

**Working as Network Operations Center (NOC) Trainer Engineer
At Metal Plus Ltd.**

BY

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This Report Presented in Partial Fulfillment of the Requirements for the
Degree of Bachelor of Science in Computer Science and Engineering

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APPROVAL

This Internship titled “**Working as Network Operations Center (NOC) Trainee Engineer at Metal Plus Ltd**”, submitted by Srabonti Das, ID No: 162-15-7984 to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 12 September.

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We hereby declare that, this project has been done by us under the supervision of **Ahmed Al Marouf, Lecturer, Department of CSE** Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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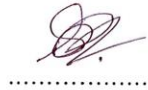
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At first, I discover my greatest love and thank to my almighty God for his otherworldly gift dedication makes me imaginable to finished the final year internship efficaciously.

I actually thankful and wish our profound and thankfulness to **AHMED AL MAROUF**, Lecturer, Department of CSE, Daffodil International University, Dhaka. Deep knowledge and keen interest of my supervisor in the field of ‘Telecommunication sector on Metal Plus Ltd.’ to carry out this internship.

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Throughout the period of my internship work, I have received substantial help from various residences, which I like to put on greatest here with deep gratefulness and countless pleasure.

ABSTRACT

I am Srabonti Das an honored student of Daffodil International University and I have just finalized my final year internship on a very alleged company **Metal Plus Ltd.** As a NOC engineer. This report requirement of the internship program for my Bachelor of Science course degree in my university.

This Internship is on **Metal Plus Ltd.** This is kind of involvement on telecommunication network. I am absorbed to internship basic telecommunication Company. Because present day communication is conversation of the world. In this director I am recount what I absorb about real world ground installation and working procedures of data and internet discussion on **Metal Plus Ltd.**, in my internship period.

Metal Plus Ltd is doing conservation activities of every telecom company on Bangladesh like Grameenphone, ROBI, Airtel and Banglalink. They are in this business from 2006. They have a very stunning NOC or Network Operation Center.

I do my internship on their NOC. I am screening my attentive to internship at this NOC because now a day communication technology played a very important role in modern world. In this internship period I absorb working procedures in a NOC and how to maintain the network.

The First portion of internship report gives a summary about history of **Metal Plus Ltd.** How to they capable become an important salesperson for all of telecom service provider. And how ample role they have been played on telecom sector.

Then expound about the tasks we achieved and our everyday jobs during internship, conclusion problems throughout monitoring network and process of solving them. There our main responsibilities are to monitoring the various power related alarm and take necessary steps. Hear I get a very good chance to observed the main operation on every telecom company. That's why I choose this interesting subject "Work as Network Operations center Engineer".

This report written about how a NOC engineer work and how they are monitor the whole telecom network system.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

For finishing my BSc in Computer Science and engineering I have to complete my thesis or project or internship. I selected to complete internship. I already finished my internship on Metal Plus NOC. Throughout my Internship I educated about how to work on a NOC, how to maintain network operation 24/7. At starting of my internship, I just have to experiential how my senior co-workers are liability their job. How they succeed all kind of operations, and deteriorates several network alarms to field. Throughout this time, I educated how see alarm, every single kind of network alarm, when and why alarms give the impression on system monitor etc.

1.2 Motivation

My internship apartment is **Metal plus ltd**, which corporation is doing conservation every telecom company's network tower in all over Bangladesh. That's why in this corporation I can perceive the operation of Grameen-phone, ROBI, Airtel and Banglalink in one place. I can acquire how they work and how their network work. Every single telecom company work in dissimilar way. In metal NOC I can absorb all of them or at least know their working technique. This will bounce me a fortuitous to established my working knowledges. In future I can show this knowledge on any telecom corporation in Bangladesh for a worthy job position. Structure a corporation as an intern gives us the chance to work pointers on in a professional environment. Internships benefit us by instruction more about the profession path we are following.

1.3 Internship Objective

1) Real world experience

Joining a company as an intern gives us the opportunity to work hands on in a professional environment. Internship help us by teaching more about the career path we are pursuing. Think of it like this – internship is a way to test drive possible jobs and explore different career options.

2) Networking

Internships often give us the opportunity to attend meetings and events. By interacting with professionals, you gain new connections and learn how to communicate in a professional environment. Personally, my internship will have introduced me to a lot of useful resources and should have given me the opportunity to meet a variety of professionals in my field. Networking will me acquire references and find new job opportunities. Internships can even provide me with a professional mentor.

3) Resume Builder

As a student I know the importance of a strong resume. Without a solid resume it can be tougher to be considered for a position. Internship are key to building experience as a student or recent graduate.

Employers are much more likely to hire someone with internships and work experience rather than someone with a generic resume, lacking experience.

4) Time Management

As an intern we will become a master of time management. When we are working in a fast-paced professional environment we need to know every minute counts.

Time management is vital in every circumstance in every profession.

1.4 Introduction of Company

The Metal Private Ltd (Market Leader of Tractor industry in Bangladesh), Metal Argo Ltd, Sleek Knitwear, Jamil Engineering Ltd). From July 2008, MPL is marketing Eicher Tractors in Bangladesh. Our Market Share in this industry is around 15 %. From August 2010, MPL is marketing Diesel Generators, Powered by Eicher Engine Metal Plus Limited (MPL) was established in July 2005. It's sister s. From January 2011, MPL has started O&M activities in Telecom sectors. Presently, we are working with Grameenphone, Banglalink, Airtel Bangladesh Ltd., Huawei Technologies (BD) ltd., City cell, and Ericsson etc.

Key Management

Chairman

Engr Mr. Aminul Islam,

He is also MD of more eight companies (including Project Builders Limited).

Managing director

Engr Mr. Sadid Jamil,

He is MD of more four companies including The Metal Private Limited.

Executive Director

Lieutenant Colonel **Tarequl Alam Khan** (Retired),

He is working in this company from July 15, 2009. He is responsible to look after overall business of the company.

1.5 Report Layout

1. In Chapter in the report, I have represented impartial of internship, Inspiration of internship and overview to the Corporation.

2. In Chapter in the report, I have represented the method of my internship. About corporation, target group, organizational construction.

3. In Chapter in the report, I deliberate about my duty and doings of internship, proceedings and continues works.

4. In Chapter in the report, I deliberated about my Skills Gotten, Smart Plot, and discerning.

5. In chapter in the report, I deliberated and deduction, define scope for further profession of networking ground.

CHAPTER 2

ORGANIZATION

2.1 Introduction

The word 'Metal' manifests hardness of bondage existing among its members of companies, its shine in works accomplished and conductivity maintained throughout building dynamic organization. The seed of Chronological progress of Metal sown in 1987.

1987:

In November of this year, engineer **Mr. Sadid Jamil** and engineer **Mr. Aminul Islam** jointly started their business journey with their flagship company. The Metal (Pvt.) Limited by becoming distributor of Simpson and Company Limited, Chennai of India.

1992:

In mid of this year, in Bangladesh 'The Metal (Pvt.) Limited' changed its business track by introducing Messy Ferguson Tractors in the name of TAFE tractors, owned by Tractors and Farm Equipment (TAFE) of Chennai, India.

2002:

The Metal (Private) Limited took a very prudent and dynamic decision by introducing credit line for tractor buyers on its own accord.

2003:

In earlier of this year, Metal kept its foot point in agriculture sector by opening a company named, 'Metal AGRO Limited'.

2004:

In February, The Metal (Pvt.) Limited opened a manufacturing unit of tipping and non-tipping trailers at Langolband, Narayanganj. In the same year TMPL introduced Italy Organized world famous MASCHIO Rotavators in Bangladesh as its Sole Distributor.

2008:

In February of 2008, both Metal and TMTL of India agreed to sign an agreement to introduce latter's new brand product Eicher Tractor in Bangladesh by its sister concern 'Metal Plus Limited'.

2009:

Jamil Engineers Limited, a concern of Metal was formed in May, 2009. It was formed to act as a dealer of Bosch fuel pumps in Bangladesh and provide related services. In addition, this company manufactures various AGRO Machineries.

2010:

From July of this year Metal diversified its business by introducing marketing of Eicher Engines powered Diesel Generators its concern Metal Plus Limited.

2011:

From January of this year Metal stepped into Telecom sector as its service support provider through Metal Plus Limited and thereby diversified further.

2012:

Metal Holdings Limited, a developer company of Metal come into in mid of this year. This company started their journey by building Surf Club cum Hotel at Cox's Bazar.

2017:

To meet huge demand of genuine parts of both TAFE and Eicher Tractor in Bangladesh a separate company of Metal Parts Limited was opened in April of this year. At the same time another company Metal Agritech Limited was also introduced to do marketing and sales of various types of AGRO machineries in Bangladesh.



Fig. 2.1: Introduction of Metal Plus Ltd [1]



Fig. 2.2: Introduction of Metal Plus Ltd

2.2 Product and Market Situation

Products

The Metal (Pvt.) Limited is the exclusive dealer/distributor in Bangladesh of:

- TAFE tractors
- MASCHIO rotary Tillers
- Metal rice trans planters
- CLASS combine harvesters
- Metal power tillers
- Reaper binder machines
- Metal reapers
- World combine harvester



Fig. 2.3: The Metal (Pvt.) Limited



Fig. 2.4: The Metal (Pvt.) Limited

Services

- After sales service
- Free trainings on machinery operation, machinery maintenance, and entrepreneurship for farmers and local services providers.

Creating Widespread change

The sale of every machine of the Metal (Pvt.) Limited can help

Up to 20 non-machine owning farmers in the community for

Increased production via machines service support.

AGRO

Products

- Vegetable seeds
- Rice seeds
- Maize seeds
- Oil seeds
- Pulse seeds
- Potato seeds
- Spices seeds
- Fodder seeds
- Flower seeds
- Nursery seed

Services

- Seed genetic development, with an emphasis on regional preferences, stress and disease tolerance and resistance along with yield, taste, earliness, and shelf life.
- Seed production, both hybrid and Open Pollinated (OP).
- Quality control throughout seed packing, storage, and delivery.

- Product demonstration and field days to increase product awareness and collection of direct farmer feedback.
- Feedback collection on product usage and problems from their customers via Metal's own call center.

Products

- Eicher tractors
- Diesel generators
- Telecommunications service support
- MASCHIO Rotavators
- Supply of Telecom Power Support items
- Combine Harvester
- Reaper

Services

- After sales services support of tractors
- After sales services support of generators
- Providing management services to mobile operators.
- After sales supports of other AGRO machineries.

2.3 Target Group

Metal Plus Ltd. look forward to become a vibrant dynamic organization and lead The country's telecommunication sector by establishing a sound and Cost-effective tower maintenance.

They are trying to become the largest vendor in telecom sector. They provide a very activate cost effective BTS maintenance service to every telecom group in Bangladesh.

Achievements

- Sold 750 units of diesel generators to retail and corporate clients in the last 8 years.
- Provided operations and maintenance support in more than 5,000 Base Transceiver Station (BTS) sites for large mobile operators, including Grameenphone.
- Ensured average 39% year-on-year growth of Eicher Tractors for the last 3years.

- Grew total number of staffs from 15 to 450 during the last 9 years.
- Having more than 14% of the tractors market share, up from 10% in 2013.
- By now positioned Eicher Tractors in 44 districts of Bangladesh.

2.4 SWOT Analysis of Metal Plus (Pvt.) Limited

SWOT (strengths, weaknesses, opportunities, and threats) analysis is a background used to estimate a corporation's inexpensive position and to progress premeditated planning. SWOT analysis measures interior and exterior influences, as well as present and upcoming potential.

A SWOT analysis is premeditated to facilitate a representative, fact-based, data-driven look at the strengths and weaknesses of an association, its creativities, or an industry. The association requirements to keep the analysis correct by circumventing pre-conceived opinions or gray areas and as an alternative focusing on real-life situations. Corporations should use it as an attendant and not necessarily as a preparation.

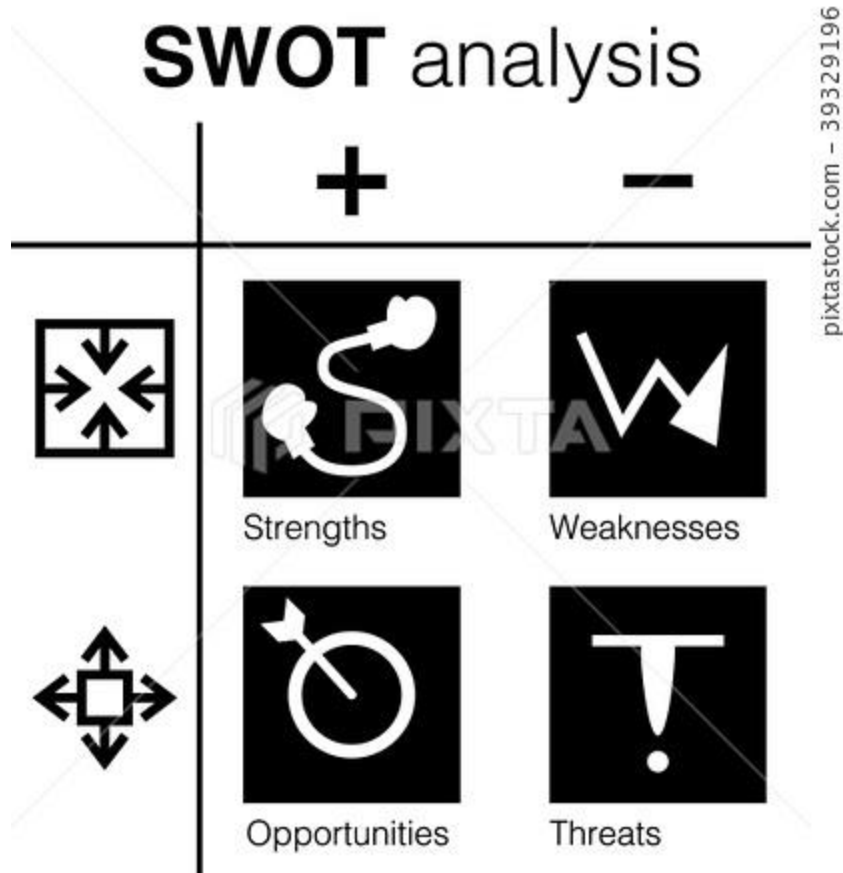


Fig. 2.5: SWOT Analysis [2]

The rest of the steps in the SWOT analysis series, find them here:

- Step 1: **Strengths**
- Step 2: **Weaknesses**
- Step 3: **Opportunities**
- Step 4: **Threats**

Strengths

In Meta all the administration groups are highly educated and experienced. The managing executives are the strengths of the Company as they have years of professional knowledge, expertise, and qualifications which helps them to work and take Metal plus Ltd. to the position it is right now.

Metal Plus Ltd. has shown spectacular growth in the profit sector.

- A remarkable revenue increase rate has already been achieved by Metal Plus Ltd.
- Metal has so many branches all over the country which offers the best service possible. All the branches are located in suitable places and they keep the branches very protected so the customers feel secured while doing services
- Vast services distinguish between Metal Plus Ltd. and other company. And customers also can choose suitable services according to their requirement.

Weaknesses

- The marketing department of Metal Plus Ltd. is very weak.
- The profit rate is very low compared to other Company.
- The way of promotion in Metal Plus Ltd. is complicated so it is one of the reasons for creating unsatisfied employees.

Opportunities

- In Power Division Our company is developing and with many future opportunities for success.
- To previous history there so many projects maintain responsibility offer yet to come.
- In Power Division sector many companies want to take help from our company which is noticeable.
- Metal Plus Ltd. provided great and reliable services and sometimes offer good job opportunities for expert engineers.

Threats

Networking sector always challenging. Here always try to maintain network strictly. Cause small mistake are big issue here. In this sector losses chances are so many. That's why team always try to maintain network smoothly otherwise another company take chances. It mentions to influences that have the probable to harm an association. For example, a drought is a danger to a wheat-producing corporation, as it may extinguish or reduce the crop harvest.

2.5 Organizational Structure

An organizational structure is a scheme that summaries how positive activities are absorbed in order to accomplish the goals of an association. These happenings can include instructions, roles, and household tasks. The organizational structure also controls how material flows between stages within the corporation.

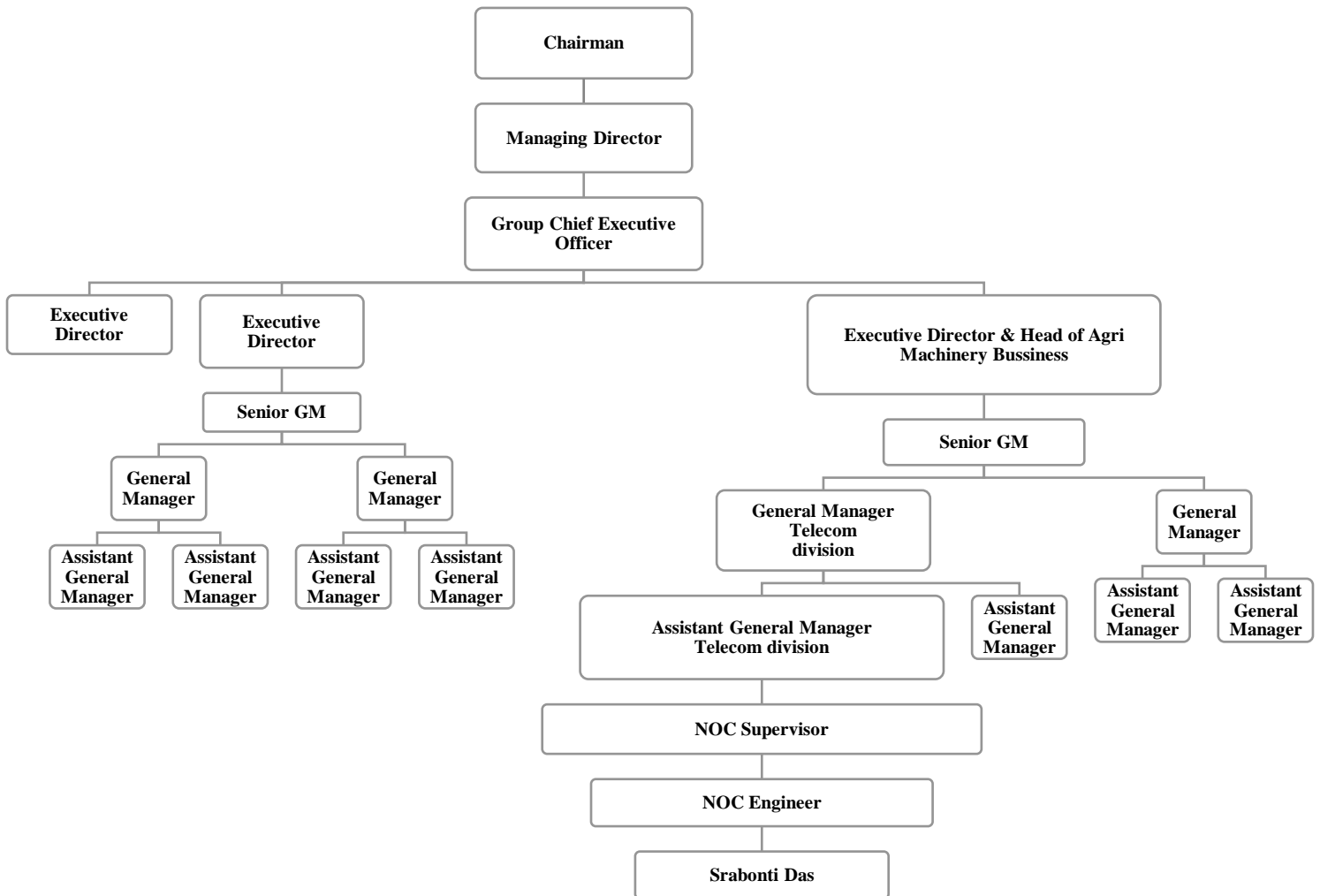


Fig. 2.6: Organizational structure

Figure Description:

Business or industry organization through self-sufficient subdivisions. Consultant explorations downstairs from top and responsibility downwards from bottommost along the sequence of facility, and each subdivision administrator has controller over his or her subdivision's businesses and workers.

CHAPTER 3

Tasks, Projects and Activities

3.1 Daily Tasks and Activities

Month-1 Activities:

At 1st month of internship on MPL NOC they have teach and introduce with me some basic topics:

1. How Network work.
2. What tools we need to monitor any network.
3. What is the commend line.
4. Why we need that's comments.
5. Which terminal we need to follow.
6. Basic signal of any tower.
7. Types of power alarms.
8. Types of transition alarms.
9. How to access ROBI SOC.
10. How to access GP NOC.

Month-2 Activities:

At ours 2nd month they introduce about our packages site give us small task like:

1. Introduces about our packages.
2. Every site name and code names.
3. Hub site and IPBH sites names.
4. Check our packages site list from database.

5. Checking alarms of ours sites.
6. Checking voltages of our sites.
7. Inform to zone lenders about critical voltages sites.
8. Inform to regional managers about IBH sites alarms.

Month-3 Activities:

At ours 3nd month my colleague teaches me how to deal with clients and allow my to do every NOC task like:

1. Learn about disaster time activities.
2. Teach me about priority site.
3. Learn about IP back bone site and high revenue sites.
4. Send and received official mail to GP and ROBI.
5. Give feedback to GP GM.
6. Work with head of operation of Grameenphone.
7. Tacking control of Grameen phone terminal.

Month-4 Activities:

At 4th month of my internship MPL give me offer letter to join with them. I get a desk and professional setup.

1. Work with my coworker with 100% NOC access.
2. Take control of GP terminal.
3. Operated full passive part operations.

4. Giving full feedback of site down summery.



Fig. 3.1: Metal Plus NOC

3.2 Events and Activities

In a telecommunication network there are two kind of tower conservation.

Active part and Passive part.

•Active Part:

All kind of communication happenings on this part. Active substructure compares the core moderate of cellular telephony in the form of a network system and connecting radio cells provided that reporting through functioning on enthusiastic set of radio channels of distinct frequency.

Element of the active infrastructure are the basic transceiver station (BST), the base station controller BSC a, the mobile switching center MSC and microwave and GSM antenna. The whisker empowers both the communication and to progress receiving the radio signal, qualifying the cellular telephony to progress intermittent as the subscriber is mobile.

•Passive Part:

In contrast the passive substructure encompasses the component which permit the active infra to function as designated directly above. The telecommuting tower is used for presenting the

Protuberance to programmed and theoretically viable statures for optimal handling of cellular system. The towers are characteristically designated at site themselves and also encompass poles for increasing the protuberances, accommodations and house for electrical and telecom paraphernalia.

Passive substructure distribution refers to sharing of corporeal sites, houses, living quarters, towers, power supply, and battery backup.

Metal Plus Ltd NOC take care both part of Grameenphone, ROBI and Banglalink.

3.3 Project Task and Activities

In my internship period I effort on only passive part. I effort on ROBI exclusive SEM system. They give me an access of that arrangement. I have to login every time and take insufficient stages on that structure.

And then get main specialist care arrangement. Same organization is only support on IE9.

I also collect and analysis the down summary data and PG data.

Metal Plus Site Down Summary 30th July' 2019 16:00 hrs.

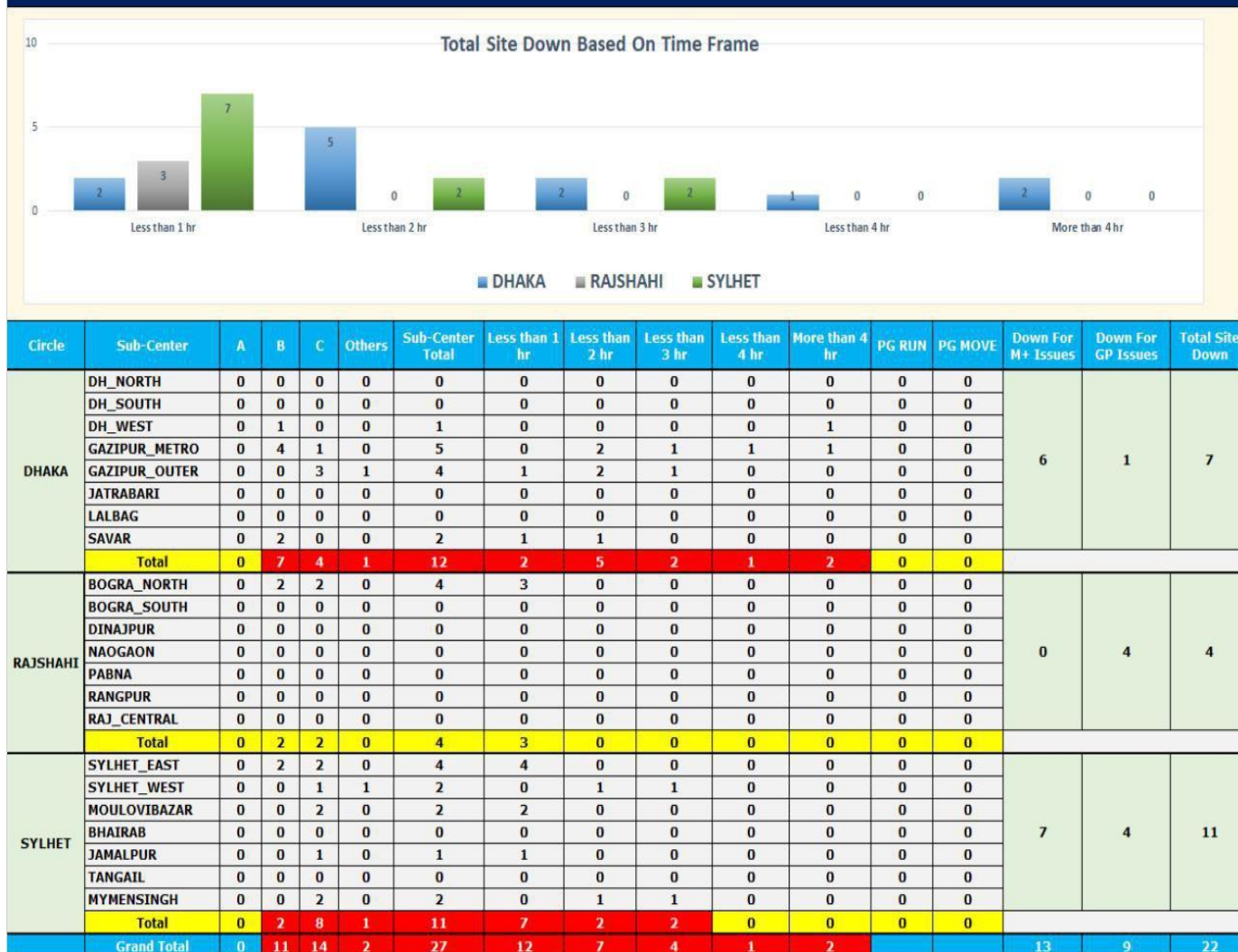


Fig. 3.2: Down Summary of three Zone

Figure description:

This is 30th July's total down site. Our three zone Dhaka, Rajshahi, Sylhet.

Here in Dhaka zone total site down is 7, and M+ issues means site down for Metal Plus and GP issues means transmission or another issues it could be anything not for our company.

Down summary at 16:00													
Site Code	Sub Center	Region	Event Time	Comments	Category	Priority	Duration	Site Name	Connected Site	Power Type	Site Class	Package	Update
DHPLBN_0109	DH_WEST	DHAKA	5/20/2019 1:47	MF,TEMP,DOWN2	Z1	3	1718:34	DHPLBN	2	CP	B	Package 1	24 Hr. access restricted
GPTNGJ_0109	GAZIPUR_METRO	DHAKA	7/30/2019 15:19	BATT,MF,DOWN2			1:02	GPTNGJ	1	CP	B	Package 1	Mr.Sohel is moving
GPTOND_0109	GAZIPUR_METRO	DHAKA	7/30/2019 14:49	BATT,MF,DOWN2	Z1	2	1:32	GPTOND	1	CP	B	Package 1	Local people not allow to run PG.
GPKNBC_0109	GAZIPUR_METRO	DHAKA	7/30/2019 14:05	MF,DOWN2,BATT	Z2	1	2:16	GPKNBC	8	CP	B	Package 1	24 hrs PG run restricted by Local people
GPVNR1_0109	GAZIPUR_METRO	DHAKA	7/30/2019 12:49	DOWN2			3:32	GPVNR1	1	ISS	C	Package 5	24 hrs PG run restricted by Local people
GPTONS_0109	GAZIPUR_METRO	DHAKA	7/30/2019 11:05	BATT,RF,DOWN2	Z1	2	5:16	GPTONS	6	CP	B	Package 1	PG run restricted by Awamigh Party office authority
GPSLD1_0109	GAZIPUR_OUTER	DHAKA	7/30/2019 15:30	BATT,DOWN2,DR			0:51	GPSLD1	1	CP	C	Package 1	Mr.Ali is moving. ERT: 17:00 hrs
GPFEDI_0109	GAZIPUR_OUTER	DHAKA	7/30/2019 15:10	BATT,DOWN2			1:11	GPFEDI	1				Mr.Rashed kazi is moving
GPDM1_0109	GAZIPUR_OUTER	DHAKA	7/30/2019 15:01	DOWN			1:20	GPDM1	1	CP	C	Package 1	Mr. Rezaul will move from GPTOK5
GPTOK5_0109	GAZIPUR_OUTER	DHAKA	7/30/2019 14:00	DR,BATT,DOWN2			2:21	GPTOK5	1	ISS	C	Package 5	PG run restricted by Awamigh Party office authority
DHSAVO_0109	SAVAR	DHAKA	7/30/2019 15:30	BATT,DOWN2,RF,MF	Z1	1	0:51	DHSAVO	1	CP	B	Package 1	24 hrs PG run restricted by Mizan plaza owner
DHSAVY_0109	SAVAR	DHAKA	7/30/2019 14:25	MF,DOWN2,BATT,DVS	Z3	3	1:56	DHSAVY	3	CP	B	Package 1	24 hrs PG run restricted by House owner
BOVPK1_0109	BOGRA_NORTH	RAJSHAHI	7/30/2019 15:58	DOWN2			#VALUE!	BOVPK1	1	ISS	C	Package 5	down from BOCMH1
BOALH1_0109	BOGRA_NORTH	RAJSHAHI	7/30/2019 15:58	DOWN			0:23	BOALH1	1	CP	C	Package 1	down from BOCMH1
BOSGD1_0109	BOGRA_NORTH	RAJSHAHI	7/30/2019 15:58	DOWN		5	0:23	BOSGD1	3	CP	B	Package 1	down from BOCMH1
BOCMH1_0109	BOGRA_NORTH	RAJSHAHI	7/30/2019 15:58	AVI,DR,DOWN		5	0:23	BOCMH1	5	CP	B	Package 1	GP vendor team working
JPULJ1_0109	JAMALPUR	SYLHET	7/30/2019 15:51	DOWN2,DR		7	0:30	JPULJ1	1	CP+AG	C	Package 2	Vendor working on site
MBLAM1_0109	MOULOVIBAZAR	SYLHET	7/30/2019 15:36	DOWN2	Z1	7	0:45	MBLAM1	1	CP	C	Package 1	Vendor working on site
MBFTP4_0109	MOULOVIBAZAR	SYLHET	7/30/2019 15:25	DOWN2			0:56	MBFTP4	1	CP	C	Package 1	Road Access problem
SNPKT1_0109	MYMENSINGH	SYLHET	7/30/2019 14:43	DOWN		7	1:38	SNPKT1	0	CP	C	Package 1	Mr. Khorsed OTW, ERT: 18:00 hrs
MYKND1_0109	MYMENSINGH	SYLHET	7/30/2019 13:46	TEMP,DOWN,RF,MF,DR		5	2:35	MYKND1	2	ISS	C	Package 5	Mr. Hossen OTW, ERT: 17:20 hrs
SYKRB1_0109	SYLHET_EAST	SYLHET	7/30/2019 15:51	DOWN2	=	10	0:30	SYKRB1	1	CP	C	Package 1	Down from SYMAT1
SYMAT1_0109	SYLHET_EAST	SYLHET	7/30/2019 15:51	DOWN2,DR	Z4	1	0:30	SYMAT1	3	CP+AG	B	Package 2	Battery missing site, Team present at site
SYMAT2_0109	SYLHET_EAST	SYLHET	7/30/2019 15:51	DR,RF,DOWN2		7	0:30	SYMAT2	1	CP	C	Package 1	Down from SYMAT1
SYHOL1_0109	SYLHET_EAST	SYLHET	7/30/2019 15:25	DR,DOWN2	Z3	2	0:56	SYHOL1	2	CP	B	Package 1	Mr. Minhaj OTW, ERT: 17:15 hrs
SNJNP2_0109	SYLHET_WEST	SYLHET	7/30/2019 14:35	DOWN2	Z3	5	1:46	SNJNP2	1	CP+AG	C	Package 2	Down for Others issue
SNJAD3_0109	SYLHET_WEST	SYLHET	7/30/2019 13:33	DOWN		1	2:48	SNJAD3	1				Not in package

Fig. 3.3: Down Summary details of three Zone with Estimated restore time

Figure description:

Here our three zone Dhaka, Rajshahi, Sylhet and their sub center down summery details with estimated time. In comments section we mention site down reason and how much time it been down. We define all site with name and also count connected site.

DHAKA CIRCLE										
Sub center	Total site count	Mains fail	Battery alarm	Site down	No of PG run	No of PG moving	Next 1 hrs PG deploy	Total PG	Idle PG	AG site down
GAZIPUR METRO	244	18	8	5	1	2	0	15	12	0
GAZIPUR OUTER	386	44	11	4	9	3	0	33	21	0
JATRABARI	398	8	1	0	3	1	0	10	6	0
LALBAG	448	13	0	0	6	2	0	20	12	0
DH_SOUTH	369	1	2	0	1	0	0	4	3	0
DH_NORTH	294	1	0	0	0	0	0	3	3	0
DH_WEST	453	2	0	1	1	0	0	4	3	0
SAVAR	374	31	3	2	1	2	0	25	22	0
Total PG	2966	118	25	12	22	10	0	114	82	0
SYLHET CIRCLE										
Sub center	Total site count	Mains fail	Battery alarm	Site down	No of PG run	No of PG moving	Next 1 hrs PG deploy	Total PG	Idle PG	AG site down
BHAIRAB	367	36	6	0	3	5	2	45	37	0
JAMALPUR	234	40	1	1	2	2	0	26	22	1
MOULOVIBAZAR	441	46	5	2	6	7	2	43	30	0
MYMENSINGH	541	64	5	2	5	11	2	44	28	0
SYLHET_EAST	367	35	3	4	6	3	1	35	26	1
SYLHET_WEST	284	21	3	2	0	2	1	30	28	1
TANGAIL	380	51	3	0	2	5	1	44	37	0
Total PG	2614	293	26	11	24	35	9	267	208	3
RAJSHAHI CIRCLE										
Sub Center	Total Site Count	Mains fail	Battery Alarm	Site down	No of PG run	No of PG moving	Next 1 hrs PG deploy	Total PG	Idle PG	AG site down
Bogra North	358	20	1	4	0	3	0	25	22	0
Bogra South	435	48	8	0	3	4	2	30	23	0
Rajshahi	625	24	3	0	2	1	0	30	27	0
Naogaon	306	26	1	0	0	0	0	20	20	0
Pabna	241	27	0	0	0	0	0	17	17	0
Rangpur	567	70	2	0	0	4	2	30	26	0
Dinajpur	440	30	0	0	1	0	0	27	26	0
Total	2972	245	15	4	6	12	4	179	161	0

Fig. 3.4: Three Zone with Total PG run and Move

Figure description:

This summary all about total PG run and Move. In our of all sub center from Dhaka, Rajshahi, Sylhet. Here we count total PG. Total PG depends on battery alarm, site down and no. of PG moving. Any zone's whole PG depends on sum of all section.

Mainly we check or monitoring battery alarm and update Summary to send PG so that no one site cannot be down.



Fig. 3.5: Grameenphone WEB SOC

Figure description:

This is GP Web SOC (security operations center). Here shown how many site are down and how many PG are running with bar diagram.

SITE Down: 128, Time: 30-Jul-2019 16:21

Region / SubCenter: RAJSHAHI | BTS Down: 8, Site Down: 8

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SiteCode	SubCenter	Region	EventTime	Comments	Category	Priority
PGGT1M_0109	DINAJPUR	RAJSHAHI	30-Jul-2019 04:10 PM	DOWN		
JYKTL1_0109	NAOGAON	RAJSHAHI	30-Jul-2019 04:10 PM	DOWN2		6
SGKZP3_0109	BOGRA_SOUTH	RAJSHAHI	30-Jul-2019 04:08 PM	MF,DOWN,BATT,AVI	=	10
NWCNP1_0109	RAJ_CENTRAL	RAJSHAHI	30-Jul-2019 04:07 PM	DOWN2,DR	Z3	5
BOVPK1_0109	BOGRA_NORTH	RAJSHAHI	30-Jul-2019 03:58 PM	DOWN2		
BOALH1_0109	BOGRA_NORTH	RAJSHAHI	30-Jul-2019 03:58 PM	DOWN		
BOSGD1_0109	BOGRA_NORTH	RAJSHAHI	30-Jul-2019 03:58 PM	DOWN		5
BOCMH1_0109	BOGRA_NORTH	RAJSHAHI	30-Jul-2019 03:58 PM	AVI,DR,DOWN		5

Fig. 3.6: Grameenphone Site down list on Rajshahi Zone

Figure description:

This is Rajshahi zone and we can see site code and sub center. Here we can see how many site are down and how many BTS down and total site down.

SITE Down: 128, Time: 30-Jul-2019 16:21

Region / SubCenter: (All.) BTS Down: 128, Site Down: 128 [Get Excel File](#) [Goto Map](#)

SiteCode	SubCenter	Region	EventTime	Comments	Category	Priority
FNBRG1_0109	NOAKHALI	CHITTAGONG	30-Jul-2019 04:17 PM	MF,DR		
LXDLB4_0109	CHANDPUR	CHITTAGONG	30-Jul-2019 04:17 PM	OML Fault		9
JKMRH1_0109	BARISAL	KHULNA	30-Jul-2019 04:15 PM	DOWN,MF		5
KHILP1_0109	KHULNA_EAST	KHULNA	30-Jul-2019 04:14 PM	DOWN2,BATT,DR		8
FPMJD1_0109	FARIDPUR	KHULNA	30-Jul-2019 04:14 PM	BATT,MF,DR,DOWN2		5
PPDKJ1_0109	BARISAL	KHULNA	30-Jul-2019 04:14 PM	DOWN,MF,AVI,BATT		
GPBGB2_0109	GAZIPUR_OUTER	DHAKA	30-Jul-2019 04:13 PM	DR,DOWN2,BATT,MF	Z1	7
PTNRN1_0109	PATUAKHALI	KHULNA	30-Jul-2019 04:12 PM	DOWN,BATT,MF	Z3	3
PTKKP1_0109	PATUAKHALI	KHULNA	30-Jul-2019 04:11 PM	DOWN,GR,BATT,MF,DRAG	Z4	1
NOCMP3_0109	NOAKHALI	CHITTAGONG	30-Jul-2019 04:11 PM	MF		
BMSAD1_0109	BHAIRAB	SYLHET	30-Jul-2019 04:11 PM	BATT,MF	Z2	1
FNDPD1_0109	NOAKHALI	CHITTAGONG	30-Jul-2019 04:11 PM	DR,BATT		
CMKDR1_0109	COMILLA_METRO	CHITTAGONG	30-Jul-2019 04:11 PM	DR		5
NOCMP2_0109	NOAKHALI	CHITTAGONG	30-Jul-2019 04:11 PM	AVI,DR,DRAG		9
FNDKR1_0109	NOAKHALI	CHITTAGONG	30-Jul-2019 04:11 PM	DR,MF		
NORNG1_0109	NOAKHALI	CHITTAGONG	30-Jul-2019 04:11 PM	MF	=	10
BMMTB1_0109	BHAIRAB	SYLHET	30-Jul-2019 04:11 PM	OML Fault		
NOKCH1_0109	NOAKHALI	CHITTAGONG	30-Jul-2019 04:11 PM	MF		
NOCMP1_0109	NOAKHALI	CHITTAGONG	30-Jul-2019 04:11 PM	OML Fault	Z4	1
NOBSH1_0109	NOAKHALI	CHITTAGONG	30-Jul-2019 04:11 PM	OML Fault		
NONBD1_0109	NOAKHALI	CHITTAGONG	30-Jul-2019 04:11 PM	MF		
NOPRP1_0109	CHANDPUR	CHITTAGONG	30-Jul-2019 04:11 PM	MF,BATT		
PGGT1M_0109	DINAJPUR	RAJSHAHI	30-Jul-2019 04:10 PM	DOWN		
JYKTL1_0109	NAOGAON	RAJSHAHI	30-Jul-2019 04:10 PM	DOWN2		6
CPRDM1_0109	CHANDPUR	CHITTAGONG	30-Jul-2019 04:09 PM	OML Fault		9
LXDBN1_0109	CHANDPUR	CHITTAGONG	30-Jul-2019 04:09 PM	AVI,MF,BATT,DRAG		6
SGKZP3_0109	BOGRA_SOUTH	RAJSHAHI	30-Jul-2019 04:08 PM	MF,DOWN,BATT,AVI	=	10
NWCNP1_0109	RAJ_CENTRAL	RAJSHAHI	30-Jul-2019 04:07 PM	DOWN2,DR	Z3	5
LXGPR1_0109	CHANDPUR	CHITTAGONG	30-Jul-2019 04:07 PM	GR,AVI		3
NOTHT1_0109	NOAKHALI	CHITTAGONG	30-Jul-2019 04:07 PM	MF		1
NKLEP1_0109	MYMENSINGH	SYLHET	30-Jul-2019 04:06 PM	DC,TEMP,DOWN,DR	Z2	5
GPKSR1_0109	GAZIPUR_OUTER	DHAKA	30-Jul-2019 04:06 PM	RF,DOWN2		
CMCHM1_0109	COMILLA_METRO	CHITTAGONG	30-Jul-2019 04:05 PM	MF		1
CGMRH1_0109	CG_CENTRAL	CHITTAGONG	30-Jul-2019 04:05 PM	OML Fault		
BHLS2_0109	BHOLA	KHULNA	30-Jul-2019 04:04 PM	BATT,DOWN,DVS		3
NOKLP1_0109	CHANDPUR	CHITTAGONG	30-Jul-2019 04:03 PM	MF,AVI	=	10
LXHZP1_0109	CHANDPUR	CHITTAGONG	30-Jul-2019 04:03 PM	MF,BATT		6
NGSFIM_0109	JATRABARI	DHAKA	30-Jul-2019 04:02 PM	DOWN2,DR		
MBVAT1_0109	MOULOVIBAZAR	SYLHET	30-Jul-2019 04:02 PM	DOWN2,BATT,MF	Z3	1
GPBBR1_0109	GAZIPUR_METRO	DHAKA	30-Jul-2019 04:02 PM	MF,BATT,DOWN2		
MBRN2_0109	MOULOVIBAZAR	SYLHET	30-Jul-2019 04:01 PM	DOWN,AVI		7
CPPT1_0109	CHANDPUR	CHITTAGONG	30-Jul-2019 04:01 PM	BATT DR MF		7

Fig. 3.7: Grameenphone Site down list on All Bangladesh

Figure description:

This is 30th july total GP sub center's down site list on all Bangladesh. In here include our three zone. All sub center of three zone. That day total site down 128. Also include event time.

Total Alarm: 93, Time: 30-Jul-2019 4:20 PM

Region / SubCenter: CHITTAGONG Filtered Alarm: 37 [Get Excel File](#) [Goto Map](#)

SiteCode	SubCenter	Region	EventTime	Comments	Vendor	Priority
CGJDN1_0109	CG_CENTRAL	CHITTAGONG	30-Jul-2019 04:21 PM	Volt=26.8, MF@		
CPMAN1_0109	CHANDPUR	CHITTAGONG	30-Jul-2019 04:21 PM	Volt=.1, MF@		
CMDHP1_0109	COMILLA_OUTER	CHITTAGONG	30-Jul-2019 04:21 PM	Volt=34.8, MF@		
CMALP2_0109	COMILLA_OUTER	CHITTAGONG	30-Jul-2019 04:21 PM	Volt=45.6, MF@		
CGJMT1_0109	CG_CENTRAL	CHITTAGONG	30-Jul-2019 04:21 PM	Volt=46.9, MF@30-Jul-19 08:25 AM		
CGSGT1_0109	CG_WEST	CHITTAGONG	30-Jul-2019 04:21 PM	Volt=35.6, MF@	Huawei	8
CPCND2_0109	CHANDPUR	CHITTAGONG	30-Jul-2019 04:21 PM	Volt=44.9, MF@		
CGGSD3_0109	CG_WEST	CHITTAGONG	30-Jul-2019 04:21 PM	Volt=45.6, MF@		
NOATB1_0109	CHOWMOHONI	CHITTAGONG	30-Jul-2019 04:21 PM	Volt=46, MF@30-Jul-19 10:34 AM	Huawei	1
NOHTA8_0109	NOAKHALI	CHITTAGONG	30-Jul-2019 04:21 PM	Volt=47, MF@30-Jul-19 03:32 PM	Huawei	6
NODDL1_0109	CHOWMOHONI	CHITTAGONG	30-Jul-2019 04:21 PM	Volt=46.2, MF@	Huawei	6
NOHTA4_0109	NOAKHALI	CHITTAGONG	30-Jul-2019 04:21 PM	Volt=46.8, MF@	Huawei	3
CGFZH1_0109	CG_CENTRAL	CHITTAGONG	30-Jul-2019 04:21 PM	Volt=46.3, MF@		
CMCBK1_0109	COMILLA_OUTER	CHITTAGONG	30-Jul-2019 04:21 PM	Volt=46.8, MF@		
LXMGH1_0109	CHANDPUR	CHITTAGONG	30-Jul-2019 04:21 PM	Volt=46.9, MF@30-Jul-19 02:58 PM		
CGCDG8_0109	CG_CENTRAL	CHITTAGONG	30-Jul-2019 04:21 PM	Volt=45.8, MF@		
KCTWN3_0109	NOAKHALI	CHITTAGONG	30-Jul-2019 04:21 PM	Volt=46.5, MF@	Huawei	1
CGMHH1_0109	CG_WEST	CHITTAGONG	30-Jul-2019 04:21 PM	Volt=12.2, MF@03-Jul-19 04:54 PM		
CGBHK2_0109	CG_SOUTH	CHITTAGONG	30-Jul-2019 04:21 PM	Volt=46.6, MF@	Huawei	1
CGWMD1_0109	CG_CENTRAL	CHITTAGONG	30-Jul-2019 04:21 PM	Volt=47, MF@		
CGBGH1_0109	CG_CENTRAL	CHITTAGONG	30-Jul-2019 04:21 PM	Volt=45.2, MF@	Huawei	9
CGGSD2_0109	CG_WEST	CHITTAGONG	30-Jul-2019 04:21 PM	Volt=46.4, MF@	Huawei	8
CGBTL1_0109	CG_CENTRAL	CHITTAGONG	30-Jul-2019 04:20 PM	Volt=45.8, MF@	Huawei	8
CGKIAM_0109	CG_NORTH	CHITTAGONG	30-Jul-2019 04:20 PM	Volt=46.8, MF@	Huawei	8
KCMNC1_0109	CG_NORTH	CHITTAGONG	30-Jul-2019 04:20 PM	Volt=46.4, MF@30-Jul-19 04:06 PM	Huawei	10
CMABP1_0109	COMILLA_OUTER	CHITTAGONG	30-Jul-2019 04:20 PM	Volt=45.7, MF@		
CPBLK1_0109	CHANDPUR	CHITTAGONG	30-Jul-2019 04:20 PM	Volt=46.8, MF@	Huawei	9
CMSHI1_0109	COMILLA_METRO	CHITTAGONG	30-Jul-2019 04:20 PM	Volt=1.5, MF@		
CPASF1_0109	COMILLA	CHITTAGONG	30-Jul-2019 04:20 PM	Volt=46.9, MF@	Huawei	9
CPGLV1_0109	CHANDPUR	CHITTAGONG	30-Jul-2019 04:20 PM	Volt=46.4, MF@	Huawei	6
LXKHS1_0109	CHANDPUR	CHITTAGONG	30-Jul-2019 04:20 PM	Volt=46.2, MF@	Huawei	1
LXMTR1_0109	CHANDPUR	CHITTAGONG	30-Jul-2019 04:20 PM	Volt=46.5, MF@30-Jul-19 02:58 PM	Huawei	7
LXKHT1_0109	CHANDPUR	CHITTAGONG	30-Jul-2019 04:20 PM	Volt=46.7, MF@	Huawei	7
LXMND1_0109	CHANDPUR	CHITTAGONG	30-Jul-2019 04:20 PM	Volt=46.8, MF@	Huawei	1
LXDHT1_0109	CHANDPUR	CHITTAGONG	30-Jul-2019 04:20 PM	Volt=45.8, MF@30-Jul-19 04:15 PM	Huawei	3
NOBNG1_0109	NOAKHALI	CHITTAGONG	30-Jul-2019 04:20 PM	Volt=46.4, MF@	Huawei	7
NOUDH1_0109	NOAKHALI	CHITTAGONG	30-Jul-2019 04:20 PM	Volt=37.5, MF@	Huawei	10

Fig. 3.8: Grameenphone Site Voltage on All Bangladesh

Figure description:

This is GP site voltage on all Bangladesh. Here our sub center is Chittagong. In 30th July total alarm 93 and filtered alarm 37. We can see sub-code, sub-center and event time so that we can easily define that.

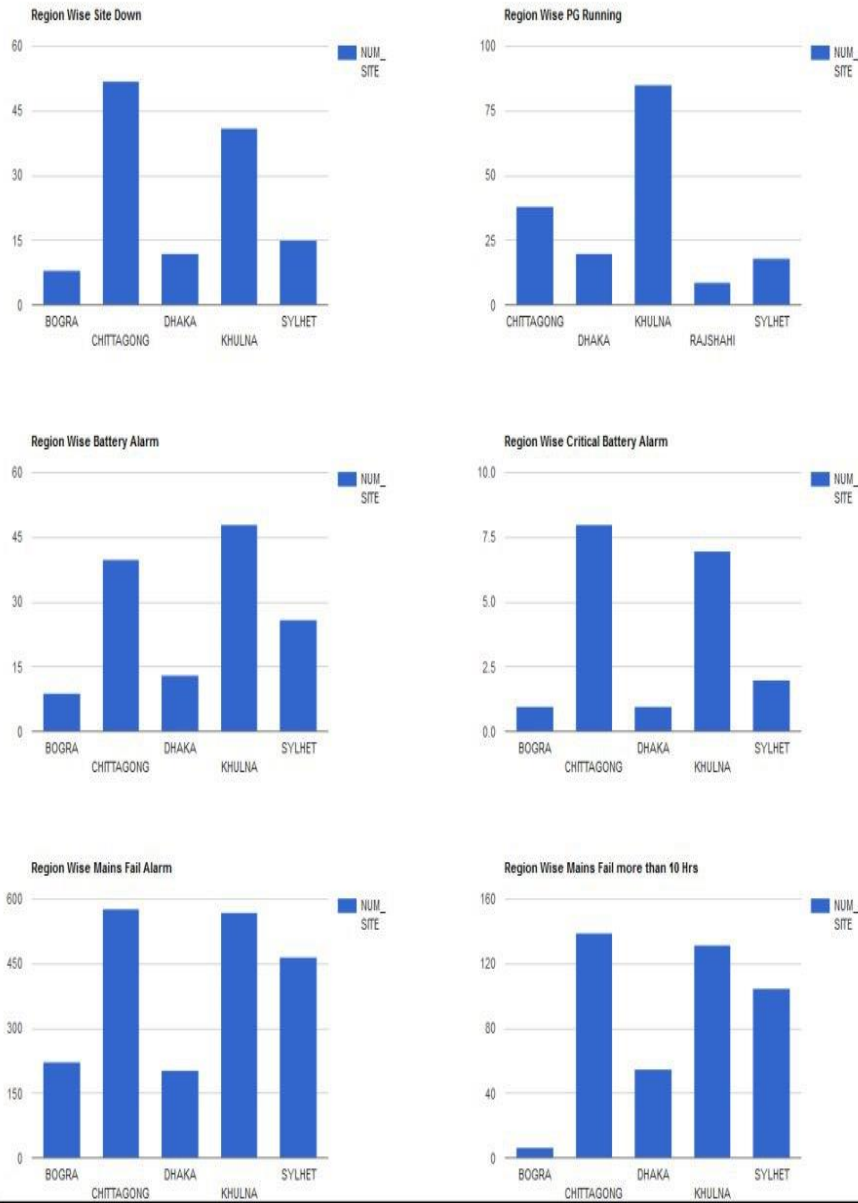


Fig. 3.9: Grameenphone Site Alarm chart for All Bangladesh

Figure description:

This is GP site alarm chart for all Bangladesh. This site alarm can define us how many site goes to down. We can see PG running, battery alarm, mains fail and down site.

Site Name	SC Name	Circle Name	IPBH	ASD	Package	Pac
BGCOS1	KHULNA_EAST	KHULNA	Yes	BGCOS1	Region Feedback	Package 2
BGDBL1	KHULNA_EAST	KHULNA	Yes	BGDBL1	Region Feedback	Package 2
BHBKH1	BHOLA	KHULNA	Yes	BHBKH1	Region Feedback	Package 2
BHCOS1	BHOLA	KHULNA	Yes	BHCOS1	Region Feedback	Package 2
BHNRM1	BHOLA	KHULNA	Yes	BHNRM1	Region Feedback	Package 2
BMAKAR	BHAIRAB	SYLHET	Yes	BMAKAR	Region Feedback	Package 2
BMBAN1	COMILLA_OUTER	CHITTAGONG	Yes	BMBAN1	Region Feedback	Package 2
BMKUT3	COMILLA_OUTER	CHITTAGONG	Yes	BMKUT3	Region Feedback	Package 2
BMTWNR	BHAIRAB	SYLHET	Yes	BMTWNR	Region Feedback	Package 2
BOSHP1	BOGRA_SOUTH	RAJSHAHI	Yes	BOSHP1	Region Feedback	Package 2
BOSNTR	BOGRA_SOUTH	RAJSHAHI	Yes	BOSNTR	Region Feedback	Package 2
BOSTLR	BOGRA_NORTH	RAJSHAHI	Yes	BOSTLR	Region Feedback	Package 2
BOTALR	BOGRA_SOUTH	RAJSHAHI	Yes	BOTALR	Region Feedback	Package 2
BOTWNR	BOGRA_SOUTH	RAJSHAHI	Yes	BOTWNR	Region Feedback	Package 2
BRSKB2	PATUAKHALI	KHULNA	Yes	BRSKB2	Region Feedback	Package 2
BSBKG1	BARISAL	KHULNA	Yes	BSBKG1	Region Feedback	Package 2
BSBOA1	BARISAL	KHULNA	Yes	BSBOA1	Region Feedback	Package 2
BSBOA2	BARISAL	KHULNA	Yes	BSBOA2	Region Feedback	Package 2
BSBTZ1	BARISAL	KHULNA	Yes	BSBTZ1	Region Feedback	Package 2
BSCOS1	BARISAL	KHULNA	Yes	BSCOS1	Region Feedback	Package 2
CDDMHT	KUSHTIA	KHULNA	Yes	CDDMHT	Region Feedback	Package 2
CDTWNR	KUSHTIA	KHULNA	Yes	CDTWNR	Region Feedback	Package 2
CDUTLR	KUSHTIA	KHULNA	Yes	CDUTLR	Region Feedback	Package 2
CGAGB1	CG_WEST	CHITTAGONG	Yes	CGAGB1	Region Feedback	Package 1
CGBAH2	NOAKHALI	CHITTAGONG	Yes	CGBAH2	Region Feedback	Package 2
CGBGH2	CG_CENTRAL	CHITTAGONG	Yes	CGBGH2	Region Feedback	Package 2
CGCHN2	CG_CENTRAL	CHITTAGONG	Yes	CGCHN2	Region Feedback	Package 2
CGCRB1	CG_CENTRAL	CHITTAGONG	Yes	CGCRB1	Region Feedback	Package 2
CGEPZ1	CG_WEST	CHITTAGONG	Yes	CGEPZ1	Region Feedback	Package 1
CGHTZ1	CG_WEST	CHITTAGONG	Yes	CGHTZ1	Region Feedback	Package 2
CGMDG1	CG_WEST	CHITTAGONG	Yes	CGMDG1	Region Feedback	Package 2
CGMIRR	CG_WEST	CHITTAGONG	Yes	CGMIRR	Region Feedback	Package 2
CGORS1	CG_CENTRAL	CHITTAGONG	Yes	CGORS1	Region Feedback	Package 1
CGSKD1	CG_WEST	CHITTAGONG	Yes	CGSKD1	Region Feedback	Package 2

Fig. 3.10: A small part of Grameenphone Database

Figure description:

This is GP database with site name, SC name. Circle name. That helps insignificant and medium-sized productions gain superior control over catalogue and processes. For consecutively speedily with an answer that is bendable, configurable.

ID	Site_name	Circle	Sub Center	Package	Start_time	Clear_time	Duration_minutes	Duration_hours
2249790	DHRS3	DHAKA	DH_WEST	Package 3	7/29/2019 1:06	7/29/2019 1:22	16	0.27
2250265	DHRS3	DHAKA	DH_WEST	Package 3	7/29/2019 6:03	7/29/2019 8:10	126	2.10
2250386	DHRS3	DHAKA	DH_WEST	Package 3	7/29/2019 9:19	7/29/2019 9:28	8	0.13
2250511	DHRS3	DHAKA	DH_WEST	Package 3	7/29/2019 9:27	7/29/2019 10:10	42	0.70
2250547	DHRS3	DHAKA	DH_WEST	Package 3	7/29/2019 10:16	7/29/2019 11:16	59	0.98
2251063	DHRS3	DHAKA	DH_WEST	Package 3	7/29/2019 15:07	7/29/2019 15:34	26	0.43
2251264	DHRS3	DHAKA	DH_WEST	Package 3	7/29/2019 15:45	7/29/2019 17:16	90	1.50
2251815	DHRS3	DHAKA	DH_WEST	Package 3	7/29/2019 21:32	7/29/2019 21:52	20	0.33
2251853	DHRS3	DHAKA	DH_WEST	Package 3	7/29/2019 21:55	7/29/2019 22:10	14	0.23
2251931	DHRS3	DHAKA	DH_WEST	Package 3	7/29/2019 22:14	7/29/2019 23:46	92	1.53
2250284	GPSRD1	DHAKA	GAZIPUR_METRO	Package 2	7/29/2019 8:45	7/29/2019 8:52	7	0.12
2250460	GPKAL6	DHAKA	GAZIPUR_METRO	Package 2	7/29/2019 10:21	7/29/2019 10:34	12	0.20
2250464	GPSRD1	DHAKA	GAZIPUR_METRO	Package 2	7/29/2019 9:05	7/29/2019 10:04	58	0.97
2250501	GPSRD1	DHAKA	GAZIPUR_METRO	Package 2	7/29/2019 10:05	7/29/2019 10:28	22	0.37
2250591	GPSRD1	DHAKA	GAZIPUR_METRO	Package 2	7/29/2019 10:32	7/29/2019 11:34	62	1.03
2250612	GPKAL6	DHAKA	GAZIPUR_METRO	Package 2	7/29/2019 11:50	7/29/2019 11:58	8	0.13
2250614	GPSRD1	DHAKA	GAZIPUR_METRO	Package 2	7/29/2019 11:35	7/29/2019 11:58	23	0.38
2250816	GPKAL6	DHAKA	GAZIPUR_METRO	Package 2	7/29/2019 12:35	7/29/2019 13:28	53	0.88
2251065	GPSRD1	DHAKA	GAZIPUR_METRO	Package 2	7/29/2019 15:27	7/29/2019 15:34	7	0.12
2251069	GPKAL6	DHAKA	GAZIPUR_METRO	Package 2	7/29/2019 15:25	7/29/2019 15:52	26	0.43
2251172	GPKAL6	DHAKA	GAZIPUR_METRO	Package 2	7/29/2019 16:31	7/29/2019 16:40	9	0.15
2251266	GPSRD1	DHAKA	GAZIPUR_METRO	Package 2	7/29/2019 16:13	7/29/2019 17:10	56	0.93
2251413	GPKAL6	DHAKA	GAZIPUR_METRO	Package 2	7/29/2019 17:40	7/29/2019 18:16	36	0.60
2251925	GPKMN1	DHAKA	GAZIPUR_METRO	Package 2	7/29/2019 22:27	7/29/2019 22:34	6	0.10
2249773	NSSRN1	DHAKA	GAZIPUR_OUTER	Package 3	7/29/2019 0:07	7/29/2019 1:10	63	1.05
2249861	NSNGT1	DHAKA	GAZIPUR_OUTER	Package 2	7/29/2019 2:38	7/29/2019 2:46	7	0.12
2249996	NSSRN1	DHAKA	GAZIPUR_OUTER	Package 3	7/29/2019 3:57	7/29/2019 4:58	61	1.02
2250033	NSSRG1	DHAKA	GAZIPUR_OUTER	Package 3	7/29/2019 3:13	7/29/2019 5:16	122	2.03
2250046	NSNGT1	DHAKA	GAZIPUR_OUTER	Package 2	7/29/2019 5:44	7/29/2019 5:52	7	0.12
2250087	NSKLP1	DHAKA	GAZIPUR_OUTER	Package 3	7/29/2019 4:17	7/29/2019 6:28	130	2.17
2250130	GPKPSD	DHAKA	GAZIPUR_OUTER	Package 2	7/29/2019 5:49	7/29/2019 6:04	15	0.25
2250168	NSNGT1	DHAKA	GAZIPUR_OUTER	Package 2	7/29/2019 6:56	7/29/2019 7:04	8	0.13
2250285	GPKPSD	DHAKA	GAZIPUR_OUTER	Package 2	7/29/2019 7:43	7/29/2019 8:52	68	1.13
2250393	NSSRN1	DHAKA	GAZIPUR_OUTER	Package 3	7/29/2019 8:40	7/29/2019 9:40	60	1.00
2250486	NSNGT1	DHAKA	GAZIPUR_OUTER	Package 2	7/29/2019 8:39	7/29/2019 10:34	115	1.92
2250610	GPKPSF	DHAKA	GAZIPUR_OUTER	Package 2	7/29/2019 9:09	7/29/2019 11:28	139	2.32
2250632	GPRJB1	DHAKA	GAZIPUR_OUTER	Package 2	7/29/2019 10:18	7/29/2019 11:52	93	1.55
2250740	NSKLP1	DHAKA	GAZIPUR_OUTER	Package 3	7/29/2019 10:47	7/29/2019 12:58	131	2.18

Fig. 3.11: A small part of Grameenphone PSA DATA

Figure description:

This is part of GP PSA Data. That need ID from all sub center and there have starting time and clear time and duration minutes and duration hour so that we can fixed it. We stock data and deliver services of penetrating unambiguous record in given data. We stock special material used to manage the data. This material is called metadata and it is not publicized to all the people observing at the data.

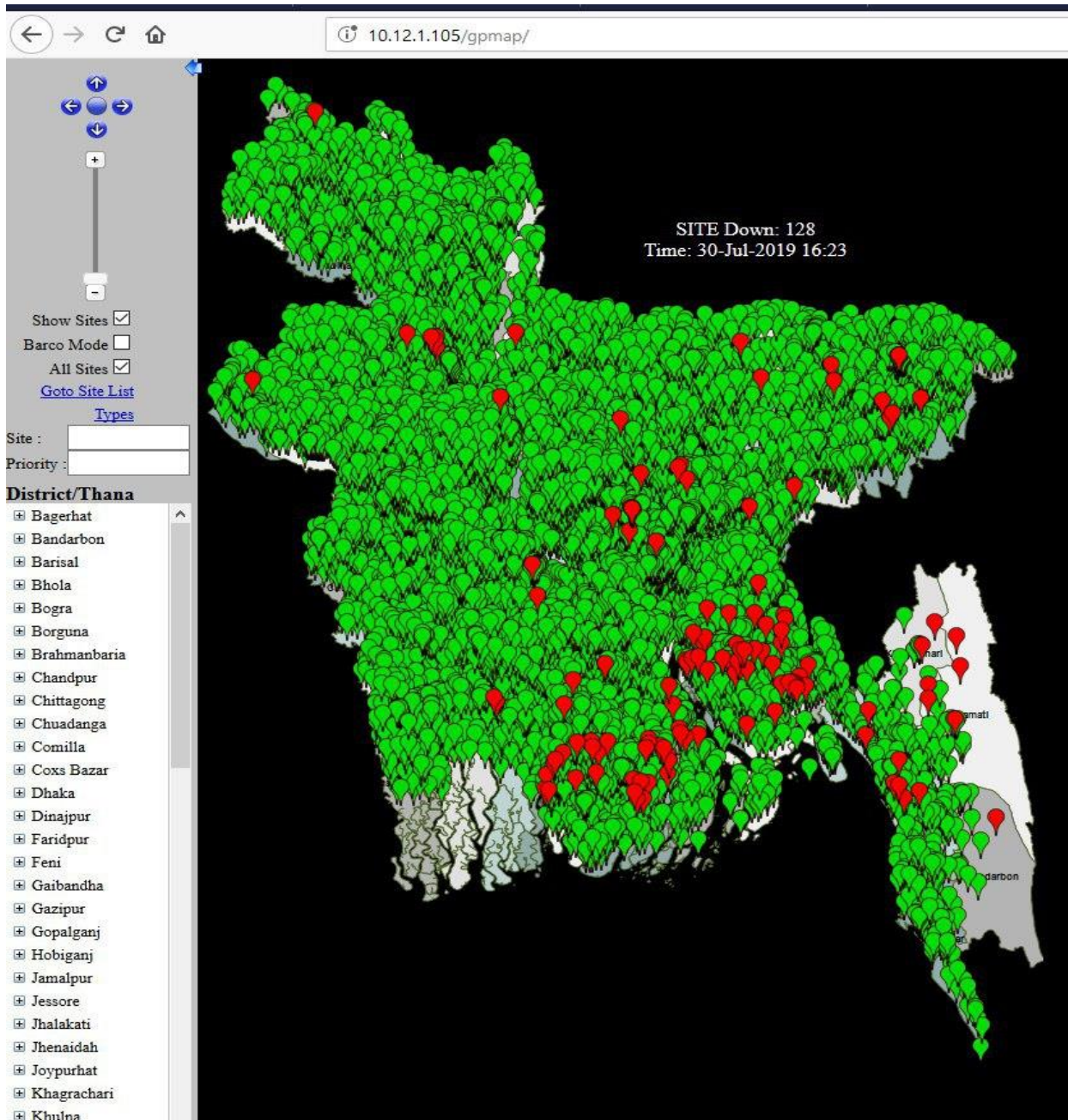


Figure 3.12: Grameenphone BTS MAP for all Bangladesh

Figure description:

Here, Red points are down site and Green points are active site. This is down site summery of 30th July.

Activities

First, we link with GP terminal with a Cisco VPN improved by GP. By entering user name and password we then connect with GP IP. Then it takes us SSO-portal. Then we drive to SEM tab. Then we can discovery total amount of alarms of Bangladesh. And summery of all tower. Then by connecting on alarm we can go to ALU Integrated Portal. Then we have to put our user name yet again and find main SEM system. After confirm some arrangement we can realize all alarm of Bangladesh of GP. After sorting I can find an imaginative page where we can see location name, Alarm name, Last Manifestation vendor name attentive group etc. Hare we can discovery all alarm of Rajshahi zone. Then we reproduction all alarm and placed it on a excel file. Where by Macro we can acceptable our site name and alarm name. Then we detect that alarms and if essential, we deteriorate this alarm to our sub center by telegram.

3.4 Challenges

Internship Challenges Every Single Intern Face as a Newbie — Your first stage in your effort life. You are just complete with your Couse and ready to contrivance your educated knowledge into movements. If not instigated, at least see how all those academic knowledges is being used in commercial life. However, you accurately don't know what to expect or predict.

At introductory of my internship, I faced thought-provoking encounters. Like first I have been present office at 8 AM. That's is really very hard for me. Also have to exertion at office all day long from 8 AM to 5 PM. That was really very problematic for me. It was my first office situation that's why I have to absorb many office instructions in a very quick period. I have to interconnect with lots of people. I absorb how to work with the and how-to transaction with them. It was actually a very vast challenge for me.

So, I reached the office and here and now it's my orientation. I make known to a lot of people. Actually, too many people to think of the names and their subdivision/descriptions. I might graciously say them, hello but I don't actually recognize what to say next. So, I remain cumberksomely quiet.

It sure takes time to recognize the office environment. Since every administrative environment varies from office to office. Some have a unbending construction while others are supple.

Though administrations are moving more towards suppleness nowadays, some offices do have some strict strategies. Then again, there are some interior differences too.

For example, the marketing section may be more of social, high-spirited than the finance section. The vice-versa may transpire too.

Throughout your first weeks of meet people struggles, trying to perceive the administrative comportment is a challenge here too. My discernment is very significant here since bestowing to that you progress on meet people.

CHAPTER 4

Competencies and Smart Plan

4.1 Competencies Earned

- Supervised network and determined all problems that happened on same At Grameenphone Network.
- Achieved troubleshoot on system and determined all issues in progression.
- Corresponding with oldest level engineering group and site acquaintances for determining all technical questions.
- Intensive care all Serious, Major, and Inconsequential of BTS linked alarm through GP web soc webpage.
- Intensive care the Back Bone network as well as high size links concluded x-bot.
- Make available dissimilar types of technical material to FO team by examination GP web soc webpage.
- Sustaining the MS Excel logbook for organized dissimilar types of report created on customer prerequisite.
- Follow up dissimilar types of work instructions grounded on customer prerequisite.
- Power alarm intensive care for backbone smooth-edged the clock.
- SMS announcement to concerned engineers for different faults.
- Alarm appreciation according to the recommendation.
- Preserving the MS word and MS Excel log book for organized dissimilar types of report grounded on customer obligation.

4.2 Smart Plan

By Internship on Metal Plus NOC now I am worried to the upcoming of my career now. In intern period, I get actual life familiarity that will help my upcoming career in Telecom sector. It has very high petition in modern expertise. I educated some real-world things in my internship period in an office atmosphere. Now I will try my best to growth this

acquaintance and repetition more and more. My future strategy is completely knowledge about Network Engineering, then execution in real world.

4.3 Reflections

By responsibility Internship on Metal Plus (Pvt.) Limited we get the real-world knowledge and information in the ground of Network Engineering. It supports me to get understanding in engineering job. In my intern period, I educated telecom related Real-world information. Telecom segment is a smart and self-motivated occupation at this time. This Internship will benefit me to be get a smart job. Internship gives unconventional tricks and trips that expert by the specialized.

CHAPTER 5

Conclusion and Future Career

5.1 Discussion and Conclusion

My Internship on Metal Plus Ltd has been completed in 30 April 2019. By internship, I improvement knowledge of many belongings which is deliberate in preceding section. Now a days all communication structure depends on Telecom network. This internship springs me a chance to gain specific career acquaintance before permanents responsibilities are made. I am actually lucky to get internship on Metal Plus NOC.

5.2 Scope for Further Career

In our country in Bangladesh there are many lots of corporation. In this corporations Metal Plus Ltd. is one of the major and popular corporation. Main facilities in this corporation they on condition that are Maintenance main backbone of network ground. They take maintenance all network tower of all telecom operative in the Bangladesh. Therefore, by intern on MPL NOC its really help ne to get a proper job on this company. The scope of responsibilities of networking engineers can vary significantly, the chief role being that of a network supervision accompanying procedure and conservation of the entire Structure of associated devices. A lot of network admins enjoy their job for the reason that there is little to do with troublesome composite system.

References

[1] Metal Plus official Logo: <http://www.metalplusltdbd.com/images/metallogo.png> (30-07-2017 06:06pm)

[2] SWOT Image: <https://en.pimg.jp/039/329/196/1/39329196.jpg> (30-07-2017 06:50pm)

APPENDICES

Appendix A:

Internship Reflection

In empirical knowledge and internships, the real education comes after the work term when you have a chance to think about what you saw and knowledgeable. Reflecting back about the involvement is a key to education and it is absolutely not a newfangled idea.

I am actual appreciative to finish my internship. At first, I want to give an unlimited appreciation to my supervisor, to **AHMED AI MAROUF** sir without him it's terrible for us to complete it. He is continuously to formulate to answer all of my interrogations and clear my concept for assigned tasks. For this internship in an insufficient month a lot of changed chanced for me. This internship is exposed a great opportunity to enter a new epoch. Reproduction on my intern I accomplish abundant real-life connectivity and lots Involvement.

Appendix B: Company Details



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