



**UNIVERSITI TEKNOLOGY MARA
FACULTY OF INFORMATION MANAGEMENT**

**INDUSTRIAL TRAINING REPORT:
MALAYSIAN ELECTRONIC CLEARING CORPORATION SDN BHD
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**DEPARTMENTAL PROFILE AND INSTRUCTIONAL DESIGN
MATERIAL (SLIDE & VIDEO)**

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01 FEBRUARY 2017 - 30 JUNE 2017

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**SPECIAL PROJECT: DEPARTMENTAL PROFILE AND
INSTRUCTIONAL DESIGN MATERIAL (SLIDE & VIDEO)**

**BY
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**REPORT SUBMITTED IN FULFILLMENT OF THE
REQUIREMENT FOR THE INDUSTRIAL TRAINING
FACULTY OF INFORMATION MANAGEMENT
UNIVERSITI TEKNOLOGI MARA KELANTAN**

01 FEBRUARY 2017 – 30 JUNE 2017

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Signed by

Nabilah Bt Omar

2013302359

Date of submission: 16th July 2017

ABSTRACT

The trainee undergoing industrial training based on the period from 1st February 2017 to 30th June 2017 in Security Management Unit, IT Security Department at Malaysian Electronic Clearing Corporation Sdn Bhd (MyClear). During the industrial training period, the trainee was monitored by company supervisor, Miss Nora Azura Bt Mohd Ali. The task was given during internship session related to security management that involve with audit team from internal and external parties. Which are, the trainee join to compile all the evidence that required by auditor such as audit log review, penetration test, Windows configuration known as hardening checklist and the trainee exposure to security management activity as daily operation the company to secure the information, because operation in company related with Malaysia's financial system. In the other hand, trainee also involve to join the conference call with auditor team, join National Cyber Drill Exercise, meet and discussion with vendor, joint security conference held by external part and participate in company event and meeting such as department meeting. Besides, trainee given the tasks which are prepared awareness slide, video that attached in MyClear E-Learning portal as refresher and give awareness to staff during daily operation in the office.

Keywords: *security management, audit log, penetration test, E-Learning Portal*

ACKNOWLEDGEMENT

My internship would not have been possible and complete without the contribution and collaboration of the others. My sincere and thank to Allah who granted me in health life during internship without any obstacle and problem. My sincere gratitude for my company's supervisor, Miss Nora Azura who is Assistant Manager, Security Management, IT Security Department for giving me opportunities in joint her team and without her I will not able to complete my internship. She had the kindness in help and guides me with her advice, her idea and feedback despite her busy schedule. She is like my family members that always behind me and supports me during daily operation in the office.

In addition, I would like also thanks to Head Of Department, Madam Juliaty Abd Rahman and all MyClear's staff especially in IT Security team that help me and give information during complete all the task given there. Besides, I highly appreciate and thankfully to my faculty supervisor Mr. Faizal Haini Fadzil who always give me the brilliant and great idea and always share information during I am complete my special project and internship report. Furthermore, I would like to thank and appreciate to Madam NurulAnnisa Binti Abdullah who is my industrial training coordinator, who always gives the best advices to me, always explain details if I have any problem and question when asked her.

Last but not least, I would like to with high thanks and appreciate to my family, husband and friends who are always support , give advice, cooperation and support in financial during complete my study and internship session.

Thank You.

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CHAPTER 1: INTRODUCTION

1.1 Background of the Organization

MyClear is stand for Malaysian Electronic Clearing Corporation Sdn Bhd was established in 2008. MyClear is a wholly- owned subsidiary of Bank Negara Malaysia. MyClear is one of organization that build and operate world-class payment systems and financial infrastructure that fully safely, reliably and efficiently enable the functioning and development of Malaysia's financial system.

In the other hand, MyClear have their own services and products which are run their business by getting budget that provided by Bank Negara Malaysia. Below are the Figure 1 shows the MyClear`s product and services and Table 1 is the explanation each products.

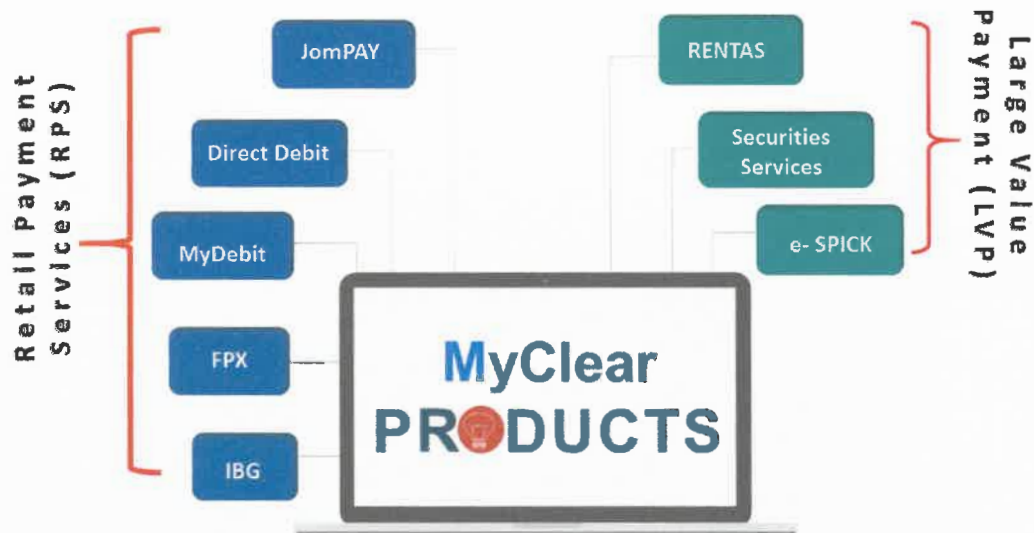


Figure 1
MyClear`s products and Services

Table 1
Details MyClear Products and Services

<p>Real Time Electronic Transfer of Funds and Securities (RENTAS)</p>	<p>- Real-time gross settlement of wholesale funds transfers and securities trades denominated in Ringgit as well as Renminbi. RENTAS' Renminbi settlement service supports Malaysia's role as a recognized off-shore Renminbi clearing hub.</p>
<p>Debt Securities Services end-to-end facilities for issuers, arrangers and investors covering the entire bond lifecycle from issuance to trade settlement and depository:</p>	<p>Fully Automated System for Tendering (FAST)</p> <p>- automated issuance and tendering system for all government securities, BNM papers, private debt securities and money market instruments, as well as a repository of reference information of all active debt securities issued in Malaysia.</p> <p>RENTAS Depository</p> <p>- Facilities custody of all unlisted debt securities in Malaysia. Today, we operate the largest depository for sukuk instruments in the world, as well as the largest debt securities depository in ASEAN.</p>
<p>Sistem Penjelasan Imej Cek Kebangsaan (eSPICK)</p>	<p>- Malaysia's national cheque clearing house.</p>
<p>Interbank GIRO (IBG)</p>	<p>- A funds transfer system that allows account-to-account credit transfers between 42 participating banks in Malaysia</p>
<p>JomPAY</p>	<p>- Malaysia's national bill payment scheme where customers can pay any registered biller from Internet or Mobile banking by drawing funds from Current, Savings or Credit Card accounts. Billers need</p>

	only sign up with one bank to collect payments via 42 banks.
MyDebit	- Malaysia's domestic debit card scheme, which allows point-of-sale payments using ATM cards issued by banks in Malaysia.
FPX (Financial Process Exchange)	- Direct-to-bank Internet payment gateway, which facilitates Internet payments and e-commerce purchases using savings and current accounts.
Direct Debit	- Allows billers and merchants to debit a consumer's bank accounts on a periodic basis to collect recurring payments.

Besides, below Table 2 is show the summary of organization profile related to MyClear.

Table 2

MyClear Organization Summary Profile

Organization Name	Malaysia Electronic Clearing Corporation Sdn Bhd (MyClear)
Address	Tower 2A, Avenue 5, Bangsar South, 8 Jalan Kerinchi, 59200 Kuala Lumpur
Telephone Number/Fax	+603-22648600/+603-22648601
Website Address	http://www.myclear.org.my/index.html

Below is Figure 2 explaining to the MyClear logos meaning.

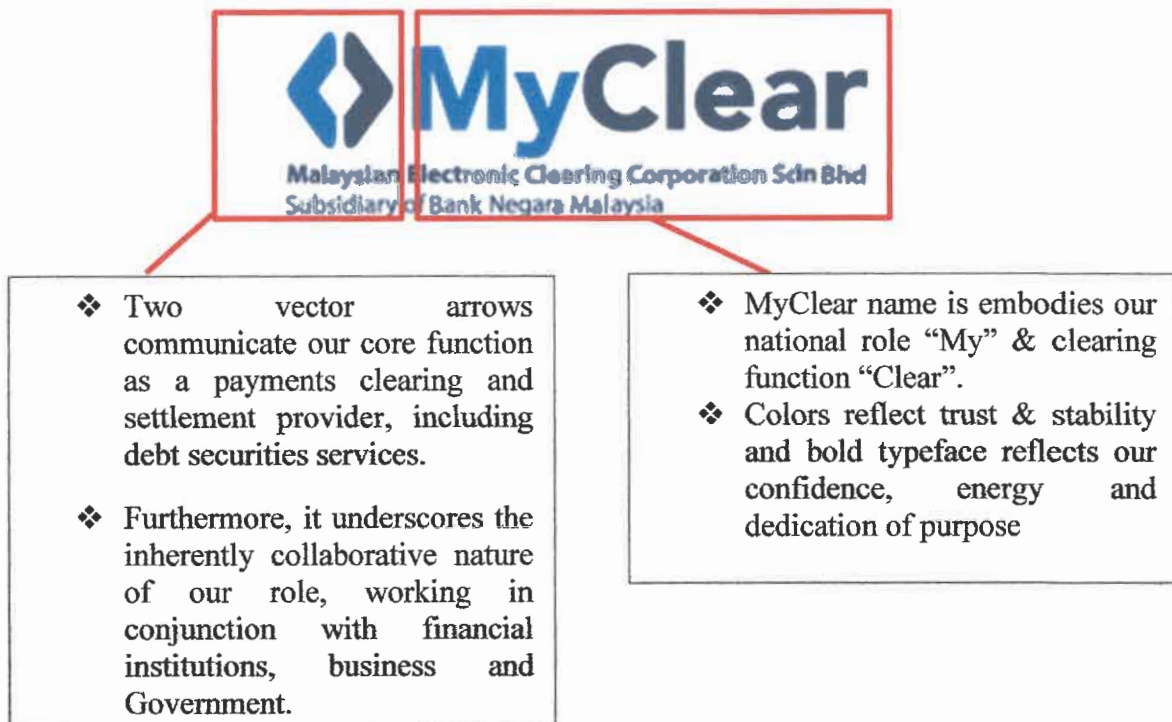


Figure 2

Logo MyClear

Each company has their own corporate goal and objective for they achieve towards their activity.

Below the details related to the Vision and Mission of MyClear.

1.1.1 MyClear Vision

To accelerate Malaysia's growth and prosperity, through the provision of world class payments system and financial market infrastructures.

1.1.2 MyClear Mission

MyClear's mission are design, build and operate world- class payment systems and financial market infrastructures that safely, reliably and efficiently enable the functioning and development of Malaysia's financial system as well as the economy as a whole.

1.2 Organizational Structure

An organizational structure defines as the activities that divided the task allocation, coordination and supervision are directed toward the achievement of the organization goals. An organization need to be flexible, efficient, innovative and caring in order to make the organization successful operation and more competitive.

An organization can be structure in many ways based in the organization depending to organization's goals. In the other hand, with these organizations structure allows the company to be expressing allocation of responsibility every different unit depending to their function and position. Without proper organization structure, an organization could not be achieved organization's goals and aims to be more success.

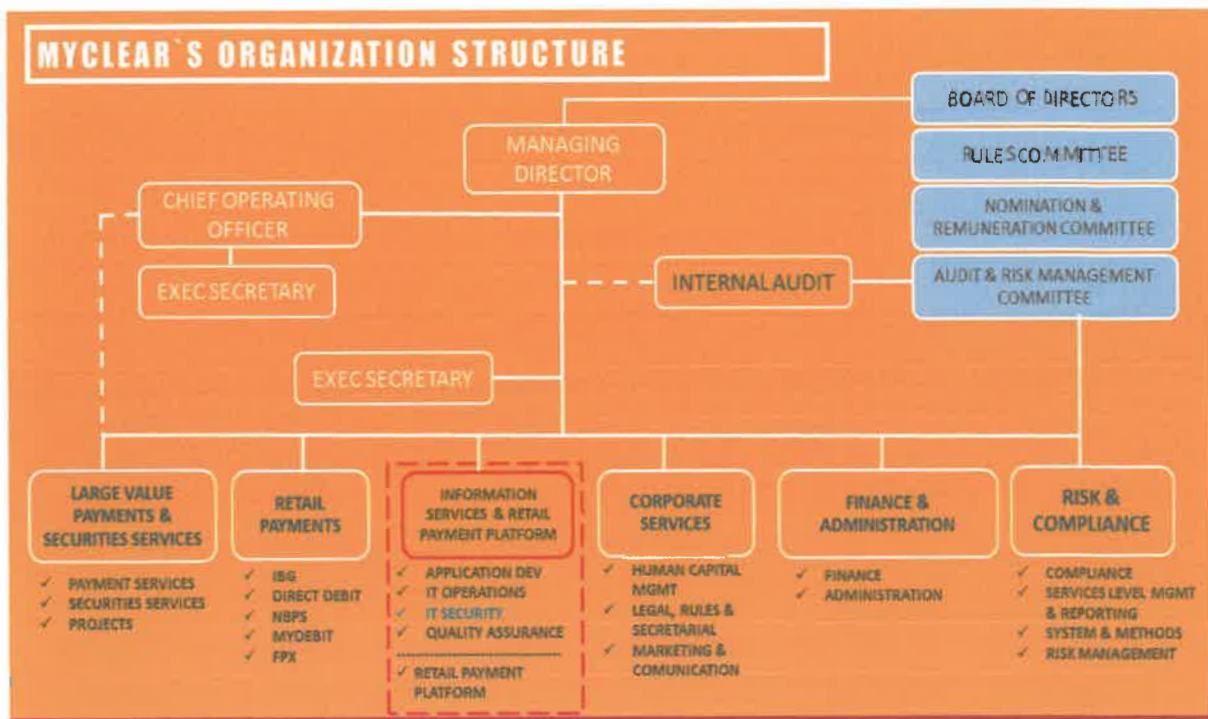


Figure 3

The Organizational Structure in MyClear

CHAPTER 2: ORGANIZATION INFORMATION

2.1 Departmental Structure

In MyClear have a huge of department structure which are divided to different departments and narrow down to every unit that have their own role and function in daily operation to achieve MyClear's aim and objectives. In the next sub topic below are explain detail to every each department and units which are the placed to trainee complete the internship session with gain the lot of experience and skill to be practice there.

2.1.1 Information Services Division Structure

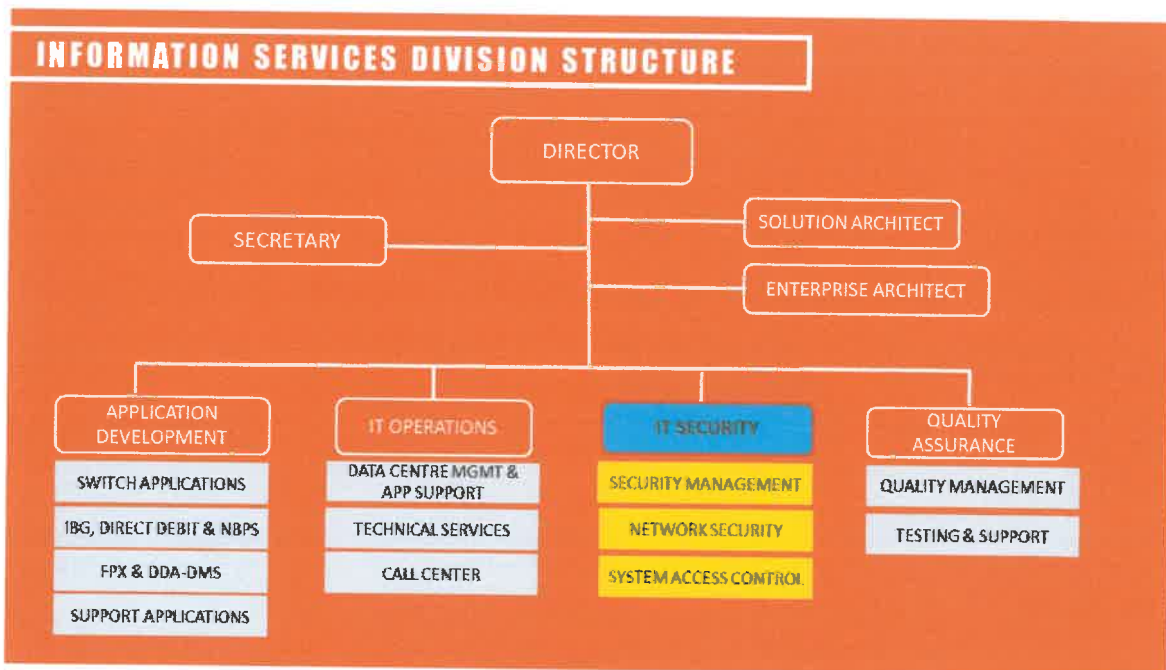


Figure 4

Information Services Division Chart

According to the above Figure 2.1 there is show the department structure which trainee complete the internship session. To be clear about organization structure, in MyClear divided by six main divisions which are Large Value Payment and Securities Services, Retail Payments, Information Services and Retail Payment Platform, Corporate Services, Finance and Administration and lastly Is Risk And Compliance.

The Information Services Division and Retail payment platform (ISD) that divided by four which are Application Development, IT Operations, IT Security and Quality Assurance. Below is Table 2.1 which is explaining details each of department in Information Services Division.

Table 3
Details Each Department in Information Services Division

Application Development	<ul style="list-style-type: none"> • constantly maintaining current knowledge of software development trends and utilize state of art technology to deliver customer applications, intergrations, training & documentation • to design, development , implementation anda integration of computer information system.
It Operations	<ul style="list-style-type: none"> • IT operations management is the process of managing the day-to-day IT infrastructure including managing the provisioning, capacity, performance and availability of the computing, networking and application environment. • data center management, technical services and call services
It Security	<ul style="list-style-type: none"> • to guarantee the availability, integrity and confidentiality of an organization's data, information and IT services • manage security management, network security & systems acces control
Quality Assurance	<ul style="list-style-type: none"> • as a gatekeeper for myclear services to nation in give good quality other words TESTING AREA • responsible establishing testing guidelines, test deliverables and evaluations

According to the Table 3 the trainee was placed under IT security department in MyClear. Information Services Division is managed by Madam Ros Yusoff who is the Director for Information Services Division and Retail Payment Platform.

2.1.2 IT Security Department

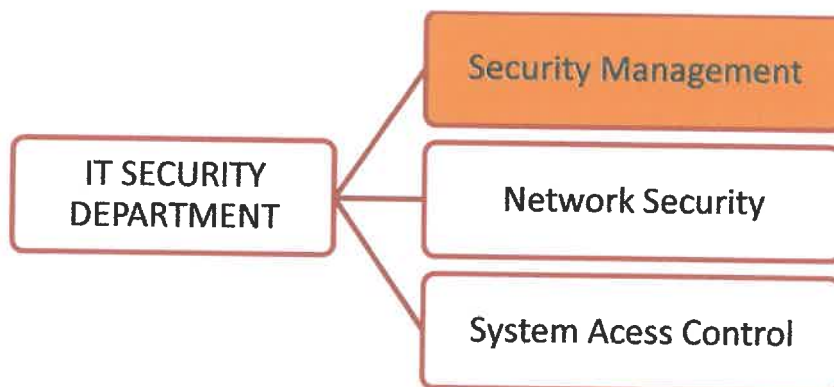


Figure 5

General IT Security Department Structure

Above is show the Figure 2.2 which is general IT Security Department Structure to make clearly which part that trainee was be placed. Trainee start the internship session is under IT Security Management Unit under IT Security Department. Which are, under IT Security divided by three units there are Security Management, Network Security and System Access Control.

Below is Figure 6 that shows the next IT Security Department structures that mention the team members and their role in MyClear. IT Security Department which parts that trainee trains the knowledge and skill in friendly team members. IT Security head by Madam Juliaty Abd Rahman who is Head of IT Security Department and assist by Assistant Manager for unit Security Management, Miss Nora Azura who is as Company Supervisor to the trainee. In the others part,

for Network Security assist by three senior executive and last unit is System Access Control lead by Assistant Manager, Madam Norhayani.

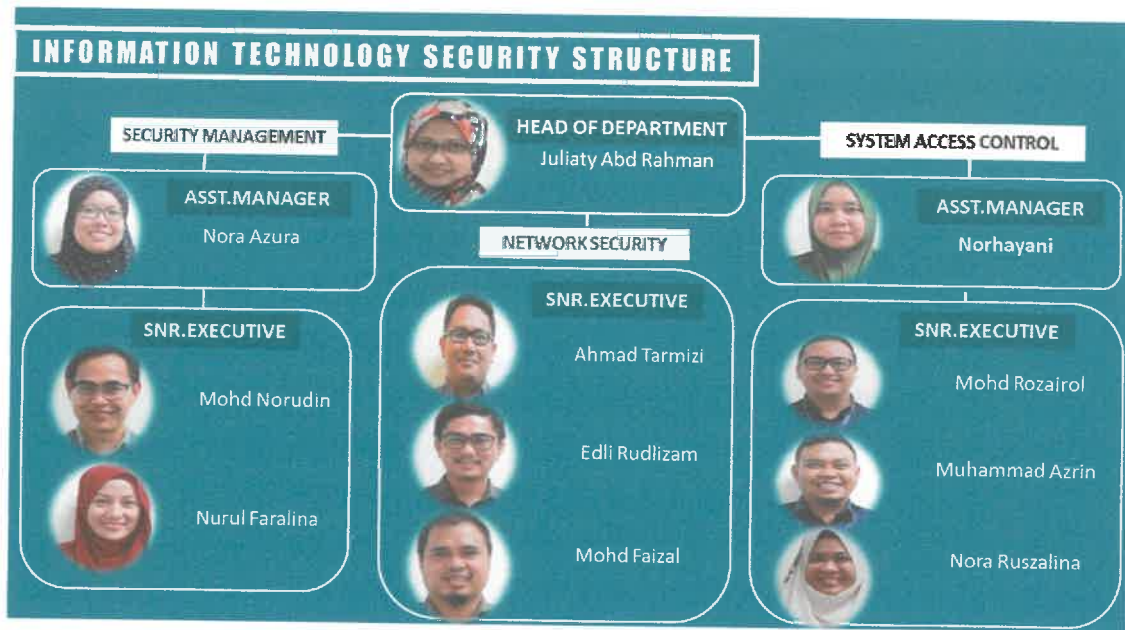


Figure 6

IT Security Structure

2.2 Department Function

IT Security department is one of important backbone to MyClear because off, all the computer system including server, system and staff access during daily operation will be guide and monitor by ITS department. ITS department is entrusted to sense and keep abreast of internal and external issues, propose and implement appropriate mitigation control within the organization. ITS are needed to accelerate and support MyClear's vision. IT Security Department is responsible and accountable for security administration. Besides, ITS department directly manages and supervises risk assessment, development of policies, standards and procedures, testing and security report processes. ITS is one of department with the train and expert staff

after sending them to security training, conference, sufficient knowledge for enable their staff perform the task given to monitoring in daily operation.

In the other hand, the IT Security Department will involve with the Penetration Test report that consolidate the findings to compile the evidence related to the external auditor and internal auditor that ensure all the information cardholder data will be secure. Besides, IT Security also involve in security activity to train their staff to become fully knowledge and skill in handling and monitoring all information security in MyClear.

Furthermore, IT Security also involve in assist the audit log review which is preparing the report that requested by auditor. Audit log review is one of report that reviews to the activity daily in office which is abnormalities of activity. Means that, abnormalities can be known as out of from working office hours the activities after 6 pm. In the other hands, preparing to windows configuration known as hardening checklist is also involve with IT Security department.

2.2.1 IT Security Department's Mission

ITS mission to sense issues and shield MyClear's information assets whilst maintaining sound technical security posture and governance.

2.2.2 The Service Unit in IT Security Department

IT Security Department divided by three units which are Security Management, Network Security and System Access Control. Every each unit has their own services which the exactly task and also every task that operate by them will be have the references each services. Their responsibility to monitor information security in MyClear in handling the financial industry especially related to payment card industry such as product in MyClear that related to online transaction. It is because, they need to be monitor to ensure all the information cardholder data

and the other assets in MyClear will be secure smoothly without obstacles. Table 4 shows the services, descriptions and references in IT Security Department daily operation.

Table 4
ITS Units Services, Descriptions and References.

Security Management Unit:		
<ul style="list-style-type: none"> • Do planning, implementation, monitoring & maintenance for ISO/IEC27001 & Payment Card Industry Data Security Standard (PCI DSS) • Do prepare, review & update the Information Security Policy, procedures & guidelines • Verify System security hardening 		
Services	Description	References
Security Monitoring	Daily monitoring by implemented tools at OS level and application for user activities. Strange trends are observed & investigated to identify existence of security events and incidents.	<ul style="list-style-type: none"> • Security Log Monitoring Procedure • Incident response & escalation procedure.
Security Assessment	Periodic security assessment or prior to new system Go-live as per ISP requirement. This covers penetration tests, host / device configuration review, wireless assessment, etc.	<ul style="list-style-type: none"> • Vulnerability Assessment & Penetration Test Procedure • Application Security Assessment Procedure
Information Security Management System (ISMS) Awareness	Designing and coordinating ISMS or security awareness program for MYCLEAR with support from ISMS Steering Committee	<ul style="list-style-type: none"> • Annual ISMS Awareness Program via eLearning Platform

ISMS Steering Committee Secretariat	Perform secretariat role (scheduling meeting, minutes taking, follow up on action items) for the ISMS Steering Committee	<ul style="list-style-type: none"> ISMS Manual
PCI DSS Certification Coordination	Focal point of contact by external Qualified Security Assessors (QSA) for the PCI DSS assessment. MYCLEAR coordinator in ensuring actions is taken as required.	<ul style="list-style-type: none"> PCI DSS standard
ISMS Certification Coordination	Focal point of contact by external CB for the ISMS certification. MYCLEAR coordinator in ensuring actions is taken as required.	<ul style="list-style-type: none"> ISMS documentations

Network Security Unit:

- Manage network security devices such as Firewalls, Intrusion Prevention Systems, and Web Application Firewalls.
- Technical Security Services such as Application Security Assessment, Vulnerability Assessment, Penetration Testing, and Technical Security Advisory.

Services	Description	References
Security Monitoring	Daily security monitoring through implemented tools at network security and OS level. Peculiar trends are observed and investigated to identify existence of security events and incidents.	<ul style="list-style-type: none"> Security Log Monitoring Procedure Incident Response and Escalation Procedure
Network Security	Maintenance of network protection capability. This is achieved through implementation and proper configuration of network security	<ul style="list-style-type: none"> Firewall Management Procedure Security Log Monitoring

	devices namely firewall, web application firewall and network intrusion prevention system.	<p>Procedure</p> <ul style="list-style-type: none"> • Network Security Device Management Procedure
Security Assessment	Periodic or ad-hoc security assessment as per ISP requirement. This covers penetration tests, host / device configuration review, application security assessment wireless assessment, etc.	<ul style="list-style-type: none"> • VA/PT Procedure • Application Security Assessment Procedure
Remote Access Service	Maintenance of Remote Access Service facility provided to MYCLEAR support staff or authorized vendors from outside of MYCLEAR premise (via the Internet)	<ul style="list-style-type: none"> • Remote Access Guideline • Remote Access Procedure • Remote Access Baseline
<p>System Access Control Unit:</p> <ul style="list-style-type: none"> • Managing to the User ID and password • Managing to the Digital Certificate and key management 		
Services	Description	References
Remote Access Service- User Management	User administration activity (add user, reset password, delete users) at Remote Access Service.	<ul style="list-style-type: none"> • Remote Access Guideline • Remote Access Procedure • Remote Access Baseline
User Access Control Management	User administration activity (add user, reset password, delete users) at OS, Database and Application level. The authentication and authorization in accordance to Access Baseline & ISP of MYCLEAR.	<ul style="list-style-type: none"> • Access Control Management Procedure

Key Management	Cryptographic keys management that covers symmetric and asymmetric key and certificate management.	<ul style="list-style-type: none"> • Key Management Operational Procedure. • Key Management Standard
Privileged IDs Management	Control of privileged IDs. The IDs are not to be used for normal operational tasks.	<ul style="list-style-type: none"> • Access Control Management Procedure

CHAPTER 3: INDUSTRIAL TRAINING ACTIVITIES

3.1 Training Activities

MyClear is one organization suitable for internship student; it is because the course is relevant for students gain the knowledge and experiences. The trainee was placed to IT Security Department after pass to the interview for intern at the end of January 2017. After that, trainee work together with IT Security Department which is related to Security Management and secure the entire information asset in MyClear based on financial sector in Malaysia. Trainee is exposure to security management link to each other with subject Legal Ethics and Ethical Aspect of Information System during study on semester 6.

During internship session, trainee was experienced with new environment and information that never seen before, it because during trainee study life, only learning through theory, while during internship session, trainee can do practically and involve with working sector more challenging. In the other hand, the internship sessions is one of best way to growth and development of soft skill, communication skill and learn to be friendly with all staff there. Internship session is one of training to increase high confident level to communicate with the other internal and external people.

Internship session for 5 months starting February until June was observe and monitoring by Miss Nora Azura who is as trainee's company supervisor. Besides, it is also supported by faculty supervisor Mr. Faizal Haini Fadzil. All the task and activities trainee in IT Security Department was distributed by Miss Nora Azura. Trainee in Security Management unit also involve in explore and attach the information to the MyClear E-Learning portal.

During early of internship session begin; trainee was given the link related to MyClear E-Learning Portal which is created by vendor that company bought it to be as a tool learning platform to the staff such as awareness material, video and all related to Information Security Policy (ISP). Trainee was explore to E-Learning Portal and there is any kind of system that trainee should be do for suggest to special project. Because of MyClear is one of huge company was given budget by Bank Negara Malaysia and has their solid budget to develop a huge system related to financial system in Malaysia. So, from that situation, trainee do not have involve in development of system because of they have their own budget and all system is huge will be develop by vendor that trusted and appointed in MyClear list.

The activities trainee was joining also involve compiling the evidence related to audit internal and external parties. IT Security also involves with the audit early of year, in the middle and also end year. Audit team will be come to MyClear to audit related to all activities during daily operation in office to check whether have vulnerability and related to the abnormal suspended activity to avoid breach by cyber threat. In these chapter will provided and explain details every single activities that trainee involve during complete the internship session during 5 months.

3.1.1 Penetration Test Report

Trainee was given the task during first week attending to MyClear as intern to analyses the Penetration Test Report to consolidate the findings. Company supervisor, Miss Nora give the proper instruction and give the trainee sample previous report as example to help trainee easier to proceed to analyses the Penetration Test report.

Penetration test is to identify security weakness and strength or organization's system and networks. The objective of the penetration test is to demonstrate the existence or absence of known vulnerabilities, which is could be exploited by users. Trainee was given the task by convert from Portable Document Format (PDF) to Microsoft Excel. Which are from PDF report there are more details and difficult to remark because of PDF format cannot make any changing. Below are the figure 7 and 8 shows the way document in PDF to Excel Format.



Figure 7

Penetration test in PDF

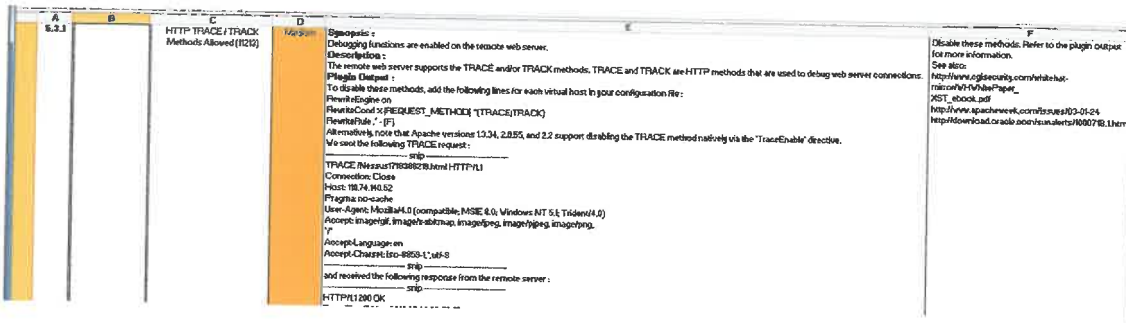


Figure 8

Penetration test after convert to Excel Format

Penetration Testing Report in Excel actually rearrange by column starting from column for system which are mention to IP address of Operating System, list the finding the version of system that mention column of risk level, description details that explain the details of problem and explain threat will be happen and foe the next column is finding which is the solution that will be take action that provided column and after checking all the server provide in remark column.

3.1.2 Audit Log Review Report

The next activity in MyClear that given to trainee is to assist audit review which is rearrange from PDF to Microsoft Excel. Audit log report is actually record of daily operation abnormalities activities in an organization. Trainee need to rearrange one by one starting from early of month until end of month in manually to excel format. Trainee requested to find any kind converter PDF to Excel through online for change the audit log review report to excel. After that, trainee can rearrange and do analysis summary of the end of review.

Audit log review report is activities all internally user which is that user fail to login, suspended such as look to the based on application, abnormalities such as out of normal activities afte 6 pm and lastly is review the security administrator and super user that based on ID that assign such as

banker ID and MyClear. Below Figure 9 and figure 10 shows PDF to Excel format of audit log review.

ACCESS REPORT			
FROM	01 Feb-2017		
TO	28 Feb-2017		
DATE	USERID	IPADDR	PROGRAM NAME
2/28/17 11:40 PM	09E00129		FPXSECURITYWORKSTATSREPORT
2/28/17 11:34 PM	09E00129		FPXSECURITYWORKSTATSREPORT
2/28/17 11:30 PM	BANK09975		LOGOUT
2/28/17 11:28 PM	BANK09975		FPX_VIEW
2/28/17 11:24 PM	BANK09975		BANK_PAGE
2/28/17 11:24 PM	BANK09975		FPX_VIEW
2/28/17 11:23 PM	BANK09975		BANK_PAGE
2/28/17 11:23 PM	BANK09975		TOP FRAME
2/28/17 11:23 PM	BANK09975		BANK_PAGE
2/28/17 11:23 PM	BANK09975		BANK_PAGE
2/28/17 11:19 PM	09E00129		FPXSECURITYWORKSTATSREPORT
2/28/17 11:04 PM	09E00129		FPXSECURITYWORKSTATSREPORT
2/28/17 10:49 PM	09E00129		FPXSECURITYWORKSTATSREPORT
2/28/17 10:34 PM	09E00129		FPXSECURITYWORKSTATSREPORT
2/28/17 10:19 PM	09E00129		FPXSECURITYWORKSTATSREPORT
2/28/17 10:07 PM	BANK09975		LOGOUT
2/28/17 10:04 PM	09E00129		FPXSECURITYWORKSTATSREPORT
2/28/17 9:59 PM	BANK09975		FPX_VIEW
2/28/17 9:57 PM	BANK09975		BANK_PAGE
2/28/17 9:57 PM	BANK09975		FPX_VIEW

Figure 9

Audit log in PDF

	M	D	L	U	C	F
1						
2	2-Feb-17					
3	By	System	System	System	System	System
4	2/2/17 11:20 AM	SEC0007838	AUTHVIEWEXCHURLSELECT			
5	2/2/17 11:20 AM	SEC0007838	FPXSECURITYMAKER			
6	2/2/17 11:20 AM	SEC0007838	TOP FRAME			
7	2/2/17 11:20 AM	SEC0007838	FPXSECURITYMAKERLINK			
8	2/2/17 11:21 AM	SEC0007838	AUTHVIEWEXCHURLEDETAILS			
9	2/2/17 11:30 AM	SEC0007838	LOGOUT			
10	2/2/17 11:30 AM	SEC0007838	CLOSEEXCHURLRESULT			
11	2/2/17 11:30 AM	SEC0007838	CLOSEEXCHURLSELECT			
12	2/2/17 11:30 AM	SEC0007838	CLOSEEXCHURLEDETAILS			
13	2/2/17 11:30 AM	SEC0007838	CLOSEEXCHURLSELECT			
14	2/2/17 11:30 AM	SEC0006722	CHANGE PASSWORD			
15	2/2/17 11:31 AM	SEC0007838	ADDEXCHURLSELECT			
16	2/2/17 11:31 AM	SEC0007838	FPXSECURITYMAKERLINK			
17	2/2/17 11:31 AM	SEC0007838	TOP FRAME			
18	2/2/17 11:31 AM	SEC0007838	FPXSECURITYMAKER			
19	2/2/17 11:31 AM	SEC0006722	LOGOUT			
20	2/2/17 11:31 AM	SEC0006722	AUTHCLOSEEXCHURLSELECT			
21	2/2/17 11:31 AM	SEC0006722	AUTHCLOSEEXCHURLRESULT			
22	2/2/17 11:31 AM	SEC0006722	AUTHCLOSEEXCHURLEDETAILS			
23	2/2/17 11:31 AM	SEC0006722	AUTHCLOSEEXCHURLSELECT			
24	2/2/17 11:31 AM	SEC0006722	FPXSECURITYAUTH			
25	2/2/17 11:31 AM	SEC0006722	FPXSECURITYAUTHLINK			
26	2/2/17 11:31 AM	SEC0006722	TOP FRAME			
27	2/2/17 11:31 AM	SEC0006722	LOGOUT			

Figure 10

Audit Log in Excel

Trainee need to rearrange start January, February and March which is need to rearrange start first day of month until last day of month using manually to excel follow to numeric list. This is because, in MyClear report produce in PDF but the arrangement of date start with end of month it difficult to review. So that, trainee should arrange by first day followed by last day on month then can do audit analysis and do summary after review as remark that audit log have been checking and found the finding.

3.1.3 Windows Configuration Checklist

Trainee assist to handle all the documents related to hardening checklist which that show the adherence on system, security hardening control all configuration changes that across the platforms. Trainees given by staff to in charge in prepare hardening checklist, after they review and remark, then the document submit to trainee for key in data in the column of excel format that requested to trainee for prepared it.

The hardening checklist is activity to verify the setting of the server. Hardening checklist will be check by appointed staff based on operating system list such as Windows, Red Hat Enterprise Linux Server, Solaris 10 and Linux Virtual Appliance. In the hardening checklist in excel format started with column IP address for server host name to make sure all the remark that already complete to redundant each other and to be smoothly process they follow operating system list to avoid do same server checklist. After trainees completed key in the information one by one according to server list, then trainee will remark with the different color in column to avoid redundant check. Below the figure 11 shows the sample hardening checklist by trainee.

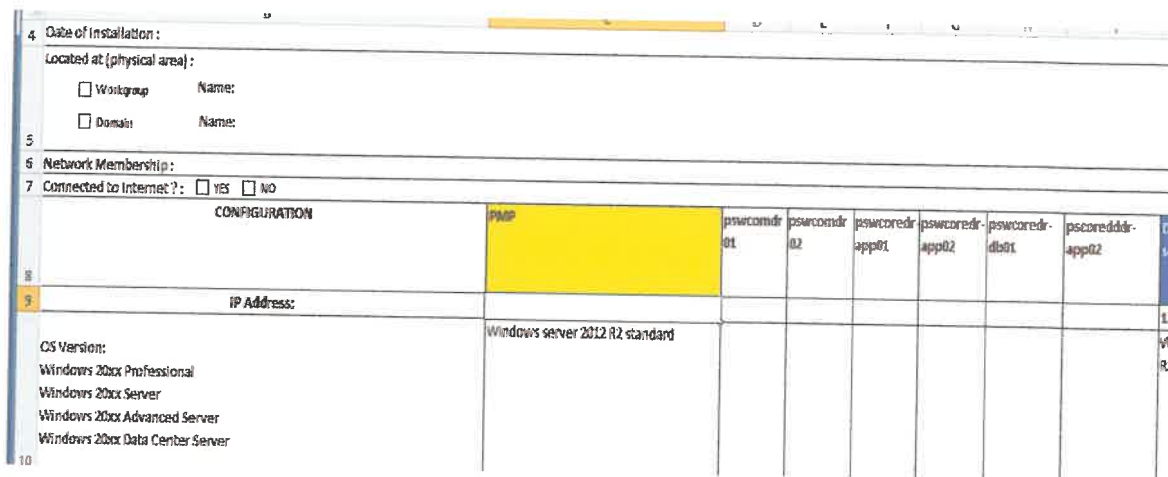


Figure 11

Windows Configuration (hardening checklist)

3.1.4 National Cyber Drill Exercise

Trainee received invitation email by IT Security Department to attend National Cyber Drill Exercise at meeting room level 10. National Cyber Drill Exercise known as X Maya 6 D-Day. Trainee was being an observer in meeting room to handle, inform to the team next issues need to be solve one by one and remark the time issued came out to the whiteboard. This is new environment that trainee involve which is never seen during study life and real working environment activity in exposure trainees on handling real crisis on cyber-attack.

The National Cyber Drill Exercise is held by National security Council collaboration with Cyber Security Malaysia that involve several organization from public and private sectors that listed under Critical National Information Infrastructure (CNII). This exercise actually design in order tto assess and improves the National cyber crisis Management Plan together with CNII's readiness against the cyber-attacks.

Below figure 12 shows the National Cyber Drill Exercise activity in MyClear.

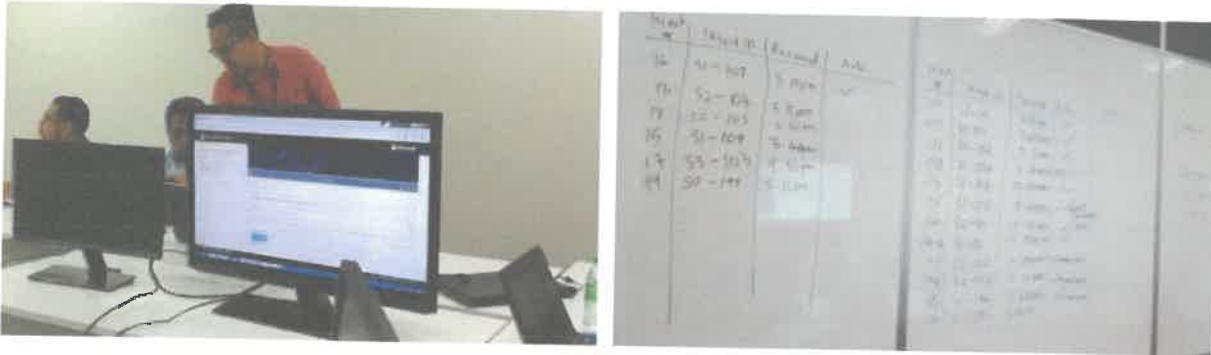


Figure 12

National Cyber Drill Exercise (X Maya 6 D-Day)

National Cyber Drill Exercise is actually to handle the cyber-attack and in this situation can see a good teamwork. Teamwork is the important key during complete this exercise , because it is needed to explanation, brainstorming and the right decision for making decision by team in handle this cyber exercise . The cyber exercise was headed by Madam Juliaty Abd Rahman who is Head of IT Security Department.

3.1.5 Discussion with Vendor

MyClear is huge organization in managing financial sector in Malaysia. In this organization they have huge operating system in daily operation. So that, all the system are provided by external party know as vendor. MyClear appointed many different vendors in internal or external form oversea. MyClear is one of platform for increase the confident level and brave to communicate with vendor or third parties.

During internship session, trainee was received invitation text through “WhatsApp” by trainee company supervisor, Miss Nora to join the discussion with vendor include together involve Mr. Norudin who is Security Management team members that in charge to meet vendor on that day. The names of vendor that involve in this discussion which is provide tools as “ObserveIT”. Below us the figure 13 show ObserveIT portal.



Figure 13

ObserveIT Portal

ObserveIT is one tools that provided by vendor to help and organization secure the system in daily use be safe and against the cyber-attack. The objective vendor for Observe IT come to MyClear which is they want to try trial version for IT Security department try before agree to buy that tools. Vendor came explain in using that tools and provide 14 days trial to ITS explore and see the function whether it suitable for MyClear or not.

Observe IT is tools to guide observe internal and external activity including staff and vendor. ObserveIT functions are monitoring, investigation and compliance that identify and eliminate insider threat. The cost to buy this ObserveIT is huge coat so IT Security needs to try trial version to look affection to MyClear or not for avoid waste the budget. ObserveIT function will capture activity by recording video to the screen that user who is in suspended activity. So that video can be as evidence to take legal action and avoid frim breach in organization.

3.1.6 Change Management System (CMS) meeting

Trainee was involved in Change Management System (CMS) meeting in meeting room level 10. CMS is intranet system which is to ensuring standardize methods and procedure used for efficient and proper handling all the changes. Then in the meeting has presented introduction ti CMS for new staff and other enhancement in CMS. Below Figure 14 is show about change management system in intranet myclear portal.

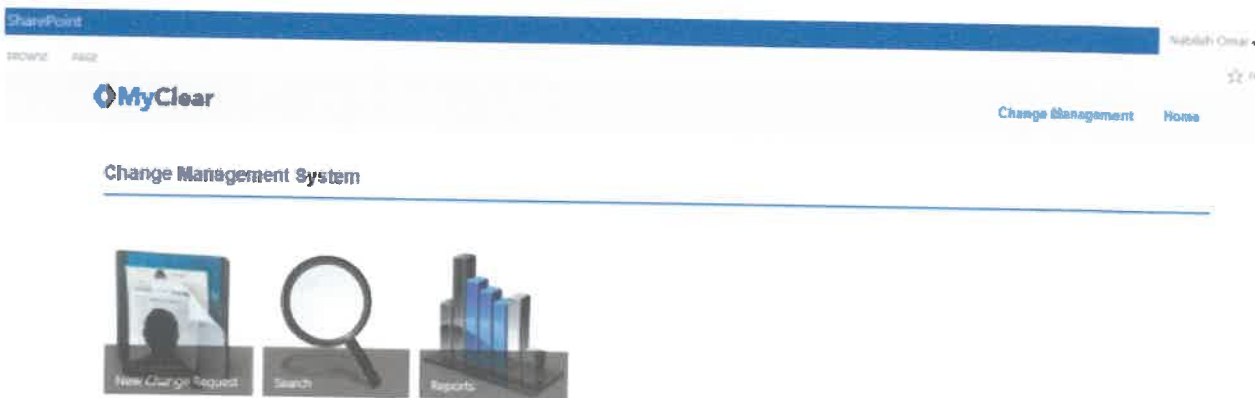


Figure 14

Change Management System

During CMS meeting trainee was exposure to the explanation of enhancement of MCS. Enhancements they do are standardization of review approval, removal and combination role, identification of tester and implementer, migration procedure and checklist, delegation of Change Advisor Committee (CAC), and mitigation procedure and checklist.

3.1.7 Conference call with Qualified Security Assessors (QSA)

Qualified Security Assessors (QSA) team is one of external editor in MyClear for auditing review. Trainee was requested by Miss Nora to follow and join her conference call with QSA. This conference call is discussion requirement that QSA provide to MyClear to follow all the guideline given to compile all documents that need to audit. This conference call was involving trainee by three times during internship. This conference call with QSA after they visit company and there any problem with guidelines they will be discuss through conference call.

Conference call was do after they have communicate with email to inform solving problem or issues. Conference call will be in IT Security Department room to avoid form disruption. Conference call held by skype call because skype not only can call but in the same time can text. MyClear provide high technology tools for easy to them make their business in daily operation in smoothly and clearly without obstacles.

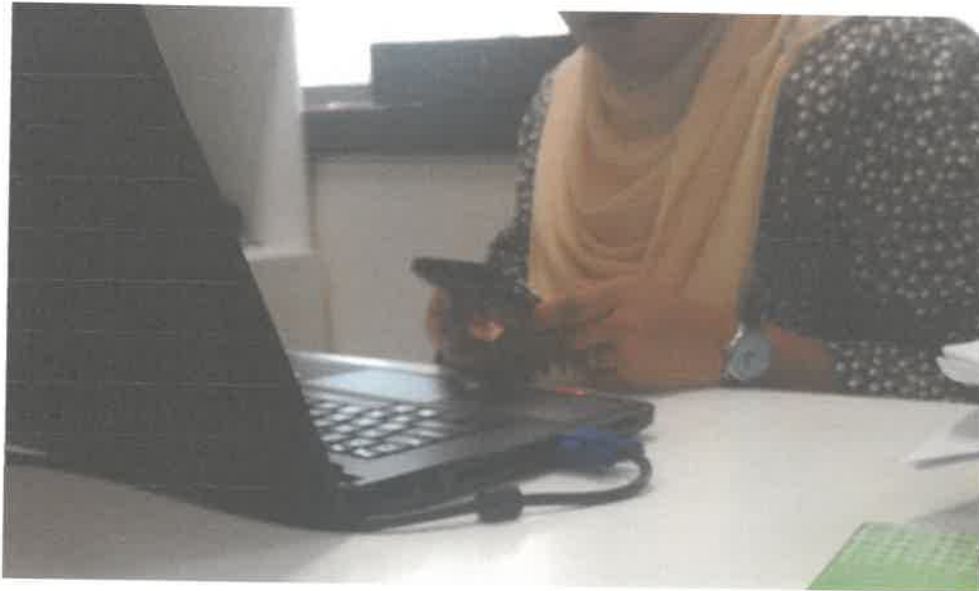


Figure 15

Miss Nora Conference call with QSA

3.1.8 Design Wannacry Ransomware Poster

On May 2017, worldwide received the news related to wannacry ransomware cyber-attack that attack by attacker in several countries. From those issues, all staff in MyClear received email by CIO; Madam Ros that mention all staff should secure information to avoid cyber-attack. Email that received was mention advice to staff be aware with the current issue to protect important information in company. She mentioned if there any suspended in screen must immediately report to IT Security Department to take action.

Wannacry ransomware attack is one worldwide attack by crypto worm which is targeted computer running the Microsoft windows operating system by encrypting screen and data to demanding for victim the ransom payments in Bitcoin cryptocurrency. In Malaysia, there no any case was reported and still under controlled situation. Below figure 16 screens encrypted to victim screen.



Figure 16

Screen encrypted by ransomware attack

From that issue in May, then trainee supervisor asked to design one poster as awareness materials to be sent through email to staff for they alert and aware. Besides, to show the step and action if possibility company operating system were attack. Trainee designs a poster using adobe photoshoot cs3 and finding the detail information through YouTube channel. Below is the figure 17 show the poster wannacry.

RANSOMWARE



Hi everyone ! The word RANSOMWARE is combination **RANSOM + SOFTWARE** which is security threat that has data-kidnapping capabilities .

Ransomware also be known as **WanaCryptor, Wanna Cry & Wcrypt.**

RANSOMWARE is one of dangerous cyber threat that will be **lock your computer data and system functions** or even render systems totally become useless that will be disrupt IT Systems worldwide.

Then, it forces victims to **pay ransom** to regain access to your files or systems.

HOW DO YOU GET INFECTED?

Here are the ransomware infection stages



HOW TO PROTECT FROM RANSOMWARE

- 01 Backup regularly and keep your data offline
- 02 Refrain from visits suspicious websites & do not open suspicious email
- 03 Keep your machine up to date
- 04 Please contact your colleagues below if you have question or not sure if your computer are protected
 - I. JUNAIDEE
 - II. MAHADHIR
 - III. JULIATY
 - IV. SRINIVASAN

Figure 17

Poster WannaCry

3.1.9 Attend Security Conference

One of benefit that trainee gains in MyClear which is MyClear provide conference event to trainee attend. For staff, they provided two times for go training every year which is for increase and review their key performance indicator (KPI) for gain higher position and increment payroll. So, trainee's supervisor was asked trainee to attend conference together with Madam Faralina one of security management member at outside of office.

This conference organized by third parties known as Blue Fortress sdn bhd which is involving several presenters from internal and external countries. This conference held one day at Nexus building behind MyClear building. Trainee was attend conference at morning until evening. This conference is about "Secure Your Organization against Cyber Security Threat" that involve Gemalto, cyber security Malayisa, Wallix, Blue Fortress and Stormshield APAC.

They are not only present awareness but in the same time they promote their product to protect organization. So trainee was so lucky because being as representative for ITS depart to attend prestige conference that gains the new knowledge and information that never seen during study.



Figure 18

Conference session

3.1.10 IT Security Department Meeting

After the training attend to security conference, then trainee involve in department meeting at level 10 at the evening. IT Security meeting actually headed by HOD, Madam Juliaty. During the meeting, HOD asked to know the update and progress ITS team members. This is to ensure the entire project for this year will be followed by timeline and rearrange if there any schedule that need quickly complete.

Each IT Security team members should explain to HOD their progress and HOD will advise whether the need to speedily complete the project and she give suggestion If there any problem. Trainees in that meeting room just an observer because Supervisor Company want trainee to be exposure with the working environments with ITS team. Below the figure 19 shows IT Security department meeting.



Figure 19

IT Security department meeting

At the same time, trainee takes chances to show special project about IT Security department profile to HOD and team members. They impress and agree with the special project and HOD was reviewed than she asked to add several content suggest by HOD. Besides, after show that special project, then trainee asked ITS team members for take picture for attach in special projects. Below figure 20 show participate by ITS team members.



Figure 20

IT Security Team photo

3.2 Special Project

Trainee was completed special project as required by faculty during 5 months internship session in IT Security Department starting from February until June 2017. Special project was done by trainee divided by two categories which are special project and sub special project. Below Figure 21 are shows the special project title for more clearly.

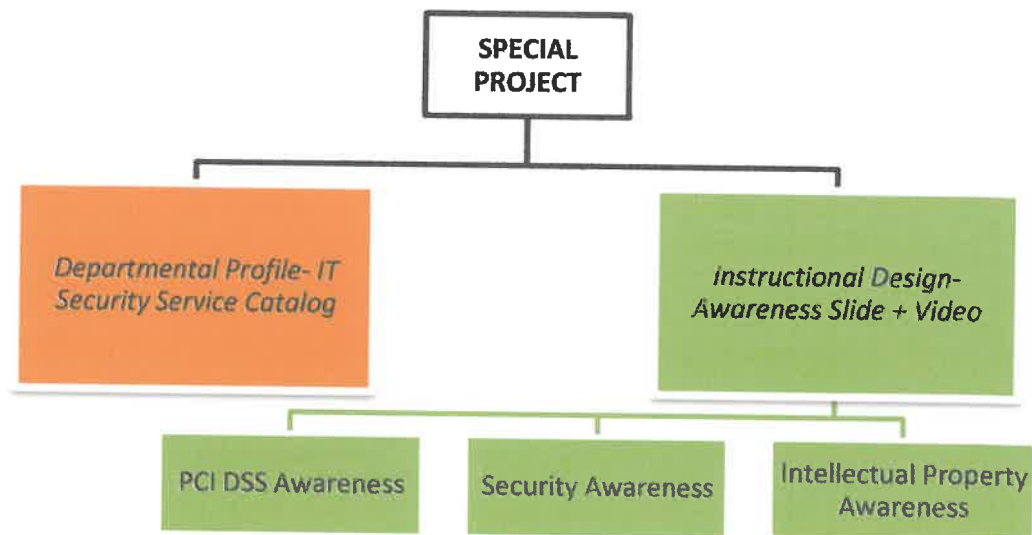


Figure 21
Categories Special Projects

Special Projects completed by trainee took 5 months in MyClear for complete all those special projects. Below Figure 22 is shows the timeline projects for complete both categories special projects.

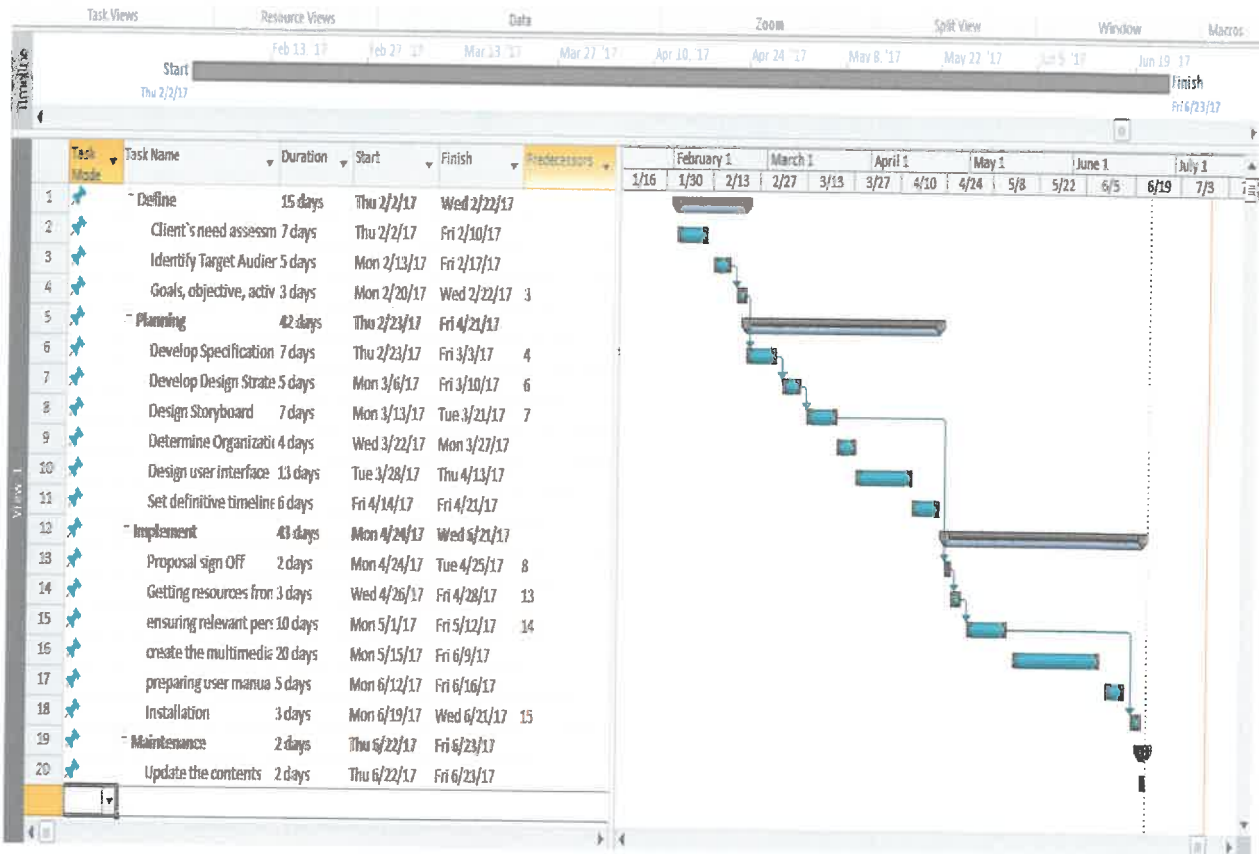


Figure 22

Project timeline

According to MyClear, all the materials that trainee do actually subject to internally use only, but with the permission letter from IT Security Department, all the screenshot of software, material awareness slide, video and some documents data print screen was have permission. Below are Figure 23 is show the letter permission by IT Security Department approved by Miss Nora Azura who is company supervisor to trainee as representative to replaced approved from HOD, it is because HOD is attending to conference at London for a week.

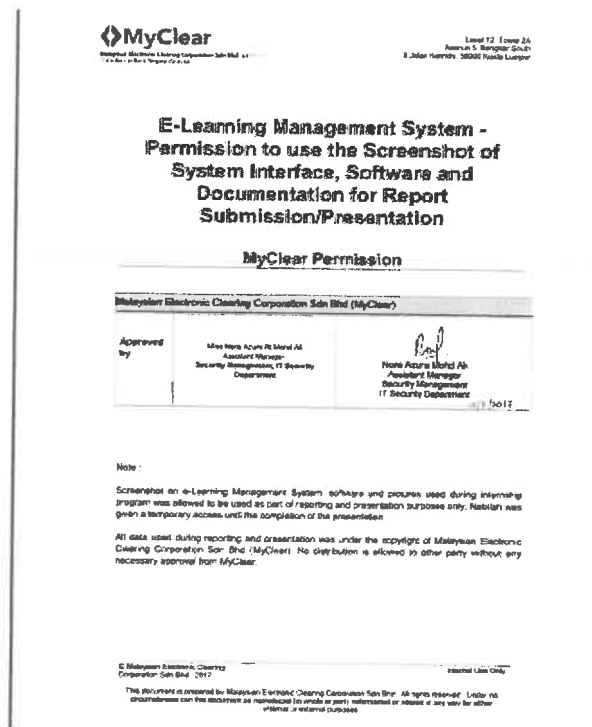


Figure 23
 Permission Letter by IT Security

3.2.1 Overview Project (Departmental Profile-IT Security Service Catalog)

First day during internship session experience, trainee does not know to start activity and task because company supervisor was not given any kind of the task. From that situation, trainee got the idea to design a departmental profile for IT Security Department which is never do before. After that, trainee was inform to company supervisor Miss Nora Azura about departmental profile, then she said for preparing the proposal to reviewed and approval by Head Of Department (may view the proposal in Appendixes page).

Trainee was meeting with company supervisor and Head Of Department (HOD) to show the proposal and after that, trainee`s proposal for departmental profile was approved and then trainee will begin the next step and all the progress need reviewed and approved by company supervisor and HOD. HOD was given name to the Departmental Profile as IT Security Service Catalog that trainee will be attaching the interactive slide in MyClear E-Learning Portal. These ideas came after trainee saw several IT Security Department slide look simple and not attract audience to pay attention during presentation. This is because, there is not enough time in create the interactive slide in previous time, after trainee came to that company and the trainee got the idea in transform all those material to become interactive material for attract audience.

In IT Security Department Profile was including executive summary, MyClear vision and mission, MyClear Product and services, Keynote by Chief Information Officer (CIO) and HOD, Introduction to IT Security department, IT Security`s Mission, Awards and recognition, departmental structure, IT Security service and Photo galleries. Below Figure 24 is showing the interface of interactive slide in MyClear E-Learning Portal.



Figure 24

Interface IT Security Department Profile interactive slide in MyClear E-Learning Portal.

The full version of IT Security Department Profile interactive slide will be showed in Appendixes page. In the other hand, trainee was planning which is, before audience look to IT Security Department Profile, trainee was provided an introduction video (view in Appendixes page) of IT Security Department. This is an alternative to attract audience to read the IT Security Department profile after watching to the introduction video. Below the Figure 25 is show to interface introduction video for IT Security Department Profile.



Figure 25

Interface Introduction video of IT Security department profile.

After complete that slide, then it was reviewed and approval by CIO and HOD. Trainee was reviewed by HOD for three times, after HOD approve that slide, than trainee can show it and reviewed to CIO, Madam Ros Yusoff. So, after CIO approved it, this slide can be implementing into MyClear E-Learning portal. Below Figure 26 is show that involves with CIO approval and reviewed process.

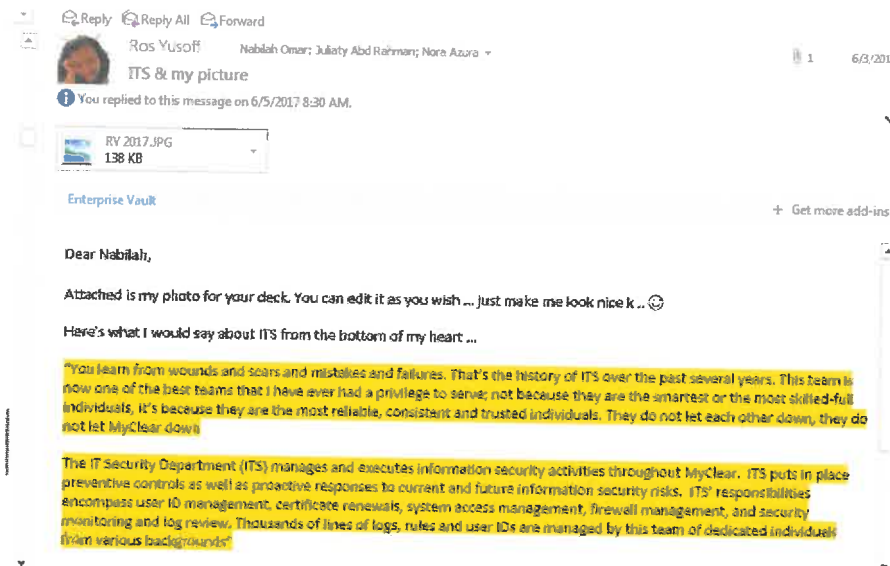


Figure 26

Madam Ros send email related to keynote message for ITS Department Profile

3.2.1.1 Objectives of Special Project

There are several purposes in support activities in IT Security Department that become useful and give benefit to the organization. The specific objectives of this IT Security Department Profile are:

- I. To be as a quick reference and refresher course for the staff and new members.
- II. To ensure that everyone is clear about their roles in IT Security Department.

3.2.1.2 Scope and Functions of IT Security Department Profile

Scope of uses this IT Security Department Profile is focus to staff, new staff and intern as reference and refresher course. Below is the Table 5 show the details scope of uses IT Security Department Profile.

Table 5
Scope uses IT Security Department Profile

SCOPE	DESCRIPTIONS
Staff	<p>This IT Security Department Profile known as IT Security Service Catalog which is created and design for staff especially in IT Security Department. This Service Catalog is related with Departmental function and services or known as department profile that create as ease to staff make is such as reference and refresher course. In the other hand, trainee create this IT Security Department Profile because in MyClear are not having it yet, it just in simple slide and also in handbook are not as details and interactive as IT Security Department Profile. With this new transformation by trainee interactive slide and including with video, they can access in MyCear E-Learning portal as their reference and refresher. In addition, staff may use all the content in the IT Security Department Profile to on boarding presentation if necessary. Onboarding presentation is one the action or process of integrating a new employee into an organization or familiarizing a new customer or client with one's products or services.</p>

<p>New staff & Intern</p>	<p>Furthermore, IT Security Department Profile interactive slide and video actually trainee was created for new staff and intern. Actually, from experience trainee attend internship session at first day do not know what should do, so trainee was created this IT Security Department profile slide in interactive including with introduction video which is new staff or intern student may access through MyClear E-Learning Portal and read this slide and watch the video for the purpose, they know and familiar with the function, roles and activities in IT Security Department. So when they watch the video and read the IT Security Department Profile, they already know and understand their services and in the other hand, they will ready during onboarding presentation will be assist by appointed staff. This IT Security Department Profile and Video will help new members in clearly situation and easy for them suitable with new environment.</p>
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Functions of IT Security Department Profile also known as Service catalog is functioning when user accessing in MyClear E-Learning Portal. It will be function with the animation slide in interactive which is having button next and previous. In the other hand, during service catalog attach in E-Learning Portal, there have condition was created which is staff need to watching the video introduction at the first step and after done watching the video, staff can move to the next topic which is to IT Security Department Profile interactive slide will be appear in animation. Below the Figure 27 show the screenshot E-Learning Portal, Video interface and slide interface.

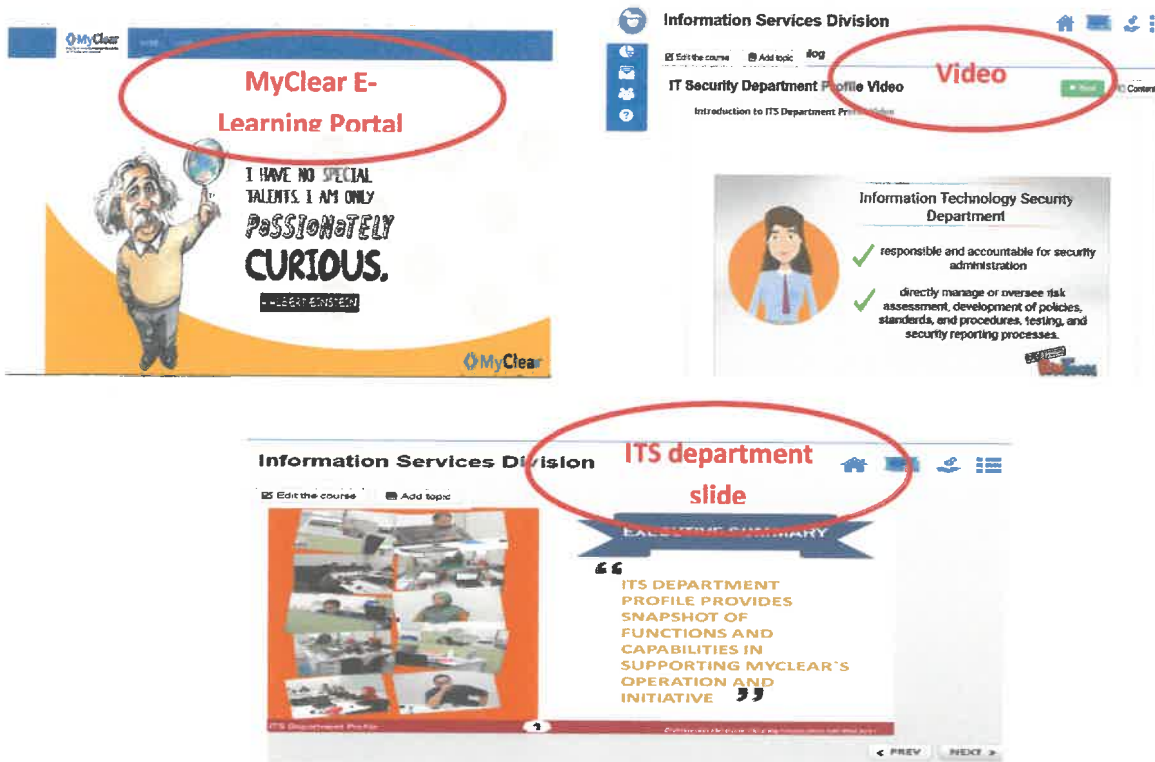


Figure 27

The interface of E-Learning Portal, Video & Interactive slide ITS

For more clearly, may refer to the appendixes which is trainee was provide such like user manual to easy audience understand the function of IT Security Department Profile slide and video. Besides, IT Security Department Profile slide is not as simple slide, but it more interactive which is using internally software that will be telling details to the next topic. The function of IT Security Department Profile slide functioning which is user must log in to MyClear E-Learning Portal, choose the course and can be proceed to next pages just click on the “ Next” button and user will be go back just click to “Prev” button which is known as previous. So easy to user for accessing and read anytime together with interactive video that trainee provide in attract the attention to user.

3.2.1.3 Tools Used

During trainee was completed the special project, all the tools was used is internally use and provide license by company. This license was only can access in the MyClear and cannot be bring out from external use. But for documentation trainee have permission letter that can screen shot for documentation and presentation only (can refer in appendixes page). There are several list of tools was used during completed special project which are Microsoft PowerPoint, Articulate Storyline 2, online video maker (PowToon) and Adobe Photoshop CS3.

I. Microsoft PowerPoint



Firstly, trainee was design the IT Security Department Profile using Microsoft PowerPoint. This is because, this slide will be support with software that internally use for attach in MyClear E-Learning portal. Using Microsoft PowerPoint easy to edit and smoothly because when using Articulate Storyline 2 it is can make computer will be slower. Even though Articulate Storyline 2 has same function with PowerPoint, trainee was using PowerPoint slide for faster work. After done design the IT Security Department Profile using PowerPoint, and then trainee will export that slide using Articulate Storyline for edit the next process before can be implement in MyClear E-Learning Portal.

II. Articulate Storyline 2



Secondly, after done edit using PowerPoint slide, IT Security Department Profile will be import to Articulate Storyline 2 to edit the coordination, animation and button “Next”, “Prev”. After done editing process the button, then IT Security Department Profile can be accessing trough MyClear E-Learning Portal that can add several step including the condition term. Storyline Articulate 2 is internally use with the license was bought by company. Trainee was expert using this Storyline Articulate 2 after explore by self and get advice and supporting by company supervisor and one of staff named as Vino, she help trainee in several step such as how to create the button and animation. In the other hand, Storyline Articulate 2 has function that can create character which is can choose which character can be used to more interactive slide.

III. PowToon



Trainee was introduce online video maker by PowToon to company supervisor, than trainee was showed the video that trainee created, then company supervisor was surprised and she said she like trainee video. PowToon is online movie maker that suitable to student, corporate sector and

public. This PowToon function is easy to use that including the interesting characters, the animation and suitable for make such as promotion video or also can be as montage video.

IV. Adobe Photoshop CS3



Trainee was used Adobe Photoshop CS3 as support tools, which is it used for crop the team members photo. It is because, using Adobe Photoshop CS3 is working in save the editing picture into PNG, JPEG format that support in Articulate Storyline 2. Adobe Photoshop CS3 is one of universal huge editing platform that easy to use for applying filers, formatting save and others functions.

3.2.2 Overview Project (Instructional Design- Awareness Slide, Awareness Video)

The sub project by trainee during internship is the Instructional Design which is Awareness Slide and Awareness Video. Awareness slide was created same with IT Security Department Profile, but trainee was created including with the video introduction to that according slide. For Instructional Design are divided by three which are Payment Card Industry Data Security Standard (PCI DSS) awareness, Security Awareness and Intellectual Properties Awareness.

All those slide and video awareness is one of alternative that every year IT Security Department creates to attach in MyClear E-Learning Portal. This awareness slide are provided to give awareness to staff because of, MyClear should encourage consistent and professional use of information and to know to protect the information asset during daily operation. In early of every year, awareness material such as slide will created as refresher and reference to staff.

Trainee got the idea; when first week in MyClear as intern, company supervisor was given a task which is create a slide related to PCI DSS. At the first, trainee did not clearly understand what is exactly that PCI DSS, but during that process, trainee was using google for learn new thing. After that, trainee was asked Supervisor Company for the sample easy way for intern understands. Then she gives the previous slide look so simple and not interactives and also she provided one documents known as Information Security Policy. Below is the Figure 28 is show the in front of Information Security Policy.

INFORMATION SECURITY POLICY

MyClear Security Clearance Corporation 4th Floor, Chicago	
Reviewed by	MyClear Management Committee Date: 1/18/2011
Approved by	Board of Directors Date: 1/18/2011

This document is controlled by MyClear Security Clearance Corporation. Changes to this document shall be made only by the MyClear Management Committee. No other changes shall be made without the approval of the MyClear Management Committee. This document is the property of MyClear Security Clearance Corporation and shall remain confidential. All rights reserved. Under no circumstances shall any information be disclosed or made available to any other person without the express written permission of MyClear Security Clearance Corporation.

Figure 28

Information Security Policy

First slide awareness related to PCI DSS and video, it is actually about payment Industry card data security standard that known as PCI DSS establishes rule and security standards which maintain by PCI Security Standard Council (VISA, MASTERCARD & AMERICAN EXPRESS) that applies to all organization to process confidential cardholder data information to prevent from the fraud, hacking, data breach and any other security incident. This is awareness material that including the several sections that provided by Information Security Policy in MyClear that staff must be follows to secure information assets in organization.



Figure 29

PCI DSS Slide and video interface

Second awareness slide is known as Security awareness and video which is to give aware to staff for their responsibilities in order to protect confidentiality, availability and integrity of their organization's information and information assets. In the other hand for improve coherence of the need to protect information and system resources, and defining the user's role in the process. Besides, making computer system users aware of their security responsibilities and disseminating correct practices can help user's change past behaviors and defining the user's role in the process.



Figure 30

Security Awareness Slide and video interface

Third awareness slide known as intellectual property and video is actually to give awareness to staff related staff to avoid breaches of any criminal and civil law, statutory, regulatory or contractual obligations of any security requirements. This is because, MyClear is prestige company that deal with external parties such as vendor. This is one of awareness to give to staff to open their eye about the important know the right during daily operation to avoid from breach of the contract and to secure information according to copyright, computer crime and the others that can damage all information asset in organization.

In the other hand, in MyClear have their own product and services such as FPX, JOMPAY, and MY DIRECT DEBIT which are need to protect their logo to avoid the other irresponsible parties copy that logo for their own benefit. Besides, intellectual property is one of awareness materials in order to avoid staff being victim to plagiarism that can make organization reputation down and have problem. So, the intellectual property awareness slide and video should show to staff for them alert in current situation to secure data.

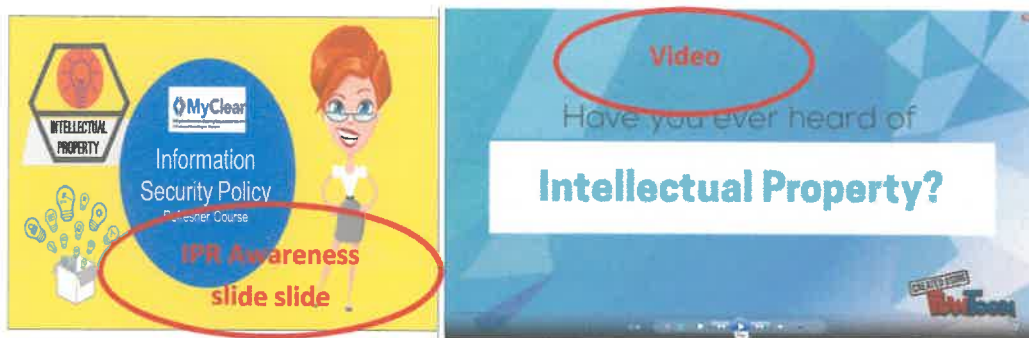


Figure 31

interface Intellectual Property Slide and Video

3.2.2.1 Objectives of Special Project

There are several purposes in support activities in MyClear that become useful and give benefit to the organization. The specific objectives of this Instructional Design (Awareness slide and Video) are:

- I. To be as a quick reference and refresher course for the staff and new members.
- II. To provide ease of access to awareness materials.

3.2.2.2 Scope and Functions

Scope of uses this Awareness slide and Video is focus to staff, new staff and intern as reference and refresher course. Below is the Table 6 show the details scope of uses IT Security Department Profile.

Table 6

Scope uses Interactive Slide and video awareness

SCOPE	DESCRIPTIONS
Staff	Interactive awareness slide and video actually for staff use in the MyClear E-Learning Portal. Early every year, staff will be inform to involve in E-Learning Portal to access to education path which is staff need to read the awareness slide as reference and refresher course. Because as human, sometimes forget about what they learn and then they should do revision for consistent in daily operations. But, before this, slide awareness material in simple and not interactive, then trainee touch off new environment with interactive slide awareness and including with video introduction. So that, it can attract attention to staff easy to understand and more interactive in read and learn back from that slide.
New staff & Intern	Furthermore, Awareness interactive slide and video actually trainee was created for new staff and intern. It is because, for new member from the other company and from student life is in different life before. They did not know in MyClear environment and how staff in MyClear activities.

	<p>So, from this alternative, new member will be read awareness slide and watch the video to help them too familiar with current situation in MyClear. In the other hand, to help them easy to involve after task was given, because after they read on his slide and watch the video they already understand, and absolutely new members will be more and clearly understand after have second onboarding explanation. So, at the first day, they have a task which is understand the awareness slide and video for easy in future daily operation.</p>
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Awareness interactive slide and video is same function with IT Security department profile is functioning when user accessing in MyClear E-Learning Portal. It will be function with the animation slide in interactive which is having button next and previous. In the other hand, during awareness slide attach in E-Learning Portal, there have condition was created which is staff need to watching the video introduction at the first step and after done watching the video, staff can move to the next topic which is to awareness interactive slide will be appear in animation.

For more clearly, may refer to the appendixes which is trainee was provide such like user manual to easy audience understand the function of Awareness Slide and video. Besides, three of awareness slide is not as simple slide, but it more interactive which is using internally software that will be telling details to the next topic. The function of awareness slide functioning which is user must log in to MyClear E-Learning Portal, choose the course and can be proceed to next pages just click on the “Next” button and user will be go back just click to “Prev” button which is known as previous. So easy to user for accessing and read anytime together with interactive video that trainee provide in attract the attention to user.

3.2.2.3 Tool Used

Tool was used same with tools that explain in 3.2.1.3 which is tools to create three awareness slide and video are same IT Security department Profile project. The tools used such as PowerPoint, Articulate Storyline 2, Adobe Photoshop CS3 and PowToon.

CHAPTER 4: CONCLUSION

4.1 Application of knowledge, skills and experience in undertaking the task

During internship session, trainee was gain knowledge and skill form experience undertaking the task in MyClear. Trainee had applied the knowledge and skills more on learnt related to course of Legal and Ethics Aspect of Information System. It is because, trainee was done internship session 5 months in IT Security Department related with security management that involve securing information assets. In the other hand, trainee also applied knowledge and skill learnt from Data Center Operational and services which is exposure to know the security setting server during preparing the hardening checklist.

In addition trainee also gain knowledge and skills related to business and professional, presentation skills, information technology project management, foundation of information management and information system interaction and consultation. Trainee was learnt and exposure to communicate with external parties, discussion with vendor, attend conference, department meeting and prepare to consult about awareness materials. Below are more clearly Table 7 is show the knowledge and skill related to the course.

Table 7

Application of knowledge, skills and experience in undertaking the task

Task	Knowledge and Skills	Related Course
Penetration Test Report	I. Identify vulnerabilities risk	I. IMS657- Legal and
Audit Log Review Report	II. Review activities internally	Ethic Aspect of
Windows Configuration Checklist	III. Verify security setting of server	Information System II. IMS605 Data Center Operational and services.
Change Management System (CMS) meeting	I. Communication skill	I. BEL 482 –Business and professional communication
IT Security Department Meeting	II. Teamwork	
Conference call with Qualified Security Assessors (QSA)	I. Communication skill and soft skill, which is involve with external parties.	I. Bel 492- Presentation Skill
Discussion with Vendor	II. Expose to in assist discussion with vendor	II. IMS 654- Information Technology Project Management
Involve Security Conference	III. Expose the knowledge latest product for avoid cyber threat.	III. IMS657- Legal and Ethic Aspect of Information System.

PCI DSS awareness slide and video	I. Expose in assist to awareness exercise.	I. IMS657- Legal and Ethic Aspect of Information System
Security Awareness slide and video	II. Expose in preparing for attract audience with the awareness materials	II. IMC402- Foundation Of Information Management
Intellectual Property slide and video		III. IMS556-Information Systems Interaction & Consultation
IT Security Department profile		IV. IMS554-Information Marketing for Information system department.
National Cyber Drill Exercise		
Design Wannacry Ransomware Poster		

4.2 Personal thought and opinions

Five months internship session was enough for trainee to gain knowledge, skills and experience. In MyClear trainee feels that the organizations provide a lot of opportunities and supportive environment. There are because of the company supervisor, the staff and even the top management are friendly and easy to dealt with sharing knowledge, give information even help trainee in give the advice and ideas during completed internship session.

In the other hand, trainee feels easy to dealt work with their team. This is because, their team working together without any obstacle. Their team has good teamwork with handling the issues together and listens to the instruction. Every decision must be discuss before top management decided in solving the problem and etc. In the other hand, staff in MyClear very helpful and train has good communication skill. For example, trainee does not know how to use intranet system portal, then ask to other team, they consider trainee is like their friend. They help trainee until get what the trainee want which is help to teach trainee use that portal one by one, in submit medical leave and apply leave.

Important to the trainee which is working together in expertise and experiences staff. It is because; trainee can help their self in growth and development knowledge and skill. Besides, in order to know and learn new thing with expertise. For example, company supervisor is one of experiences and expertise in handling security management. She also involves with vendor and she also handling and monitoring when audit team from external and internal come to the MyClear. She cans also preparing with proper preparation and can expert in answer all those question by auditor.

The trainee also thinks that knowledge and skill provided by faculty is necessary and useful. However, some improvement can be done by company which is balancing the task to the technical support such as seat together with network security unit in handling and manage network security devices such as Firewalls and Intrusion Prevention System. It is can be more effective to intern in gain both side like management and technically.

4.3 Lesson Learnt

Trainee has learnt to be more active and exposure to do well in communication skills, good relationship with teamwork and punctuality. In the other hands, being working surrounding, trainee also learnt how be independent and increase self-confident and be more responsibility when complete the task.

4.3.1 Communication skill

Trainee always exposure to communicate with all staff in complete the task such as looking for information. Besides, trainee also exposure by company supervisor to make discussion with HOD and CIO during reviewed and approval special project. In addition, trainee was exposure to attend and involve in conference call, attend security conference outside and meet external parties. Besides, trainee was exposure to talk and do the discussion with vendor and auditor in seeking requirement that needed by them. So from all those kind experiences is enough to trainee growth and develop communication skills.

4.3.2 Good teamwork

Trainee also involves attending meeting and event related to the departments such as attend department meeting and cyber drill exercise. During cyber drill exercise are given exercise in handling cyber threat activity, in there trainee was involve as observer and take note the situation given and the time records. In solving activities, need have a good teamwork and from there trainee was learn, good teamwork was needed in handling every single in secure information assets in company.

Besides, during department meeting, HOD want all team members update the progress each staff to let HOD alert and know whether their team members meet the timeline or not. If not, HOD will help and assist in giving advice and information for them achieves and meets timeline without delay.

4.3.3 Punctuality

Trainee also growth and development their self to be more punctual and improve in manage the time. MyClear have flexible time which is staff can come at 8 am and finish work at 5 pm, while for those want come 9 am then staff can finish work at 6 pm as long as enough for 9 working hours. In the other hands, in task given must be punctual time submission. Even though the task are not specified to submit earlier, as staff need to be punctual which means submit earlier that submission date to avoid load of task will be given later on.

4.3.4 Independent and increase self-confident

Next lesson learn that trainee gain during internship is independent and increase self-confidence. Which is if some task was given in preparing the report or any kind documentation, if trainee find any words or listen to the conversation some word that trainee do not clearly understand. Then trainee takes action independently in searching through the internet to make it clearly. Besides, if something not clear, trainee will be asked company supervisor or other colleague to gain more details for understanding.

4.4 Limitation and recommendations

The limitation for trainee during internship is lack of exposure to technically in daily task. This is, in IT Security Department only provide trainee in management part which is preparing to the document and compile the evidence for audit. The trainee would like to recommend that IT Security Department may improve by providing more on balancing task in management and technically for future student undergo practical training exposure and gain more skills technical part. Technically which is part of system access control in managing the user id and password, managing digital certificate and key management. Besides, in network security this is in handling security devices such firewall and technical services such s technical security advisory.

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APPENDIXES

Appendixes A: Photocopy of logbook template

Appendixes B: Attendance list

Appendixes C: Permission Letter Print screen internally use

Appendixes D: Proposal copy of IT Security Department Profile

Appendixes E: Screenshot email by HOD & CIO

Appendixes F: Information Security Policy cover page

Appendixes G: Industrial Training Checklist

Appendixes H: Conference Tentative

Appendixes I: Picture activities

Appendixes J: User Manual Articulate Storyline and Attachment in E-Learning Portal

Appendixes K: Screenshot Video from YouTube

Appendixes L: Screenshot Content of special project