



ব্র্যাক বিশ্ববিদ্যালয়

***Internship Report  
on  
Fleet Automation System of Robi Axiata Limited***

***Submitted To:***

***Dr. Salehuddin Ahmed  
Professor  
BRAC Business School  
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***Date of Submission: 9 July 2018***





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## Fleet Automation System of Robi Axiata Limited

An Internship Report  
By  
Tanvir Reza





## Letter Of Transmittal:

Date: 9 July, 2018

To

Dr. Salehuddin Ahmed  
Professor  
BRAC Business School  
BRAC University  
Dhaka

### **Subject: Submission of Internship Report**

Dear Sir,

I am here by submitting my Internship Report, which is a part of the MBA Program curriculum. It is great achievement to work under your active supervision.

This report is based on, “Fleet Automation System of Robi Axiata Limited.” I have the opportunity to work in Robi Axiata Limited in “Fleet management of Facility & Services” under P&C division for couples of years, under the supervision of Mohammad Khokon Meah, Manager, Fleet Management, Facility & Services.

This project gave me both academic and practical exposures. 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 work with “Fleet Automation System of Robi Axiata Limited.” in corporate environment.

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**

-----

Tanvir Reza  
ID: 15264046  
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BRAC University



## **Acknowledgement:**

First of all, I wish to express my gratitude to the almighty ALLAH for giving me the strength to perform my responsibilities as an intern and complete the report within the stipulated time.

I am deeply indebted to my Advisor Dr. Salehuddin Ahmed, Professor, BRAC Business School, I am also grateful to Mohammad Khokon Meah, as my organizational supervisor. It would have been very difficult to prepare this report up to this mark without their guidance.

My gratitude goes to entire BRACU for arranging Internship Program that facilitates integration of theoretical knowledge with real life situation.

Last but not the least, I would like to convey my gratitude to Mohammad Khokon Meah, Manager, Fleet Management, Facility & Services under P&C Division, for helping me in furnishing the report. Moreover, I would also like to express my gratitude to my Robi Axiata Ltd fellows, seniors, and colleagues who gave me good advice, suggestions, inspiration, and support. I must mention the wonderful working environment and group commitment of this organization that has enabled me to deal with many things.

## Executive Summary:

This report is prepared on the basis of my years of practical experience at Robi Axiata Limited. This internship program helped me to learn about the practical scenario of a Telecommunication Company. Robi Axiata Limited is a dynamic and leading countrywide GSM communication solution provider. It is a joint venture between Axiata Group of Malaysia, Bharti Airtel, of India and NTT Docomo Inc., of Japan. Axiata holds 68.7% controlling stake in the entity, Bharti holds 25% while the remaining 6.3% is held by NTT Docomo of Japan. RobiAxiata Limited, formerly known as Telecom Malaysia International (Bangladesh), commenced its operation in 1997 under the brand name Aktel among the pioneer GSM mobile telecommunications service providers in Bangladesh. This report has been presented based on my observation and experience gathered from the company. The organization has many divisions and departments but the focus is given more on the level of Fleet Automation System of Robi Axiata Limited, as I only got the opportunity to work in this division.

The report is conducted to draw a conclusion on the effects of System automation. The result that is found is quite considerable. However this project gave me both academic and practical exposures. 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 work with “Fleet Automation System of Robi Axiata Limited.” in corporate environment.

After knowing the scenario of Robi Axiata Limited in terms of their employee satisfaction a lot of recommendation came up. The report also consist recommendations and conclusion according to my point of view, which I think would improve the environment of the organization if implemented.

## TABLE OF CONTENT

Chapter	Topics	Page Number
Chapter-1	<b>Introduction</b>	
1.1	Origin of the Report	1
1.2	Objective of the Report	1
1.3	Scope of the study	2
1.4	Methodology	2
1.5	Limitations of the Study	3
1.6	Review of Related Literature	4
Chapter-2	<b>Company Overview</b>	
2.1	Present Scenario of the Industry	6
2.2	Governance of telecommunication sector of Bangladesh	7
2.3	Market Share of Mobile Phone Companies in Bangladesh	8
Chapter-3	<b>Background</b>	
3.1	Background of the Robi Axiata Ltd.	9
3.2	Company Acquaintance	10
3.3	Global Mission of the Company	10
3.4	The Business Slogan, Logo and Visual Language	10
3.5	Organogram (Robi Axiata Ltd.)	12
3.6	Organization Structure of the Company	13
3.7	Shareholders of the Company	13
3.8	Facility & Services Under HR Divisions of the Company	15
3.9	Milestones of Robi Axiata Ltd	17
Chapter-4	<b>Fleet management</b>	
4.1	Basic Fleet management	18
4.2	Role of Today's Fleet Managers	19
4.3	Fleet management of Robi Axiata Ltd.	19
Chapter-5	<b>Automation</b>	
5.1	Introduction to the Process Automation of Fleet Management	22
5.2	Savings from Fleet Automation	23
5.3	Expected Outcome from Automation Process	23
5.4	Justification of Automation Process	24
5.5	Functions of the Automation Process	24
5.6	Impact on Organizational and Technological Factors	26
5.7	Major Systems of Automation Process	27
5.8	Six-phase Process of Automation	32
5.9	Overall gain from Automation Process by Robi Axiata Ltd.	34
5.10	Limitations of the Process Automation	35
Chapter-6	<b>Analysis</b>	
6.1	SWOT Analysis	36
6.2	Findings	38
	Recommendations	45
	Conclusion	46
	Reference List	47



## 1. Introduction

In spite of economic recession, the economy of Bangladesh has become the 43<sup>th</sup> largest economy in nominal term & 30<sup>nd</sup> largest by purchasing power parity. The telecommunication sector holds a major portion of that economy. Currently four communication companies are operating in Bangladesh. About 145.114 million customers are subscribed with those telecommunication companies. Among the four players of this sector Robi Axiata Ltd. is the “Emerging Market Service Provider of the Year”. Approximately, it grasps 29.56% customers of those subscribers. It has been operating its business work since 1997 as brand named “AKTEL”. In 2010, its management has transferred to Axiata group with brand named “Robi Axiata Ltd.” At present the company is operating its one of the major part called “Fleet management” through a manual process. Now the management of Robi Axiata Ltd. has decided to automate this process through fleet automation to minimize the internal cost and to improve the operational Excellency. Here I am helping them to make a report on process automation.

### 1.1 Origin of the Report

As a part of the MBA program of BRACU, it is mandatory to submit an internship report to complete MBA program. For this purpose I am working on it along with my job experience in Robi Axiata Ltd, Discussing with my supervisor; Mohammad Khokon Meah, Manager Fleet Management (Facility & Services.), Robi Axiata Ltd, I was assigned to the task, to prepare a project on process automation. Dr. Salehuddin Ahmed, Professor, BRAC Business School, accepted the proposal to supervise the report as guide on behalf BRACU MBA program. This report is about the process Automation: Fleet Automation System of Robi Axiata Ltd. Here the report contains how to automate the current manual system of fleet management and benefits of the automation.

### 1.2 Objective of the Report

There are mainly two objectives of the reports. As follows:

#### **A. Broad Objective:**

1. To accomplish the requirement of MBA program as necessitated by BRAC University.
2. To illustrate automate the process of fleet management of Robi Axiata Ltd. for providing world standard fleet support in a cost effective manner.

#### **B. Specific Objectives**

1. To reduce internal cost by managing fleet in a cost effective manner
2. To expedite and make effective vehicle management system
3. To improve operational activities
4. To make a centrally web-based application
5. To ensure the safety, security integrity and improve satisfaction level of employee.
6. Finally to ensure the best utilization of company asset as well as satisfy the stake holders' expectation.



### 1.3 Scope of the study

The scope of the study is limited within telecommunication business in Bangladesh. It is also limited within the organization of Robi Axiata Ltd. This study also shows an overview of Robi Axiata Ltd.

Robi Axiata Ltd. is the market follower in the mobile telecommunication industry of Bangladesh. But in this edge of competition, it is very complex to hold the market position. The study intends to provide a brief but complete idea about the automation process of fleet management of Robi Axiata Ltd.

Also through this study an evaluation of the operational activities and costs efficiency has done and some problems have been identified that hinder the better performance. Finally, recommendations have been mentioned to improve operation of fleet and other processes to being automated for reducing the internal costs.

### 1.4 Methodology

This report is an exploratory research. Exploratory research often relies on secondary research such as reviewing available literature and/or data, or qualitative approaches such as informal discussions with consumers, employees, management or competitors, and more formal approaches through in-depth interviews, focus groups, projective methods, case studies or pilot studies. The Internet allows for research methods that are more interactive in nature. The objective of the exploratory research is to explore or search through a problem or situation to provide better understanding. However, this report is about to develop an approach for process automation to reduce the cost and maximize the utilization of operation activities, secondary data have collected and analyzed. Because secondary data is helpful to identify the problem, better define the problem and easy to collect.

#### **Sources of Data:**

This study has covered the following secondary sources:

#### **Secondary Data:**

- a. Going through different documents and papers, newsletter (for internal purpose only), developed by the company personnel, different books, newspapers, brochures to collect the secondary data.
- b. Internal Portal of Robi Axiata Ltd.
- c. Different web sites.
- d. Utilization report of Robi Axiata Ltd.
- e. Several telecommunication and fleet management related journals.

#### **Analysis of Data:**

Collected data are analyzed by using percentages, graphs to draw the conclusion. All the data have shown in tabular form.





## 1.5 Limitations of the Study

➤ **Authentication of the information:**

Robi Axiata Ltd. has managed about 95 own vehicles and 400 outsources vehicles around the country. This study needs to accumulate the exact information of every vehicles and drivers to transform the manual process into automation. It is hardly possible to automate the whole process accurately.

➤ **Confidentiality:**

Confidentiality of data was another important barrier that was confronted during the conduct of this study. Every organization has their own secrecy that is not revealed to others.

➤ **Time Constraint:**

Time constraint of the semester require less time that may be ideal for an ethnographic study. By being a student and worker I also get a few time for preparing the report.



## 1.6 Literature Review:

*According to business process expert:*

✚ **Dr. Laury Verner**, businesses over the past decade have devoted increasing attention to business processes, their improvement, and their automation. This interest grows out of the need to streamline business operations, consolidate organizations, and reduce costs. A good automation tool will provide an easy way to automate processes, coordinate tasks, and move data between process-players. It will also provide the flexibility and agility to support a constantly changing environment. You owe it to yourself and your company to investigate process automation in order to keep pace with the competition and move to the next level of performance. Mention to the **Business Process Management's Success Hinges on Business-Led Initiatives**", Gartner, 26 July 2005

✚ **Dr. Verner states:**

The design and automation of business processes warrants its own field of study, known as business process management (BPM). BPM has emerged as a critical cross-discipline control and process enabler, and is responsible for ensuring consistency in planning and performance management while reducing costs across the enterprise<sup>1</sup>. "In this competitive business environment where we are asked to cut costs and do more with less, process improvement is essential to staying alive and meeting our strategic objectives. Process automation can facilitate process implementation and improvement, provide consistency in process execution, ensure regulatory compliance, and allow us to change in response to rapidly changing conditions and demands. **"The Process and the Challenge"**, Laury Verner, Ph.D., ACM Queue, Vol. 2, No. 1, March 2004

✚ **James A. Moudry:**

Today's economic reality is that of increased competition, better informed and demanding customers, and relentless pressure to cut costs. Companies are being asked to do more with less. Improving processes has become a top priority for all types of businesses. A recent survey of 1,400 CIOs by Gartner Executive Programs revealed that the top business priority of their company was business process improvement. Of course, there are many ways to improve processes, but implementing process automation offers significant opportunities for gains in efficiency, compliance, and a host of other benefits

*Shorter Cycle Times.* Time is money. By automating processes, they are kept moving, hand-offs are facilitated, consistency is assured, and cycle times to complete the



process are shortened. Getting the product or service to the end user or to market quicker can result in significant financial benefits. **James A.Moudry, ASQ CMQ/OE and CSQE; Candidate SCAMPI Lead Appraiser, Academic Press.**

✚ **Dr. Flint Brinton (senior vice president, Intelligent Automation Solutions, Cisco):** As leaders in IT, Automation will increasingly become the major contributor to efficiency, cost-containment and risk-mitigation in the new dynamic data center models, it is important that we help the market as it undergoes this transformation from traditional to more dynamic, virtualized and cloud-based models. Through this agreement, we are helping to not only meet the demands for IT process automation but are doing so rapidly to address customer needs.

✚ **Stephen Spears (senior vice president, Application Lifecycle Management Software, SAP);** SAP is constantly enhancing its support of customers, helping them optimize their operations of heterogeneous SAP solutions,". "With SAP IT Process Automation, which is an extension of SAP Solution Manager, customers can better leverage IT operations standards and Run SAP methodology through the definition of automated resolution workflows. This agreement between SAP and Cisco will further heighten the value and increase the adoption of SAP Solution Manager as the central platform for managing SAP solutions within SAP Enterprise Support services.  
**"WALLDORF, Germany and SAN JOSE, Calif. — June 20, 2012 — SAP AG (NYSE: SAP)**

✚ **According to Wikipedia,** “Business Process Automation, or BPA, is the strategy a business uses to automate processes in order to contain costs. It consists of integrating applications, restructuring labor resources and using software applications throughout the organization. “Continuous improvement is at the heart of process automation. The ability to have the information with which to continuously improve processes and gain incremental return on investment (ROI) on a consistent basis is a major benefit of process automation. A real benefit of process automation and management is the visibility and control of the business processes that is achieved. Process automation can activate the process; orchestrate the people, data, and documents involved in the process; and give managers visibility into how the process is operating, where the bottlenecks may be, and highlight possible process improvements, thus driving maximum performance and efficiency



## 2.1. Present Scenario of the Industry

As a most densely populated country, Bangladesh is one of the best lucrative markets for the mobile telecommunication providers. In 1993 by introducing Advanced Mobile Phone System (AMPS) Bangladesh commenced her mobile telecommunications industry. Though at very beginning the growth of this sector was steady, in last 5-10 it is noticeable that there is an exponential growth and in Bangladesh it has had the same transformative impact on Bangladesh's economy as the growth of Ready Made Garments and Remittances.

At present there are four major players are providing services in Bangladesh. They are as follows:

1. Grameen Phone Ltd. (GP)
2. Robi Axiata Limited (Robi)
3. Orascom Telecom Bangladesh Limited (Banglalink)
4. Teletalk Bangladesh Ltd. (Teletalk)

However, 145.65 million customers are using mobile phones in a population of 163 million in Bangladesh. As the oligopoly remains in the industry, competition base is still on the startup price and call rate structure.

In Bangladesh there is no other competitive market except mobile telecommunication market. In this market, the almost all of the subscribers are generally very much price sensitive and thus a price cut of a particular mobile telecom company still force other players to cut their price too which is not good at all from business point of view. On the other hand, differentiation is not yet been achieved so greatly by any of the telecommunication company here on the main stream services like generic communication facilities and thus differentiation base is still the same – startup price and call rate. As a consequence the profit structure is very low for most of the mobile telecom in Bangladesh, except **Grameen Phone**.



## 2.2. Governance of telecommunication sector of Bangladesh

Bangladesh Telecommunication Regulatory Commission (BTRC), is the government owned telecommunication-controlling company, is regulating the telecommunication sector in Bangladesh.

Figure: 01 below broadly portrays the rather complicated organizational structure of the telecommunication sector. MOPT is the policy making body of the Government of Bangladesh (GOB) for telecommunications. In the absence of a formal regulator, MOPT is also responsible for spectrum management, and regulation of BTRC and private sector rural and cellular operators. The value-added service providers such as VSAT and Internet Service Providers (ISPs) are also supposed to be regulated by MOPT.

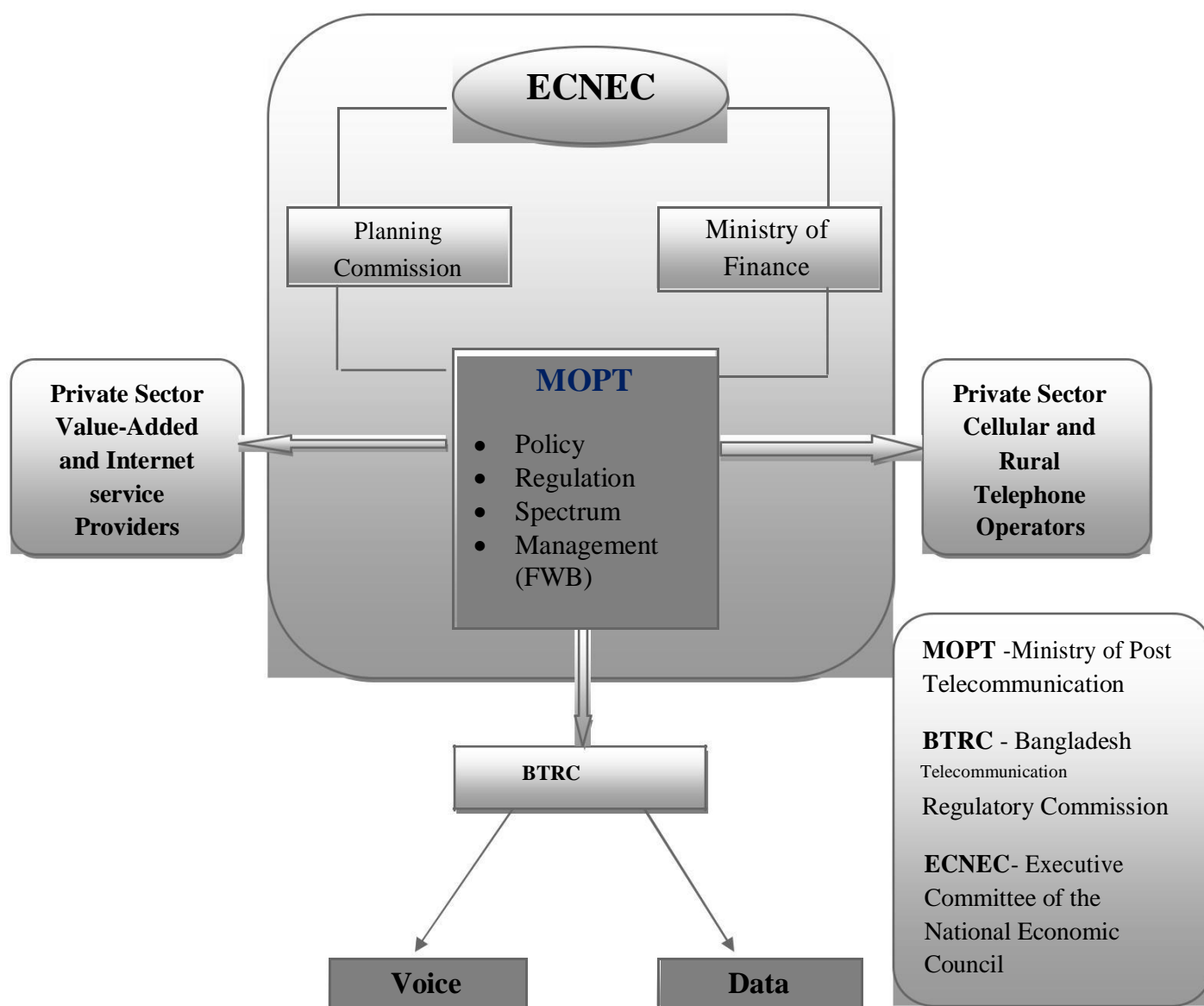


Figure: 01- Governance of Telecom Sectors of Bangladesh



### 2.3 Market Share of Mobile Phone Companies in Bangladesh

In this most competitive market, Robi Axiata Limited has achieved more market share in 2018 than 2017. Figure below shows that GP has the largest market share among 3 companies. After being merged with Airtel, Robi became the 2<sup>nd</sup> largest mobile company in Bangladesh.

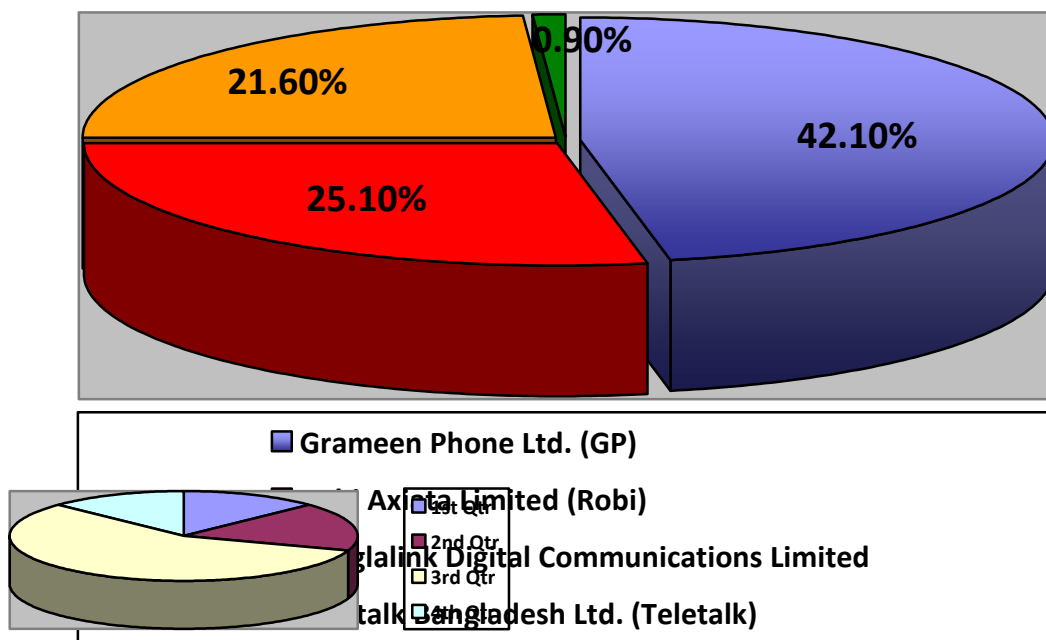


Figure 02: Telecommunication Market Share of Bangladesh in 2018-wikipedia

**Table 1: Present Subscribers of the mobile services providers in Bangladesh**

OPERATOR	SUBSCRIBER (IN MILLIONS)
Grameen Phone Ltd. (GP)	68.594
Robi Axiata Limited (Robi)	45.029
Banglalink Digital Communications Limited	33.346
Teletalk Bangladesh Ltd. (Teletalk)	3.757
<b>Total</b>	<b>150.727</b>

Source: BTRC



### 3.1 Background of the Robi Axiata Ltd.

Robi Axiata Limited, DBA Robi is the second largest mobile network operator of Bangladesh. It is a joint venture between Axiata Group Berhad, of Malaysia, Bharti Airtel Limited, of India and NTT DoCoMo Inc., of Japan. Axiata holds 68.7% controlling stake in the entity, Bharti holds 25% while the remaining 6.3% is held by NTT DOCOMO of Japan. The first merger of Bangladesh's telecom sector has come into effect with the beginning of the operation of Robi Axiata Limited as the merged company on November 16, 2016. Following the merger of Robi and airtel, the merged company is now known as Robi Axiata Limited. Having successfully completed the merger process, Robi has emerged as the second largest mobile phone operator in Bangladesh. The merged company has nationwide network coverage. airtel' is as an independent product brand of Robi Axiata. Robi Axiata has spectrum on GSM 900, 1800 and 2100 MHz bands.

Robi Axiata Limited started as a joint venture company between Telekom Malaysia and AK Khan and Company. It was formerly known as Telekom Malaysia International Bangladesh Limited which commenced operations in Bangladesh in 1997 with the brand name 'AKTEL'. In 2008, AK Khan and Company exited the business by selling its 30% stake to Japan's NTT Docomo for US\$350 million.

On March 28, 2010, 'AKTEL' was rebranded as 'Robi' which means Sun in Bengali. It also took the logo of parent company Axiata Group which itself also went through a major rebranding in 2009. In 2013, after five years of presence, Docomo reduced its ownership to 8% for Axiata to take 92%.

On 28 January 2016, it was announced that Robi Axiata and Airtel Bangladesh will merge in Q1 2016. The combined entity will be called Robi, to serve about 40 million subscribers combined by both networks. Axiata Group will own 68.3% share, while Bharti Group will own 25%. The remaining shares will be owned by NTT Docomo. Finally Robi and Airtel were merged on November 16, 2016 and Robi set sail as the merged company.



## 3.2 Company Acquaintance

### Vision

Robi's vision is to continuously monitor its customer's needs and to plan accordingly. It will monitor the development of technology and updated self to meet customer demand.

### Mission

Robi aims to achieve its vision through being number 'one' not only in terms of market share, but also by being an employer of choice with up-to-date knowledge and products geared to address the ever changing needs of our budding nation

### Theme

extends its services to its customers and subscribers with the theme of spreading its power to every individual and empowering them with their own strength.

## 3.3 Global Mission of the Company

Robi Axiata Ltd. wants to provide its customers the best quality service in terms of

1. Trusted technology around the world
2. Wide coverage with digital clarity
3. Digital security with peace of mind
4. Various choices of value-added features
5. Better customer service-not just promised, but delivered
6. Competitive rate and better billing.

## 3.4 The Business Slogan, Logo and Visual Language

### 3.4.1 Business Slogan

Robi Axiata Ltd. has its own slogan: "Apnar Shokti Apnar Sathe, Jole Uthun Apon Shoktite" That means "Your power is in you, light up with your own power".



Figure 03: Robi Business Slogan





### 3.4.2 Logo and Visual Language

At the heart of the new brand is its new logo . It is a symbol of balance, movement and change.

### 3.4.3 Usage of Brand Signature (Logo)

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

### 3.4.4 Usage of Alpona

The **Alpona** is one of the most creative expressions of Bengali graphic arts.



*Figure 04: Robi Alpona*

Robi’s Alpona motif is uniquely created, especially for them. Taken from a very traditional ceremonial form and tidied up to look more contemporary- the Alpona is vibrant and modern. It has a very organic soft feel to it whilst providing a forward moving direction- one of positivity and focus. The lack of sharp points and use of large curves provides a feeling of warmth and friendliness.



### 3.5 Organogram (Robi Axiata Ltd.)

Like every company Robi Axiata Ltd. has its own organizational structure. Its mother company, Axiata Group, basically controls the organization which is mainly structured with a Board of Directors. Figure: Portrays complex but complete Organogram of Robi Axiata Ltd.

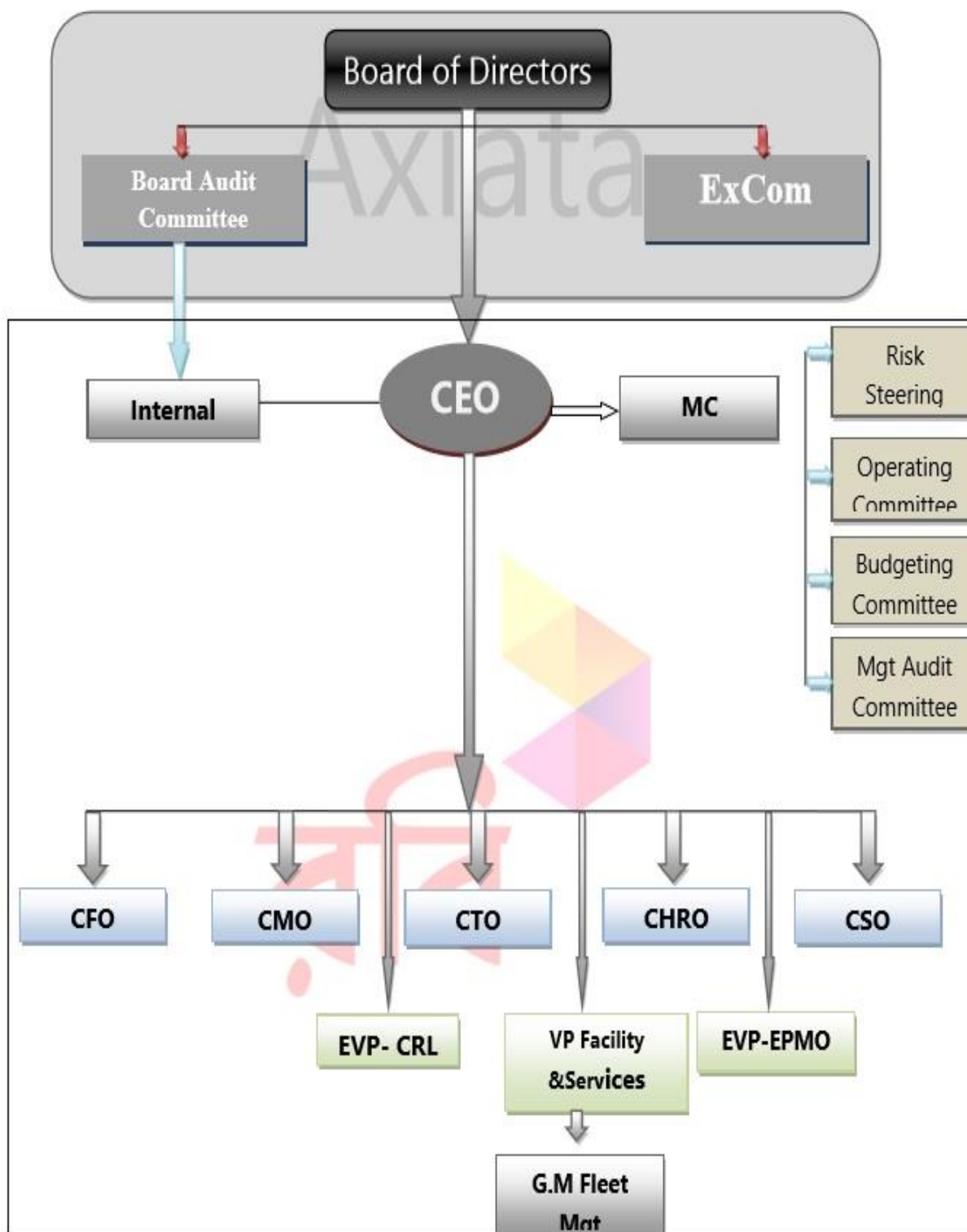


Figure 05: Robi Organogram by Author

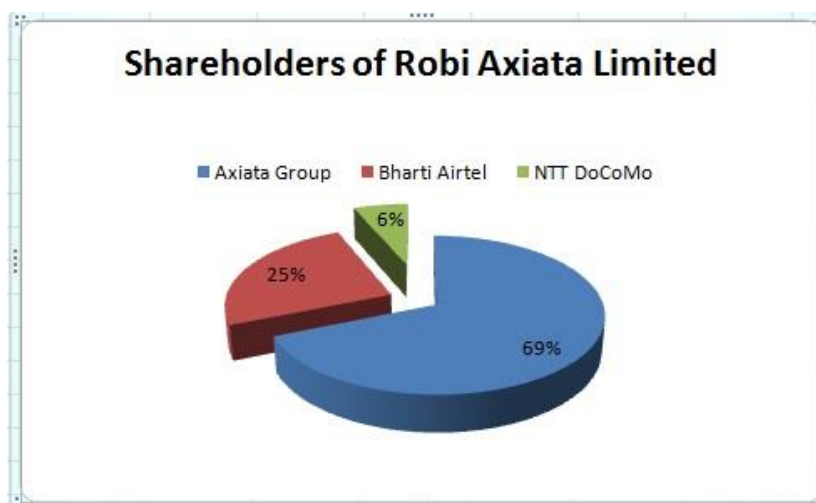


### 3.6 Organization Structure of the Company

Robi Axiata Ltd. places a high value on human resource development and the contributions made by its employees. It preserves to maintain a productive and harmonious working environment in the whole organization. Robi Axiata Ltd. always continues with its efforts to improve the efficiency of its employees and align them to the right positions with well-defined responsibilities. Because of the rapid expansions of its networks and enormous growth of its subscriber's base, the company has increased its workforce. Robi Axiata Ltd. has successfully hired some key senior managers who were recruited on the basis of their professional expertise and experience. In order to cope up with the dynamic nature of the company's business, initiatives are always taken to restructure and recognize the company's existing set up. It always evolves standardized management systems and procedures across functional divisions, focusing in particular, on the effective integration and assimilation of all the organizational units.

### 3.7 Shareholders of the Company

Robi Axiata Limited is a joint venture of Axiata Group Berhad of Malaysia, Bharti Airtel Limited of India (Bharti) and NTT DoCoMo Inc. of Japan (NTT DoCoMo). The entity 'Robi Axiata Limited' merged with Bharti's operation in Bangladesh, 'Airtel Bangladesh Limited', in November 2016 to form the new entity where Axiata holds 68.7% controlling stake, Bharti 25% while the remaining 6.3% is held by NTT DoCoMo.



*Figure 06:-Shareholders of ROBI*

*Source: Robi Internal Portal*



### 3.7.1 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. Axiata Group Berhad, including its subsidiaries and associates, has approximately 300 million mobile subscribers in Asia, and is listed on Malaysia's stock exchange (Bursa Malaysia). In their website in 2016, it was announced that Axiata had over 300 million subscriber across Asia and a group revenue of USD4.52 billion in 2015. It was also reported that the company provided employment to 25,000 people in ten countries.

Axiata's mobile subsidiaries and associates operate under the brand name 'Celcom' in Malaysia, 'XL' in Indonesia, 'Dialog' in Sri Lanka, 'Robi' in Bangladesh, 'Smart' in Cambodia, 'Idea' in India, 'Ncell' in Nepal (acquisition from TeliaSonera completed on 12 April 2016, and 'M1' in Singapore.

### 3.7.2 NTT DOCOMO INC



NTT DOCOMO, INC. is the predominant mobile phone operator in Japan. The name is officially an abbreviation of the phrase, "do communications over the mobile network", and is also from a compound word docomo, meaning "everywhere" in Japanese.

Docomo provides phone, video phone (FOMA and Some PHS), i-mode (internet), and mail (i-mode mail, Short Mail, and SMS) services. The company's headquarters are in the Sanno Park Tower, Nagatachō, Chiyoda, Tokyo. At the beginning of 2015, it was the fourth largest public company in Japan when measured by market capitalization.

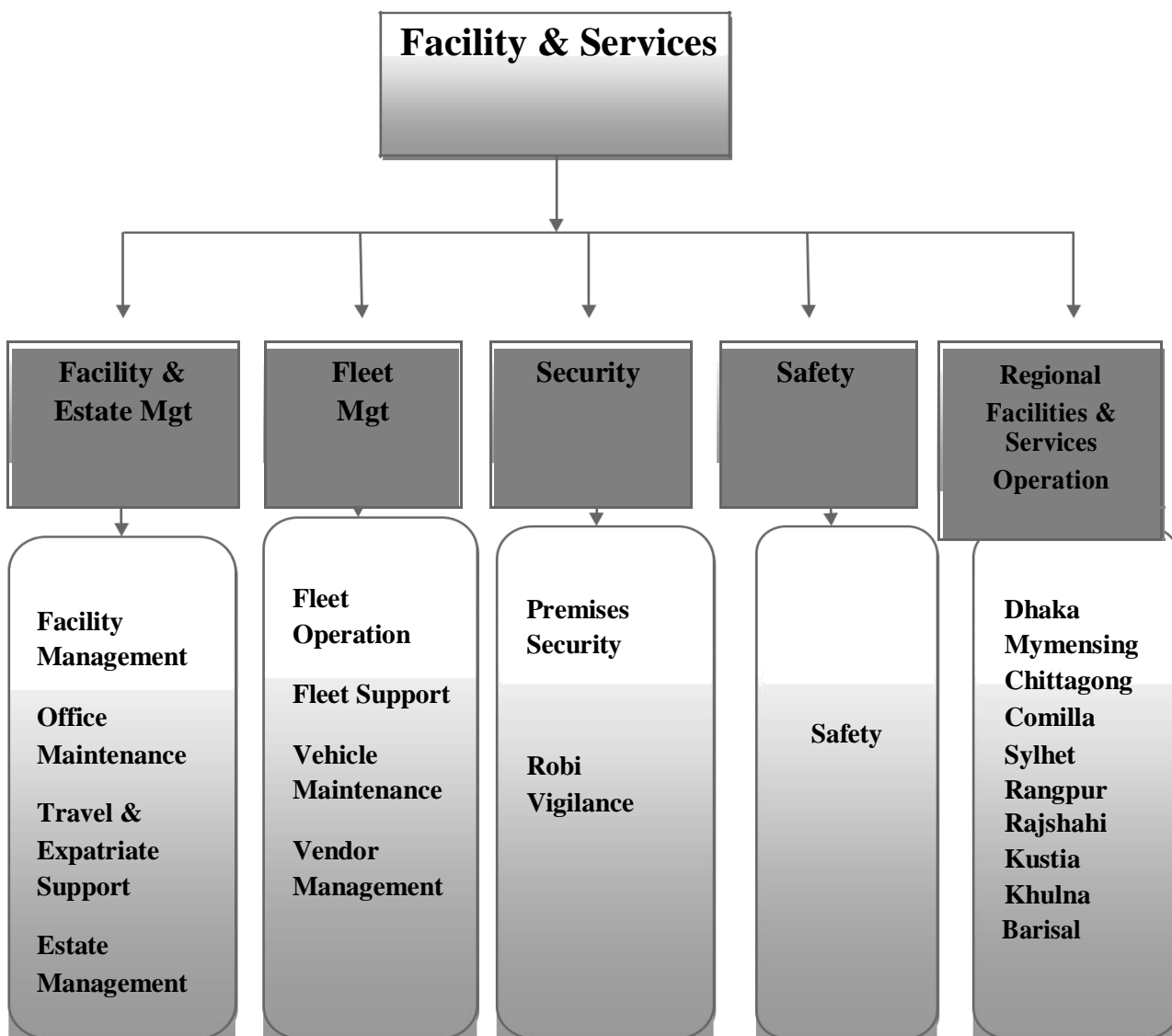
Docomo was spun off from Nippon Telegraph and Telephone (NTT) in August 1991 to take over the mobile cellular operations. It provides 2G (mova) PDC cellular services and 3G (FOMA) W-CDMA services and 4G LTE services. Its businesses also included PHS(Paldio), paging, and satellite. Docomo ceased offering a PHS service on January 7, 2008.



### 3.8 Facility & Services:

Facility & Services can be defined as the universal process of organizing people and resources efficiently so as to direct activities toward common goals and objectives. Robi Axiata Ltd. Facility & Services is a very competent one full of activities and works. **Md Abdullah Al Mamun** (Acting) is now head of this Unit. Some of the core functions of this division are described below-

- **Planning** maps the path from where the organization is to where it wants to be. The planning function involves establishing goals and arranging them in logical order. Administrators engage in both short-range and long-range plan.
- **Organizing** involves identifying responsibilities to be performed, grouping responsibilities into departments or divisions, and specifying organizational relationships. The purpose is to achieve coordinated effort among all the elements in the organization (**Coordinating**).
- Directing (**Commanding**) is leading people in a manner that achieves the goals of the organization. This involves proper allocation of resources and providing an effective support system.
- **Controlling** is a function that evaluates quality in all areas and detects potential or actual deviations from the organization's plan. This ensures high-quality performance and satisfactory results while maintaining an orderly and problem-free environment.



*Figure 07:- Facility & Services of ROBI*



### 3.9 Milestones of Robi Axiata Ltd.

Robi Axiata Ltd. is one of the major players in the mobile telecommunication industry in Bangladesh, which concentrates on offering GSM communication services for private and corporate customers. The company's intention is to promote the wireless lifestyle – the complete mobile society. It is renowned for bringing new service offers in Bangladesh. Some of the first time major offers are mentioned below:

- ✓ First time introduced magic voice circle for the cellular
- ✓ Robi brings a unique proposition with Robi Radio which is 1st of its kind in the VAS industry of Bangladesh!!
- ✓ Café 8000: Robi Axiata Ltd. Introduces news update; listen to hit songs, top charts, jokes and important contacts of yellow pages.
- ✓ Cricket alert: Robi Axiata Ltd. offers customer the best cricket information service first time among mobile service providers.
- ✓ News on Demand: News video clips on demand, launched by Robi first time in Bangladesh.
- ✓ M-ticket: There is way to do better-m-ticket service, launch by Robi First time is Bangladesh
- ✓ First time introduced the 'Mobile plus (PSTN Incoming Connectivity Only) Product Services' in Bangladesh.
- ✓ First time introduced the Tele-ramadan (timing of Iftar and Sehri during Ramadan) under Tele-info Services in Bangladesh.
- ✓ First time introduced the Seamless Coverage throughout the Dhaka-Chittagong Highway and named it as 'Chittagong Dhaka Corridor (CDC)'.
- ✓ First time introduced the full-fledged IVR based Customer Services (Call Center) in telecom market.
- ✓ First time introduced cellular services in the most northern part of Bangladesh by launching Robi Service in Rangpur and Dinajpur in 2002.
- ✓ First time introduced 30-second pulse rate in Bangladesh, recently Robi has introduced 10-second pulse for the pre-paid users and 1-second pulse for the Post-paid users.



- ✓ First time introduced club membership offer for the exclusive users of Robi. The club is known as Club Magnate, which offers extra services with its Platinum, Gold and Silver cards.
- ✓ First time introduced the concept of E-fill system

## Fleet Management:

### 4.1 Basic Fleet management

From the very beginning, every industry is depending on fleet. In the telecom sector it is obligatory to maintain a moderate level of fleets to carry on their business. Fleet means vehicles or a group of vehicles. “Fleet management involves the co-ordination of a fleet of business vehicles to ensure that they are purchased for the best price and that they are run efficiently, economically, legally, safely and securely.”

In the past, maintenance decisions have been limited to what kind of action to use (corrective or preventive) and to the definition of such variables as best frequency, best predictive technique, and best information organization. The history of fleet management solutions goes back several decades. On-board vehicle computers first emerged in the 1980s and were soon connected to various satellite and terrestrial wireless networks. Today mobile networks can provide ubiquitous online connectivity at a reasonable cost and mobile computing technology delivers very high performance, as well as excellent usability. All of these components combined enable the delivery of vehicle management, transport management, driver management and mobile workforce management applications linking vehicles and enterprise IT systems.

To establish efficient and effective fleet services by providing customer agencies with safe, reliable, economical, environmentally-sound transportation and related support services that are responsive to the needs of customer groups and that conserve vehicle value and equipment investment.

Fleet Management's primary objective is to control the overall cost of operating and maintaining the vehicles and equipment, to maintain vehicles and equipment in a manner that extends their useful life, to control the growth in size of the fleet, to standardize the composition of the fleet and to accurately budget for maintenance and replacement costs.<sup>[</sup>

In Bangladesh fleet management is done by manual process almost every industry. But only Grameenphone Ltd. has been developed an automation process. *Fleet Automation*





*for Grameenphone Ltd.*”, studied by Mr. Rasheq Zillur Rahman (2008), in fleet division of Grameenphone Ltd.. Vehicle replacement program has been developed in that project, which determines the replacement dates for vehicles. The criteria for replacement include age, usage and maintenance costs. All new purchases for vehicles are part of the budget cycle and are coordinated through Fleet Management.

#### **4.2 Role of Today’s Fleet Managers**

With the changes of time, the responsibility of fleet managers is changing. In the past, maintaining vehicle and equipment was the only job for them. But now the era has been changed. In modern world, fleet managers are performing many tasks by using various technological instruments. Such as vendor managements, fleet supports, bidding with the upper class vendors, control the fuel and overtime costs etc.

Keene (2000), lists nice central key areas of fleet management as discussed by Storhaug (2003). These are outlined below.

1. Preventive and predictive maintenance
2. Computerized work management
3. Clear bid specifications
4. Highly skilled, trained, and certified personnel
5. In-house warranty repairs
6. Parts management
7. Support equipment and facilities
8. Outsourcing of appropriate activities
9. Customer orientation with courteous service

#### **4.3 Fleet management of Robi Axiata Ltd.**

Fleet is the most vital part of every Telecom sector now-a-days. Although change is constant in almost all endeavors, no Telecom industry has experienced more dramatic change than fleet management. To maintain whole fleet in a cost effective manner is also increase the benefit of the company.



The leading Telecom of the country Robi Axiata Ltd. also maintain Approx 480no’s vehicle all over the country to operate their business. Out of 480 no’s 95 no’s vehicle RAX own and rest of the vehicles are outsourced from different vendor. Fleet management has managed their activity by following this organ gram as show below:

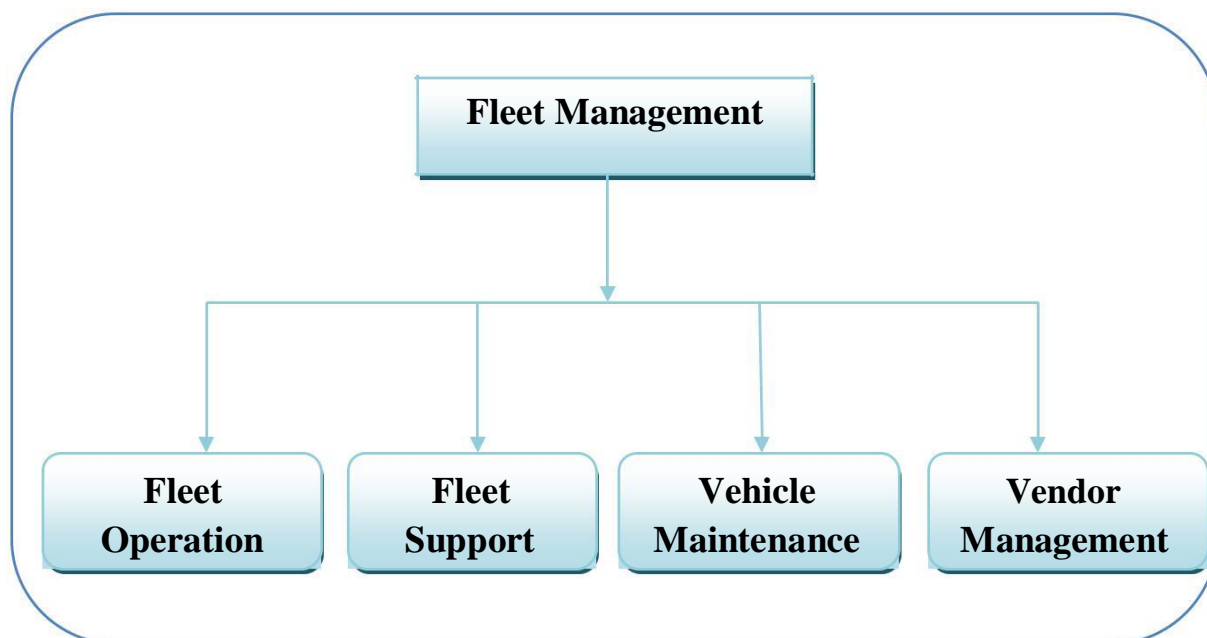


Figure 7:-Fleet management of ROBI

Source: Created by Author

### 4.3.1 Fleet Operation

Currently Robi Axiata Ltd. is operating 203 vehicles for their business activities. Fleet operation responsibility is to operate these large groups of vehicle. The following table has shown the status of its vehicles.

Table 2: Fleet status of Robi Axiata Ltd

Fleet Status:			
Own Vehicle		Rented Vehicle	
Type of Vehicle	Number of Vehicle	Type of Vehicle	Number of Vehicle
Car	20	Car	59
Jeep	7	Bus/Coaster	13
Pickup/Carry boy	61	Pickup/Carry boy	19
Microbus	1	Microbus	23

Source: Robi’s internal database



The activities of fleet operation is to-

- a. Vehicle distribution for all users of Robi.
- b. Companywide vehicle distribution for continuity of business.
- c. Driver management.
- d. Driver awareness also ensured by this ground.

#### **4.3.2 Fleet Support**

The activities of fleet support is to-

- a. Renew of vehicle documentation like tax token, route permit, registration paper, fitness etc.
- b. Handling the accidental cases.
- c. Claim insurance for accidental cases.
- d. To process the auction of old vehicles.

#### **4.3.3 Vehicle Maintenance**

The activities of vehicle maintenance is to-

- a. To ensure on time repairing and maintenance of Robi's own vehicle.
- b. To ensure safety journey from safety point of view.
- c. Ensure interior and exterior cleanliness.
- d. Safety parking of vehicle.

#### **4.3.4 Vendor Management**

The activities of vendor management is to-

- a. To process new rental vehicle acquisition.
- b. Extension of agreement as per necessary requirement.
- c. To ensure the payment of vendors on time.
- d. Conflict resolving.
- e. Vendor counseling to get proper support.



## 5.1 Introduction to the Process Automation of Fleet Management

Recently dramatic changes have occurred in the field of technology. The world is being updated continuously by many endeavors of technology. With the motion of that updated technology the roles of fleet managers are also changing as discussed in chapter four.

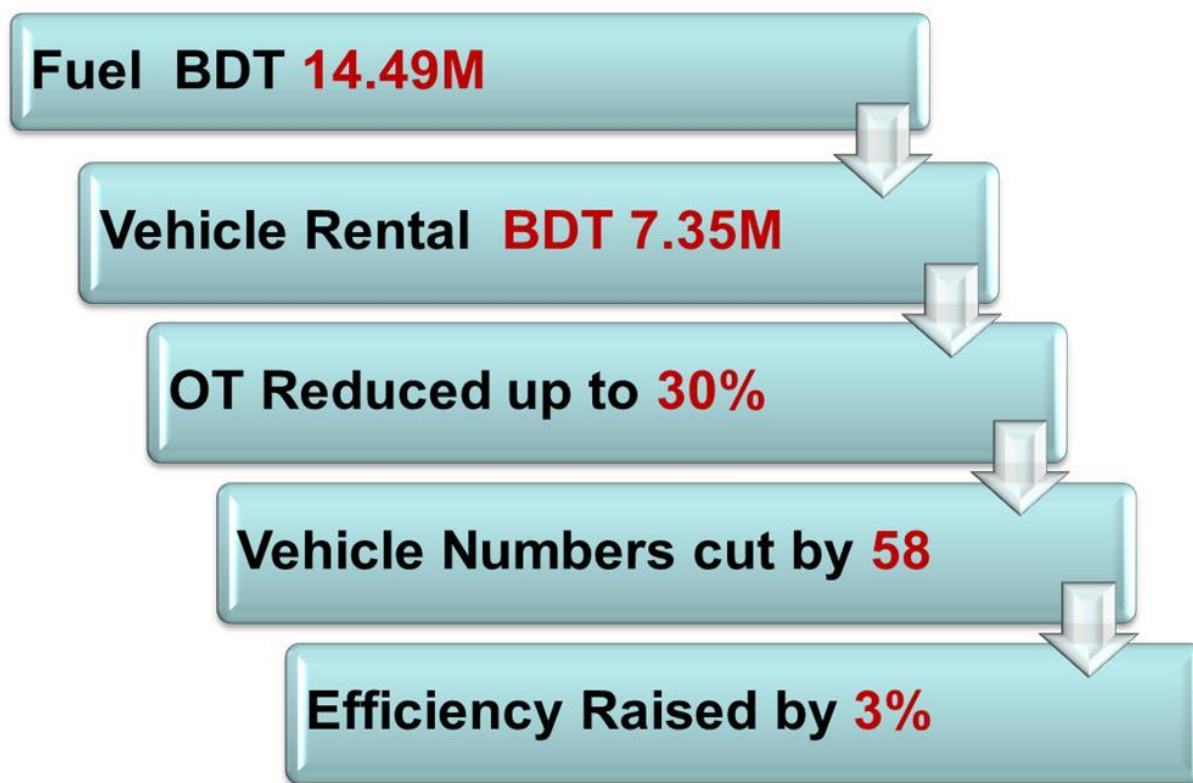
Due to problems of maintenance of the huge group of vehicles with the manual process, now many companies are adopting the automation process. To adapt and pursue with this technology and speed up its internal operation Robi Axiata Ltd. wants to apply this process to its fleet maintenance.

Its fleet team has moved to a de-centralized business model from the very beginning. As its clients are increasing more than past, it needs to support more services in more locations; consequently the administration of its workforce has become more difficult. Until now, many of its internal requirements such as reporting, payroll activities, and resource management have been done via manual process.

As Robi Axiata Ltd.'s workforce expands in various numbers and areas, this manual process has become inadequate to effectively manage these administrative activities. This inadequacy is manifested in higher costs and increased employee dissatisfaction which it has seen over the last couple of months. In order to manage its fleet, reduce costs, ensure safety & security integrity and improve employee satisfaction level more effectively, this proposal will move to a **web-based application** as outlined in this report for the automation process. By doing so, agents will assume a greater role in managing their fleet in a professional way, ensure best utilization of company assets, stake holders' expectations will be satisfied & feel safety, security on jobs; finally the company can manage its fleet from one central and common platform in a cost effective way.



## 5.2 Savings from Fleet Automation



*Figure 8:-Costing Status*

*Source: Created by Author*

After using Fleet Automation process, Robi Axiata Ltd Saved Fuel cost BDT 14.49 million, Vehicle Rental Cost BDT 7.35 million, Overtime Cost Reduce up to 30%, 58 Vehicle reduce, and efficiency raised by 3%.

## 5.3 Expected Outcome from Automation Process

By changing the manual system into web based automation system of fleet management, Robi Axiata Ltd. can get advantages from various sides. These are:

1. Can manage their vehicle administrative functions.
2. Can ensure the best utilization of vehicles.
3. Can control fuel consumption, over time, and rental cost in an accurate and combined way.
4. Can reduce overhead costs associated with the vehicle, driver, fuel, and rental.
5. Can reduce large workforce & time currently required to manage these tasks



6. Can reduce number of vehicle by means of reused vehicle on idle time, calculate drivers over time, driven KM, fuel consumption rate through this system to reduce OPEX.

## **5.4 Justification of Automation Process**

The migration of fleet operation and other administrative functions from the manual system to the web-based automation will result in greater efficiency with regard to company resources and business processes. The automation project was selected for proposal in this report because it provides the best opportunity to realize benefits in an expedited manner while also allowing for the greatest improvement in efficiency and cost reduction. And there are some existing problems in manual process. These are:

- a. Time consuming.
- b. No data retrieve for business requirement analysis.
- c. Disability to do full utilization of vehicles.
- d. Drivers and vendors of vehicles cannot be managed properly.

But this automated system can overcome those barriers and it also ensures employee and asset safety and security concern through tracking system. Reporting is another problem area associated with the present practice. All weekly and monthly financial and utilization reports must be generated manually which allows for a high probability of error and requires significant amounts of time. These manual tasks further add to the burden and expense of the company. Finally automation process will help the company to achieve faultless reporting proficiency.

## **5.5 Functions of the Automation Process**

There are several modules of this process automation. RTA Fleet management (2011) has outlined several functions of the automation process. These are as follows:

1. Vehicle Management
2. Cost Management
3. Fleet Reporting suite
4. Fuel Management
5. Driver Management
6. Accident Management



### **1. Vehicle Management**

By the central web-based automation the process will help to display summary information on vehicle servicing, driver history, financing, and performance details. The Vehicle Management module also stores all fuel consumption in details.

### **2. Cost Management**

This module helps to control servicing, repairs, fuel and financing costs. Cost Management stores line-by-line invoice details and maintenance history for each vehicle.

### **3. Fleet Reporting suite**

Reporting is another important part of vehicle maintenance. The process can maintain customized reports which can be created within the system, using the updated databases.

### **4. Fuel Management**

Fuel contributes a huge amount of cost in vehicle maintenances. The process allows for the electronic import of transactions from company's chosen fuel suppliers.

### **5. Accident Management**

It's not possible to protect vehicle form accidents. But it can take necessary actions to reduce the loss of accident. To reduce the cost the automation process maintain and store insurance details, claims history, third party details, repair details, and records required actions and notes. Accident Management also provides the Fleet Manager with comprehensive reporting for accident analysis.

### **6. Driver Management**

Finally the automation process stores all Driver Details, and allows for the allocation of drivers to Cost Centers or Company Divisions providing extensive Cost Center analysis.



## 5.6 Impact on Organizational and Technological Factors

Change is the logical order of every new process. The automation process will also require some organizational changes in Robi Axiata Ltd. through several ways. The following factors will be affected as a result of the automation process implementation:

### 1. Organization

After the implementation of this project company will be benefited in financial fragment by reducing number of vehicles, drivers over time, controlling fuel consumption, best utilization of company assets. Internal operational activities are also expedited by finding 24/7 vehicle support.

### 2. Tools & Training

Since the automation process requires some special software, tools and systems to be used by the users of vehicles, they should be trained. Employers and employee and drivers will be trained up to use that equipment (Division basis one by one)

### 3. Roles and Responsibilities

In this system to use vehicle for business purpose user responsibility is to raise a ticket through laptop/web/SMS which will be discussed later. The responsibility of 1<sup>st</sup> level supervisors of users is to approve the ticket by observing the needs of vehicle. Fleet team member will cancel the ticket if they think and it depends on vehicle availability of priority on business

### 4. Hardware/Software

In addition to the software and licensing for the project, it will be required to purchase additional servers to accommodate the platform and its anticipated growth for the fleet tracking system or manage fleet in commercial basis. The new platform will be managed by the IT group.





## 5.7 Major Systems of Automation Process

ROBI has a big group of fleet to make its business smooth and faster. It has 477 vehicles for operational purpose across the country. 92 vehicle are its own and 385 vehicle source from outsource beneficiary as discussed in previous chapter.

To maintain this large number of fleets in a professional, effective and efficient manner Robi Axiata Ltd. needs a standard process and relevant system to distribute and tracking the vehicles. For this reason, the Automation process introduces the following systems in ROBI fleet operation:

1. Vehicle management system (VMS).
2. Fleet Distribution Center (FDC).
3. Vehicle Tracking System (VTS).

### 1. Vehicle Management System (VMS)

Vehicle Management System is a dynamic web-based solution for efficient and effective management of vehicles, drivers and their duties. The total life-cycle of a vehicle and driver will be managed through this system.

The VMS is a single centralized framework that would integrate various disparate vehicle management processes such as scheduling, maintenance, insurance, sales etc. This web based vehicle management system helps in streamlining and easing the process of managing company vehicles. The solution also provides the client with the means to monitor vehicle and driver performances. The figure portrays the VMS of Robi Axiata Ltd.

#### **VMS will have mainly two different parts:**

- User part for requisition of vehicles.
- Management part for resolving or cancelling ticket, arranging pick & drop, generating report (through this portal)

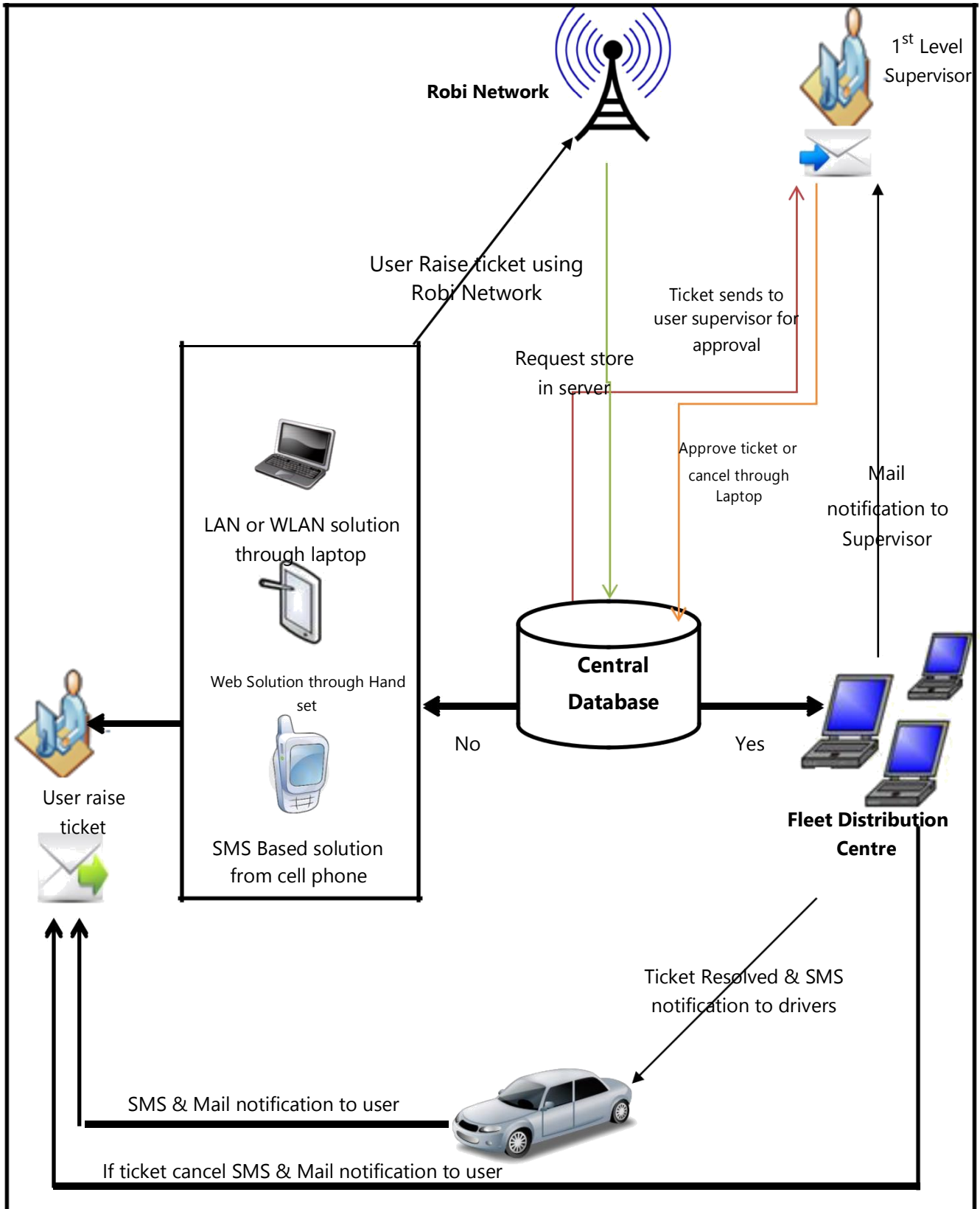


Figure: 9- Flow chart of VMS

Source: Created by Author, (concept from "VMS by Grameenphone Ltd".)



In the user part, users can raise their transport ticket to seek vehicle for business activity purposes. In management part, agents can resolve the ticket with available vehicle. They also enjoy some additional features as well from back end databases.

### **Benefits of VMS**

1. A web based common central point for vehicle requisition & resolve through PC/SMS/Web link.
2. Authentication of senior supervisors can be applied.
3. Automatic e-mail and SMS notification to user, e-mail notification to 1<sup>st</sup> level supervisor of user, and SMS notification to assign driver.
4. Balanced ticket approval.
5. Lively operation monitoring system with greater accuracy.
6. Driver's Overtime & tour management efficiency.
7. Accurate driver duty schedule management.
8. A common database for all drivers and vehicle information can be maintained.
9. Vehicle other involvement information (Maintenance/BRTA/Insurance) update.
10. Vehicle key management can be done properly.
11. Increase information security & integrity.
12. Dynamic report for data analysis

## **2. Fleet Distribution Center (FDC)**

Fleet Distribution Center will manage the current fleet operation activities as discussed in chapter 3. The main objective of ROBI FDC is to distribute fleet to all stakeholders for business purpose activities in a discipline and specialized manner.



## **Benefits of FDC**

1. It can ensure vehicle support 24/7 as per requirement for Robi's employees
2. It can ensure support on emergency situation like accident/incident time.
3. It allows analyzing vehicle uses pattern randomly to ensure the best use of company asset.
4. It can make "implement need analysis report" which tries to reduce number of vehicle.
5. It can control operational hour by analyzing vehicle usage trends and thus it can switch off the idle vehicle to reduce driver's overtime.
6. For driver's motivation, FDC will distribute the duty on time to time basis.
7. FDC member will operate outsource employees in an efficient way.
8. It can deliver continuous data & trend analysis about vehicle users.
9. It can provide vehicle support for any events (Picnic, workshop, special gathering e.tc.)

### **3. Vehicle Tracking System (VTS):**

Vehicle Tracking System, based on GPS is a premium solution with comprehensive features to track and manage the fleet, along with useful security features. GPS tracking systems are designed for tracking both vehicles and people. Employed as part of a business's fleet management strategy, they can improve efficiency and reduce costs. They also allow a business to monitor its fleet, wherever the vehicles may be.

Robi Axiata Ltd. can track vehicles using web interface and SMS push-pull facility. GPS is used to locate the mobile asset with great accuracy. Using GPRS communications, more data can be sent more frequently at a much lower cost.



Figure: 10- Vehicle Tracking Systems

Source: <http://www.i2ko.com/cars/vehicle-tracking.html>

### Benefits of VTS:

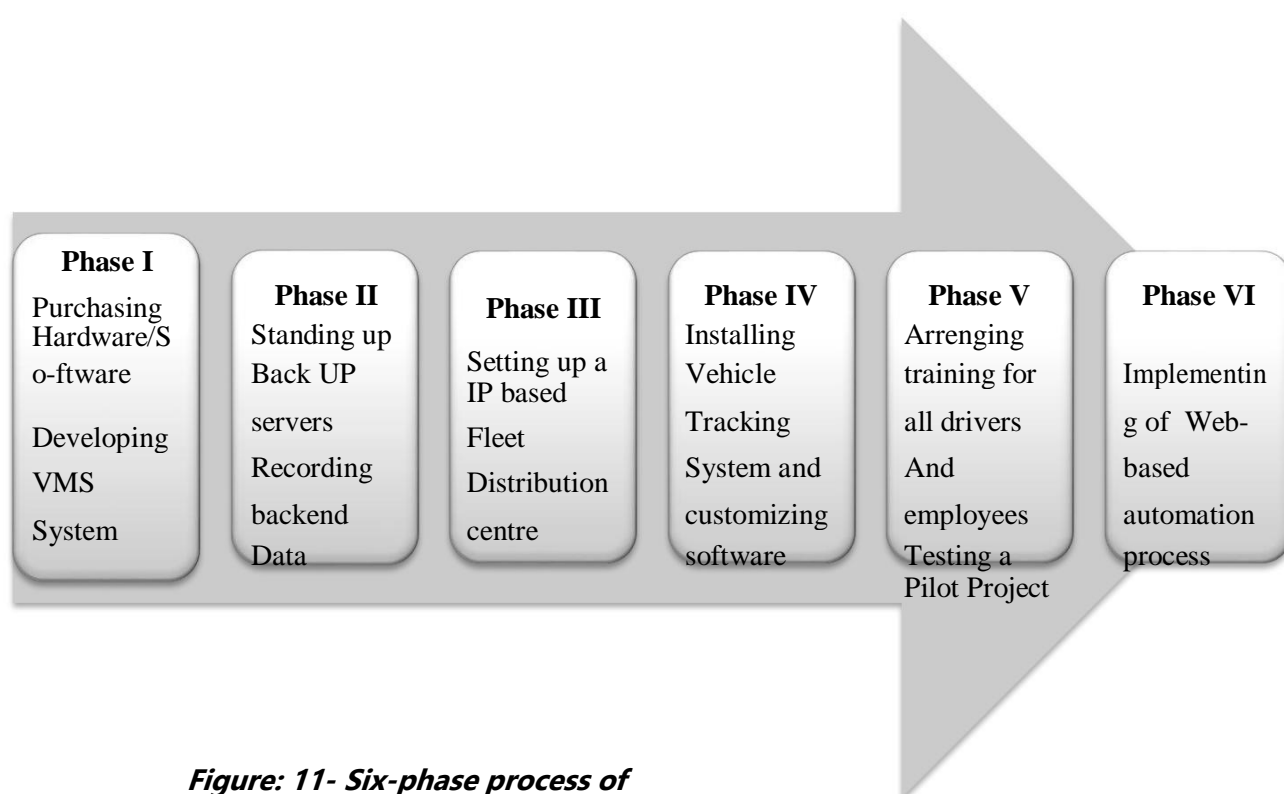
Many experts have done analysis on the vehicle tracking system from many view points. But Robi Axiata Ltd. can be benefited by installing VTS from following factors:

1. It will easily track the status of vehicle; position, direction, speed & time.
2. Vehicle tracking and monitoring through PC / Mobile /Web can be done.
3. If any accidents or disruptions occur, VTS can generate real time alarm & create automatic notification.
4. Stolen vehicle can be found by recovery option
5. Countrywide area based vehicle controlling and monitoring can be possible
6. It will give assurance of greater safety of user and company asset.
7. Mechanical malfunction notification of vehicle like Battery tempered, water and fuel level, engine over heat etc.
8. It can maintain a professional Driver management tasks
9. It will also help the VMS SMS Forwarding to desired number.
10. It can generate dynamic report & replay like distance, Start/stop, Location, Movement, GYR report.



## 5.8 Six-phase Process of Automation

In order to effectively transfer the existing manual system to the new web-based system, a phased approach has been developed. It will increase the quality of operational activities with minimal disruption. It will also maximize boost up the administrative tasks and payroll activities. The following is a high-level overview of the technical migration phased approach developed by Mr. Rasheq Zillur Rahman, Fleet manager of Grameenphone Ltd. (2008):



**Figure: 11- Six-phase process of**

**Source: Created by Author**

### Phase I

In the first phase hardware/software will be purchased and the VMS system will be developed (designing & coding) in the web-based environment and tested by the IT development team.



## **Phase II**

After developing the VMS systems, in this phase IT team will stand up a backup server. This will be used as a backup system and also to archive all data from the company existing mainframe.

## **Phase III**

To distribute vehicles and manage administrative job needed to set up an IP based fleet distribution center as well as it will be treat as central point of fleet team for employees and drivers.

## **Phase IV**

In this fourth phase, Vehicle tracking device will be installed to track the vehicles. Customized software will be developed also in this step.

## **Phase V**

As there is a requirement of training up the employees and drivers, a training session will be arranged for all drivers & division wise random basis selected employees for better understanding/operating of this system. Before fully commercialized the process, a pilot project will be also tested and disruption will be solved if required.

## **Phase VI**

Finally, the automation process will be implemented if the pilot project represents the benefit and accuracy of it.



## 5.9 Overall gain from Automation Process by Robi Axiata Ltd

From the above discussion it can be said that the following advantages can be grabbed by adopting automation process:

### a. **Ensure Company Requirement**

Automation process can ensure vehicle support (24/7 or as per requirement) for their entire stake holder comparatively more disciplined and professional manner than manual process. It will also provide vehicle support for any official events in Robi Axiata Ltd.

### b. **Reduce Number of Vehicle**

By analyzing the utilization report of vehicles it can reduce 23 number of vehicle from existing pool division by reusing idle hour.

### c. **Reduce Driver over time**

Automation process enables to scrutinize the operational hour and holiday vehicle usage trends. It can also coordinate with control room for key issue/received for switch off the idle vehicle. Thus both options can help to reduce driver's overtime (.e.g. +-5%).

### d. **Reduce Fuel Cost**

From VTS it can generate accurate running Kilometer of vehicle. It also ensures maximizing CNG use instead of Octane to reduce excess fuel consumption +-2%.

### e. **Motivational Factors**

The process can increase the quality of operational activity of employee. As they find support 24/7 from FDC, they will be motivated from their mind. From drivers' point of view, it will manage the stress, allocation of proper duty (e.g. tour, &Overtime will be increased).





#### **f. Safety & Security Integrity**

It ensures the safety and security of stake holders and company's assets. Consequently accident, incident, and any kinds of disruption will be minimized. It also allows support of vehicle from PC/Cell Phone for any emergency situation.

#### **g. Conformity Factor**

Fleet team will operate outsource employee in a compliance way. The process will implement timetable duty (Considering business requirement) for controlling driver duty under labor law.

#### **h. Other Emergency Alarm Notification**

Another major advantage is that it can generate automatic e-mail& SMS notification on emergency time. It can also update the vehicle other involvement information (e.g. maintenance/BRTA /Insurance).

#### **i. Timely and accurate reporting**

At last, as it is a web based tool, it will allow real-time and accurate reporting of usage, financial cost, idle hour, trend, distance, start/stop time, location, movement, GYR report etc.

### **5.10 Limitations of the Process Automation**

There is nothing without negative side in the world. This process has also some limitations. These are:

#### **1. Software/System Down & Maintenance**

The main back point of the automation process is that software may be shut down automatically for some technical constraints.

#### **2. Alignment of all staffs with new system & continues changes**

Changes are not accepted everywhere simply. As it is a new concept and it breaks down the existing long year process, a major change will occur. Stake holders of Robi Axiata Ltd. may not adapt themselves easily with this process.



### **3. Alignment of all outsource/rental staffs with new system & continues changes**

As Robi Axiata Ltd. is outsourcing and renting most of the vehicles from vendors, it also needs to adapt them with the new process. It will also do a complex job.

### **4. Dependencies on outsource vendors**

The process is a high tech project. It needs professional IT personnel from third party. Every tool of VMS, FDC and VTS will also be outsourced from the vendor. As a result, it will create dependencies on the third party.

### **5. Expensive Budgetary Plan for first year**

Although it will expedite Robi Axiata' Ltd.'s operation, it requires high definition technology. Thus it increases the budgetary costs.

## **6.1 SWOT Analysis**

SWOT analysis describes the strength, weakness, opportunity and threats of a company or project. Process automation of Robi Axiata Ltd. has also some strength, weakness, opportunity and threats. These have been analyzed as following part:

### **6.1.1 Strength**

Strength part describes the main internal advantage of project. Some important strengths of Process automation are described below:

1. This automation process will ensure 24/7 vehicle support for their entire stakeholder in a disciplined and professional manner.
2. It will ensure safety and security integrity.
3. It will give timely and accurate report.
4. It will give alarming notification for any emergency.
5. Reducing driver Overtime will add benefit.
6. It will also utilize the vehicle better than manual process and minimize the average per kilometer vehicle cost.
7. It allows real time information to be made better decision.



### **6.1.2 Weakness**

Weakness represents the unsatisfactory factors of a study or company. This process has also some poor variables as pointed below:

1. Software/system may suddenly shut down.
2. Alignment of all new outsource/rental staff with new system and continuous change.
3. Dependencies of outsource vendor.
4. Can't manage the driver 100% accurately by this automation process
5. If satellite doesn't response properly the process will be down to give the vehicle location, time, date.

### **6.1.3 Opportunities**

Opportunity illustrates some positive factors that can provide some advantage. The opportunities of this process are discussed below:

1. Fuel tracking system can be used which ensure proper utilization of fuel
2. It can offer proper maintenance of vehicle spare part and tools.
3. Fleet managers can analyze the benchmarking of design and necessary replacement of vehicle when required.
4. It can help to evaluate cost effectiveness as a function of vehicle age.
5. It can ensure effective maintenance of people management.

### **6.1.4 Threats**

Threat describes the external force of an environment for a project and company. The process automation has also some threat as given below:

1. It will be time consuming to make proper understanding of all staff.
2. All activities will be stopped if server becomes disconnected.
3. Project duration is short term which does not show the long term benefits
4. In emergency user may dissatisfy to get vehicle on time because of processing the ticket.
5. Data may be unavailable from no network coverage area.



## 6.2 Findings

Robi Axiata Ltd. has maintained a manual database. It includes rental costs, Overtime payroll costs, fuel consumptions and maintenance costs of every vehicle. There are some graphs have been analyzed to show the actual trend of those costs. These are given below.

### 6.2.1 System Automation Process Analysis

Robi Axiata Ltd. get some Benefit by using Fleet Automation Process. They can get two types of benefit. One is Tangible & another is Intangible benefit. After using Automation Process ROBI Saved 9.6 million taka, Here, We analysis January'17 to March'18.

#### Tangible Benefit:

### 6.2.2 Fuel Cost Decrease Quarter (Q) to Q

Fuel cost decreases from Quarter to Quarter by using automation process. Show in give below

Duration	Actual Cost	Variance	Variance%
Q-1	48.38	0	0
Q-2	46.25	-2.13	-4.61
Q-3	48.36	2.11	4.36
Q-4	42.15	-6.21	-14.73
Q-1	33.87	-8.28	-24.45

Figure: 12- Fuel Cost

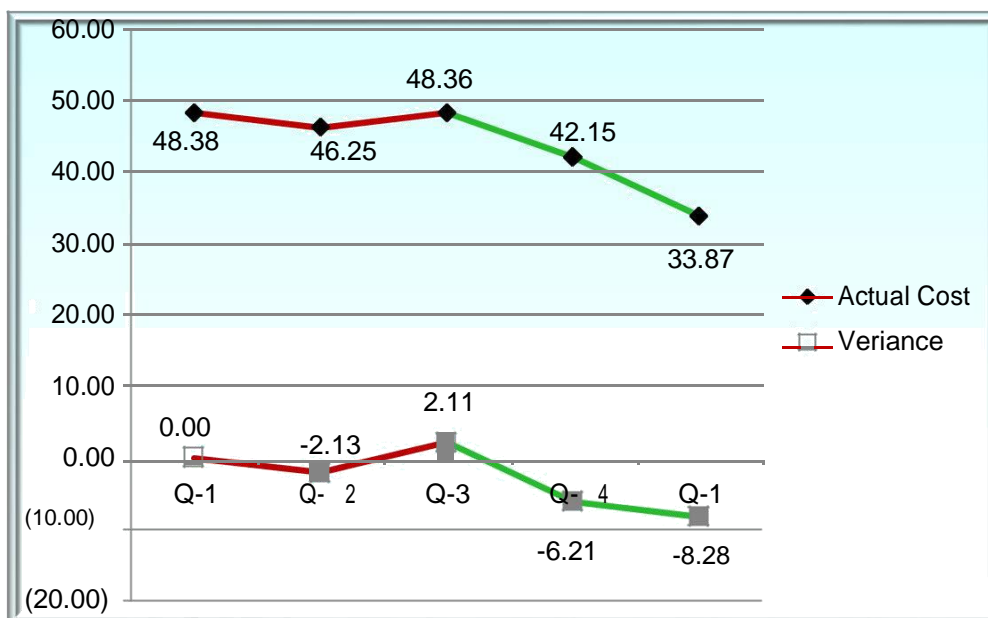


Figure: 13- Cost & Variance

### Explanation of Graph

- In Q-1' fuel, cost was 48.38M BDT.
- In Q-2' we saved 2.13 M by discarding 54 vehicles from pool.
- In Q-3' fuel cost increased by 2.11M, 14 vehicles added to pool for NMS and Renoir Project. Vehicle movement was also high due to summer.
- In Q-4' fuel cost reduced significantly by 6.21M after introducing fleet automation and ticketing system
- In Q-1'18 fuel, cost also reduced rapidly by 8.28M BDT resulting from keen monitoring & limited movement due to political unrest.
- Average fuel cost before automation was 47.33M/quarter but after automation, it is 38.01M. Average saving 9.32M/quarter.

### 6.2.3 Number of Vehicle Reduction Trend Q-wise

After Using Automation, Robi Axiata ltd. Reduce the Number of Vehicle.

Show figure With Explanation in given below:

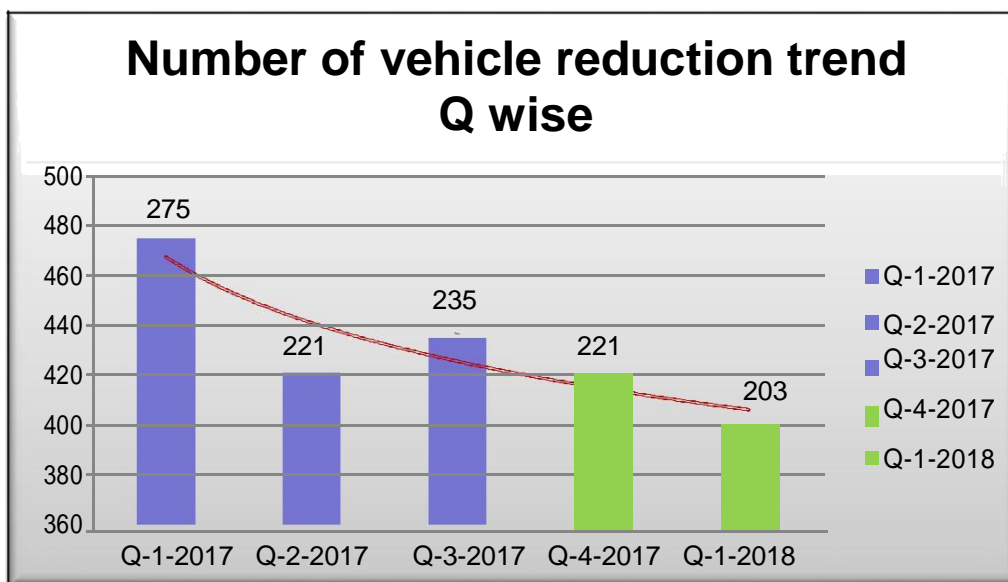


Figure: 14- No of vehicle decreased

Duration	Number of Vehicle		Total	Number of Vehicle Reduced
	Own	Rental		
Q-1-2017	92	183	275	275
Q-2-2017	92	129	221	-54
Q-3-2017	92	143	235	14
Q-4-2017	89	132	221	-14
Q-1-2018	89	114	203	-18

Figure: 15- No of vehicle

### Explanation of Graph

- In Q-1'17, we start with 275 number of vehicle.
- In Q-2'17, we discontinued 54 vehicles from pool, as we introduced pool concept from this quarter & vehicle was distributed from central pool by mail requisition
- In Q-3'17, 14 new vehicles included in pool to cover NMS & Renoir Project
- In Q-4'17 at the end of the quarter we reduced 14 vehicles
- In Q-1'18, 18 vehicles reduced from pool by increasing utilization of existing resources through automation.



- In Q-1'18, we received additional 26 new vehicle requirements (5 from infrastructure wholesale & 21 from implementation) but without hiring new vehicle, we served them with our existing resource. Considering all those, we indeed, reduced 58 vehicles (32 existing+26 new requirements) from pool.

### 6.2.4 Rental Cost Decreases Quarter (Q) to Q

By using Automation process Rental Cost Decreases. Show in given below:

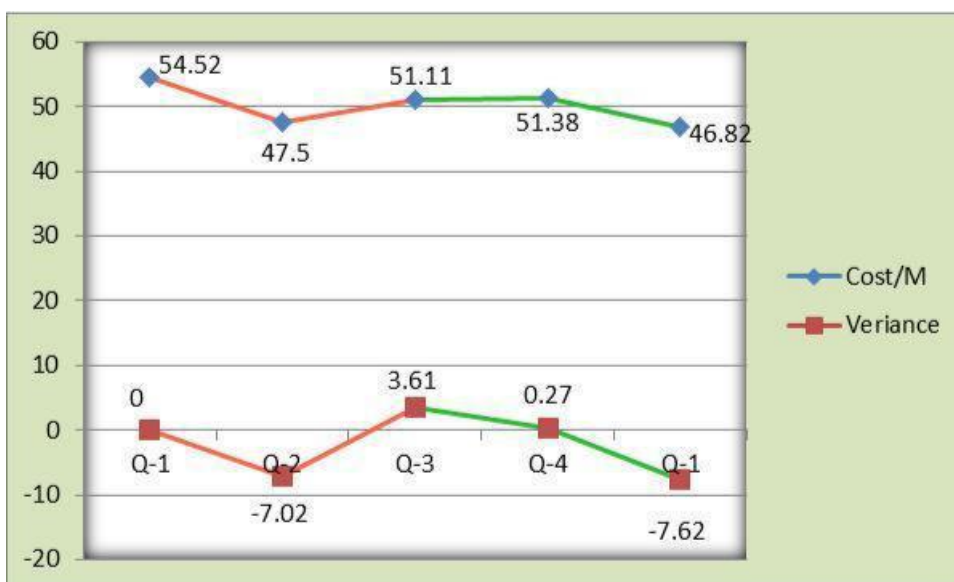


Figure: 16- Costing Graph

Duration	Cost/M	Variance	Variance%
Q-1	54.52	0	0.00
Q-2	47.5	-7.02	-14.78
Q-3	51.11	3.61	7.06
Q-4	51.38	0.27	0.53
Q-1	46.82	-7.62	-16.28

Figure: 17-Rental Cost Decreases



## Explanation of Graph

- In Q-2'17 54 vehicle reduced from pool in the month of April thus OPEX reduced significantly 7.02M.
- In Q-3'17, new rate for rental vehicle was implemented from August. Also included 14 vehicles for Renoir & NMS project thus OPEX increase 3.61M from previous quarter.
- In Q-4'17, OPEX increase 0.27M from previous quarter.
- In Q-1'18, we saved 4.56M by discontinuing 18 vehicles. In addition, we compensated 26 new requirements costing 3.06M (51000BDT/Vehicle/Month) in Q-1'18.
- Total Saving from rental cost is 7.35M





## 6.2.5 Drivers OT Reduction Quarter (Q) to Q

Driver Over time also Reduce by Using System Automation. Show in Given below:

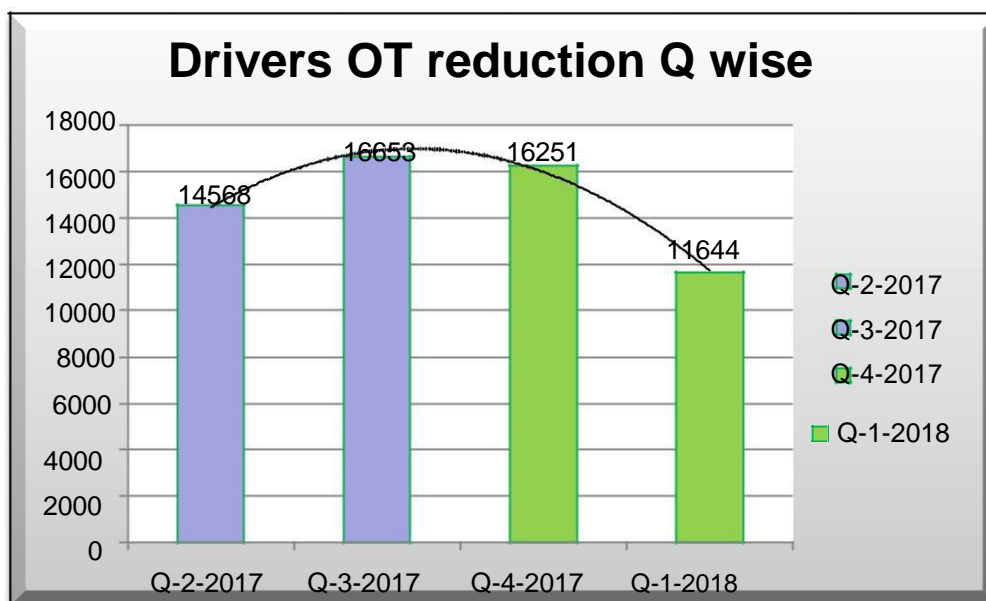


Figure: 18-OT Cost Decreases

Duration	Total OT	OT Reduced	Reduction %
Q-2-2017	14455	14455	0
Q-3-2017	16653	2198	15
Q-4-2017	16251	-402	-2
Q-1-2018	11644	-4607	-28

Figure: 19-OT Decreases

### Explanation of Graph

- In Q-2'17, we started with OT hour 14568.
- In Q-3'17 OT hour found 13% higher than Q-2 as it was summer and stormy season.
- In Q-4'17, we introduced fleet automation project and reduced drivers OT by 2%.



- In Q-1'18 drivers OT reduced drastically by 28% through introducing some initiatives like:

### **Intangible Benefit:**

There are some intangible Benefit through System Analysis process(SAP).These are given below:

- Easy online based (Web, SMS, USSD) ticketing system round the clock
- Ensure fleet operation in compliance with local labor law
- Ensure hotline (21299) based 24/7 customer service
- 24/7 basis fleet support at region to meet emergency business requirement as per SLA of transport service center
- VTD based safe movement tracking of assets & staff

### **6.2.6 Cost Efficiency by Process Automation**

Process Automation will overcome those increasing trends of cost. The appendix 1 shows the one year cost optimization (approximate) table. It shows that the project has a fixed cost of \$150000.00on the first month and a variable cost of \$7,000.00 per month. By using utilization report from VTS and VMS report the process can reduce vehicle 7 vehicles on 2<sup>nd</sup> month, 9 vehicles on 3<sup>rd</sup> month and 11 vehicles 4<sup>th</sup> month. Every vehicle costs \$1000.00. Thus it will save \$7000.00, \$16,000.00 and \$27,000.00 accordingly 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> month. From the 5<sup>th</sup> month the process will save \$27,000.00 until 12<sup>th</sup> month. It will also reduce +/- 2% fuel cost and +/-5% overtime cost of drivers every month by efficient fuel management and driver management. Finally, the table has shown that after the 3<sup>rd</sup> month the process will return \$20,400.00 per month. As a result, the payback time (PBT) is 9 month that means the cost of the process automation will be recovered within 9 months.



## Recommendations

To support the huge group of vehicles and boost up the operational activities, Robi Axiata Ltd. should consider the following recommendations.

1. It should transfer the existing manual process to automation process.
2. It can allocate the fund for setting up a distribution center along with 6/8 agent capacity for distribute vehicle from a single touch point.
3. For success of this process, higher-level management should support and administer the activity more accurately.
4. All concerned departments' or divisions' necessary support for successful project completion should be ensured.
5. All outsource staffs and selected employees should be trained accordingly in this new web-based system.
6. It should maintain a central web based database for proper driver and vehicle management.
7. It should communicate the benefits of VMS and VTS with all stakeholders as they will enjoy this system.
8. System should be developed by internal developer through Robi Axiata Ltd.'s IT division as per requirement.
9. If process automation is developed by external beneficiaries, a case study of risk for this system should be identified
10. Finally a risk minimization plan should be developed for three parts (VMS, VTS and FDC)



## Conclusion

The emerging mobile company in our country, Robi Axiata Ltd., is trying to expand its business as much as possible to retain its brand value. But in this high competitive market, retaining brand value is a complex job. It depends on many internal factors of the company. Among these factors internal operation quality and cost contribute a major part. To support the internal activities with a manual interface system is inadequate. It raises the cost and hampers the operational activities. Automation process can manage these activities more accurately. Although it has some limitations, benefits of it can offset those. At the end of the report, it has been proved that the cost of internal vehicle of Robi Axiata Ltd. is upward sloped. Thus the manual process does not support employees and control these vehicles efficiently also. On the other hand, process automation can manage the vehicles and control the cost properly. So to adapt with the modern technology, Robi Axiata Ltd. should embrace the automation process. As a result, the company can improve the existing business activities and gain the market share.



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