Report On Use of Predictive Analytics in Business

By

Fabiha Raihana ID-18304151

An Internship Report Submitted to BRAC
Business School in partial fulfillment of the
requirements for the degree of

Bachelors of Business Administration

[BRAC Business School]

BRAC University

[April, 2022]

© 2022. BRAC University All rights reserved.

Declaration

Hereby it is declared that

1. I/we created the internship report as part of our degree program

at BRAC University.

2. Except where properly cited by complete and precise referencing,

the report does not contain any previously published or written by a

third party material.

3. No material that has been approved or submitted for another

degree or diploma at a university or other institution is included in

the report.

4. I have given credit to all major sources of assistance.

Student's Full Name & Signature:

Fabiha Raihana 18304151

Supervisor's Full Name & Signature:

Mr. Shihab Kabir Shuvo Lecturer, BRAC Business School BRAC University Letter of Transmittal

Mr. Shihab Kabir Shuvo

Lecturer.

BRAC Business School

BRAC University

66 Mohakhali, Dhaka-1212

Subject: <u>Submission of Internship Report for course</u>

BUS400

Dear Sir,

With the utmost respect, I am writing to notify you that I have finished my

internship report on Customer Analytics in Enterprise Business Solutions under

Robi Axiata Ltd for the BUS400 course under your direct supervision. I did my

best to prepare this report based on my personal learning and findings, as

well as my experiences.

My internship program lasted three months, which I completed. During my

internship, I gained valuable experience and improved my skills and

knowledge. It has improved my networking abilities, which will be very

beneficial to my career growth in a positive direction. Working in this

organization allows me to improve my multitasking skills without sacrificing

the quality of work. All of my internship learnings and knowledge are

documented in my report in accordance with the rules and regulations of

BRAC University. This is my humble request that you accept my internship

report.

Sincerely yours,

Fabiha Raihana

18304151

BRAC Business

School BRAC

University

Date: 17th May,2022

Non-Disclosure Agreement

I do hereby assure, not to disclose any information about Robi transaction, business affairs or policy matters that I will come to know during my internship here with this organization.

Name of the Intern: Fabiha Raihana

Date of Joining: 17.01.2022

Division: Enterprise Business Solutions

Signature:

Fabiha

Raihana

Acknowledgment

To begin, I'd want to thank Almighty Allah for bestowing upon me the capacity to do so as well as the chance to work with the 2nd largest mobile network operator in Bangladesh. I would like to express my heartfelt appreciation to my academic supervisor, Mr. Shihab Kabir Shuvo Sir, Lecturer, BRAC Business School, BRAC University, who has assisted me in successfully completing this report. I owe him a great debt of gratitude.

I'd want to thank everyone at Robi Axiata Ltd. who worked on this study. I'd like to thank the Ex Vice-President, Mr. Faisal Ahmed, and the Project Manager, Mrs. Fahmiza Ramina Hossain in particular, for assisting me with their insights into the issue, supporting me, and devoting time to this project in addition to my usual employment. I'd also want to thank Mrs. Nahid Islam Bithi, the HR Professional, for her continued assistance and sharing the insights in these long 3 months.

Furthermore, I'd like to thank all of my colleagues, the Solution Team, for their assistance in creating this report and making my journey here easier. I would like to offer my appreciation to everyone who was engaged in the creation of this report, both directly and indirectly, and I wholeheartedly apologize to those whose names I have not mentioned; their participation is greatly appreciated. Last but not least, I would like to convey my thanks to BRAC University for including an internship program as part of the BBA degree program, which allows me to gain real work experience in a business before beginning my professional career.

Executive Summary

The practice of gathering and evaluating behavioral customer data from a variety of channels, devices, and interactions is known as predictive analytics. These analytics provide the knowledge required to create strategies, goods, and services that your clients will be interested in using. The company may need to employ strategies like data gathering and segmentation, modeling, data visualization, and more for all kinds of consumer analytics. Any business should put its customers first. Businesses have implemented customer relationship management systems to enhance procedures involving client engagement. These systems gather a lot of consumer data, which is significant information that can help a company improve customer interactions and offerings. Customer analytics typically concentrate on recording what has occurred. However, it's critical to foresee what customers will want and how they will respond in order to be proactive and actually create a company's future. Any firm must have a thorough understanding of its customers as well as how its operations have fared in the past, present, and future. My assigned division Enterprise Business Solutions is continuously focusing on improving their customer relationship more utilizing technology. This study involves how they can do it more effectively using predictive customer analytics.

Keywords: Machine Learning; Predictive Analytics; CRMS; ICT

Solutions; Techno- commercial; Data Analysis.

Table of Contents

Declaration2
Letter of Transmittal3
Non-Disclosure Agreement4
Acknowledgement5
Executive Summary6
Table of Contents7
Chapter 1 [Overview of Internship]8
1.1 [Student Information]8
1.2 [Internship Information]8
1.3 [Job Scope-Job Responsibilities]9
1.4 [Internship Outcomes]9
Chapter 2 [Organization Details]12
2.1 An Overview of Bangladesh Telecommunication Industry12
2.2 Introduction- Robi Axiata Limited16
2.3 Parent Companies of Robi Axiata Limited18
2.4 Management Profile of Robi Axiata Limited20
2.5 Assigned Division Details25
Chapter 3 [Project Part]35
3.1 Introduction35
3.2 Background/Literature Review36
3.3 Methodology37
3.4 Findings/Analysis38
Recommendations for Future43
Conclusion44
References46

Chapter 1: Overview of Internship

1.1 Student Information

Name: Fabiha

Raihana

ID: 18304151

Program: BRAC Business School

Major/Specialization: Computer Information

Management

Minor: E-commerce

1.2 Internship Information

Beginning Date: 17th January 2022

Ending Date: 25th April 2022

Company Name: Robi Axiata Ltd.

Department/Division: Enterprise Business Solutions, Enterprise Business.

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

1212. Email: 123@robi.com.bd

Internship Company Supervisor's Information Name- Mr. Faisal

Ahmed Position-Ex Vice President, Enterprise Business Solutions.

1.3 Job Scope - Job Responsibilities

- Conducting research on customer's needs in ICT Solution Business.
- Focus Group Sessions with KAMs (Key Account Managers),
 customer and identify the enterprise customer's solution needs.
- Mapping the customer needs with existing solutions or partners including RedDot & amp and beyond.
- Assist in the ongoing innovation of analysis methods in order to affect company direction.
- Product Pitch Presentation Preparation
- Digital Marketing framework for SaaS product in SMEs
- Data Analysis
- Analyzing revenue target
- Generating revenue from digital marketing

1.4 Internship Outcomes

1.4.1 Student's contribution to the company

During my internship with Robi Axiata Ltd, I had been assigned with a variety of tasks. With my expertise and talents, I have made several contributions. I was mainly assigned with making pitch deck for enterprise businesses and mapping the customer needs after a thorough discussion with the KAMs. To do that I had to go through the details of their new business ideas or existing products/service details and act thereby. Moreover, I also analyzed their pipeline and revenue tracker and helped them set a new target by filling the gap. I was also actively involved with digital marketing for the SaaS products of the division. During my tenure here,

I was also able to contribute to a few more modest initiatives.

1.4.2 Benefits to the student

Robi Axiata Ltd. is a platform where an individual may learn and witness the process of how to work professionally departmentally, as well as the collaboration with each department to achieve organizational goals. Working at Robi has taught me how to use digital marketing effectively to grasp the market widely. I also learnt how to map the customer's need and what ICT solutions they require or to offer them after analyzing their needs. It also taught me how to bring new solutions to the market keeping the customer's need in mind. Last but not the least, it has widely influenced on improving my pitch deck more and brought more presentability to it. Last but not the least, this internship experience also polished my data analysis skill.

1.4.3 Problems/Difficulties (faced during the internship period)

Working with Robi Axiata Ltd was a fantastic learning experience for me. However, I had to deal with several setbacks as well. I've found some company procedures to be quite difficult to record. As a result, it was not always simple to manage those analyses on my own. Definitely, with the assistance of other team members, I was able to resolve the issue quickly.

The most difficult situation was the internship's held virtually for some time being. It was extremely hard to keep up as I was not getting any access to any work or information widely. But the situation was improved after a certain time and I got to attend office physically for a month. But if I compare Robi's internship with both GP's and Banglalink's, I would say Robi should really change some of the procedures. GP does not pay the interns but

they ensure free transportation and food to the interns. On the other hand, Banglalink both pays high to the interns and gives them free food packages throughout the duration. However, Robiprovides very low facility to the interns and their payment is also very low which can demotivate the interns very easily.

Another problem I guess we all commonly face during internship is limitation in using company information. There is obviously a matter of confidentiality but it also impacted our report writing to some extent as we do not have the full liberty to run our research using the company information.

1.4.4 Recommendations (to the company on future internships)

First and foremost, I believe Robi Axiata LTD should place a greater emphasis on keeping their revenue in track more efficiently in order to meet the quarter wise targets. Also, it should come up with something more unique solutions to be more stable in the market and keep up with its fellow competitors. This manner, people will be able to perceive the product for what it is, without the influence of another organization clouding their judgment.

Finally, I would advise Robi to focus more on its e-business strategy and make its employees more techno-commercial. Having techno-commercial mindset people in ICT business, makes every process much easier. An organization's e-business strategy should not only support but also impact its corporate strategy. In terms of marketing strategy, I would recommend focusing on boosting the company's social media presence in order to raise brand recognition more.

Chapter 2

2.1 An Overview of Bangladesh Telecommunication Industry

Bangladesh is a quickly creating market-based economy and, in spite of the multitude of political and financial obstacles, this nation actually draws in an enormous pool of possible financial backers. Throughout the long term, Bangladesh has gone through fast primary changes and further developed its infrastructural advancement colossally. Bangladesh is the ninth biggest versatile market on the planet as far as novel supporters, which represents 51% of the nation's populace. The low duty rates and the decreased obstructions to passage and exit in this nation has prompted many all around the world laid out financial backers being drawn to this little however quickly agricultural nation. In 2010, Bangladesh's per capita pay was laid out as US\$1700 (changed as buying power equality) and its GDP development rate was settled at 6.3% (Before the political struggles of mid 2013). Bangladesh is recorded in the Next-Eleven nations by Goldman Sachs and an individual from the D-8 nations. These elements have added to the way that numerous unfamiliar financial backers expect to put resources into the RMG area, the foundation area and the Telecommunications area of Bangladesh. The Telecommunications area of Bangladesh is guickly forming into a market center loaded with potential for nearby and unfamiliar financial backers. Not at all like most different nations, this area is still new and quickly developing and along these lines has not arrived at development level yet. The media communications area has seen development in portable infiltration that has surpassed all assumptions by having over 65.1 million supporters in September 2010 contrasted with just 4 million out of 2004. While at first most organization administrators zeroed in on the financially clamoring urban communities

like Dhaka and Chittagong, as the market in these nations extended and developed, many organization administrators are zeroing in on different locale, tapping new domains, distant and far off regions for portable supporters. This guick development in versatile communication significantly affects the economy as far as total venture, FDI and efficiency levels, also upgrades in correspondence, systems administration and social union. Foreign financial backer certainty has additionally expanded because of the presentation of IPO by Grameenphone, the biggest market investor in the telecom business and the business has taken on a lot more prominent importance in Bangladesh's capital business sectors advancement thus. The new option of increment potential for Value Added Services (VAS) and 4G contributions has made a further scramble to enter the telecom center of Bangladesh. The development in the telecommunications industry can fundamentally be ascribed to variables like the liberation of the telecom business, absence of a decent legitimate foundation in the business and very high contest between the significant market heads of this industry. Decreased obstructions to passage because of joint effort with nearby and unfamiliar financial backers have additionally prompted worldwide organizations entering the market and making enormous degrees of Foreign Direct Investment (FDI) by telecom goliaths like Telenor, Axiata-Berhard, Orascom, Singtel and, most as of late, the entry of Bharti media communications as Airtel. Bangladesh's immense potential in WiMAX and submarine link, albeit generally created and developing in many nations, is still new and arising in Bangladesh and numerous unfamiliar financial backers are entering this market to make the most of this asset. At present, there are four telecom organizations in Bangladesh. These are:

- **1.** Grameenphone/Telenor Bangladesh Ltd Branded as Grameenphone.
- 2. Axiata Bangladesh Ltd. Branded as Robi Axiata Limited.

- **3.** Telecom Ventures Ltd. Branded as Banglalink Digital Communication Limited.
- **4.** Teletalk Bangladesh Ltd. Branded as Teletalk.

The two key assistance contributions of the business are voice call administrations and portable web. The previous rules the income of organizations as just 1 out of5 Bangladeshis buys into versatile internet providers. The quantity of novel endorsers is developing at a CAGR of 3%, however versatile internet subscribers are developing at 10%, demonstrating an enormous potential in the last option for development. The expanded accessibility of minimal expense cell phones and developing youth populaces are the significant drivers pushing the business forward. The improvement of internet subordinate administrations, like web-based business, e-agribusiness, and e-training, ridesharing, and other on-request benefits are likewise adding to the need of development in the business.



Figure 1- Bangladesh Number of Mobile Subscribers (2015-2019)/Source: BTRC

Regarding revenue, inclusion, and supporter base, **Grameenphone Ltd.** is Bangladesh's largest multifaceted telecom administrator. The company was incorporated as a private restricted company on October 10th, 1996. On June

25, 2007, Grameenphone fully converted to a public restricted organization. The company registered its stock and started trading on November 16, 2009, at the Dhaka and Chittagong Stock Exchanges. The two support shareholders who make up the majority of the shareholding structure are Telenor Mobile Communications AS (55.80%) and Grameen Telecom (34.20%). The general public and other institutions make up the remaining 10% of the stock. The organization works a digital versatile telecommunications network in view of theGSM standard in the 900 MHz, 1800 MHz and 2100 MHz recurrence groups, under permit allowed by the Bangladesh Telecommunication Regulatory Commission (BTRC). As of December 2017, the organization provided 2G administrations to over 92% of Bangladesh's population, and quick 3G organization to over the great majority. On February 19, 2018, the company received a license for 4G/LTE cell phone administrations. Up to this time, Grameenphone Ltd. has made contributions totaling more than BDT 313 billion to the foundation of the organization. With nearly BDT 585 billion in direct and indirect charges made to the Government Exchequer its inception, it is arguably the largest citizen in the country.

Axiata Group Berhad of Malaysia holds the controlling interest of 61.82% in **Robi Axiata Limited**, followed by Bharti Airtel of India with 28.18% and the general public with the remaining 10%. On December 24, 2020, the organization held the largest-ever initial public offering (IPO) at the nation's twin financial markets in Dhaka and Chattogram. The company started operating in 1997 under the brand name "Aktel" as Telekom Malaysia International (Bangladesh). It was renamed as "Robi" in 2010, and the company's name was changed to Robi Axiata Limited. With 53.7 million

members, of which around 23.8 million are 4G users, Robi is the second-largest portable organization administrator in Bangladesh as of the end of 2021. The company boasts having the highest rate information customers (73.7%) in the industry. After merging with Airtel Bangladesh, the combined company, Robi Axiata Limited (Robi), started conducting operations on November 16, 2016. This is currently the biggest consolidation the country has ever seen and the first consolidation in Bangladesh's diverse telecom sector. It is the primary agency responsible for providing 4.5G assistance in each of the 64 regions of the nation.

Banglalink Digital Communications Limited, which was established in February 2005 and has amassed more than 33.69 million members over the course of a decade, was the impetus behind making mobile phone service in Bangladesh a viable option for customers. Banglalink's technique, which was based on the simple objective of "Bringing mobile telecommunications to the masses," was the driving force behind the company's development. With "client experience" as Banglalink's primary focus, digitalization has become necessary to update how clients interact, communicate, and operate (internally and externally). well as to provide services that traditional/offline to advanced/online. By providing things that meet their needs, Banglalink hopes to enable its customers to make the most of the computerized future and create a true advanced biological system. Banglalink is likewise seen to have contributed vigorously and added staff significantly to zero in on its promoting efforts. Among the three Banglalink has zeroed in the most seriously on its showcasing and limited time highlights, for example, the 'Banglalink Desh' trademark and zeroed in on a forceful development crusade. It is a wholly owned entity of Telecom Ventures Ltd., a wholly owned subsidiary of Global Telecom Holding. After

a merger between VEON Ltd. and Wind Telecom S.p.A. in April 2011, VEON now owns 51.9% of Global Telecom Holding. VEON is a network provider with global records on NASDAQ and Euronext Amsterdam. It aspires to lead the individual web insurgency for its 235 million+ current customers and a large number of additional ones in the years to come. A public limited company registered with the Registrar of Joint Stock Companies of Bangladesh is **Teletalk Bangladesh Limited**. The Government of the People's Republic of Bangladesh asserts absolute offers. The primary state-run GSM and 3G cell phone administrator in Bangladesh, known by the brand name "Teletalk," started operations in 2004. With 4.211 million subscribers as of January 31, 2016, Teletalk is the fourth-largest telco in Bangladesh. The 2100 MHz Band of Teletalk offers a 10 MHz 3G range. For its 2G and 3G customers, Teletalk offers both postpaid and paid in advance plans. It offers "Agami," "Bornomala," and "Youth" prepaid plans. Additionally, the administrator provides 3G broadband devices such the Flash MODEM, Flash Router, and MiFi Router.

2.2 Introduction- Robi Axiata Ltd.

Robi Axiata Limited is a joint endeavor between Axiata Group Berhard of Malaysia which is one of the main broadcast communications organizations in Asia and NTT Docomo Inc, the overwhelming cell phone administrator of Japan. Being the primary organization to send off 4.5G help in every one of the 64 regions of the country, this milestone achievement was accomplished on the principal day of the business sendoff of the assistance by Robi on 20 February 2018. Toward the finish of 2021, Robi guaranteed 98.1% populace inclusion of its 4.5G organization with 14,810 destinations. The organization has presented numerous first of its sort computerized administrations in the nation and has been the trailblazer for making ready in taking portable monetary

administrations to the underserved networks in the rustic and semimetropolitan regions. It is the main versatile administrator in Bangladesh to have effectively directed the preliminary attempt of 5G and the principal administrator to have sent off Voice over LTE innovation on its 4.5G organization. Being profoundly associated with the financial turn of events, Robi has made the biggest web-based school, Robi-10 Minute School, set up safe drinking water offices in 10 significant railroad stations and cooperated with Aspire to Information (a2i) for setting up the National Call Center, 333, which plays had a fundamental effect in combatting the crown pandemic. Robi has in like manner been the trailblazer in the business in uncovering phenomenal high level game plans. The country's broad Islamic lifestyle application, Noor, high level redirection stage, Binge, sports entertainment application, My Sports, convenient based clinical service mechanized organization, My Health, clients' high level self-organization window, My Robi application, complete general media progressed music stage, Splash, are several the models. With the assurance of making new experiences in the presences of its clients with creative electronic things and organizations, Robi emerged with another brand demand in January 2020. Its accentuation on advancement has provoked the creation of composed work culture in the affiliation that twists with joint exertion. Accordingly, Robi presently participates in a praiseworthy lead in the business in sending Data assessment, Artificial Intelligence, IoT, Cloud plan and different other electronic headways to work on each piece of its business.

Vision:

The vision of Robi is "To be a leader service provider in Telecommunication sector in Bangladesh."

Mission:

"We are there for you, where you want and in the way you want, in order to help you develop,

Grow and make the most of your lives through our services."

Robi's mission is to empower their customer. They consider themselves number one when the customers say it. They are always there for their customer.

2.3 PARENT COMPANIES OF ROBI AXIATA LIMITED

a)AXIATA BERHAR-

Axiata is an arising telecommunications organization in Asia and one of the main organizations in Asia. Established in Malaysia, Axiata has worked in numerous Asian nations like Cambodia, Malaysia, Sri Lanka, and has entered Bangladesh effectively. The Malaysian developed organization has key and non-vital possessions in India, Singapore, Thailand, Iran and Pakistan. As of now, Axiata Berhard and including its auxiliaries and partners, have around 120 million endorsers in Asia. Because of its enormous market inclusion and profit return, it is likewise recorded in the Malaysian Stock Exchange.

Axiata Berhard has auxiliary possessions in:

- i) Celcom (100%)-Malaysia
- ii) XL (66.55%)-Indonesia

- iii) Dialog (84.97%)-Sri Lanka
- iv) Robi (70%)-Bangladesh
- v) Smart Mobile (100%)-Cambodia

Axiata

Berhard also has minority stakes in

- i) Idea Cellular (19.96%)-India
- ii) M1(29.12%)-Singapore

b) NTT DOCOMO

Docomo is the biggest cell phone administrator in Japan and a main portable correspondences network universally. Docomo is veered off from Nippon Telegraph Comparison of Previous and Current CAPEX Distribution Process 20 and Telephone on August 1991 to assume control over the portable cell activities. NTT controls 33.71% portions of Docomo and has a client base of in excess of 53 million endorsers, which is the greater part of the cell market of Japan. NTT gives an assortment of portable media administrations, for example, the I-mode which gives email and web admittance to 50 million endorsers and on 2001, Docomo sent off as the world's firs 3G versatile help in view of W-CDMA.In expansion to entirely claimed auxiliaries in Europe and North America, the organization is likewise growing its essential coalitions through associations created with cell phone administrators and broadcast communications administrations in Asia-Pacific and South East Asia.

Divisions of Robi Axiata Limited:

- o People and Corporate
- o Human Resources
- o Market Operation
- Digital Service
- o Finance

- o Technology
- o Enterprise Business
- o Internal Audit Division
- o Corporate Strategy

2.4 Management Profile of Robi Axiata

Robi screens a simple level of leadership that is immaculately spotless to each and every office. All single personnel perform delivering to the counsel through the top control.

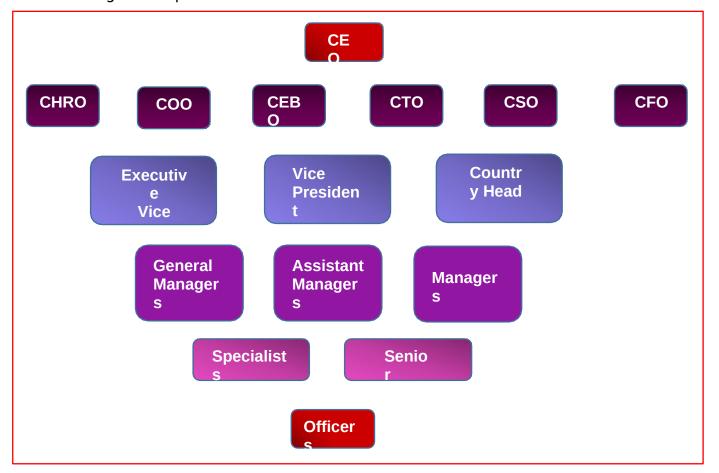


Figure 2: Hierarchy of Management

The administration order of Robi Axiata Limited is a tall construction. The control is driven via the Managing Director and Chief Executive Officer who's the essential provincially delegated CEO of any global telecom association in Bangladesh at this point. Under the CEO and Chief working Officer (COO), Chief Technological Officer (CTO), Chief Enterprise Business Officer (CEBO),

Chief Corporate and PeopleOfficer (CCPO) and Chief Financial Officer (CFO). Each division has a VP and chief VP. GM and LM report to them straightforwardly. The manager and assistant manager report to their line chief. Under them there are specialists and executive bodies. Junior official and assistants are entry level employee.

2.4.1 PRINCIPLES:

"We are there for you, where you need and in the manner in which you need, to assist you with creating, develop and make the most of your lives through our administrations."- Robi Axiata Limited.

Robi Axiata observes the going with guidelines considering their clients' and laborers' physical and significant necessities.

a) Emotional-

In the workplace, Robi emphasizes enthusiastic participants, creativity, respect, and responsiveness.

Responsiveness in the work environment was particularly underlined during the corporate remaking of Robi in 2010, when two new office concepts were presented the open office atmosphere and the paperless workplace. Making a paperless office culture was of the utmost importance to Robi to uphold the regulations of its widely dispersed parent organizations because it is one of the key associations in the incredibly serious media correspondences sector of Bangladesh. The new office was constructed; it was furnished with a remote setting and no desk phones. This decision was made in accordance with Robi's important obligations to its CSR initiatives. Robi is a typically perceptive association, therefore they were essential for the office of Robi. Other than cost decline, it progresses the eco-obliging methodologies of the association.

b) Functional- Robi follows the four helpful attributes;

- Essential
- Moral
- Straightforward
- Ownership

In addition, Robi understands these association perspectives while dealing with their clients and clients

- a) Being cognizant towards everyone.
- b) Being solid by action. Being vigorous and creative in all that they do.
- c) Keeping things direct in their work execution and cycle.
- d) Being moral and direct.
- e) Demonstrating individual and total belonging.
- f) Practicing an open culture in correspondence and collaboration.

2.4.2 Divisions & Departments

There are 9 key divisions within Robi Axiata Limited, and each has a few offices depending on the division's needs and hierarchical structure. A Chief Executive Officer/Managing Director oversees the association. Every division is run by CXOs, and every office is run by an EVP or VP, albeit occasionally one EVP is responsible for the liabilities of more than one office. Senior managers mediate disputes between employees and department heads. Managers are given clear tasks, plans, projects, and investigations to

complete. Officers and Specialists are section level personnel that carry out a variety of tasks assigned by chiefs or senior supervisors. Here is a summary of the many divisions.

Market Operation-

This division is responsible for getting month to month assigned bargains given by top organization. The division endeavors to encourage brand and market correspondence, arrangements of corporate and business things, upkeep of contact center as well as partake in creating assessing methodology of new things.

<u>Finance -</u>

Any business limits are centered on finance since they must make financial preparations. The Robi Axiata Limited finance section is in charge of providing support for various recommendations, business participation, and new product advancement. Accounting for money, creating laborer pay stubs, being aware of compliances, and other related tasks are all within the supervision of finance. The components of the Finance division are Corporate Finance, Financial Accounting and Management Reporting, Financial Compliance, Insurance and Process, Supply Chain Management, Revenue Assurance and Fraud Management, Planning, Business Partnering, Media Buying, Transformation Office, and Company Secretary.

Enterprise Business-

Enterprise Business deals with other corporate businesses. They are responsible to showcase the digital services, products/services of Robi Axiata Limited to the other businesses and close the deal.

Corporate Strategy -

Principal task of this division is to analyze month to month improvement, pay, KPIs as well as encourage new essential arrangements for Robi. The division is careful to expect progressive turn of events.

Corporate Regulatory Affairs and Legal-

This department, known as CRL, is in charge of all CSR practices support, event leader and sponsorship analysis, media relations monitoring, dealing with legitimate government issues, and other duties. Two of the division's most recognizable faces are merging.

Human Resources -

HR mostly works for selecting new staff, giving preparation to existing workers; circle pay to representatives' account, worker inspiration, as well as hierarchical turn of events. HR additionally assumes the liability of keeping up with great relations among every one of the workers.

<u>Technology</u> -

It is the division which gives IT sponsorship to all of the divisions and parts of Robi. Major endeavors of this division are upkeep of common IT action close by spreading out BTS, central association checking, advancement consistence, supporting specialists by giving fundamental hardware and programming, support contact center thus around. Controlling Robi site as well as intra-division and departmental destinations is moreover a critical task of development.

Administration-

It attempts to control the business office format, wellbeing and support, controlling in general worker the board, safety faculties and staff the executives and so forth. Moreover, keeping up with elective destinations for crisis departure is additionally a piece of managerial work.

Internal Audit-

Internal audit division of Robi attempts to guarantee worth of tasks, unwavering quality of monetary detailing, deciding and researching false exercises, defending resources as per the law and guidelines.

2.4.3 Assigned Division Details

My assigned division for the internship was Robi Enterprise Business Solutions.

Robi EBS characterizes and drives Solution Strategy and Roadmap that goes into any new arrangement like Cloud, IP, IoT, Analytic, and ICT arrangements, and so forth. The group is additionally liable for making an interpretation of arrangement technique into point-by-point prerequisites and advancement outline. It manages the venture clients to grasp their ICT and Digitization needs and deal the cost- effective solutions all together illuminate the client; and make an incentive for their business.

The team consists of 3 sub-teams which are-

- 1. Product Team
- **2.** Pre-sales Team
- 3. Project Delivery Team

Product Team is answerable for producing new arrangement idea/thought and improving component or update by breaking down current market pattern, industry center and new innovation. It likewise drives start to finish new arrangement configuration including stream and estimating by uniting sources of info and necessities from inward partners (e.g., KAM, DevOps, Sourcing and Finance) and external stakeholders (Partners). likewise express The is responsible to item group vision/methodology to partners and group and present arrangement idea and element to Axiata Business Unit and Other Axiata OpCos along with the Business group to accomplish join and support.

Pre-sales Team effectively source, assess and distinguish appropriate innovation and industry accomplices (counting top undertaking ICT players - Google, Microsoft) for the fruitful execution and organization of all arrangements connected with the portfolio. It is mindful to oversee Solution Life-cycle and drive income focuses for arrangements business of Robi Axiata Limited. Likewise, they plan quotes and specialized recommendations with the end goal that it meets client's prerequisite. The individuals assist the deals with joining during the specialized introductions too. The KAMs (Key Account Managers) chases open doors for the endeavor and afterward the pre-outreach group utilizes deals innovation and client experiences to fabricate profiles of ideal clients and their examples of conduct to recognize open doors that are probably going to close.

The Delivery Team establishes and documents the development process and it's directly involved with delivering projects. The find scope and prioritize activities based on business and customer impact. The team's responsibility also includes technical work by engineering team, operation readiness, payment process, financial settlement, customer service, legal / regulatory compliance, pricing finalization with Business team, digital marketing etc. Being the gatekeeper for new solution release to market or specific customer, with ownership of final go ahead after reviewing end to end readiness.

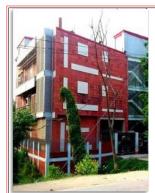
2.4.4 Products/Services

The solutions of Robi EBS are mostly digital products or services. The list of the products/services are given below followed by a short description-Robi Cloud-Robi Cloud flaunts the most elevated security principles, while

conveying an elite presentation worldwide standard help, while keeping your important information stored y in the country. It can make, have and

deal with any server configuration that you want through Virtual Server Hosting - giving you a versatile, dependable, secure and financially savvy server access with on-request limit.

- Highly reliable by ensuring redundancy in all aspects i.e network, computing, etc.
- Multiple users e.g., database server and ease of computing expansion
- High specification servers, fast disks, dedicated RAM, etc.
- Full root access, rebuild on command
- Cost-effective alternative for those who don't need a full dedicated server
- Regular backup of the system
- Ready infrastructure, hence very low Time-To-Market in comparison with physical deployment
- Secure network infrastructure
- 2. Robi Colocation- Robi Colocation gives you the choice to move the fundamental framework into our motivation assembled Data Center structure all situated in Bangladesh. Our Data Centers, licensed with ISO/IEC-27001:2013, with Tier-3 identical infrastructure with the most significant level of security will give you a steady IT solution one can rely on.



Vulta Data Centre Zone 7 Entire Room

Site Location: Kanchon Rd, Rupgonj, Narayaganj Approximate Commercial Space: 7,000 sq. ft.

Building type: Purpose built Data Center Data Centre Qualification: Tier-3 equivalent Building Earthquake Resilience: Up to 8.0 magnitude on Richter scale

Distance from Gulshan: 25km

- Floor Space/Rack Space
- Tier 3 Equivalent Infrastructure
- N+N Backup Architecture
- Tier 3 Equivalent Infrastructure
- 360º Protection
- 3. Mobile Business Connect- Robi's Mobile Business Connect or MBC for short, is a progressive call taking care of and directing arrangement. MBC offers organizations, huge and little, a solitary Robi number to meet their novel correspondence needs. Independent ventures can distribute one Robi number for getting all approaching calls from their current and planned clients. Chosen representatives of the organization can turn into the beneficiaries of the calls from the clients at whatever point they are allowed to reply. Likewise, large organizations can utilize the answer for have one Robi number inside the association for every single interior assistance and backing group. Each group can be set as a branch under an Interactive Voice Recording (IVR) tree. Don't bother saving or recalling various numbers to get the expected help from the organization.

Key Features-

- One Single Robi number for all approaching and active calls to clients
- One number answer for speak with all groups and workplaces the nation over
- Portability, accessibility and productivity of clients and representatives
- Chips away at bar, element and advanced mobile phones
- Self-administration entrance for setting up and dealing with the help as per the organization's requirements
- Savvy. No requirement for putting resources into new equipment with support guaranteed lasting through the year
- Effectively versatile. Add or eliminate call beneficiaries or divisions as indicated by your business necessities
 - **4.** Smart ERL- Robi Enterprise Resource Locator (ERL) is a location-based service to our business customers, that allows corporations to make field force activities faster and of better quality. It helps track employees using just a Robi Network.

- Clients can track their resources (human, goods, containers etc.) easily
- BTS based tracking solution
- No special device other than a mobile handset with Robi's connection is required
- Only one account required and can add the number
- Tracking interval from 3 minutes to 60 minutes.
- Tracking playback
- Assign task in a single click to all field force.
- History for two months.

5. Sales Force Automation-Robi SFA will permit you to catch Orders and deals information in the quickest, least demanding and productive way utilizing minimal expense cell phones and web advances and in this manner it will expand your field force execution and as well as association's general execution.

Key Features-

- Robi SFA will build the exhibition alongside decreasing the expense of paper, printing and information section administrator.
- It will give you constant quicker intuitive detailing by which you will actually want to know the general status of the orders, supplies and stock.
- You can take a gander at information in alternate point of view like Nationwide, Distributor wise, brand wise, Product wise, District wise, Thanawise, etc.
 - **6.** Smart Attendance Solution- Robi Attendance Solution permits you to screen participation from a distance and progressively from anyplace in the world. The devices are simple to install and very low maintenance.

- Connect Via Wi-Fi/ GSM
- Remotely track entry/ Exit
- Remote device monitoring
- Add/delete user
- Grant/Revoke access
- Bulk user upload
- API integration for external applications
- Online portal with HR Modules basic HR features
- Reports are available to download in Excel, CSV, PDF
- Diverse reporting on Attendance, late, absentees, shift, overtime, leave

7. Robi Secure Connect- Robi Secure Connect-Robi Secure Connect (RSC) is a help that gives a productive and got highlight point information network between cell phones or terminals through Robi's versatile organization. This will be the establishment to applications like IoT (Internet of Things) and M2M (Machine-to-Machine). Robi Secure Connect (RSC) empowers the trading of information between cell phones or terminals to their assigned objective through a protected versatile organization network. With a static IP and a devoted APN (Access Point Name) doled out to each SIM cards, the correspondence between gadgets is secure by means of intranet, isolating the committed APN from other public APNs, straightforwardly interfacing the SIM to client's servers. This guarantees a network with a serious level of safety by means of a standard Robi versatile organization.

- Pre-allocated Data are with 30-day legitimacy and auto-restored consistently
- Intranet network anyplace
- High Security level
- Each SIM will be doled out a static IP with a committed APN name
- Subsequent to surpassing share, information speed will be choked to 128kbps, with no extra charges (liable to Fair Usage Policy)
- Extra information buy, changes in information plan and select in/quit from an information pack can be made by means of underneath channels;
 - o Robi Corporate Helpline 01610-000786 or Robi Helpline 123
 - o Robi WIC or Robi Retailers
 - **8.** Mobile Device Management- Mobile Device Management (MDM) is a regulatory answer for secure, convey, screen, coordinate and oversee cell phones (cell phones, tablets, and so on) in the working

environment. MDM is intended to improve the functionalities and security of big business cell phones, while safeguarding the corporate organization. MDM empowers you to carry out different gadget controls, direct extensive gadget strategies and design settings.

- App control; black-list or white-listing of apps
- App Distribution
- App Repository
- App General management
- Remotely locate, lock & wipe data out in the case of theft
- Block or lock devices when SIM change occurs
- Built-in Antivirus to protect mobile devices
- Web-security feature to black-list or white list URLs
- Track devices real-time via GPS-based platform
- · View historical location data
- Fencing capabilities; Geo-fencing, Time-fencing & WIFI-fencing
- 9. IoT Solutions- Robi offers a vast number of Smart IoT solutions which help you manage your business and digitize your business processes.
 - a) Car Tracker
 - b) OBD Tracker
 - c) Bike Tracker
 - d) Asset Tracker
 - e) Smart Socket
 - f) Smart Switch
 - g) Smart ID Card

- h) Smart Smoke Detector
- i) Intelligent Surveillance Camera
- 10. Robi ERP2All- Robi ERP2ALL is a business the executives programming which coordinates generally utilitarian areas of business like preparation, buying, stock, deals, showcasing, finance (Accounting, Payroll, Fixed Assets) and HR. It furnishes/creates valuable reports with complete review preliminary prevalently known as a Management Information System (MIS).

Key Features-

- Simple, easy and user friendly
- Cloud based
- Flexible data import/export tools
- Fully integrated
- Dashboard with essential KPI
- Efficient Analytics
- Strong user privilege control
- Use of Artificial Intelligence
- Event and activity log
- **11.**Robi Amar Hishab- Robi Amar Hishab software helps all kinds of businesses like retail, clothes, shoes, etc. to manage their daily buying and selling, stock management, loans, backup, digital bookkeeping, etc.

- Easy To Use
- PC/Tab/Smartphone Compatible
- Can Prepare Sales Receipt/Bill

- Available In Both English and Bangla
- Runs On Low Bandwidth Internet
- E-Commerce Facilities
- Promotional SMS Service
- Customizable UI
- Can Be Connected to Printers, Barcode Scanners and Barcode Printers
- **12.** Microsoft Solution- RedDot a Robi subsidiary ICT company and a direct CSP tier 2 Microsoft partner to offer Robi Enterprise customers Microsoft office, windows, Server, Cloud, Security and other licensing solution.

Key Features-

- Eliminate threats
- Exchange Administration Center
- Content filtering
- No hardware required
- Security
- IT-level phone support
- Scheduled payments
- Easy to manage
- **13.** Advertisement Portfolio- Robi along with ADA Asia Ltd actively working on digital marketing integrating SMS Marketing, OBD, Ad Tech.

- A2P SMS
- Viber Push SMS
- What's App Offerings
- Premium SMS
- Target SMS

- Viber Ads
- Outbound Dialing
- Missed Call Marketing
- Digital Rewards
- **14.** Binge- Experience limitless HD quality neighborhood and global motion pictures, web series, web films, Binge firsts, and Live TV for yourself as well as your loved ones.

Key Features-

- Lucrative Packages
- Both With and Without subscription payment availability
- Connection to TV and WIFI

2.5 Marketing Practices

2.5.1 Marketing Division

Marketing & Brand division is of 6 units. A concise depiction of the units is given beneath:

1. Brand and A&P

Brand and A&P shows to brand and publicizing and headway. This unit deals with the general brand the board and headway activities of the association. The unit covers both outside (declarations, road vertical, etc) media and indoor (print and electronic) media.

2. Item Development

Thing headway unit looks like the R&D unit of an association, which is responsible for developing new things and organizations. This unit is solidly associated with the publicizing research-unit.

3. Global Roaming

International Roaming (IR) unit is on a very basic level responsible for ISD,

worldwide SMS, etc. The middle task of this unit is to wrangle with new telecom associations and to develop the overall incorporation by making oversees them.

4. Corporate Sales

This unit deals with the arrangements of things and organizations to various associations. The unit chooses concurrences with different associations to be the corporate clients of Robi and simply handle the corporate level deals.

5. Direct Sales

It is responsible for the arrangements of things and organizations to the mass clients through the client care centers.

6. Vendor Management

Vendor the board unit oversees the sellers of the organization around the globe.

2.5.2 Advertisement & Promotions

Robi GSM is endeavoring to change non-clients over totally to mobile phone clients zeroing in on the benefit of GSM administrations, and with the help benefit of Robi that will make their life more clear. To serve the market even more unequivocally their goal market will be also divided considering psychographics and business areas. They try to encourage a predominant thing will be an incessant cycle. Driving of measurable studying will be held at standard stretches. They will use their import to encourage new things considering the data they will get from survey. Thusly the thing will be expected to meet the clients need. Robi has a wide grouping of limited time works out. The special activities consolidate T.V., radio, papers, magazines, flyers, pamphlets, etc. Robi has similarly set up sheets at explicit imperative regions to attract clients as well as give their things and organizations a lift so they can construct their own client base. Robi marking has been passed on to accomplish its picture care. They are endeavoring to perceive Robi as a remarkable thing with the objective that it might be isolated from its opponents. Bulletins are there to stick out and address clients with the objective that they are familiar Robi's things and organizations. By and large, declarations have been put on central roads and a few huge shopping centers around Dhaka city like Eastern Plaza, where generally the more energetic age hang out. This subsequently would attract that section of clients inside a specific age bundle, for instance teenagers and people in their mid-twenties, as this age has the tendency to give a large part of the time and be present day on late events. As such, by propelling their things and organizations through these various media, electronic too as press ads, Robi can well block obtaining its vision in this way achieving a higher endorser base and subsequently a higher likely piece of the general business. The Commercial Division scatters flyers, pamphlets or handouts so those new clients can sort out information about Robi's various packages and investigate among them.

2.6 Industry and Competitive Analysis

2.6.1 Porter's Five Forces Analysis

To squeeze by in an industry, create, support in competition and separate an association ought to get a handle on the components of the business challenge among firms. Mr. Michael Porter has encouraged a framework known as 5 Forces Model. His model bright lights on following 5 five powers that shape rivalry inside an industry.

1. Threat of New Entrants:

- Bangladesh have presently four telecom associations.
- They have made a gigantic brand arranging and economies of scale in network consideration which furthermore goes probably as a section deterrent.
- Government and rules and rules like burden of enormous evaluation on SIM card, strong duty control by the power, can in like manner make difficulties to members.
- However, a couple of associations are finding substitute approaches to entering the business. Model Airtel-Bharti acquired 70 % stake of Warid telecom as Airtel enter to Bangladesh Market.
- Hence it has all the earmarks of being that the risks of new hopeful in flexible industry are moderate to weak.

2. Threat of substitutes:

- Bangladesh Telcom is an imaginative industry.
- The substitutes that would replace the things or organizations that would override the things or organizations of today are immovably associated with the part of advancement.
- Substitutes of Robi as also Bangladesh adaptable associations are PSTN executives, VOIP organization, skype, google talk, WiMAX, etc.
- In this way, the risk of substitutes is slight in Bangladesh

3. Bargaining Power of Buyers:

- Buyers have six adaptable telecom managers in Bangladesh
- Which are endeavoring to offer more affordable rate stood out from other.
- There is an expected entryway for buyers to pick the best association
- Bangladesh buyers get the most need in telecom Industries.

4. Bargaining Power of Suppliers:

- The wrangling power of suppliers in the adaptable undertakings changes depending upon the brand name and key meaning of the arrangements as well as the size of the association.
- For instance, Ericsson Nokia Siemens in the versatile telecom equipment organizations that sort of suppliers who value strong power in the business.
- Its huge clients included Grameenphone, Banglalink, Airtel, Citycell, Teletalk, Robi and BTCL.
- Actually Huawei development expected a huge part in modernizing network system on the new 3G stage.
 - In this manner, the wheeling and dealing power of suppliers in the business is moderate to weak.

5. Rivalry Among Established Firms:

Contention alludes to the competitive advantage between organizations in an industry to acquire piece of the pie from one another utilizing cost, item plan, unrivaled product offering, publicizing spending, after deals administration and backups. The force of contention among organizations in an industry is a component of competitive industry construction, request condition and level of leave hindrances in the business.

I. Industry Competitive Structure-

It alludes to the number and size conveyance of organizations inside that industry. In Bangladesh the cell phone industry falls under united industry addressing few huge organizations, for example - Grameenphone, Robi, Banglalink and Teletalk.

ii. Leave Barriers-

Leave Barriers addresses interest in fixed resource, high fixed cost, hardware and financial reliance on industry. Every one of the organizations entered the market with tremendous starting speculation and solid market responsibility procedure. So the leave hindrance is extremely high.

iii. Demand Conditions-

The ongoing interest on the lookout for association is extremely high. On a normal each organization is sending off another item or expansions consistently. Cost delicate clients are truly exchanging associations each time another bundle emerges.

2.6.2 SWOT Analysis of ROBI

Each association is made out of a few interior qualities and shortcomings and furthermore has a few outside valuable open doors and dangers in its entire life cycle. A definite SWOT Analysis of Robi Axiata LTD is as follows-

Strength:

The strength of Robi is portrayed underneath:

Solid HR:

Robi has a very impressive Human Resources department. In HR, there are numerous divisions. People in the HR industry are experts in their own sector. They are managing the organization flawlessly. They provide suitable guidelines for managing the affiliation's HR. They use several techniques to persuade agents to exert large quantities of energy. They increase the agent's accountability and fidelity to the relationship.

• Expanded labor force:

I have proactively referred to all of the divisions in my report. Under these divisions there are a huge number office. It made a broaden workforce at Robi. Various capacities are working under those workplaces into various endeavors.

• Solid recruitment process:

Robi follows an extraordinarily astonishing enrollment process preceding choosing a specialist for any position. They follow different enrollment gadgets. They step through made assessment, context oriented examination discussion, board interview, show meeting. At times, they take various gatherings when there is a long candidate pool. These different enlistment gadgets help them with picking the best laborers.

• Appealing advantages:

Robi gives the employees charming benefits and workplaces. In this manner, individuals who areas of now working into the affiliation, they don't think about leaving Robi.

Weakness:

The shortcomings of Robi are explained as follows:

Less facility for the interns:

Interns at Robi are treated just like exceptionally hardworking workers. Despite the fact that they are against the corporate culture as a whole, they only receive a small amount of pay and no benefits. I actually handled the problem while working here. Obviously, Grameenphone is not paying the students, but as a perk, they are provided with food and transportation. The interns receive compensation and food from Banglalink. For temporary situations, interns tend to favor Grameenphone and Banglalink rather than Robi.

• Slow career development:

The professional advancement of personnel is very slow in Robi. One delegate mentioned during my little work hour that he has been working in that passage level portion for the past 4 years without progressing. The individual who is serving in an unmistakable capacity as an Executive Vice

President is liberally redressed, to be clear. However, if the individual being referred to does not receive a job, the position won't be open. As a result, the undeniable level has no opening. That explains why business development is so terribly lax. Agents occasionally abandon the affiliation in this way.

Opportunity:

The chances of Robi are depicted below:

Accomplish the initial situation through boss brand:

Robi is still steadfast on the third situation in the telecom sector. After Robi changed their name from AKTEL, they received a lot of support. They are confident that over time and gradually, business branding strategies will make them the primary employer of choice. Robi should not figuratively plan to acquire and use capacity, but rather to cultivate it concurrently, for both local and global purposes.

Keeps learning an amazing open door:

As Robi has a really notable HR in their organization, they may be able to establish innovative tactics for laying out learning entryways for the delegates. To prepare them for competition, they must become proficient.

Threats:

Solid dispute among comparable industries.

Regarding pay and business brand, Robi's partnerships with Grameenphone and Banglalink are strong. Additionally, a number of gifts are working on those connections. These two organizations currently hold the top spots for those. It will be difficult to fight them there. Robi needs to create elective plans all the time in order to take on these two formidable rivals and win.

Chapter 3- Project Part (Use of Predictive Analytics in Business)

3.1 Introduction

My assigned division for the internship was Robi Enterprise Business Solutions. My objective aimed at analyzing customer mapping solutions and overall revenue achievement VS target.

Robi EBS team consists of 3 sub-teams which are- Product, Pre-sales, Delivery team. I worked with all of these teams during my internship period but I closely worked with the pre-sales team. Their responsibilities are-

- Prospecting and qualifying leads
- Item and Market research
- Analytics of data and customers
- Keeping the revenue tracker updated and setting targets.
- Finding digital solutions for client trouble spots
- Creating an interesting selling recommendation
- Overseeing bargain capability and recommendations

To keep the daily, monthly, yearly revenue in check, the team uses MS Excel and manually input all data there. A revenue forecasting using one of the machine learning approaches could make the process much faster and more efficient. With the digitalization of business, it has also become important to make the process digitalized as well. Predictive customer analytics can be a handful approach in this regard as it's easier to forecast sales data using this approach and the result is also pretty satisfying. One can easily set targets

and also predicts the future selling point using this method. Moreover, the division has few software like ERP (Enterprise Resource Planning), SFA (Sales Force Automation), ERL (Enterprise Resource Locator) etc. which needs active analytics and visualization since all of them are tracking software and have dashboards.

3.2 Background/Literature Review

In current period of processing, companies are zeroing in on the better usage of technology and getting by to outfit with worldwide business interest. Such rivalry is going about as a main impetus for its business to adapt up the information which produced each second of moment. This data needs to sort out and isolated with data which is expected for is business development model. The Predictive Analytics (PA) utilizes different algorithms to figure out patterns in enormous data set that could recommend the proficient way of behaving for finding solution in business. This study gives a reasonable dynamic cycle for information utilizing PA to amplify the achievement proportion for taking care of huge dataset and predict what might happen in the future. Today, various advancements like cloud computing, ERP, SOA etc. are together changing data innovation however thusly, are forcing new intricacies to the information computation. Because of such innovative advances in technology, and it requires guick and information investigation for organized and unorganized information. Predictive Analytics is a field progressively entering the business. Organizations abroad increasingly more have been utilizing PA to work on not only their inside processes and computerize redundant but also complex tasks these days finished by people. It that PA has been utilized for quite a long time by organizations to get an upper hand. Right quickly, by companies acting in the B2C space with a sizable clientele and the capacity to collect and keep client value-based data, and actually at

that time by companies acting in the B2B space. B2B selling firms use cloud-based PA providers to draw in regard to internal and external information sources to identify fresh prospects so they may effectively utilize PA. Additionally, PA can assist in creating sales insights and adjusting data forecasts. Today's businesses have challenges with sales forecasting since inaccurate predictions can result in product backlogs or inventory shortages, incorrect consumer requests, and decreased customer satisfaction.

3.3 Methodology

Endurance in digital business is gotten from the capacity to change over data into valuable information. To do as such, the managers progressively are depending on the field of prescient examination. It distinguishes and affirms connections between potential applications. Predictive Analytics utilizes affirmed connections between factors to anticipate future results. The forecasts are most frequently esteems recommending the probability a specific way of behaving or occasion will occur from here on out.

This study was done between April 2022 and May 2022. The review was led in the start of the paper to view as appropriate models for utilizing PA in the pilot instances of this review. The study covered various areas of Predictive Analytics as well as their potential applications in business. Every material and information utilized in this review, have been taken from online accessible sources.

3.4 Findings/Analysis

3.4.1 Predictive Analytics in Organization

Predictive Analytics in business portrays the product or potentially processes that dissect current and authentic deals information to foresee deals results and further develop execution. The expansion in digital marketing throughout the past ten years has given the business people admittance to a gigantic measure of first- party and outsider client/prospect information. There's such a lot of information, as a matter of fact, that managers and advertisers frequently have an overpowered outlook on the most proficient method to best utilize it to drive results. The analytics software deals with that issue; these Al driven platforms assist agents with figuring out client and deals pipeline data sets. PA based software utilizes AI and machine learning algorithms to gather information on possibilities and clients and study their way of behaving all through the deal's interaction. The PA software then, at that point, applies those experiences to deals conjectures and pipeline execution. The higher perspective advantages of this machine learning approach are self-evident. The product eliminates a significant part of the gamble of human blunder and overpower from the most common way of gathering, storing, and breaking down business information. It additionally assists deals associations with coming to a superior understanding of how their exhibition has the right stuff against the general objectives of the organization.

In short, Predictive Analytics can be truly significant to any company, in any industry, and in practically all lines of business by giving bits of knowledge into future results. It empowers business clients to prepare, keep away from botched open doors, and prudently go with additional good decision. The following are at least one or two different ways Robi can

utilize PA inside its association:

Data Forecasting: When it comes to forecasting, the capacity to home in on an open door, keep away from errors, and construct connections is critical. PA could survey authentic information on buying exercises and connection it with trends, for example, client conduct and atmospheric conditions to predict or forecast amazing deals for any timeframe. It can likewise provide insights into the types of products and services that will be in demand, providing the company the ability to maximize on those sales opportunities.

Marketing Analysis: Any company's marketing department creates chances for new business while maintaining existing ones. PA can help the pre-sales manager comprehend how to accomplish both tasks well. By spotting indications of unhappiness, it can be utilized to anticipate and prevent client churn. It can be applied to construct campaigns that move customers through the pipeline and to spot sales opportunities. Additionally, it may be employed to comprehend how clients connect with your company so that you can make it simpler for them to do so.

Product Maintenance: Over 20 items are supported by Robi EBS. It might be difficult to anticipate maintenance problems and stop equipment from malfunctioning or programming. Sometimes, the costs associated with a production backlog outweigh the cost of repair. Here, predictive analytics can be used to produce real-time data to properly forecast when a machine failure or happens any fault in the process, allowing the company to address it before it starts a chain of problems.

Credit Risk and Fraud Prevention: Making decisions about credit risk and differentiating between fraud and misrepresentation are crucial for managing operations in the finance sector. To help the firm make better decisions, predictive analytics can be utilized to identify potential danger areas from multiple data points. It can also be used to spot and stop

fraudulent transactions by keeping an eye out for them and identifying any that deviate from normal or expected behavior.

3.4.2 Classification of Predictive Analytics Models

The experts outline the following types of predictive analytics model in business:

1. Forecast models

One of the most well-known analytics models is the forecast model. By evaluating the benefits of new information in light of lessons learned from prior information, it manages metric worth forecasting. When there are no mathematical values to be found, it is usually utilized to generate them in verifiable information. The ability of PA to incorporate and set multiple parameters is likely its strongest asset. They are among the PA models that are employed the most frequently as a result. They are used for a variety of corporate endeavors and objectives. For instance, the customer service department at Robi can determine the stock they need for the upcoming sales period or the amount of assistance calls they would receive in a day using forecasting technique. These models are well known in light of the fact that they are amazingly adaptable and versatile.

2. Classification models

Classification models are among the most well-known Predictive Analytics models. These models operate by categorizing data in light of information that can be verified. It is used in many different endeavors since it can efficiently retrain with fresh information and may provide a thorough analysis to answering queries. It can also be utilized

in various ventures like sales, finance and retail, which makes sense of why they are so normal contrasted with different models.

3.Outliers Models

The outlier's model deals with anomalous data entries within a dataset, as opposed to categorization and forecast models, which deal with past data. Anomaly data, as the name suggests, is information that deviates from the usual. It functions by detecting odd data, either alone or in connection with other categories and numbers. Outlier models are helpful in sectors like retail and banking where spotting abnormalities can help businesses save millions of dollars. Outlier models can be used to uncover abnormalities, which is one reason why predictive analytics models are so good at spotting fraud. An outlier model is more likely to anticipate a fraud occurrence since it deviates from the norm. The outlier model, for instance, can evaluate the amount of money lost, location, purchase history, time, and type of purchase when recognizing a fraudulent transaction. Because of their tight relationship to anomaly data, outlier models are highly appreciated.

4. Clustering Model

In accordance with its core qualities, information is taken and split into various groupings. The capacity to segment and categorize data into various datasets depending on predetermined attributes is crucial in some applications, such as digital marketing. For instance, marketers and advertising can pinpoint a potential audience based on shared qualities. It uses two different grouping or clustering techniques, known as Hard and Soft Clustering. Hard clustering determines whether or not each data point is a member of a data cluster. While soft clustering assigns data probability while adding a cluster.

5. Time Series Model

In contrast to outliers, which concentrate on anomalous data, classification

and forecast models concentrate on past data. The time series model is primarily concerned with data where time is an input parameter. The time series model creates a numerical measure that will forecast trends over a given period of time by using various data points (taken from the data from the previous year). A Time Series predictive analytics model is required by businesses who want to track the evolution of a specific variable across time. For instance, a Time Series model is required if a small business owner needs to measure sales over the previous four quarters. A Time Series model can predict for numerous regions or projects at once or concentrate on a single region or project, depending on the objectives of the business, which makes it preferable to conventional techniques of calculating the progress of a variable. Additionally, it may adjust for extraneous elements like seasons that might have an impact on the variables.

The following table provides examples of marketing applications of predictive models and the related business questions-

Application	Question
Customer selection from prospects	Which prospects are most likely to buy?
Cross-sell and up-sell campaigns	Which existing customers of a particular product are the most likely to buy another product or buy more of the particular product?
Next Best Offer	Which product customer is likely to buy next?
Customer retention	Which customers have the highest likelihood of lapsing?
Customer lifecycle management	How long it will take for the customer to likely lapse?
Win-back campaign	Which of the former customers are most likely respond to a win-back campaign?
Customer lifetime value	What is the predicted future value of purchases for customers?

3.4.3 Predictive Analytics Implementation

A brief process of implementation of Predictive Analytics in the organization to use data in a better way is given below-

1. Defining Goals and Objectives

To get started, at first the team needs to find out a problem to solve. They can go through the already set KPIs in order to find out the target or to set new one. By doing this, they can have a better idea about the insights in the process and find the exact problem with their existing way to sort data. It can help the team to find out the best reason behind implementing Predictive Analytics in their regular work.

Then, the team needs to decide what they want to predict using the PA model and what they can achieve more by using this process. It will also have to think about the possible decisions that can be undertaken by seeing the predicted data.

2. Data Preparation and Profiling

Prepping data is about the association of the information, and data profiling is tied in with figuring out what's in the information. As information sources keep on increasing, it turns out to be much more essential to put an accentuation on data quality so the thing one is utilizing for the PA model is dependable and equipped for meeting the characterized targets and objectives. To begin, any organization/team ought to:

3. Gather existing information.

There is a wide variety of information available, including those derived from value-based frameworks, functional frameworks, financial frameworks, and third-party frameworks. Whether it's a data lake or a data warehouse, the team may

gather data that is relevant to what it is trying to predict and merge it into one location. Data gathering is a fundamental first step because many frameworks may exist that are incompatible.

4. Sort out information in a helpful manner to take into account data modeling.

The team could have great information or datasets; however, it probably won't be coordinated alright to have the option to generate insights. A data administration program can be helpful in getting sorted out the data.

5. Credit and purify the datasets.

This will assist with guaranteeing information exactness and accuracy and in refining the informational collections or datasets.

6. Survey data quality.

There is a wide variety of information available, including those derived from value-based frameworks, functional frameworks, financial frameworks, and third-party frameworks. Whether it's a data lake or a data warehouse, the team may gather data that is relevant to what it is trying to predict and merge it into one location. Data gathering is a fundamental first step because many frameworks may exist that are incompatible.

7. Decide the objective of the PA Model.

The team has to try to comprehend the kinds of results it is attempting to accomplish. On the off chance that the objective is binary, it probably needs to do classification. Assuming that if the objective is numeric, maybe it is hoping to make linear model predictions. In any case, it's fundamental to comprehend how the information elements and targets could squeeze into the

correct modeling types.

6. Modeling Data

Data modeling makes it possible to create, train, and test an Al-driven model that may be used to project explicit numerical findings or predict the likelihood that something will happen. Decision tree models and regression models are the two most common types of PA models.

Whether it's a decision tree or a regression model, a predictive model includes linkages between or business rules for ideas that need to be followed by data. Making predictive information models that can be scaled and robotized is the goal of showing or modeling data. During data modeling, one can want to:A predictive model, whether decision tree or regression — incorporates ideas one needs to follow data about, and connections, or business rules, among them. The objective in displaying or modeling data is to make prescient information models that can be robotized and that can be scaled. While modeling the data, one might want to:

Data are trained into different models (such as linear regression versus classification algorithms) and scored for characteristics such as precision, accuracy, and speed. The likelihood of precise results increases with the size of the information test informative sets.

Test the trained models that have been prepared using various techniques. Several modeling methods include K-nearest neighbor, decision trees, logistic regression, linear regression, and neural networks (deep learning or pattern recognition).

Validating Result

The team should validate the findings after training and testing the data model.

Prior to putting into operations, it's crucial to confirm that you are satisfied with

the findings because a flawed model might fail or dubious findings might lead to low adoption or lack of trust.

7. Using any PA Model

After the model has been approved and validated, the time has come to convey it in a genuine moment and allow it to get to work. Then the team needs to operationalize the outcomes by inserting them into applications or dashboards where they can be promptly utilized.

8. Monitoring the Data Model

A predictive data model must be constantly evaluated once it has been established. Even while a data model may be effective right now, there may still be unforeseen circumstances that lead to data drifts in the future. Review the data model frequently, and set up a way to make quick adjustments based on data changes. The data can be efficiently monitored in a variety of methods, but two in particular should be used to guarantee confidence, ongoing adoption, and accuracy throughout time:

-Building a dashboard to compare your actual outcomes with the predicted results. If it appears that the findings are diverging, there may be a problem with the predictive data model, and the team should make corrections.

-creating a dashboard to compare business users who follow the advice with those who don't in order to monitor the outcomes of business recommendations generated using the predictive data model. If there is no difference, your predictive data model needs to be adjusted, or you need to make sure that your end users are accepting the predictions-based recommendations.

3.4.4 Commonly Used PA

Models

Clustering Models

Clustering models is a methodology that involves unsupervised learning how to track down likenesses within clients without characterizing any theory of these groups ahead of time. The pattern of clients' groups who act likewise would rise up out of the information utilizing a clustering algorithm. An improved-onillustration of such bunch could be clients who possibly purchase when they get a discount. Applicable client attributes could be like age, orientation, area, season, price sensitivity, cost responsiveness or on the other hand assuming that they purchase from the store or on the web. Conventional methods for categorizing customers have largely been predicated on human assumptions and intuition. Automated customer statistically significant groupings can be found by using clustering algorithms. Buyer personas can be created using these results from the clustering method and used in various marketing campaigns targeting these groups. Sunglass buyers are a good illustration to help make your point. Actually, there are two clusters that could make up this segment: one could be made up of ladies who are traveling, and the other could be made up of ardent runners. Instead of targeting all sunglass purchasers with the same message, this information would be useful in helping to define the sales strategy and messages for various groups. The biggest error that marketers frequently make is failing to recognize that a person never belongs to just one category. Because segments are highly contextual, the consumer segment can change depending on the circumstance. There are several ways to apply clustering in sales, including product-based clustering, brand-based clustering, and behaviorbased clustering. Product-based clustering models establish clusters based on information about the kinds of things people buy and which goods are frequently purchased together. Clusters based on brands identify the brands that consumers are most likely to purchase. Customers who like certain brands over others tend to stick together. By comparing the customer's preference with an existing brand cluster, the brand-based clusters can also show the customer's interest in other similar brands. Brand clustering is particularly important in the retail industry since many merchants have found that consumers frequently have a stronger attachment to brands than they do to products. Customers are grouped using a behavior-based clustering algorithm based on their purchasing habits. Relevant data items could include, for instance, the amount of money spent, how frequently the consumer purchases, the seasonality of orders, or whether the client values discounts. These aforementioned segments can be targeted with various selling strategies. With marketing for inventory clearing sales or high spenders with a preview of a new product line, customers looking for discounts can be identified.

Regression Analysis Model

Sales regression analysis is used to comprehend how certain aspects of your sales process impact sales performance and forecast how sales would evolve over time if you stuck with the same approach or switched to alternative strategies.

Regression analysis is a mathematical technique used in statistics to determine how one independent variable and one or more dependent variables are related to one another. The analysis's findings show how strongly the two variables are correlated and whether the independent variable has a meaningful impact on the dependent variable. Regression

analysis comes in many forms, but the most fundamental and often used one is simple linear regression, which uses the formula Y = bX + a. A linear regression trend line uses the least squares method to draw a straight line through the prices, reducing the gaps between the prices and the final trend line. This linear regression indicator shows the trend line's value for each data point. Usually, it is considered that the values of the independent variable "cause" or "determine" the values of the dependent variable. Regression analysis can be used to quantify the specifics of the link between advertising and sales if it is assumed that the amount of advertising money spent on a product impacts the number of sales. Knowing the quantitative relationship between the variables is necessary for predicting because it enables us to generate forecasting estimations.

The motivation behind this model is to assist with sorting out which factors influence the business or organization the most and how intently they associate. The gut feeling could let know that a wide range of elements are probably going to affect deals over the course of the following month. A portion of these factors could include:

- Climate Contender Promotions
- Occasions
- Arranged sales
- GDP
- Changes in Products
- Advertising
- Marketing
- Social patterns

This model assists with moving past this staggering plenty of factors or variables to find what truly influences business the most. The VP could think GDP influences sales the most, while the manager is persuaded that weather

conditions is a driving element. A regression model can assist with seeing which of those two factors really correlates nearest with changes in sales.

Good utilization of Regression Model applications can achieve a portion of the accompanying five advantages:

<u>Identifying errors:</u> What assuming one believe that GDP relates most intimately with sales when it is really climate or new item dispatches?

<u>Expanded functional proficiency:</u> When you distinguish the correlations among variables correctly, you can set aside cash by planning and arranging appropriately.

<u>Efficient forecasting:</u> Correct and effective regression analysis surrenders you a head about future open doors and risks.

<u>Data Driven Decision:</u> If you've at any point puzzled over whether your premonition is exact, great data analysis can assist with sponsorship it up or discredit it.

<u>New viewpoints:</u> Including a regression model in analyzing of old information can assist with finding out issues, solutions and arrangements in new ways.

Decision Tree Model

A decision tree model is a support tool that use a tree-like structure to forecast anticipated outcomes, resource costs, utility costs, and associated implications. The presentation of algorithms with conditional control statements can be done using decision trees. They have branches that stand in for choices that might end in a good outcome.

Decision Tree can significantly increase their sales productivity by using advanced analytics and machine learning to anticipate the most lucrative sales possibilities for revenue growth, lower operating costs, and make smarter decisions faster. By fusing best-in-class data modeling and data analysis methodologies with data integration, it also delivers predictions of sales trends and results. By integrating sales conversion indicators like geolocation, product IDs, order tallies, and churn rates in the research, you can also gain insights into which sources of sales leads are actually driving your business growth, resulting in enhanced sale efficiencies and higher revenue margins. Analyzing your sales will also show you how to engage your clients in the best way possible. Any company's performance depends on hitting its sales goals and accurately predicting its revenue from sales. With the numbers dispersed among numerous people, places, and business divisions, the work can take a very long time and become boring. Making the sales team more effective through data-driven decisions, reducing time spent on manual tasks and spending more time on customer-facing activities, tracking revenue from renewals, the impact of churn on the business, and removing bias and guesswork are all possible by combining data with predictive analytics and using decision tree models.

Benefits of Decision Trees

1. Simple to peruse and decipher

One benefit of this approach is that the results may be easily read and understood without the need for extensive statistical PA knowledge. For instance, the marketing division can browse and analyze the graphical representation of the information or dataset while using decision trees to

introduce segment data on clients without needing sufficient PA knowledge.

When compared to various approaches developed by the firm, the information can also yield important insights on the chances, costs, and options.

2. Simple to get ready

This strategy requires less effort for information ready than other viable options. However, clients must have prepared data in order to create new factors with the capacity to predict the objective variable. Additionally, they can characterize information without performing complicated calculations. Customers can combine decision trees using various methodologies for complex situations.

3. Less information cleaning required

Choice trees also require less data cleansing after the components have been determined, which is another advantage. The information and outcome of the decision tree are less affected by instances of missing values and abnormalities.

Recommendations for future

With predictive analytics, one need not dive in headfirst. Anyone can start small and test a PA model to see how it works by investing a small amount of their business. You can build on that and grow across various parts of your association as you learn and see benefits. Even if you can't predict the future with certainty, PA will help you obtain a better idea of what will happen and how to prepare for it.

In the event that you can foresee where your client is probably going to go straightaway, it offers you the chance to convey something they need. Presales organizations can utilize these days, for instance, similar calculations and AI strategies that Amazon and E-bay utilize for strategically pitching and cross-selling.

Applying AI and statistical analysis to the client database suggests that the client agents are now proactive and prepared to "guess what your client might be thinking" rather than being arbitrary or latently dependent on the usual exhibition of the items or services. PA can be used by the team to improve deal execution and sales performance. The primary focus of today's explanation should be on purchasing or developing solutions using PA. Any business has both benefits and drawbacks. Before rushing to make decisions, directors should give them some thought. Building in-house PA software is a time-consuming process; purchasing one offers a shorter time-to-esteem but may have drawbacks.

Making KPI decisions also involves pointing an outreach team in a specific direction. Key Account Managers should preferably target accounts that are likely to make a purchase or have greater reason to be agitated. Utilizing expensive and sparse sales resources where they are more needed will help you reduce costs and raise customer lifetime value.

Predictive Analytics can assist the organizations with doing this in maybe one or two ways:

- It enables concentration in view of that potential for action and acquisition.
- Up to the product level, it can identify the possibilities for cross-selling and strategic pitching.
- It can help with segmenting different leads and creating more individualized advertising messaging.

Working with the back end of the trading system or the actual advertising is simply one aspect of PA. It can also be used to research additional new goods and services that you should provide as your company expands. If a company can predict how its customers would behave, it would be wise to use that information to start looking into what new products will have a more significant impact.

It's crucial to know whether a new product or service will be popular with your B2B clients. Knowing the response, or at the very least recognizing the possibility, indicates that they don't hang around with phony beginnings and instead focus on those product offerings or send-offs that have a greater chance of succeeding.

Conclusion

Predictive sales analytics used to be the domain of big businesses like Amazon and eBay. Because of the expanding significance of big data, data collecting itself, and Al-based predictive sales analytics software, even small and medium-sized firms today have access to cutting-edge tools that will enable them to anticipate and adapt to client behavior. Being one of the top businesses in Bangladesh is Robi Axiata Limited. They are at the cycle's maturity stage, therefore maintaining quality and service is crucial for them. It has also become increasingly vital how effectively its sales and pre-sales teams are handling their data and producing relevant insights, as the industry has entirely gone digital and is growing day by day. Robi can target the appropriate customers at the right time with the proper analytics in place, customizing sales and marketing messaging for maximum impact. The sales teams may spend less time guessing and more time converting better leads and boosting client lifetime value by utilizing predictive analytics.

References

- Company profile. (n.d.). Retrieved
 from https://www.robi.com.bd/corporate/companyprofile/?
 lang=eng#q74hV1gb qQkdXbm7.97
- Robi, Airtel Complete merger. (2016, November 17). Airtel brand name to continue for two years. Retrieved from http://www.thedailystar.net/business/telecom/robi-airtel-completemerger- 1315822
- Abbott, D. (2014). Applied Predictive Analytics: Principles and Techniques for the Professional Data Analyst.
 Indianapolis: John Wiley & Sons.
- Bari, A., Chaouchi, M., & Jung, T. (2014). Predictive Analytics for Dummies. New Jersey: John Wiley & Sons.
- Bogner, A., Littig, B., & Menz, W. (2005). Das Experteninterview: Theorie, Methode, Anwendung (2nd ed.).
 Wiesbaden: VS Verlag.
- Bogner, A., Littig, B., & Menz, W. (2014). Interviews mit Experten: Eine praxisorientierte Einführung. Wiesbaden: VS Springer.
- Brannon, E. L. (2010). Fashion Forecasting (3rd ed.). New York: Fairchild Books.
- Choi, T.-M., Hui, C.-L., & Yu, Y. (2011). Intelligent time series fast forecasting for fashion sales: A research agenda (pp. 1010-1014).

http://doi.org/10.1109/ICMLC.2011.6016870