

CO-OPERATIVE EDUCATION REPORT

CAT Telecom Chiang Rai Public Co., LTD.



Mr.Tanakrit Wuttikron 5731301028

BACHELOR OF SCIENCE

IN

INFORMATION TECHNOLOGY

SCHOOL OF INFORMATION TECHNOLOGY

MAE FAH LUANG UNIVERSITY

1301495 CO-OPERATIVE EDUCATION

THIRD SEMESTER, ACADEMIC YEAR 2017

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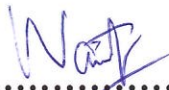
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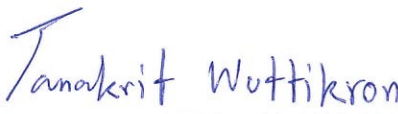
Mr.Tanakrit Wuttikron 5731301028

THIS REPORT SUBMITTED TO MAE FAH LUANG UNIVERSITY
IN PARTIAL FULFULLMENT OF THE REQUIREMENTS FOR
THE DEGREE OF BACHELOR OF SCIENCE PROGRAM
INFORMATION TECNOLOGY SEMESTER 3, 2017

EXAMINING COMMITTEE


..... **ADVISOR**
(Lecturer Aj. Dr. Waralak Chongdarakul)

INTERNSHIP MEMBER


..... **(MEMBER)**
(Mr. Tanakrit Wuttikron)

CAT Telecom Chiang Rai Public Co., LTD.

02 November 2018

Subject: Internship Experience Report

To: Internship Advisor, Information Technology major

I am pleased to inform you that I have successfully completed the entire requirement of the Cooperative Education (Course code 1301495). The report was prepared and issued by Mr. Tanakrit Wuttikron the 4th year student in Information Technology major, School of Information Technology at Mae Fah Luang University. This report provides a thorough review of my internship experiences.


My internship experience was from CAT Telecom Chiang Rai Public Company Limited. gives me the opportunity to work with the organization. I use my knowledge from previous classes and apply in real situation to useful for work, I have learned more about working together, I have learned new skills that it can develop myself, and I also know more about how to adapt of working real life.

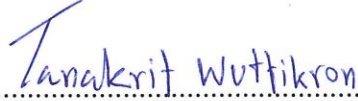
During 4 months experiences. I learned the working process of the organization. I receive more knowledge from work of organization such as manage marketing and service in the organization, contact with customers, and work together. I have practiced in various functions on the responsibilities as defined in internship agreement. This experience is good for my career in the future.

Approved by

Approved by

Your Sincerely


.....
(Aj. Dr. Waralak Chongdarakul)


.....
(Mr. Tanakrit Wuttikron)

ACKNOWLEDGEMENTS

This report is in a partial fulfillment of the requirement for the course 1301495 Co-operative Education follow the Science Bachelor Program of Mae Fah Luang University in semester 3, academic year 2017 to provide my experience of completing the internship program CAT Telecom Chiang Rai Public Company Limited, During 16 July 2018 to 2 November 2018 as IT support and Admin system.

I get many experiences and knowledge from CAT Telecom Chiang Rai Public Company Limited about Network system, Configure router Wi-Fi and Answering customer calls to report a problem etc.

So, I would like to thank you employees in CAT Telecom Chiang Rai Public Company Limited to training, supporting and give more experience to me. Every experience that I got from company I will use to improve my knowledge and skills.

Mr. Tanakrit Wuttikron

Mae Fah Luang University

School of Information Technology

Major Information Technology

Title: CAT Telecom Chiang Rai Public Company Limited

Author: Mr. Tanakrit Wuttikron

Degree: Bachelor of Science (Information Technology)

Supervisory Committee: Aj. Dr. Waralak Chongdarakul

Organization Adviser: Mr. Worrarit Wongtawan, Network System Engineer

ABSTRACT

This report is a part of Co-operative Education, Mae Fah Luang University; this report is about Networking Internship of CAT Telecom Chiang Rai Public Company Limited and responsible work during internship. My internship period was in 3 semester of year 2017, since 16 July 2018 to 2 November 2018

My responsibilities and tasks assigned is to study and tasks assigned such as Setting router Wi-Fi, Configure IP address, or Make web server for the office.

Therefore, this internship in Co-operative subject is very useful for me to prepare myself for working and solving problems in real working in the future.

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CHAPTER 1

OBJECTIVES OF CO-OPERATIVE EDUCATION

1.1. Objective of the Internship Experience Course

- 1.1.1. To get students to bring knowledge that learned in a university to apply to the real work.
- 1.1.2. To get develop the skills of students to be ready for work.
- 1.1.3. To get students to work with other employees.
- 1.1.4. To get the students are more responsible and have tolerance to pressure.
- 1.1.5. Can try to like working before I go to work in real life.

1.2. Usefulness of the Internship Experience

- 1.2.1. Students understand real work with real events.
- 1.2.2. Students try new software that is different from classroom in university.
- 1.2.3. Students try to increase their knowledge skills in many more.
- 1.2.4. Students are more responsible and more organized.
- 1.2.5. Students gain new skills from their work.

CHAPTER 2

LITERATURE REVIEW

2.1 Program & Tools

2.1.1 Microsoft Excel 2016



Figure 2.1: Microsoft Excel 2016 logo

The software program from Microsoft that is part of the Microsoft Office suite of software programs. Developed by Microsoft. Excel is capable of creating and editing spreadsheets that are saved with a .xls or .xlsx file extension. General uses of Excel include cell-based calculation, pivot tables, and various graphing tools.

For instance, with an Excel spreadsheet, you could create a monthly budget, track business expenses, or sort and organize large amounts of data.

2.1.2 Gmail



Figure 2.2: Gmail logo

This is a free Web-based e-mail service currently being tested at Google that provides users with a gigabyte of storage for messages and provides the ability to search for specific messages.

The Gmail program also automatically organizes successively related messages into a conversational thread. Another defining trait of the Gmail service is that it allows users to be inactive for up to nine months. Many similar services require a login at least once every 30 days to keep an account active.

Finally, Gmail has one of the best, if not the best, spam detection capabilities available, which means almost all spam is filtered into the trash, so you don't have to read it.

2.1.3 Sublime Text 3



Figure 2.3: Sublime text 3 logo

Text is a proprietary cross-platform source code editor with a Python application programming interface (API). It natively supports many programming languages and markup languages, and functions can be added by users with plugins, typically community-built and maintained under free-software licenses.

2.1.4 XAMPP



Figure 2.4: XAMPP logo

The XAMPP is the web server solution consisting mainly of the Apache HTTP Server, Maria DB database, and interpreters for scripts written in the PHP and Perl programming languages. Since most actual web server deployments use the same components as XAMPP, it makes transitioning from a local test server to a live server possible.

2.1.5 OTDR Machine



Figure 2.5: OTDR Machine

An optical time-domain reflectometer (OTDR) is an optoelectronic instrument used to characterize an optical fiber. An OTDR is the optical equivalent of an electronic time domain reflectometer. It injects a series of optical pulses into the fiber under test and extracts, from the same end of the fiber, light that is scattered (Rayleigh backscatter) or reflected back from points along the fiber. The scattered or reflected light that is gathered back is used to characterize the optical fiber. This is equivalent to the way that an electronic time-domain meter measures reflections caused by changes in the impedance of the cable under test. The strength of the return pulses is measured and integrated as a function of time, and plotted as a function of fiber length.

2.1.6 Fiber Optic Cable



Figure 2.6: Fiber Optic Cable

Fiber optics, or optical fiber, refers to the medium and the technology associated with the transmission of information as light pulses along a glass or plastic strand or fiber. A fiber optic cable can contain a varying number of these glass fibers -- from a few up to a couple hundred. Surrounding the glass fiber core is another glass layer called cladding. A layer known as a buffer tube protects the cladding, and a jacket layer acts as the final protective layer for the individual strand.

CHAPTER 3

ORGANIZATION BACKGROUND

3.1 Organization background

CAT Telecom Public Company Limited is a state-owned company under the supervision of Ministry of Information and Communication Technology (ICT). In an era when communications technology influences many aspects of business operations, CAT prides itself as being Thailand's leading telecom and IT service provider. The company has developed a wide range of services to fulfill the needs of customers in both government and private sectors. Key services include the international direct dialing (IDD), data communication (DATACOM), Internet, E-Business, and wireless services.

3.2 Type of organization

CAT Telecom Public Company Limited is a company providing wireless services, which are divided into 2 categories: mobile phone services for the general public and radio services for private users.

3.3 Organization Location

Name: CAT Telecom Chiang Rai Public Company Limited

Address: 63, Wiang, Mueang, Chiang Rai 57000

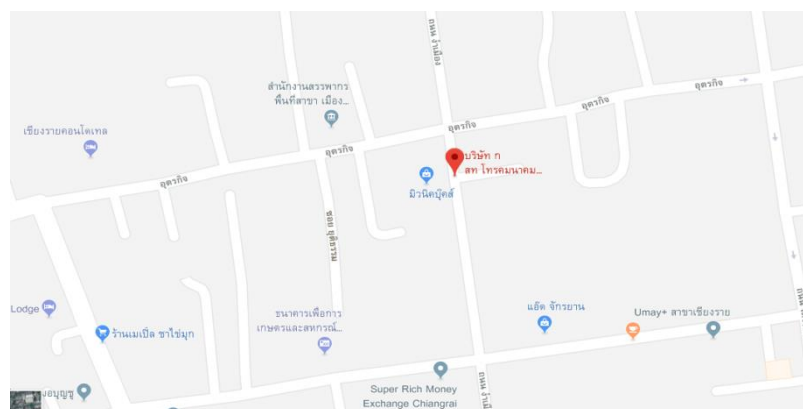


Figure 3.1: Locations of CAT Telecom Chiang Rai Public Co., Ltd.

Call / Fax: 052-029-977-8 / 052-029-97

3.4 Organization Structure

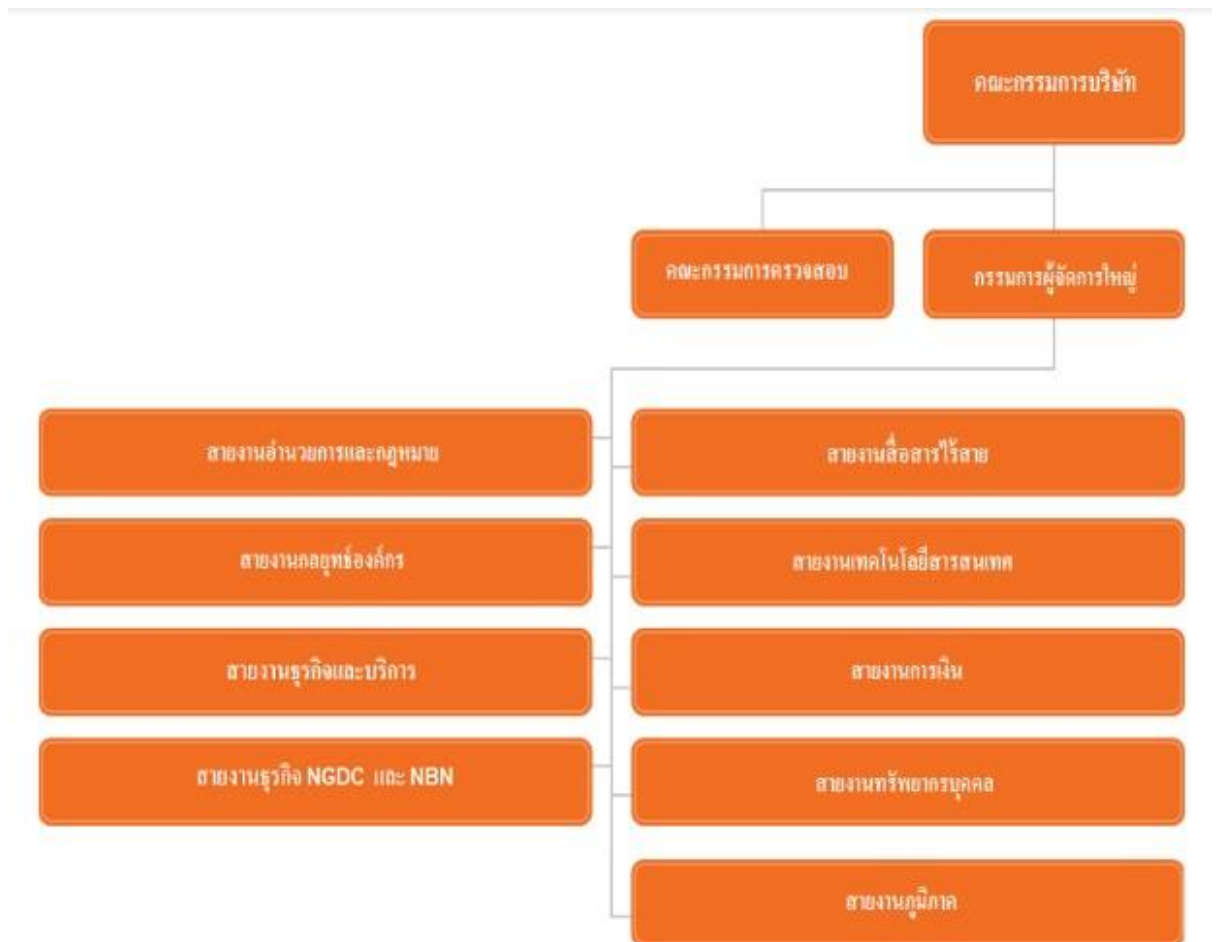


Figure 3.2: Organization Structure of CAT Telecom Chiang Rai Public Co., Ltd.

3.5 Work position and duties

Work in organization as IT support and Admin service.

3.6 Job responsibilities

- 3.6.1 Answering customer calls to report a problem.
- 3.6.2 Internship outside at various locations.
- 3.6.3 Make web server.
- 3.6.4 Backup configure file of Wi-Fi devices.
- 3.6.5 Print the assigned documents.
- 3.6.6 Checks configure Wi-Fi devices.

3.7 Job supervisor

Mr. Worrarit Wongtawan

Position: Network System Engineer

Department: Network System Engineer

Tel. 081-2320135

3.8 Duration and work plan

Internship program at CAT Telecom Chiang Rai Public Co., Ltd. start 16 July 2018 to 2 November 2018 (Monday – Friday from 8.30 A.M. – 16.30 P.M.).

No.	Tasks	Weeks															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Learning about Network system of organizations and systems other of the organization.																
2	Working as assigned.																
3	Internship outside operations, such as the installation of Internet systems.																
4	Make web server and web site of office.																

Table 3.1: Work plan.

CHAPTER 4

JOB DESCRIPTION AND JOB RESPONSIBILITIES

4.1 Job descriptions

CAT Telecom Public Company Limited is a company providing wireless services, which are divided into 2 categories: Mobile phone services for the general public and Radio services for private users. Therefore most of the assignments are about Network system includes:

4.1.1 Setting Internet connection devices such as Micro Tick, Access Point and other devices.

Before sending the router to the customer to use. You need to configure the IP to the router to make connections. After that, we will arrange the routers according to the customer's ID to forward to the next department.

4.1.2 Reported problems from customers in the province.

When customers call to report problems about the Internet or the system that customers use. After knowing the problem, we will do the analysis for the cause. Then notify the department Out-sort to hurry to solve the problem in the next step.

4.1.3 Check Server Room.

Check the performance of the device inside the server room. Check to make sure the server is working properly. If there are any abnormalities, they will inform the staff to check the cause again.

4.1.4 Make web server and website to office.

Create a web site for the office to optimize the collection of information, because the office will store the information in the form of a printed out paper, which makes important information can be easily lost. So the office has set up this website to be able to store data in database for better store information.

4.2 Job responsibilities and accomplishment in table

1) Month: July

DD / MM / YY To DD / MM / YY	Assigned Tasks	Results
16/07/2018	<ul style="list-style-type: none"> - Learn about connect to network. - View the example of connect and install the device. - Activate windows 7. 	100% Complete all
17/07/2018- 20/07/2018	<ul style="list-style-type: none"> - Install TFTP Server on Computer. - Set ONU. - Create web site on web server. 	100% Complete all
23/07/2018- 27/07/2018	<ul style="list-style-type: none"> - Internship outside at Grand Vista Hotel, Chiang Rai. - View the example about ODF machine, Fiber machine. - Create database of web site. 	100% Complete all

Table 4.1: Job responsibilities in July.

2) Month: August

DD / MM / YY To DD / MM / YY	Assigned Tasks	Results
31/07/2018- 03/08/2018	<ul style="list-style-type: none"> - Backup file config of Chiang rai. - Internship outside at Payameng rai Hospital. - To install Internet equipment. 	100% Complete all
06/08/2018- 10/08/2018	<ul style="list-style-type: none"> - Backup file config of Chiang rai. - Internship outside at Rim kok Hotel. - View the demo server authentication. 	100% Complete all

13/08/2018- 17/08/2018	<ul style="list-style-type: none"> - Internship outside at Happy City to store internet equipment. - Internship outside at Public health to check sever equipment. - Big cleaning in office. 	100% Complete all
20/08/2018- 24/08/2018	<ul style="list-style-type: none"> - Install Visual studio program. - Install Fiber Optic Cable. 	100% Complete all
27/08/2018- 31/08/2018	<ul style="list-style-type: none"> - Check speed internet at Chiang Khong Customs House. - Check signal internet at Ban tar, Chiang Khong. 	100% Complete all

Table 4.2: Job responsibilities in August.

3) Month: September

DD / MM / YY To DD / MM / YY	Assigned Tasks	Results
03/09/2018- 07/09/2018	<ul style="list-style-type: none"> - Make web server cont. - Print the assigned documents. - Answering customer calls to report a problem. 	100% Complete all
10/09/2018- 14/09/2018	<ul style="list-style-type: none"> - Make web server cont. - Print the assigned documents. - Check wi-fi devices. - Install Fiber Optic Cable. 	100% Complete all
17/09/2018- 21/09/2018	<ul style="list-style-type: none"> - Answering customer calls to report a problem. - Make web server cont. - Learn to make a tomato firmware. 	100% Complete all

24/09/2018- 28/09/2018	<ul style="list-style-type: none"> - Make a tomato firmware. - Print the assigned documents. - Answering customer calls to report a problem. 	100% Complete all
---------------------------	---	--------------------------

Table 4.3: Job responsibilities in September.

4) Month: October

DD / MM / YY To DD / MM / YY	Assigned Tasks	Results
01/10/2018- 05/10/2018	<ul style="list-style-type: none"> - Make web server cont. - Print the assigned documents. 	100% Complete all
08/10/2018- 12/10/2018	<ul style="list-style-type: none"> - Make web server cont. - Check wi-fi devices. - Configure IP router Wi-Fi 	100% Complete all
15/10/2018- 19/10/2018	<ul style="list-style-type: none"> - Check server room. - Make web server cont. 	100% Complete all
22/10/2018- 26/10/2018	<ul style="list-style-type: none"> - Answering customer calls to report a problem. - Up project web site to server. 	100% Complete all
29/10/2018- 02/11/2018	<ul style="list-style-type: none"> - Present website. - Print the assigned documents. 	100% Complete all

Table 4.4: Job responsibilities in October.

4.3 Outcome and Experience

During the 4-month internship, I have many experiences and knowledge such as Setting Internet connection devices, Reported problems from customers in the province, Check Server Room and Make web server and website to office etc.

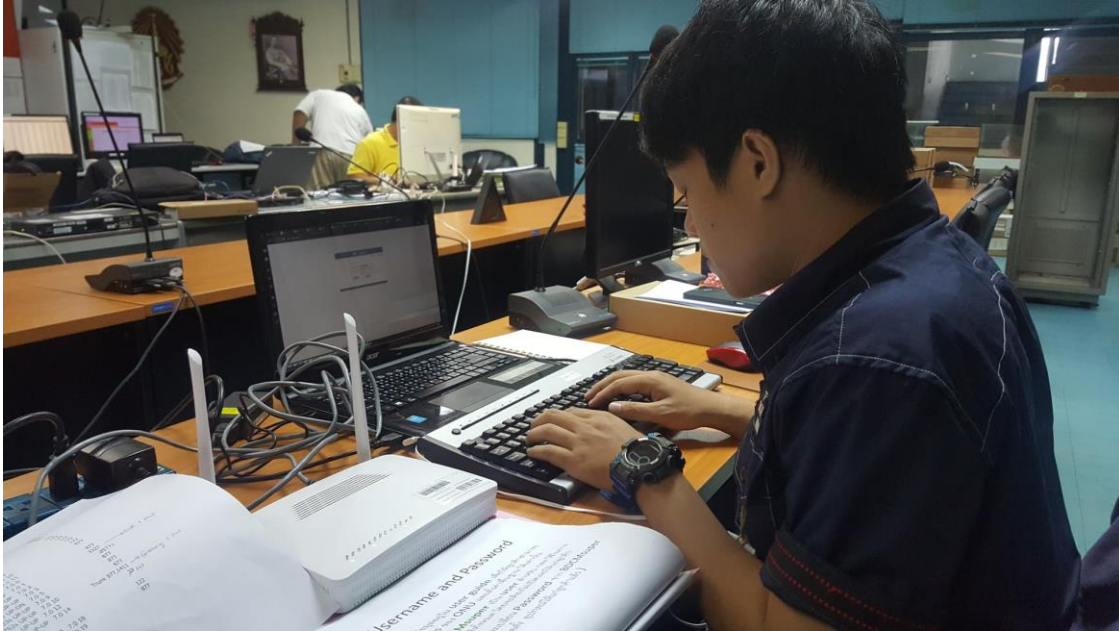


Figure 4.1: Configure internet router Wi-Fi.

Before sending the router to the customer to use. We need to configure the IP to the router to make connections. After that, we will arrange the routers according to the customer's ID to forward to the next department.

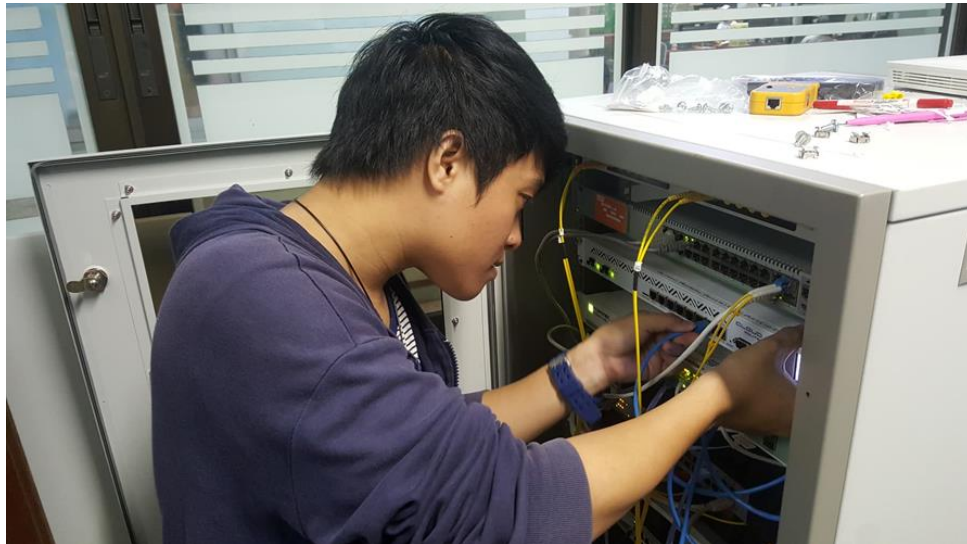


Figure 4.2: Change the switch router at the hospital.

The hospital said that the problem of the Internet. The organization went to change the equipment to the hospital. Then the system was returned to work normally.

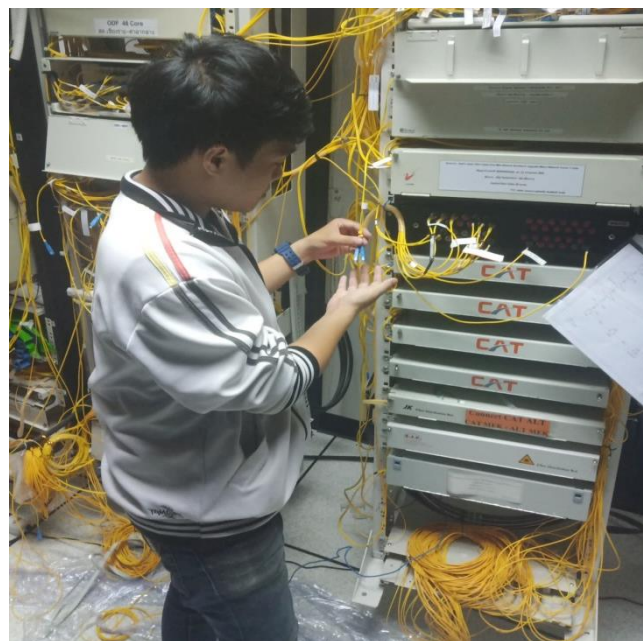


Figure 4.3: Check server Room.

Check the performance of the device in the server room to check that it is working properly.



Figure 4.4: View the example about ODF machine, Fiber machine.

Listen to explanations about how each piece of equipment and see demonstrations how to equipment used by specialized staff. I also learn a lot more than I have ever learned in the classroom.

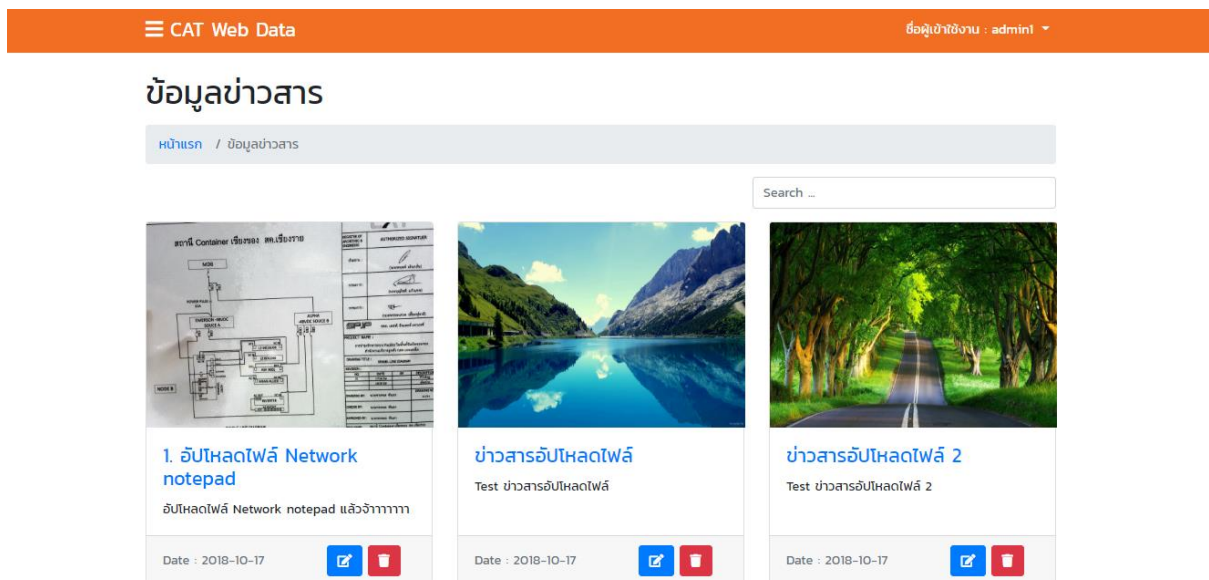


Figure 4.5: Interface website.

This is interface of website that create for the office to optimize the collection of information, because the office will store the information in the form of a printed out paper, which makes important information can be easily lost. So the office has set up this website to be able to store data in database for better store information.

CAT Web Data

ชื่อผู้ใช้งาน : admin1

อัพโหลดคู่มือ

หน้าแรก / อัพโหลดคู่มือ

ชื่อคู่มือ :

ชื่อ...

ไฟล์คู่มือ :

เลือกไฟล์

ไม่ได้เลือกไฟล์ใด

บันทึก

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Search...













ลำดับ	ชื่อคู่มือ	ไฟล์	วันที่อัพโหลด	แก้ไข/ลบ
1	คำสั่ง CLI ที่ใช้ประจำสำหรับ GPON BDCOM GP3600	ONU GP1704-4GV Configure with OLT.pdf	2018-09-07	  
2	fsdhogjjmviha nosd ทหสดัพรหัดวสกาห	คำสั่ง CLI ที่ใช้ประจำสำหรับ GPON BDCOM GP3600.pdf	2018-09-07	  
3	Edit Test 03 03 03	คู่มือการ setup Huawei-HG630-VDSL_Single_vlan.pdf	2018-09-08	  
4	คำสั่ง CLI ที่ใช้ประจำสำหรับ GPON BDCOM GP3600	คู่มือ SET Zisa วิธีการตั้งค่าใช้งาน ZISA V105WL.pdf	2018-09-07	  

Figure 4.6: Interface of uploaded manual page.

This is another page, this page is the work of uploading guides. Because the company has a lot of manual installation equipment, this page will help to keep the manual file more efficient. Here are some examples of the site. In addition to this page, there are also many other pages.

CHAPTER 5

CONCLUSION AND SUGGESTION

5.1 Internship experience conclusion

During the 4-month internship at CAT Telecom Chiang Rai Public Company Limited, sine 16 July 2018 to 2 November 2018. I have applied the knowledge gained from the university to apply for the work and how to work with many people, be patient for pressure, and work with the real project to improve ability. In addition to the knowledge in the classroom the internship also gives me new knowledge from the study with off-site work.

Finally, I recognize that classroom-specific knowledge is not enough to do the actual work, and there is still plenty of knowledge not available in the classroom. If I do not internship, I was not known that I still lack a lot of knowledge.

5.2 Problem with training assignment

- 5.2.1 When the organization assignment then used new programs that are unfamiliar, I had to study before and it made the job slow.
- 5.2.2 Assigned work is never done before. Thus causing a delay in the work.
- 5.2.3 The equipment used in the work is not familiar, so learn a lot.
- 5.2.4 Take some time to adjust to their friends and employees in the workplace are quite long enough.
- 5.2.5 I do not have any programs that I need to work on. I need to download a new one so it wastes a lot of time.

5.3 Suggestion in internship

CAT Telecom Public Company Limited is a company providing wireless services, mobile phone services for the general public and radio services for private users. It will require a lot of specialized knowledge to work or study with this company, but you will have many experiences and knowledge about networking, internet and more from this company.

REFERENCES

REFERENCES

- [1] Microsoft Excel 2016. Retrieved August 07, 2018, from <https://www.computerhope.com/jargon/e/excel.htm>.
- [2] Gmail. Retrieved August 07, 2018, from <https://www.computerhope.com/jargon/g/gmail.htm>.
- [3] Xampp. Retrieved September 04, 2018, from <https://www.apachefriends.org/index.html>.
- [4] SublimeText3. Retrieved September 04, 2018, from <https://www.sublimetext.com/3>

APPENDIX



Figure A1: Outside the organization.

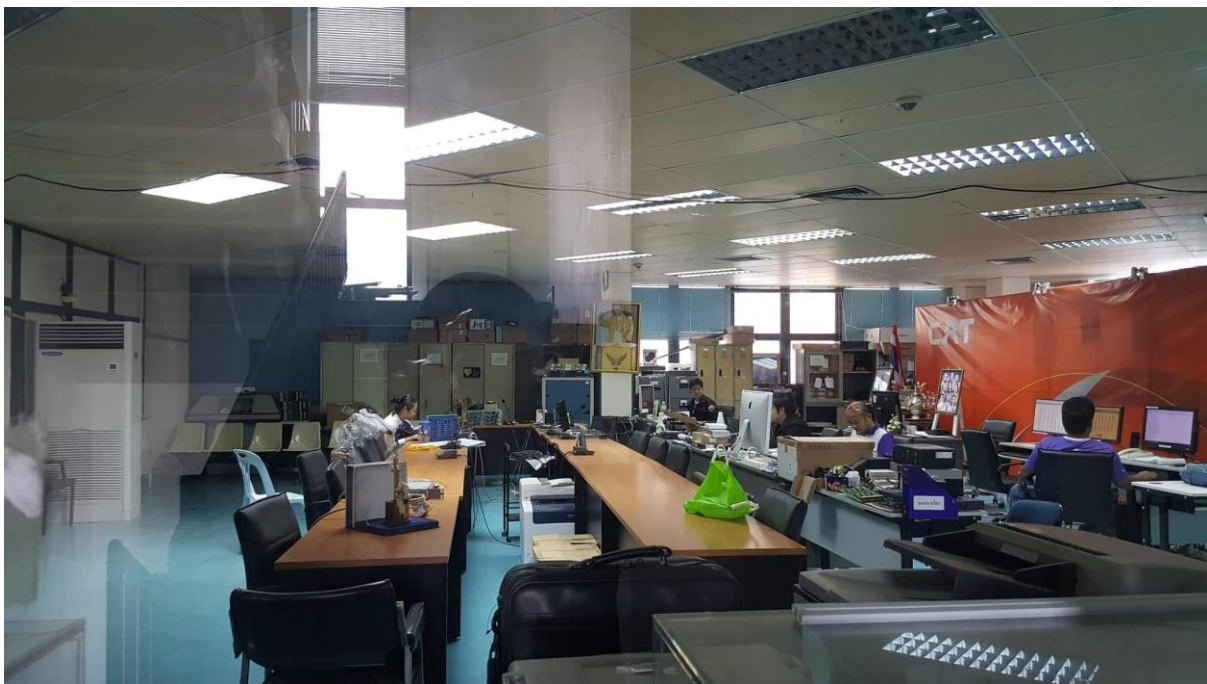


Figure A2: Inside the organization.



Figure A3: Photos with Supervision Internship.



Figure A4: Make merit with organization.



Figure A5: Photos with employees in the organization.