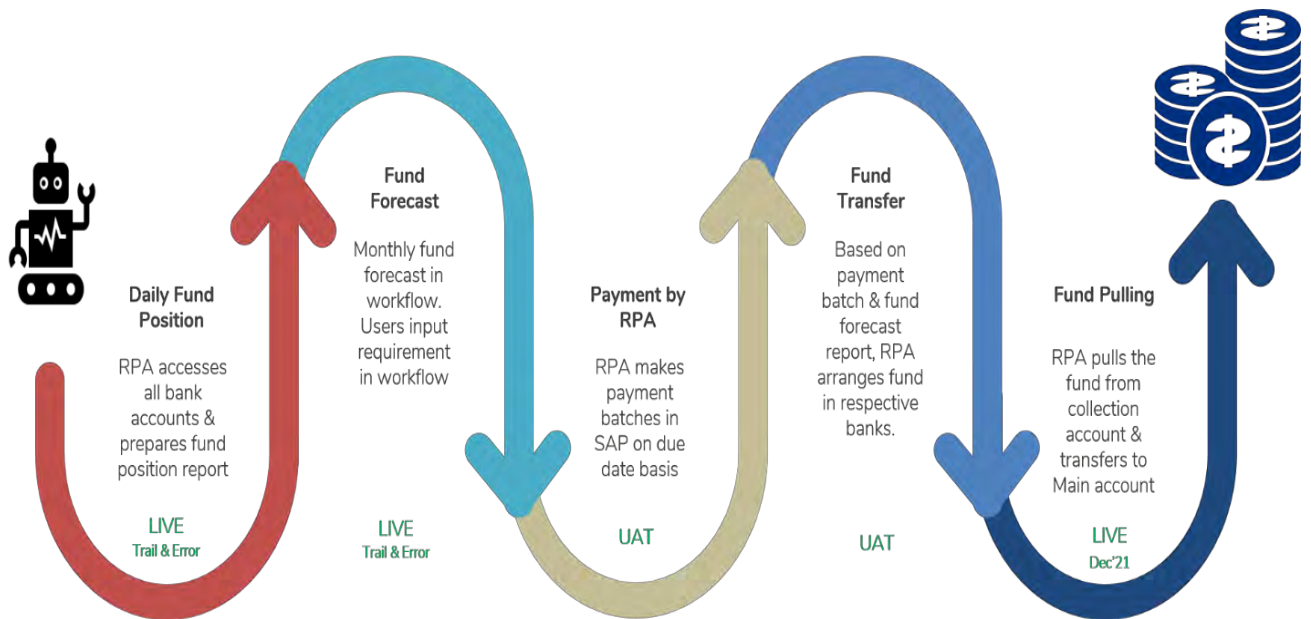


Figure 7: Treasury's 5 fund management activities

To understand in detail how the activities are done automated in the Workflow, the outcome of the use cases of User Acceptance Testing (UAT) for the 5 activities are shown below with observations. In the tables, each of the automated tasks are divided into smaller tasks like log in, download, submit, email reports etc. In the Result column, the success or failure of the tasks to be automatically done, are reported. For example, if a task is successfully done automatically, it has passed the test.

### 1. Daily Fund Positioning:

Table 1: UAT for Daily Fund Positioning

SL	Task	Expected outcome	Result		Remarks
			Pass	Fail	
01	Log into the banking websites/accounts	> If Successful: Continue to the next step. > If unsuccessful:	✓		RPA cannot log in to



		The error message will be stored in the log records.			OTP/CAPTCHA cases
02	Download all of the server's bank statements	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		Except OTP/CAPTCHA cases. For those, manual log in by user
03	Convert the bank statements into the specified format	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		RPA unable to convert some bank's PDF statement (The City)
04	Classify cash receipts (revenue, non-revenue, loan drawdown, and payment refunds)	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		Not classified properly
05	Classify cash payments (i.e. vendor, LC, Tax/VAT, regulatory, loan repayment, interest etc.)	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		Not classified properly

06	Collect bank-specific closing balances and convert USD balances to BDT balances.	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		A few issues with closing and restricted cash
07	Update drawdown/settlement schedule for short-term loans.	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		Fund forecasting has some logical flaws.
08	Prepare the report and distribute it to the recipients.	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		Email set up in progress

**Observation:**

- This system experiences a pause. The fund manager needs to take the data out of the work flow, enter it manually, and then upload it again.
- Every day 2 to 3 bank account data points were improperly captured.
- A new bank account must be mentioned
- Running strategy needed for RPA over holidays
- Keep an error log up to date

## 2. Monthly Cash Flow Forecast:

Table 2: UAT for Monthly Cash Flow Forecast

SL	Task	Expected outcome	Result		Remarks
			Pass	Fail	
01	On the 20th of the month, all users will receive a notification for data input into the workflow.	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		Email address set up required
02	Enter a daily payment schedule in the workflow by the 25th of the month.	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		Email address set up required
03	Collect vendor payment schedule from SAP	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		
04	Enter daily cash collection forecast (i.e. mobile, DS, device, site, ICX, etc.) in workflow by the 25th of the month.	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		

05	Get loan repayment schedule and interest payable	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		
07	Get closing bank balance for the current month	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		Review the logic and results
08	System will alert for fund deficits or surpluses and suggest loan drawdown on the due date in advance.	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>			Need development
09	Fund manager will evaluate report, make necessary changes, and send to supervisor.	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records</p>	✓		Email address set up required
10	Supervisor will review the report and accept/decline	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records</p>	✓		Email address set up required

11	If declined, fund manager will modify and send to Supervisor	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records</p>	✓		Email address set up required
12	Supervisor will release	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records</p>	✓		Email address set up required
13	Report will be sent to the recipients	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records</p>	✓		Email address set up required

**Observation:**

- The prior month of the anticipated month must be open on the reporting calendar.
- A filtering and querying tool must be created.
- Formatting using decimal and millions
- Keep an error log
- Make operations user-friendly

### 3. Daily Fund Payment RPA:

Table 3: UAT for Daily Fund Payment

SL	Task	Expected outcome	Result		Remarks
			Pass	Fail	
01	Log in to SAP System with t-code	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		
02	Insert the expected date of payment and the posted status.	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		
03	Download the t-code report	<p>&gt; If Successful: Go to next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		
04	Remove Duplicate vendor	<p>&gt; If Successful: Process Finished.</p> <p>&gt; If unsuccessful:</p>			

		The error message will be stored in the log records.			
05	Log in to SAP System with the next t-code	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		
06	Click get variant> F110> dynamic selection	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		
07	Enter Vendor code, Company code, Document number	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		
08	Select all row from generated sheet> Click Mass Change	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		

09	Create a payment block that is free for payment	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		
10	Enter Payment method and Reason Code	<p>&gt; If Successful: Continue to the next step and process finished.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		
11	Log in to SAP System with t-code	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		
12	Enter Run Date & Identification	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		
13	Go to Parameter and copy Parameter	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful:</p>	✓		



		The error message will be stored in the log records.			
14	Enter Company code, payment method, next posting date & Vendor Code	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		
15	Go to Free Selection, save parameter and go back	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		
16	Click Proposal and tick mark start immediately	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		
17	Click Payment Run	<p>&gt; If Successful: Process Finished.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		This automates the payment and reporting

**Observation:**

- Checking the vendor's bank details and separating the payment options

- Distinguishing high-value vendor payments
- Establish priority logic
- RPA running schedule needed throughout the holidays.
- Develop the UI and make operations user-friendly.

#### 4. Daily Fund Transfers:

Table 4: UAT for Daily Fund Transfers

SL	Task	Expected outcome	Result		Remarks
			Pass	Fail	
01	Check daily payment schedule (for vendors, LCs, etc.)	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		Vendor schedule needs to be check carefully
02	Check loan payment schedule with interests	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		
03	Check the balance by logging into the bank's websites	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful:</p>	✓		

		The error message will be stored in the log records.			
04	Determine the fund requirements for each bank based on scheduled vendor, LC, and loan payments	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		Logic set up needed
05	Prepare daily bank wise DRAFT fund transfer report	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		Need improvement
06	Fund manager will review, modify (if required) and release	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		Need improvement
07	System will make accounting entry in SAP	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		

08	Prepare BEFTN/RTGS instruction (CSV file) as per template	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		Need improvement
09	Log into the specified banking platform and upload the file	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records</p>	✓		Need improvement.
10	File sent to the approver (bank signatory)	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records</p>	✓		
11	Automatic e-mail reminder sent to the approver to ensure timely release	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records</p>	✓		Email address set up required
12	Fund transfer instruction will be available by 12:00 p.m.	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records</p>	✓		

**Observation:**

- Once the RPA portion was finished, the Fund Manager was contacted. The fund manager will examine and, if necessary, provide input.
- Review bank balance to determine the funding needs plus a safety margin.
- Running strategy for RPA over holidays

**5. Daily Fund Pooling:**

*Table 5: UAT for Daily Fund Pooling*

SL	Task	Expected outcome	Result		Remarks
			Pass	Fail	
01	Get the closing cash amounts of all collection accounts at 4:00 p.m. from bank websites	> If Successful: Continue to the next step. > If unsuccessful: The error message will be stored in the log records.	✓		
02	Get closing cash balances of all collection accounts at 4:00pm from downloaded statements in workflow	> If Successful: Continue to the next step. > If unsuccessful: The error message will be stored in the log records.	✓		Issue in banks with Captcha/OTP
03	Determine the pooling amount for each bank and maintain the required minimum balances.	> If Successful: Continue to the next step. > If unsuccessful:	✓		

		The error message will be stored in the log records.			
04	Prepare daily bank wise DRAFT pooling reports	> If Successful: Continue to the next step. > If unsuccessful: The error message will be stored in the log records.	✓		
05	Upload the completed reports to the server for Fund Manager review	> If Successful: Continue to the next step. > If unsuccessful: The error message will be stored in the log records.	✓		Email address set up required
MANUAL INTERVENTION					
06	System will make accounting entry in SAP	> If Successful: Continue to the next step. > If unsuccessful: The error message will be stored in the log records.	✓		
07	Prepare the upload file (xls) with bank wise pooling amount and SAP document number from previous step	> If Successful: Continue to the next step. > If unsuccessful: The error message will be stored in the log records.	✓		

08	Log into the designated banking platform and upload the file	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		
09	File sent to the approver (bank signatory) by logging into the specified banking platform	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		
10	Automatic e-mail reminder to the approver for on-time release	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		Email address set up required
11	Fund pooling instruction released by 5:30pm	<p>&gt; If Successful: Continue to the next step.</p> <p>&gt; If unsuccessful: The error message will be stored in the log records.</p>	✓		

**Observation:**

- A new bank account must be mentioned
- RPA training schedule during holidays
- Keep an error log current

- User-friendly operation and interface development

### **3.3.3 Challenges & possible solutions of the project:**

Despite the continuous developments in the backend, as mentioned in the observation in brief, since the project is ongoing, there are still some issues with the automated activities, especially in Daily Fund Position and Monthly Fund Forecast. Below are the issues and their possible solutions advised in the meetings with the IT team.

#### **➤ Daily Fund Position (DFP) issues:**

##### **1. Everyday 22 bank accounts of 12 Banks statement need to keep in**

##### **Workflow server which have log in problem (OTP/Password/Captcha):**

- Generate and upload bank statement manually before 10:30 AM
- Time Consuming
- Skipping holiday and off day
- Double work

Possible solution:

- ✓ Download statements with OTP issue manually for the time being and Email them to the server directly
- ✓ Fix API connectivity issue

##### **2. Everyday RPA missed 3 to 4 banks due to log in or other IT problem**

- Identify which bank missed
- Input manually
- Double work

Possible solution: No possible solution yet.



### 3. API Connectivity:

- Banks do not provide enough time for API connectivity

Possible solution:

- ✓ Contact the banks for smoother API Connectivity

### 4. Implementing new changes:

- Frequent changes in Bank's web portal & statement designs
- Updating the RPA requires 1 to 2 weeks

Possible solution:

- Fix lags for quicker RPA upgrade in response to the changes

### 5. Developing proper logic:

- Difficult to establish logic/keyword since they change frequently
- Overlap of words

Possible solution: No possible solution yet.

### ➤ Monthly Fund Forecast (MFF) issues:

From my own experience of updating the Monthly Fund Forecast, some in detail issues in the fund management section of the workflow are shown below.

- Destination: Create New case > fund management (monthly forecast) > LTL
  - **LTL Table & LTL repayment schedule table:** the Statuses cannot be changed

**LTL**

USD Rate: 103.21      Status: Open

Add More Rows ++

Facility Provider	Currency Type	Drawdown Date	Drawdown Amount(USD)	Rate(%)	Status
USD 99m IFC facility	USD	01/01/2016	99,000,000	4.11	Open
USD 95m IFC facility	USD	01/12/2020	95,000,000	7.35	Open
BDT 4000m DBBL	BDT	19/06/2022	40,000,000	6.00	Open
<b>Total</b>			<b>234,000,000.00</b>	<b>5.82</b>	

Figure 8: LTL table issue 1

Long Term Loan(LTL) Repayment Schedule

Select Facility Provider

USD 99m IFC facility

Add More Rows ++

Installment No.	Balance after Principle Payment(USD)	Balance after Principle Payment(BDT)	Proposed Interest Amount(USD)	Status	Action
1st	39,623,308.00	3,395,717,495.60	1,330,418.76	Close	
2nd	29,723,308.00	2,547,287,495.60	520,520	Close	
3rd	19,823,308.00	1,698,857,495.60	264,659.18	Close	
4th	9,923,308.00	850,427,495.60	235,235	Close	
5th	23,308.00	1,997,495.60	155,097.22	Close	
<b>Total</b>	<b>99,116,540.00</b>	<b>8,494,287,478.00</b>	<b>501186.03</b>		

Figure 9: LTL table issue 2

- **LTL repayment schedule:** The total amount after paying all the principal amount should become 0 in this column

Long Term Loan(LTL) Repayment Schedule

Select Facility Provider  
 USD 99m IFC facility

Add More Rows ++

Installment No.	USD Rate	Balance after Principle Payment(USD)	Balance after Principle Payment(BDT)	Proposed Interest Amount(USD)	Status
1st	85.7000	39,623,308.00	3,395,717,495.60	1,330,418.76	Close
2nd	85.7000	29,723,308.00	2,547,287,495.60	520,520	Close
3rd	85.8500	19,823,308.00	1,698,857,495.60	264,659.18	Close
4th	86.0500	9,923,308.00	850,427,495.60	235,235	Close
5th	105.0	23,308.00	1,997,495.60	155,097.22	Close
<b>Total</b>		99,116,540.00	8,494,287,478.00	501186.03	

Figure 10: LTL repayment table issue 1

- **LTL repayment schedule:** after changing the rate of 95mm facility in LTL table, it automatically does not change in the 2<sup>nd</sup> table

https://workflow.robi.com.bd/sysrobiworkflow/en/robiux/init/open?id=30251064063c6695e5c0780039859704&index=1&action=todo

Facility Provider	Drawdown Date	Amount(USD)	Rate(%)	Status	Amount(BDT)
USD 99m IFC facility	01/01/2016	99,000,000	4.11	Open	8,484,300,000.00
USD 95m IFC facility			7.35	Open	8,141,500,000.00
BDT 4000m DBBL	19/06/2022	40,000,000	6.00	Open	4,042,000,000.00
<b>Total</b>		234,000,000.00	5.82		20,667,800,000.00

Submit

Long Term Loan(LTL) Repayment Schedule

Select Facility Provider  
 USD 95m IFC facility

Add More Rows ++

Installment No.	Balance after Principle Payment(USD)	Balance after Principle Payment(BDT)	Proposed Interest Amount(USD)	Status	Action
1st	85,500,000.00	8,678,250,000.00	4.111	Open	
2nd	76,000,000.00	7,714,000,000.00	4.111	Open	

Figure 11: LTL repayment table issue 2

- Destination: Create New case > fund management (monthly forecast) > Vendor SAP
  - **Vendor SAP table:** February Total shows NaN

Type	1-February-2023	2-February-2023	3-February-2023	4-February-2023	5-February-2023
zmtrackn	NaN	NaN	NaN	NaN	NaN
Summit Communicatic	0.00	0.00	0.00	0.00	845,714.00
Fiber @ Home	0.00	0.00	0.00	0.00	0.00
Total Amount	NaN	NaN	NaN	NaN	NaN

*Figure 12: Vendor SAP table issue*

- Destination: Create New case > fund management (monthly forecast) > LC payment
  - **LC payment tab and others:** Sample template download format is invalid and redirects to another link
- Destination: Create New case > fund management (monthly forecast)
  - **Redirecting dialog box grammatical error:** When an action, for example, ‘Fund Management’ is clicked, a dialogue box appears with the dialog - “Are you sure you?”

**Solution:** Upon the meeting with the respective IT team personnels, these particular issues of Monthly Fund Forecast will be solved by the IT team from the backend.

### **3.4 Summary & Conclusion**

Robi Axiata Limited's Treasury department's fund management automation project is a part of the RPA initiative under LEAP. Under this project, the Treasury is in process to automate its activities such as cash payment, forecast monthly budget, measuring and spending company funds etc. The use cases result for each of the activity demonstrates the ultimate success of the project. However, there are still some bugs and lags to fix, to make the workflow portal fully operational for automated activities. Many of the tasks still requires manual help, which are being worked on by the respective IT departments of Robi and RedDot Digital.

### **3.5 Recommendations**

As a user of the workflow, my recommendation for the workflow automation development would be-

- Organize the activities of the workflow by main activities and sub-activities, which will help to find the accurate task in short time.
- Allow more than one user to use the same account in the workflow, by maintaining security measures. It can allow the interns to incorporate updates on behalf of the supervisor.
- Hold weekly meetings with the IT team regarding the issues, possible solutions and updates of previously discussed issues.
- Lessen the steps of doing a task. For example, after clicking an activity, there is no need of showing a dialog box again to confirm. Similarly, after completing a task, letting the user start another sub task immediately (without going back to the main page and come back) will save time.

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## Appendix

Profitability ratio data:

	2022	2021	2020	2019	2018	2017
Profit After tax/ Net profit	1,827,199	1,803,352	1,553,315	169,089	2,147,341	-104,584
Total Shareholder's Equity	67,126,541	66,207,563	65,956,131	59,588,895	60,591,633	58,670,822
Total no. of shares outstanding	523,792,894	5,237,932,895	5,237,932,895	4,714,140,001	4,714,140,001	4,714,140,001
Total Assets	197,274,601	197,274,601	199,464,858	171,968,640	144,614,084	142,101,150
Gross Profit	32,236,698	27,433,541	28,284,295	27,838,116	19,919,280	15,426,038
Sales	85,859,740	81,424,640	75,642,696	74,811,748	67,982,295	68,255,508
COGS	53,623,042	53,991,099	47,358,401	46,973,632	48,063,015	52,829,470

ROA & ROE data:

	2022	2021	2020	2019	2018	2017
Net Income	1,827,199	1,803,352	1,553,315	169,089	2,147,341	-104,584
Total Assets	197,293,018	207,412,167	199,464,858	171,968,640	144,614,084	142,101,150
Average Total Assets	202,352,593	203,438,513	185,716,749	158,291,362	143,357,617	
Total Shareholder's Equity	67,126,541	66,207,563	65,956,131	59,588,895	60,591,633	58,670,822
Average Shareholder's Equity	66,667,052	66,081,847	62,772,513	60,090,264	59,631,228	

Current Ratio data:

	2022	2021	2020	2019	2018
Current assets	14,270,357	15,635,500	19,536,739	15,629,944	12,436,746
Current liabilities	69,498,669	76,302,663	73,800,355	69,972,952	68,326,279

Debt ratio data:

	2022	2021	2020	2019	2018
Total liabilities	130,148,060	141,386,803	133,508,727	112,379,745	84,022,451
Total Assets	197,293,018	207,412,167	199,464,858	171,968,640	144,614,084



Asset Management ratios data:

	2022	2021	2020	2019	2018	2017
Sales	85,859,740	81,424,640	75,642,696	74,811,748	67,982,295	68,255,508
Total Assets	197,293,018	207,412,167	199,464,858	171,968,640	144,614,084	142,101,150
Average Total Assets	202,352,593	203,438,513	185,716,749	158,291,362	143,357,617	
Fixed asset (property, plant, and equipment)	108,852,659	109,450,354	107,044,991	100,540,016	99,182,172	91,128,128
Average fixed asset (pro	109,151,507	108,247,673	103,792,504	99,861,094	95,155,150	