



**An insight on 'pre product and service
features: user acceptance test, at Robi
Axiata limited'**

An insight on 'pre product and service features: user acceptance test, at Robi Axiata limited'



Submitted To,

Saif Hossain

Senior Lecturer

BRAC Business School

BRAC University

Submitted By,

Suzana Zaman

ID No.: 11104102

Letter of transmittal

29th June, 2015

Mr. Saif Hossain
Senior Lecturer
BRAC Business School
BRAC University

Subject: Submission of internship report.

Dear Sir,

I am here by submitting my internship report on ‘pre product & service features: user acceptance test, at Robi Axiata limited’ which is a part of our BBA program curriculum. It is an immense pleasure for me to work under your active supervision.

It is an enormous opportunity for me to work in Robi Axiata Limited in “Revenuer assurance & Fraud Management’ under Finance division for four months under the supervision of Sk. Shaheen Islam (General Manager, RAFM).This project gives me the chance to relate my academic knowledge with real life experience. First of all I learned about the organizational culture of a prominent Telecommunication organization of the country. Secondly, the project gave me the opportunity to develop a network with the corporate environment.

I tried my level best to follow your guidelines in every aspect. I am earnestly thankful to you for your guidance during the preparation of this report

I shall be highly obliged if you are kind enough to receive this report and provide your valuable judgment. It would be my immense pleasure if you find this report useful and informative to have an apparent perspective on the issue.

Sincerely yours,

Suzana Zaman
ID: 11104102

DECLARATION

I declare that this written submission represents my ideas in my own words and where others' ideas or words have been included, I have adequately cited and referenced the original sources. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea or data or fact or source in my submission. I understand that any violation of the above will be cause for disciplinary action by the University and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

Suzana Zaman

(Id No: 11104102)

Date: 29th June, 2015

Acknowledgment

First of all, I would like to thank and convey my deepest gratitude to the Almighty Allah (SWT). Then I will take the honor to thank my Parents, without whom I am nothing. With their continuous encouragement and faith I am here today. Apart from them with the support of many people I have completed my internship report and here I'm proud to acknowledge them.

A Big thanks and deep regards to my Advisor **Mr. Saif Hossain, Senior Lecturer of BRAC Business School**, for his right guidance, enthusiasm, encouragement, patience and time for me. His attention to every single detail has helped me to shape and complete the report with accuracy. Also thanks to all of my **Faculties** for their guidance, suggestions and instructions throughout the four years of my graduation.

I also express my sincere thanks to my supervisor **Mr. SK Shaheen Islam, General Manger, Revenue assurance and fraud management (RAFM)**, for his kind advice, suggestions and faith in the entire internship period. Throughout the whole period he had believed me with many responsibilities which have increased my confidence and experiences. I'm also thankful to the entire **Revenue assurance and fraud management (RAFM) Department & My UAT team** for their enormous support and love. They had created such a nice and friendly environment for me that work never felt like load to me.

BRAC University Career Service Office needs to be recognized as they had selected me to do my internship in Robi Axiata Limited. Big appreciations go to their team as well.

Lastly, I want to thank all my friends and relatives who helped me with their love and inspiration. And Special thanks to **Anik Das & Shayeda Afsar Moumita** for their backing to prepare the report. Their support helped me to complete my report efficiently.

Table of contents

Executive Summary	7
1.The Organization	8
1.1 Introduction	9
1.2 Company Overview	10
1.3 Principal & Purpose	15
1.4 Divisions	16
1.5 Finance Division	17
1.6 Product & Services	18
1.6.1 Prepaid Product	18
1.6.2 Postpaid Product	20
1.6.3 International Roaming	21
1.6.4 Value Added Services	21
2.Job	25
2.1 Main Job Description	26
2.2 Other Significant Responsibilities	26
2.3 Some Of The Regular Task List As Intern	28
2.4 Two Special Tasks Completed As An Intern	28
2.5 Different Aspect Of Job Performance	29
2.6 Observation	30
3. Project	31
3.1 User Acceptance Test	32
3.1.1 Functions Of Uat In Robi By Revenue Assurance (Ra)	32
3.2 Project Description	33
3.2.1 Objective Of The Project	33
3.2.2 Methodology	33
3.2.3 Limitations	34
3.3 UAT Process	34

3.4 Benefits & Challenges Of UAT	40
3.5 Hindrances Of UAT	43
3.6 Recommendation	44
4. Conclusion	46
References	48
Abbreviations	49

The purpose of this report was to analyze the function of the User Acceptance test of Robi Axiata Limited.

This report has considered different aspect of Robi, particularly regarding the function on Revenue Assurance and Fraud Management (RAFM) department. As I was basically selected for conducting the User Acceptance test so my research topic about the report is “Pre product & service features: user acceptance test, a case study on Robi Axiata limited”.

Initially I have divided my entire report in four parts. In my First part I gave the introduction with the organizational overview. The organizational overview consists of with the company background, its vision and mission, company shareholder, company’s principal and purpose, product & service portfolio and departmental overview. Second part is comprised of with my Job responsibilities, its different aspects and my observation as an intern. Third part is the main part of my report that is the project part. In this part I gave the whole Idea about User acceptance test, how it works, my research finding regarding the benefits and challenges of UAT with recommendations. And lastly conclude the whole part with a conclusion.

1. The Organization



1.1 Introduction

Telecommunication is the transmission of information, over significant distances, for the purpose of communication. They connect with people through voice transfer and via Internet. Today the world is a global village and telecommunication has become the part and parcel to people's life. Furthermore, with the help of advance mobile network, telecommunication has started introducing some diversified areas.

Presently in people's day-to-day life Mobile technology is comes up with plenty of cheap solutions. Currently, people cannot think a single day without mobile phone. With the current scenario connecting people through mobile phone is far different in comparison with traditional scenario. Information technology supports telecom companies to deliver economic solutions with a very low-cost and easily available access, which was not accessible earlier as well as costly to some extent.

Today the world is village and telecommunication has become a necessity in people's life. Nearly 35 million people own and use mobile phones as an important device and depend on these for their ultimate connectivity. From a rickshaw puller to a higher official, everyone owns a mobile phone.

Now a day Mobile phone is become a very important communication factor of our country. People cannot think a single day without mobile phone thus the number of mobile user is increasing day by day.

For the telecom industry it is a very lucrative market. Presently there are six companies present in the market and all of them are trying to maintain and increase their market share. Among them Robi Axiata Limited is one of the leading companies in the telecommunication sector.

1.2 Company Overview

In order to keep a rhythm with the current era, infrastructure development of the telecommunication sector should be given greater priority. Telecommunication is the transmission of information, over significant distances, for the purpose of communication and in this current situation a person without a mobile phone is like a person living outside of the planet. By understanding the needs of the people, Axiata which is one of the largest telecommunication companies in Asia and the NTT DOCOMO which is leading voice and data network provider in Japan, created a joint venture company which is named Robi Axiata Limited. Robi Axiata Limited is considered as one of the pioneers in the telecommunication sector of Bangladesh, also as a dynamic and leading countrywide GSM communication solution provider. Formerly, it was known as Telekom Malaysia International (Bangladesh) which commenced its operations in Bangladesh in 1997 with the brand name AKTEL. Later on in 28 March, 2010 it transformed its brand name from AKTEL to Robi Axiata Limited. Reason behind changing brand name was to approach more closely to the people of our country. Along with the brand name the strategy of business, operational activities as well as scope of providing higher quality, Robi also modified service to customers and as a result, now they are almost in close proximity to their destination.

Setting up of new Robi customer service points, relocation of old ones, offering numerous new packages and services to benefit customers etc. It not only stimulated their growth but also helped in strengthening customer confidence greatly. Besides, introduction of e-remittance, e-traffic and other internet related services have also added value to their operations.

As a subsidiary of Axiata Berhad Malaysia, Robi ensure leading-edge technology to provide its service in Bangladesh, covering almost 100% of the population, Robi is committed to provide best data and voice quality and will continue to ensure that its customers are able to enjoy the best experience through leading edge technology and innovative products and services.

Robi's services include 2G & 3G voices, CAMEL Phase II & III and GPRS/EDGE service with high-speed Internet connectivity. It also has the widest worldwide exposure in Bangladesh that connects 600 operators in more than 200 countries, with the help of flexible tariff plan, customer oriented Value Added Service (VAS), quality service centers, 24-hours call center, digital

network facility etc. Robi has reached to the hearts of million people thus as a customer centric company, Robi believes in providing superior service that leads to good business and good development in the society. They believe that quality is continuous and never ending journey. Hence, every step Robi takes is a continuous endeavor to upgrade and expand their network for better and more efficient services to subscriber.

Together with its unique ability to develop local insights, Robi creates distinct services with local flavor to remain close to the hearts of its customer and so as a telecom company, they believes in customer satisfaction because they are the ultimate consumers for whom Robi can stand.

Mission

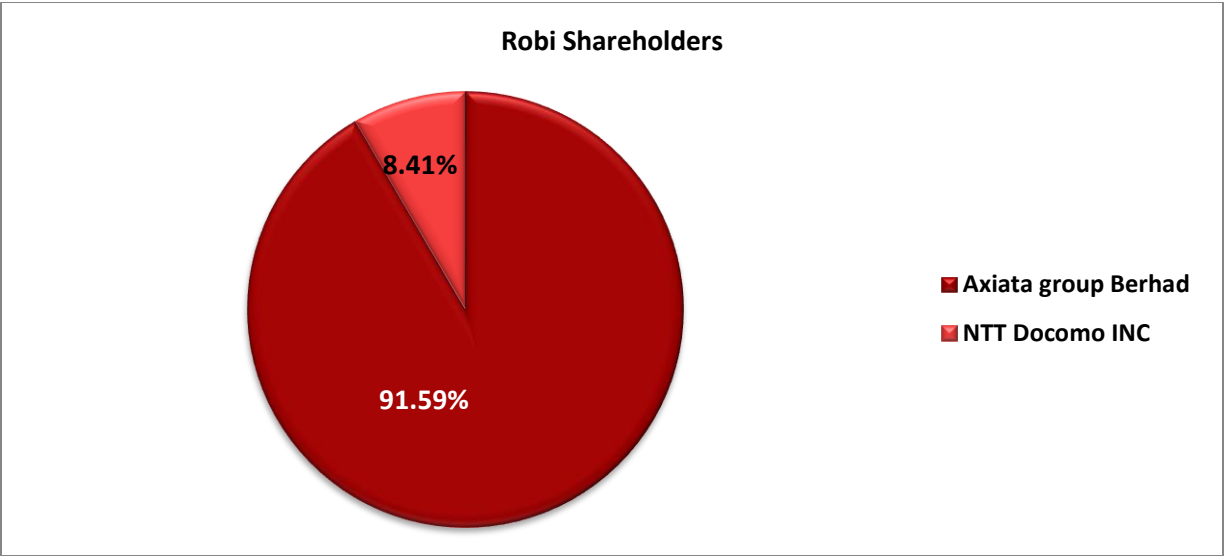
Becoming the market leader in telecommunication service in Bangladesh

Vision

Robi Axiata's vision is to be the leader among the Telecommunication Service Providers in Bangladesh. For achieving this Robi has formulated many strategic plans like proving specific services according to customer groups, increasing network coverage, providing best value for money to the customer, providing quality services in a competitive rate, developing better network infrastructure, developing new and unique products, working with positive attitude.

Shareholders

The company is a joint venture flanked by Axiata Group Berhad, Malaysia and NTT DOCOMO Inc., Japan. Axiata holds 91.51% and DOCOMO grasps 8.41% shares of Robi



Axiata Group Berhad

Axiata is an emerging leader in Asian telecommunications with significant presence in Malaysia, Indonesia, Sri Lanka, Bangladesh and Cambodia. In addition, the Malaysian grown holding company has strategic mobile and non-mobile telecommunications operations and investments in India, Singapore, Iran, Pakistan and Thailand. Axapta Group Berhad, including its subsidiaries and associates, has approximately 120 million mobile subscribers in Asia, and is listed on Malaysia’s stock exchange (Bursa Malaysia).



NTT DOCOMO INC

NTT DOCOMO INC is the world's leading mobile communications company and the largest mobile communications company in Japan. DOCOMO serves over 56 million customers, including 44 million people subscribed to FOMA™, launched as the world's first 3G mobile service based on W-CDMA in 2001. DOCOMO also offers wide variety of leading-edge mobile

multimedia services, including i-mode™, the world's most popular mobile e-mail/Internet service, used by 48 million people. With the addition of credit-card and other e-wallet functions, DOCOMO mobile phone has become a highly versatile tool for daily life.



Corporate Logo:

They believe that, “We will keep our promises and deliver. We will innovate, execute fresh ideas and, as a nationwide organization, we will be respectful of our customers and stakeholders.”

Their policies in terms of logo usage are as follows:

- Their logo should always appear in Bengali.
- When writing in English (Roman) text, it should be written as “Robi”
- Special authorization is required if logo is presented in English



Alpona

The Alpona of Robi is one of the most creative expressions of Bengali graphic arts. The Alpona is uniquely created & designed to represent the brand Robi & spread the message of positivity & focus. The Alpona is taken from a very traditional ceremonial form & tidied up, to look more

contemporary. The lack of sharp points and use of large curves provides a feeling of warmth and friendliness.



Slogan

The slogan of Robi is 'Jole uthun apon shoktite' (Ignite the power within)



Operator Number



Robi Internet Logo



1.3 Principal and Purpose

Uncompromising Integrity

- We will be legally, ethically, and morally correct.
- Our conduct will be fair and honest.
- We will listen, seek understanding and encourage open dialogue.
- We will be passionate in pursuing our beliefs
- We will treat others with dignity, valuing and benefiting from diversity
- We will be accountable for our actions and behaviors on fellow employees, customers, shareholders, and the communities in which we operate.
- We will be courageous in sharing our work and bold to learn and improve from our mistakes
- We will adhere to our Code of Conduct, protect and uphold it.

Customer at the Centre

- We will be customer centric delivering their needs in terms of value, quality and satisfaction.
- Our customer focus will be unrelenting in creating positive experience, at every point of interface, sale and post-sale.
- Simplicity will be the key for the customer to learn about us, buy from us, and get support from us whenever, wherever.
- We will strive for continuous innovative solutions in every sphere of our work.
- We will engagement with the customers to know their demands and design our actions to care for them better than our competitors can.
- We will not be distracted from creating and providing value for our customers.

I Can, I Will

- Ensure our efforts produce desired results.
- Seize opportunities at the right time and execute them on time.
- Go beyond our scope, strive for and achieve excellence.
- Do what it takes to ensure delivery of results not waiting for delegation.
- Go that extra mile, setting ambitious goals to ensure our efforts bring success.
- Have the courage to say and do what it takes in order to ensure success¹

1.4 Divisions

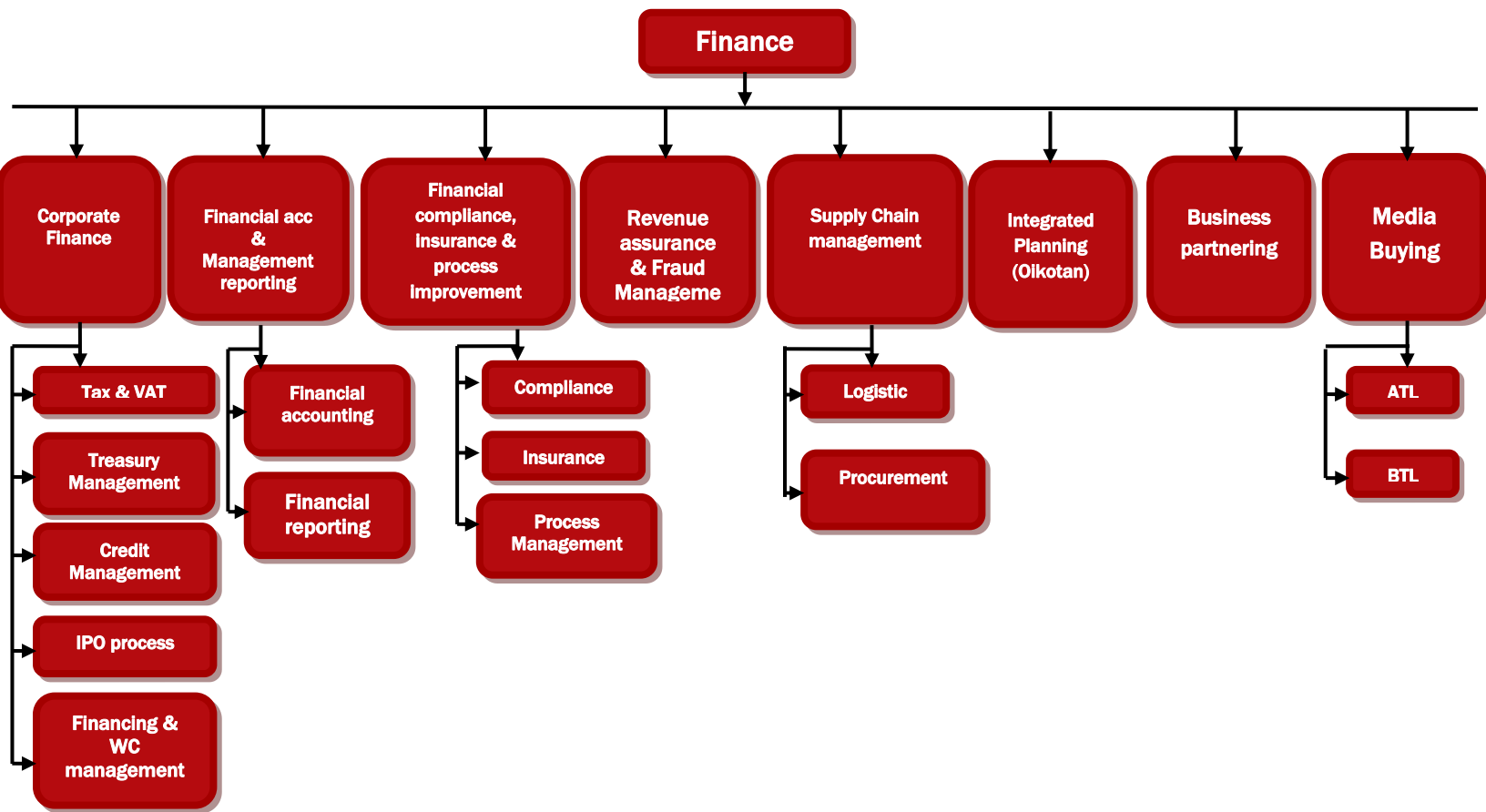
Robi Axiata limited follows a big hierarchy. In the hierarchy, there are ten different Divisions which are headed by the CEO. Different divisions plays very crucial role for the success of the company. The list of the ten divisions is given below:

- | | |
|--|-----------------------------|
| ➤ Corporate Strategy Division | ➤ People and Corporate |
| ➤ Digital Services | ➤ Infrastructure Division |
| ➤ Enterprise Program Management Office | ➤ Internal Audit Division |
| ➤ Ethics Office | ➤ Market Operation Division |
| ➤ Finance Division | ➤ Technology Division |

¹ (Robi Axiata limited, 2015)

1.5 Finance Division

The finance division is comprised of eight departments. Each of the departments has sub departments to work more accurately in a particular sector. There are approximately 150 employees who work in Finance division, which is 8% of the total employee of Robi. The organogram of finance division of Robi are illustrated below:



Picture 1: Organogram of Finance division

1.6.1 Prepaid Product

Robi prepaid packages gives customer a wide range of variety. With this single package it delivers the customer simplicity & flexibility as well as by continuously adding new features & plans it provides absolute freedom to the customers. It has the distinct prepaid package with the best rates in the market. Moreover, there are different tariff plans in one package to meet different types of needs of the customers. There are various easy, quick & multiple facilities available to the customers to migrate from one tariff plan to another. Furthermore, there is nationwide Easy Load & high-speed internet connectivity, value Added Services (e.g. SMS, MMS, GoonGoon, ringtone, wallpaper, games, animation downloads) are available. Also customers can recharge their Robi Prepaid by using scratch cards and Easy Load facilities.

Package Benefits

- Highest 7 FnF numbers Facility
- Priyo number Facility (Super FnF)
- Cluster of packages to fulfill your desired benefits
- Simple package change facility through USSD codes
- Range of special Bundle and Combo offers to fulfill your Voice and VAS desire
- Full BTCL connectivity with FREE BTCL incoming
- Extended and simplified recharge validity for ease and freedom
- Nationwide Easy Load facility
- Nationwide high speed internet connectivity
- All available Value Added Services (e.g. SMS, MMS, internet, GoonGoon, ringtone, wallpaper, games, animation downloads)²

² (Robi Axiata Limited Website, 2015)

Prepaid packages:

With the superior OCS network, Robi gives the best mobile phone experience in Bangladesh. For better customer satisfaction Robi comes up with different prepaid packages with innovative tariff plans.

 <p>Damal Samal 22</p>	 <p>Tarunno 26</p>	
 <p>Anonna 27</p>	 <p>Muhurto 31</p>	 <p>With the Hoothaast Chomok Package Enjoy the lowest call rate upto 4.17 paisa across the country To migrate for free dial *8999*32#</p>
 <p>Robi Club 34</p>	 <p>Goti 36</p>	 <p>Nobanno 37</p>
 <p>Shasroyee 38</p>	 <p>Shorol 39</p>	 <p>Uddokta & Easyload</p>

Picture 2: Prepaid packages offered by Robi

1.6.2 Postpaid Product

Along with the prepaid packages, Robi also offers post-paid service for the customer. This package comes up with a bundle of features & offers for those customers who are worried about paying advance for the mobile service. Therefore the customer receives the bill at the end of the month. For the convenient of the customer the postpaid bill can be paid through various online payment systems. The Price of the package is BDT 299 Taka and the credit limit is BDT 300 Taka.

Activation benefits of the Post-paid Package:

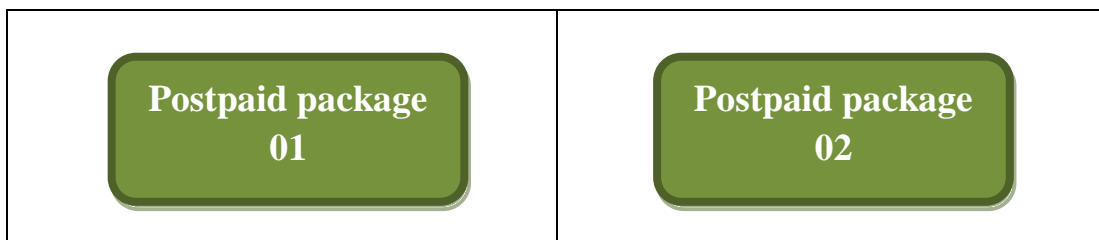
- Tk.300 cash back
- Free 300 SMS
- Free 300 MMS
- Free Daily news alert (3 months validity)
- Free Call Block service (3 months validity)

For the expediency of the customer there are two ways a customer can pay their bills. These two are:

- Scratch Card Auto Debit Easy load Bank
- Customer Care Center³

Postpaid Packages:

Currently Robi offers two postpaid packages for the customer one is postpaid pack 01 & other is postpaid Pack 02.



Picture 03: Postpaid packages offered by Robi

³ (Robi Axiata Limited, 2015)

1.6.3 International Roaming

Robi International Roaming Services allows Robi subscribers to make and receive calls while travelling to foreign countries. With its simple & affordable rates in 200 countries it is also available on Air and Sea. Subscribers need to have a post-paid Robi international roaming subscription to enjoy roaming services at selected networks at sea and air.

International Roaming offers:

- Use of the existing Robi number for roaming in all partner networks abroad
- Global network coverage with over 573 operators and 207 countries
- Spanning over six continents
- No additional monthly charge for availing the service
- Sending and receiving SMS to and from Robi
- Internet access and web surfing through GPRS Roaming Services
- Itemized bill without additional charge
- International Roaming Tariff information Through SMS⁴

1.6.4 Value Added Services

In addition with the pre-paid and post-paid mobile services, Robi also offers a wide range of value-added products and services such as, SMS, GPRS, EDGE, international roaming, Mobile Banking, SMS banking, Caller Ring Back Tone, MMS, Voice Greetings, Welcome Tunes, Call Blocking etc. The list of wide range of value-added products and services are:

1. SMS & Messaging

- SMS bundle
- International SMS
- International SMS Pack
- Circle

⁴ (Robi Axiata Limited Website, 2015)

- Circle premium services
- Hi buddy
- MMS
- Dynamic voice mail service
- Web SMS
- Voice SMS (Kothar Chithi)
- mGreetings

2. Music

- Goon Goon
- Night Radio
- Robi Radio
- Voice tube
- Local Express
- Dhamaka Express
- Sponsored Album

3. Calling & Mobile management






- Balance transfer
- Call Block
- Call conference
- Call waiting/forward/divert/holding
- Missed call alert
- Easy Menu
- Phone Backup

4. Social & Chat

- Robi Kothabarta
- Circle
- Facebook SMS
- SMS Chat
- Voice Chat
- Locator
- Shorgol

 Bangla Messenger






5. Finance & Career

-  BIMA Mobile Life Insurance
-  m-Pay
-  Job Alert
-  Ortho - DWASA Bill Payment
-  Robi Bazar





6. Information Services

-  Emergency Helpline
-  m-Farmer Service
-  E-traffic
-  Projukti jiggasha o SMS Tips
-  Robi Travel Line
-  Train Tracker
-  Robi Banglanews24.com News Service
-  Robi Shobjanta
-  News Bite
-  Haat-bazar
-  Islamic Info
-  Aroti Portal

7. Islamic services

-  Islamer Alo Portal
-  Islamic Kotha
-  Religious portal
-  Ebadaat service
-  Islamic Info

8. Lifestyle & Education

-  Matrimony
-  Health Tips
-  Muslim Life
-  Women Zone

- BBC Janala

9. Entertainment

- Entertainment World
- Cricket World
- Magic Voice
- Robi Zone
- Fun Portal
- Love Portal
- Kids Zone
- Star Search
- Horoscope
- Cricthrill

There are also some advance services available which are offered by Robi.

10. Advance services

- Balance Recharge through ATM Cards
- Train Tracker
- Balance Transfer
- Call Block
- Phone Backup
- Locator
- BIMA Life Insurance
- Missed Call Alert
- E-traffic
- FnF and Priyo Numbers

2. Job

বাবি



2.1 Main Job Description

Pre product and service features, User Acceptance Test (UAT) is very important prior to product launch to assure Billing/Charging/Network system readiness to serve the customer as per Company's plan to improve customer satisfaction, reduce churn and protect revenue from loss.

The main job role is to perform UAT with Cross functional team (MO, Tech, PLA) for regular upcoming new product, campaign before offering the new products and services to the market to ensure the accuracy of -

- Assurance or Testing of Billing and Charging rules configuration in the system as per campaign rules prior to launch,
 - Assurance or testing of complex discount and bonus disbursement rules is configured in the systems prior to launch,
 - Service or Offer expiry checking as per business plan
 - Ensure data availability in RA system for upcoming offers
 - Ensure RA systems readiness to monitor the upcoming features so that there is no leakage.
 - Testing data quality & data integrity between cross nodes to ensure accuracy of revenue.
- [Source: Job description of Intern]

2.2 Other Significant Responsibilities

Other tasks that I performed as an intern is illustrated below:

- Revenue Assurance control monitor
- Monitoring high Roaming usage

Interconnect Analysis

Revenue Assurance control monitor

For different sectors, revenue assurance has various controls. As an intern my task is to monitor the controls in a daily basis and mail it to the respective concerns. Monitoring the controls is very important because if any deviation or abnormalities occurs it is required to inform the concern person which will helps the RA to instantly find out the problem and solve it accordingly.

Monitoring high roaming usage

Robi international roaming service allows Robi subscriber's to make and receive calls to more than 600 operators and more than 200 countries around the globe. During my internship with Robi, I was assigned to check the billing of postpaid customers of international roaming. By activating this service these customers can enjoy international roaming service. Usually the customers have a certain limit on their usage and my main task is to check the credit limit threshold of these roaming customers. The customers who exceeded their credit limit by a particular amount then they will be noted down in an excel sheet and later on informed by a formal mail concerning their exceeded credit limit issue.

Interconnect Analysis

Interconnect is the process of handling calls for other service providers. This allows the customers of one service provider to communicate with the customers of another service provider. For example If two operators A and B are not interconnect partners, then it would not be possible for a customer of Operator A to communicate with a customer of operator B. Usually, operators keep their agreements with each other to allow their customers to communicate with each other. Interconnect analysis in Robi is conducted in various way. As an intern I had to do two sorts of analysis. One is by doing a graphical analysis, and comparing those analyses by checking the overall incoming & outgoing call of all the operators and call duration between Robi and other operators of Bangladesh. Another one is the day wise individual operators incoming and outgoing call analysis. I was assigned to do the graphical analysis and then make an overall report of it. The information that was used in the analysis was extracted from their database, through using database software like Oracle, SQL by running

different query. After conducting the analysis I was responsible to report the whole summary and findings to my supervisor and concern person.

2.3 Some of the regular task list as intern

- Updating Interconnect Analysis information in excel sheet extracted from the server
- Looking for missing files
- Snipping RAFM control pages and mail respectively to the supervisor
- Updating Revenue Reports and mail the chart
- Tracking subscribers of High Roaming Reports (HUR) to check their credit exposure limit
- Updating package wise revenue
- Perform UAT (User Acceptance Test)
- Updating UAT track report

2.4 Two special tasks completed as an intern

Organized team outing in Gazipur

As a part of the team building process we went for a refreshing team outing to ‘Jol O Jongoler Kabbo’, Gazipur. These sorts of activity help the team to improve bonding and relationships with each other. It also helps us to get a break from the monotonous day job and bring motivation into the team. Despite being an intern, I got the opportunity to arrange a team outing at ‘Jol O Jongoler Kabbo’, Gazipur. We preplanned for the whole function with varieties of fun and sports

activities. The activities included cricket matches, different games competition etc. With the help of the entire team, I made sure the program was flawless and enjoyable.

Pahela baishakh Floor competition

In the last Pahela Baishakh, Robi Axiata limited arranged Pahela Baishakh program and announced a floor competition keeping our culture and ethnicity in mind. It is the time of the year when we express our love and respect to our culture by indulging ourselves in number of traditional activities. With respect to that, I was assigned to lead in the 9th floor decoration. Along with the floor decoration we also had traditional dress code. Even though we couldn't win the competition, the program was much enjoyable and reminded us of our root.

2.5 Different Aspects of Job Performance

- **Product full proof floating in the market**

The main aspect of the job performance is to ensure whether the product is full proof floating in the market or not. By doing UAT all the team participants tests different parts of the product like the system readiness, Billing or charging, customer friendliness etc. Most importantly ensuring what is promised to the customer and what the customer is actually receiving.

- **Ensuring customer satisfaction:**

The second part of the Job performance is to ensuring the customer satisfaction. Customer satisfaction is verified by checking the promised duration or pulse of the call. Also with the new product and the service campaigns which have been offered to the customers. And lastly by assuring the charging that has been deducted based on the customer usage.

- **Revenue leakage prevention:**

Telecom operators continue to lose billions of money every year due to revenue and Fraud leakage. Operators continue to be more dependent on revenue growth from new products and services, which come up with new challenges and risk. In this particular case, across all geographical areas, over half of identified leakages were not recovered. So preventing the revenue leakage is an important part for Revenue Assurance team. Same goes for Robi as well. For revenue leakage mitigation the first thing need to check is the system configuration for the upcoming product or service. If the system configuration is corrected properly then it reduces the leakage halfway. And secondly checking the validity or expiry date of the data bundle, whether the offering validity and displayed validity are similar or not.

2.6 Observation

- Usually For old or launched features, which will be launched within two days, is known as ‘Fast Track’ launching. During the fast track launching sometimes vast level UAT is required but due to time limitations product go live with short UAT. As a result it creates risk for revenue leakage as well as customer dissatisfaction may arise.
- Product owners have come up with different packages with various charging criteria which sometimes contradict with current charging system. Sometimes it was impossible for the system to solve this issue as a result the system has to launch the product with default charging system. This may incur loss for the company if the amount of default is greater or might have chance for greater revenue leakage.
- During the UAT test cases needs to follow appropriately. Usually test cases are prepared by both product owner and technology team. From my observation the test cases are not fully done as well during the UAT time the test cases are not followed properly. After launching the product if any problem occurs then that will count as revenue loss, which can turn to be a big problem for the company.

3. Project



3.1 User Acceptance Test

User Acceptance testing is a user-run test that demonstrates the application's ability to meet the original business objectives and system requirements and usually consists of a subset of system tests. The UAT process allows for any issues to be fixed before the system goes live. During user acceptance testing; user review test results, verification of the correctness of acceptance testing, decision of pass or failure of tests and decide which failed tests are of the highest priority for correction. After testing concludes, users either grant or refuse acceptance of the system. So therefore user acceptance test is a final testing phase that is conducted during the life cycle of any product or service development, in order to determine whether the developed system meets the agreed requirements and to evaluate the readiness for operational use. When the test is completed successfully, then only customer or user will accept the software or offer in term of money.

3.1.1 Functions of UAT in Robi by Revenue Assurance (RA)

- Before launching any new product or service, the RA team conducts UAT to verify, whether charges are imposed as per the business plan. RA team ensures that product is successfully launched in the market and for that they use the best method to incorporate any changes and provide the best quality service to satisfy the target customers.
- Through UAT, the RA team ensures that the service offered has proper validity and expiry as it claims in the business plan.
- By conducting UAT the RA team goes for proper analysis of the improvement of service in newly launched products. If any discrepancy found in the test, the products go for further edition by the experts so that it just becomes the same as pre planned.
- RA team not only verifies the charging and billing part but they also go for feasibility analysis of service to check whether products and services are actually providing valid benefits to the end users which increases customer satisfaction.

3.2 Project Description

3.2.1 Objective of the Project

General objective: The general objective of this project is to explore the benefits & challenges of UAT at Robi Axiata limited.

Specific objective:

The specific objective of this project is:

- To describe the whole process of User Acceptance Test (UAT)
- To Analyze the need of User Acceptance Test (UAT) for Revenue Assurance team
- To find out the benefits of User Acceptance Test (UAT) for Revenue Assurance team
- To identify the obstacles of User Acceptance Test (UAT) faced by Revenue Assurance team
- To assess the recommendation given by the RA employees.

3.2.2 Methodology

There are few ways of collecting information, for example in depth interview, Projective techniques, Focus Group discussion, Observational method etc. As I was directly involved with the UAT team so, the whole process of User Acceptance Test (UAT) has been described through the observation method. To analyze the significance & challenges of UAT, I had to collect data from direct respondents. Keeping the cost, time and convenience in mind I went with in-depth interview method. I ensured the representativeness of the research by selecting five respondents from Revenue Assurance and fraud management department. After finishing the in depth interview of my respondents I individually analyzed every respondent's data and figured out why UAT is needed for RA team, what are the benefits, what are those obstacles faced during UAT and lastly the recommendation given by them.

3.2.3 Limitations

- Due to the confidential policy of the organization and especially as I worked for the revenue assurance team it would be difficult to disclose and cover all the information in this study. In addition to that as this not a publically listed company in stock exchange so they are reluctant to share their company's information.
- User acceptance test itself is a confidential property before the product goes live, so in this report I cannot mention any product related information.
- There were different department participated in User acceptance testing but I have only take the in depth interview of the Revenue assurance and fraud management department. Moreover, the number of respondent for in depth interview is very less; in that case some point might not be focused or might miss out.
- Every organization maintains their secrecy. While collecting data through interviewing the employees, they did not disclose much information for the sake of the confidentiality of the organization.

3.3 UAT process

Process objective:


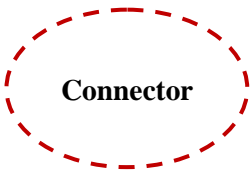

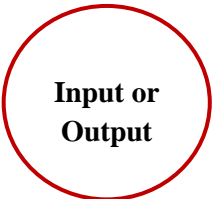


To identify and take corrective actions for existing product defects and probable failure points and fine tune the product in the most efficient and effective manner to turn out a robust and user friendly final product as per the user expectations along with identify and prevent revenue leakage.

UAT Participants:

- 👉 **For voice or device:** Product manager of Voice or device

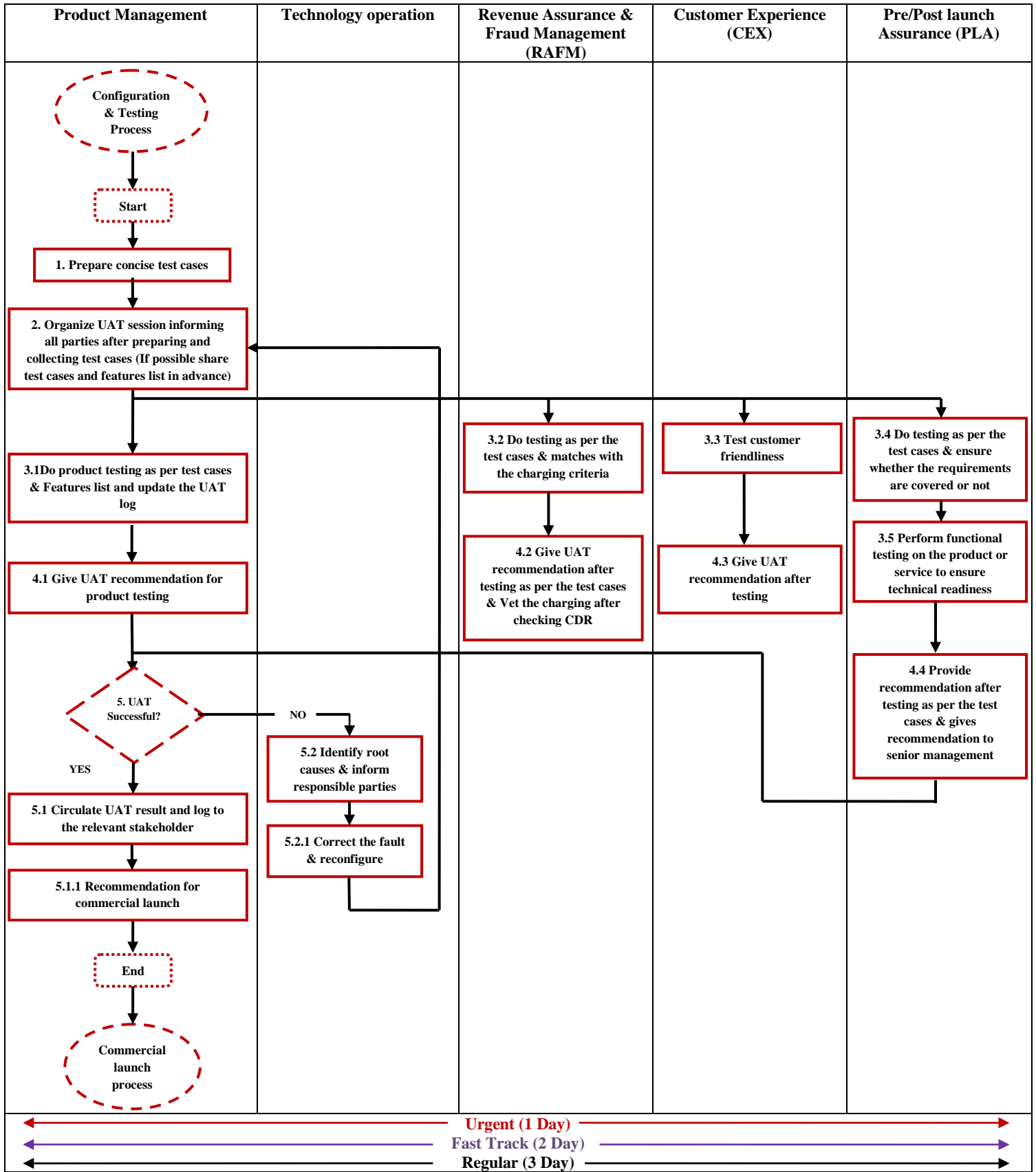
- **For VAS, Data or International Roaming:** Product manager of VAS, DATA or IR
- **For Micro Campaign or Reward or Win back:** Customer loyalty management (CLM)
- **For all kind of financial checking:** Revenue Assurance & Fraud Management(RAFM)
- **For technology related support:** Technology configuration team
- **For customer related support :**Customer experience (CEX)
- **For post launch evaluation:** Post launch assurance (PLA)

Process Symbol:

 <p>Start or End</p>	 <p>Connector</p>	 <p>Decision</p>
 <p>Input or Output</p>	 <p>Storage</p>	 <p>Activity</p>

Process Flowchart:

From Revenue Assurance team I was assigned to do the UAT. As I was the direct participant of the UAT team so I have the idea of the whole process. Based on the observation method the process of UAT has been designed. Through a flowchart the whole process of UAT process is described below



Process Steps:

Process Start

- 1.** Product or campaign manager to prepare concise test cases for UAT to capture all the possible features and probable fail proofing steps.
- 2.** Product, Campaign or service manager to organize UAT session informing all parties after preparing and collecting test cases and explain the details to be checked. (If possible share test cases and features list in advance).
 - 3.1.** Product, Campaign or Service Manager to test product or service feature as per the test cases and features list in the UAT and update UAT log.
 - 3.2.** RAFM does the testing as per the test cases for charging related issues.
 - 3.3.** Customer experience team checks the user friendliness of the product or service.
 - 3.4.** Post launch assurance team does the testing to ensure weather the requirement needed are fulfilled or not.
 - 3.5** PLA also Perform functional testing on the product or service to ensure technical readiness.
 - 4.1.** Product or Campaign Manager to give UAT recommendation for product testing.
 - 4.2.** RAFM to give UAT recommendation after testing as per test cases and Vet the charging after checking Call duration record(CDR)
 - 4.3.** CE to give UAT recommendation after checking;
 - 4.4** PLA to Provide recommendation after testing as per the test cases & gives recommendation to senior management
- 5.** Is the UAT successful?
 - 5.1.** If Yes, Product, Campaign or Service Manager to circulate UAT result and log to all parties
 - 5.1.1** Recommend for commercial launch
 - 5.2.** If No, Technology operation to identify root causes and responsible parties;

5.2.1. Technology to correct the fault and reconfigure and follow step 3.1, 3.2, 3.3, 3.4, 3.5

Process end

Some other terms:

Urgent: ‘Urgent’ means the product needs to be launch within one day. Generally innovative campaigns against competitor or new features are launched in ‘Urgent’ phase. In case of ‘Urgent’ phase IT, Charging Head, and department head’s approval or alignment is required.

Fast Track: ‘Fast Track’ means it must be an old or launched feature and usually the product will be launch within two days.

Regular: ‘Regular’ phase is the normal launching phase. Commonly Old or Launched feature or Non-tested feature or New Feature or 3rd Party vendor services are launched as regular. Typically it spans up to three days.

Example:

In context of Robi Axiata Limited let us assume that Robi is planning to launch a new product in the market. Also assume it’s a win back campaign and by recharging 60tk the customer will get 60 on net minute, 60 off net minute and 60 MB data and validity 6 days. During UAT testing all these mentioned criteria needs to be tested. UAT tester will be provided with a test handset and a test number through which each criterion will be tested, and will ensure whether the offer actually charged 60 TK or not, whether after purchasing this offer customer will get the following services that they are claiming to give.

The process of UAT is given below:

First the Product or campaign manager of Customer loyalty management (CLM) will prepare a concise test case of ‘Win back 60 campaign’ for UAT to capture all the possible features and probable fail proofing steps. Then he or she will call for UAT session, informing all parties after preparing and collecting test cases and will explain the details to be checked for example, whether the customer will get the desired minutes and data. RAFM will see the charging of on net and off net minutes, its call duration, consumption of data and product quality or functionality. Customer experience will check if the new bundle campaign is user friendly. Post

launch assurance team does the testing to ensure weather the requirement mentioned in the concept paper is fulfilled and also perform functional testing of win back campaign to ensure technical readiness. After doing the testing, respective teams will give their recommendation and will clear out their queries regarding this upcoming campaign. If the ‘win back 60’ UAT is successful then RAFM team will check the call duration record (CDR) and do the vetting. After getting the confirmation, all the concern team will give go ahead and sign in the UAT document. If there are any technical difficulties or charging issues then Technology operation will try to identify root causes and try to correct the fault and reconfigure. After configuring, again product owner will call for UAT.

Winback 60 Campaign														
UAT Number 018*****														
Cases	From	To	Start Time	End Time	Duration	Pulse	Before Balance	After balance	Charged ammount	Before bonus	After bonus	Charged Bonus	Pass/Fail	Remarks
USSD *XXXX*XX#														You have got 60 on net minute, 60 off net minute and 60 MB data
On net minute	018*****	018*****	XX:XX	XX:XX	XX	X	XXX	XXX	0	XX	XX	X	Okay	XX min remaining
Off net Minute	018*****	016*****	XX:XX	XX:XX	XX	X	XXX	XXX	0	XX	XX	X	Okay	XX min remaining
Data Use	018*****		XX:XX	XX:XX	XX	X	XXX	XXX	0	XX	XX	X	Okay	XX MB remaining

Picture 4: Sample of UAT log

3.4 Benefits & challenges of UAT

Respondent's information:

Name	Designation	Team
Mahfuz Alam	Manager	Revenue Assurance
MD. Rakibul Islam	Manager	Revenue Assurance
Naresh Chandra Biswas	Manager	Revenue Assurance
Farhad Hossain	Manager	Fraud Management
Mashrur Hossain	Specialist	Fraud Management

After conducting the in depth interview of the five respondents from revenue assurance and fraud management (RAFM) department I have come up with some points

3.4.1 Importance and benefits of User Acceptance test

Mitigate the revenue leakage: A typical telecom operation consists of a long and complex chain of interrelated operations that work together to deliver telecommunication services to the customers and then track the services delivered and bill the customers for the services delivered. This long and complex chain is very often referred as a Revenue Management Chain.⁵ Typically Revenue Management Chain pertaining to any operator in the world is comprised of the network and the network operations ensuring the fact that the services are being delivered properly to the subscribers. With the Different billing systems, for example, prepaid, post-paid, interconnect as

⁵ (Kalyan Hariharan, 2011)

well as roaming and the core process related to billing, for example, tracking, collection, dunning, and credit control. In this Revenue Management Chain it is observed that in some cases the subscribers are not billed in spite of the necessary services have been provided, which is defined as a 'revenue leakage'.⁶ So a 'revenue leakage' is when a service is delivered but not billed yielding into non-collection of payments for the services not billed. This will create a huge loss for the company. So According to all the respondents, the major importance of UAT is to mitigate the revenue leakage. Through UAT the company can assure all the above mentioned issues which can detect revenue leakages and subsequently to prevent the leakages. Moreover, pointing those areas where leakage might occur in future and taking necessary steps for the preventive action.

Enhance the customer experience: 'Customer satisfaction' is the most important mantra in any service industry, especially for the booming telecom sector. Recent studies revealed that the power in the communications industry has clearly shifted to the consumer and their satisfaction.⁷ The 'customer satisfaction' is one of the core business objectives, which will amplify the revenue, and goodwill of the company. Across the world, telecom operators have been struggling to implement many measures just to give their customers a pleasing service, which can result in customer satisfaction and will lead to customer longevity. Robi always believes that if we are able to keep our customers happy, then the other objective of revenue will be achieved automatically. That is why the people, processes and systems clearly utilize this mantra and drive all their conscious efforts to ensure that the ultimate objective of customer satisfaction is ensured for their products and services. Keeping that in mind Based on the five respondents, the second importance of UAT is to enhance the customer experience. During UAT the participants always check whether the upcoming product or service is customer centric, whether product communication is fair enough, how to give customer support by different channel, and lastly by checking the readiness of technical support and system support. UAT helps to develop the customer loyalty and word-of-mouth market share. Finding success with a program that offers the kind of quality that only thorough testing can provide, is much easier than trying to build a customer base on buggy and defect-riddled code. So by conducting UAT it ensure the customers

⁶ (Kalyan Hariharan, 2011)

⁷ (Kalyan Hariharan, 2011)

user friendliness and to reduce the customer complains which will ultimately escalate the revenue of Robi.

Full proof product launching: According to Mr. Mahfuz Alam, Mr. Rakibul islam, Mr. Farhad Hossain and Mr. Mashrur Hossain UAT is also needed to check whether the full prof product is delivering the market or not. New products or services and upgrades to existing product or service act as key to a business's survival and User Acceptance test plays a vital role in the development of these parameters. Doing the UAT before launch a new product increases the chances of being successful in the market manifold. The cost involved in UAT is very less because all we have to do is act on customer reviews and performs some other tests, which is virtually a zero cost affair. After a new product is designed it needs to be tested for its effectiveness by making it available to the employees. Employees can give review about the product on various parameters such as quality and longevity. The testing period is crucial since it gives an idea of the major shortcomings in the product through a customer point of view but it also helps the product manager to analyze the post-test effect and customer complaints which can easily be rectified. Also if any difficulties are found after launching the product, then it can be simply revised.

Revenue sources recognize: As the telecom market evolves, new performance metrics must be embraced in order to accommodate a saturated market where subscriber growth is tapering. With the new technology and devices each of these comes with different revenue plans and pricing models, representing different business relationships between the user and the operator. Consequently, the product and marketing organizations will now need to move beyond traditional sources of revenue. As they have gained a better understanding of their customers, they can use this to improve customer experience management and generate new revenue sources. As operators get more comfortable with customer, they can use customer knowledge to change the revenue paradigm. An operator who really knows its customers' devices, locations, mobility habits and usage patterns can better tailor services and offers for each and every customer, ensuring retention and continuous business. These transformations help create a much closer and stable relationship between the operator and the customer, making competitor penetration an increasingly difficult endeavor. Most importantly, these enable operators to

become champions of customer support and service, while prompting entirely new sources of revenue that is already at their fingertips. All these things are possible if proper UAT is done. That is why Mr. Mashrur Hossain pointed that UAT is needed to recognize the sources of revenues. Through UAT we can get the idea of new opportunities that are waiting at the doorstep for the company.

3.4.2 Hindrances of User Acceptance test

Team Co-ordination: During the User Acceptance test all the people from the respective departments need to be present and without any one of the teams the UAT will be incomplete. In Robi there are different individuals, groups and departments whose activities are different from each other. Moreover all participants have different time preference and their thoughts are different from each other. So managing the time and thoughts of the cross-functional team is a major obstacle of UAT. The five respondents also mark this team alignment problem as a major obstacle of UAT. This not only lies in the time and thought, sometimes, different project owners arrange UAT, which clashes with the other UAT time. As a result it was difficult for the UAT participants to prioritize which to attend and which to skip.

Lack of proper adequate time for UAT :Mr. Rakibul islam, Mr. Naresh Chandra Biswas, Mr. Farhad Hossain and Mr. Mashrur Hossain said, Lack of proper acceptable time for UAT is another challenges faced during UAT time. Sometimes product owner called for UAT with a very short notice by mentioning the fast launch of the product, service or campaigns. In that case the team is left with very less time for the UAT. On the other hand all the UAT participants are not always available, thus there are chances of default. At the same time if the product is not timely launched in the market, then that might cause revenue loss.

Inadequate Test cases and concept paper: Proper concept paper and test cases are important part of successful UAT. Generally Product owner and technology team both prepare the concept paper and test cases. According to Mr. Mahfuz Alam and Mr. Naresh Chandra Biswas inadequate test cases and concept papers create problem during the UAT session. Majority of the

time before the UAT session, the participants did not get the whole concept paper as a result they were not fully prepared for the UAT. Furthermore product owner sometimes change the concept paper in the last moment which creates problem in the test case finalization. Thus, it creates hassle during UAT and the value of outcome was not up to the mark.

Technical readiness: Technical readiness is another challenge of UAT said by Mr. Rakibul Islam and Mr. Mashrur Hossain. Basically a particular team is assigned for the product and service configuration but sometimes multiple product owners' call for UAT, so it was quite difficult for the configuration team to co-ordinate with the multiple product owners. At times communication gap occurs between the configuration team and product owners for which during UAT it is found that the product design has flaws or faced with some technical difficulties. For these problems multiparty needs to sit again and again until the UAT are successful and that creates disturbance to the UAT participants due to wastage of their time.

3.5 Recommendation

- There should be a permanent UAT team where concerned person from the respective teams should be assigned only for UAT in a separate UAT room. Permanent UAT team is required to reduce the time of the cross functional team alignment as well as there will be fewer chances for multiple UAT at the same time.
- During UAT, the product owner and participants do not strictly follow all the rules and regulations. That is why different campaigns UAT is organized in different ways. Sometimes new product owner mixes up the whole UAT process and has liaison, which creates hassles during UAT. That is why there must be proper Service level agreement (SLA) which is to be followed strictly.
- There should be soft launching among the UAT team and employees before the product goes live because the new product or campaign needs to be verified by the employees. Employees can give review and can give comments on the product regarding various factors, which will help to reduce the chances of product errors and technical

complications. Also if any problem occurs before launching then it can be easily rectifiable. As a result we can eradicate the after launching customer complaints and minimize the cost.

- Before doing UAT, technical team and product owner should do pre UAT just to be prepared in front of the UAT participants with proper concept paper and test cases. Also to confirm the technical readiness with a better communication so that no confusion lies between them. This will help the UAT participants not to sit in the UAT repeatedly, which will reduce the time and dissatisfaction of the participants.
- Adequate time should be allowed for UAT to reduce the default time of launching the product. If proper time is not given in the UAT then we cannot test every single cases of the UAT.
- There is a particular time allocated for UAT .Within this allocated time if any of the participants is late then the whole process will be delayed. Furthermore manpower of many people will be wasted due to anybody's delay. So for the sake of everybody all the UAT participants & stakeholders should be present on time because the more lately the process commences, the less time the participant will get to test the product.
- Every product owner should follow proper and common documentation format for doing UAT. Otherwise it will be difficult for the rest of the people to match it up every time after UAT. If a proper and common format is maintained then it will reduce time during the UAT.
- Lead time is a very important factor before launching any product or service. Every product owner should keep that in mind that before launching any product there should be a proper lead time because it will allow adequate time for proper concept paper and test cases, thus full fledge UAT which will lead to a proper final product or service without having any discrepancies. Also if any problem occurs it can be easily solved.
- UAT test case need to finalize with all the concern team before conducting the UAT since it is very essential during the UAT time. If the product owner finalize the test case with the concern team then every single factor will be highlighted, which will ensure greater customer satisfaction.

4.

Conclusion



For the completion of my BBA program it is mandatory to complete my internship program in any organization and I was very privileged to work with one of the largest telecommunication service provider company Robi Axiata Limited. Working in a large organization like Robi is very pleasurable experience for me and on top of that Finance division is like the cherry on the cake. Within this four month of internship program I got the idea of the corporate culture, work place, work life, and so on. The culture and the work environment of Robi are very different. Specially the team where I belong, they never treated me as an intern and always considered me as a part of their Robi Family. After working here I truly believe Robi is the people-oriented brand of Bangladesh. Robi has always emphasized on developing a good guidance system in order to achieve its desired corporate objectives. From the origin of the company, Robi has come to a long way in reaching these objectives by listening to client's needs, learning real time lessons from past projects, innovating and partnering. For the people of Bangladesh it is peoples champion .Having the local tradition at its core, Robi marches ahead with innovation and creativity.

References

- Robi Axiata Limited website.
URL: <http://www.robi.com.bd/>
- Tutorial Point Website
URL: <http://www.tutorialspoint.com/telecom-billing/interconnect-billing.htm> [Accessed in 24th June 2015]
- India Telecom Online
URL: <http://www.indiatelecomonline.com/tag/revenue-leakage/> [Accessed in 25th June 2015]
URL: <http://www.indiatelecomonline.com/customer-happiness/> [Accessed in 26th June 2015]
- Internship report of Murtazma Ahmed

Abbreviations

- **UAT:** User Acceptance test
- **CAMEL:** Customized Applications for Mobile Enhanced Logic
- **GPRS:** General Pack Radio Service
- **EDGE:** Enhanced Data rates for GSM Evolution
- **GSM:** Global System for Mobile
- **MO:** Market Operation
- **VAS:** Value Added Service
- **PLA:** Post Launch Assurance
- **R&D:** Research & Development
- **3G:** Third Generation
- **SLA:** Service level agreement
- **CDR:** Call duration record
- **OCS:** Online charging system
- **IN:** Intelligent Network