NGEE ANN POLYTECHNIC
The Polytechnic of Industry

THE SCHOOL OF INFOCOMM TECHNOLOGY

DIPLOMA IN INFORMATION TECHNOLOGY
FINAL-YEAR PROJECT 2021/2022

PROJECT REPORT
submitted by

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PROJECT TITLE
Cyber Security Awareness

SUPERVISOR
Mr. Tan Choon Peng

2nd MARKER
Mr. Tan Ah Chiew Arthur

Abstract

Azzi Izzuan and Aaron Choo initiated the Cyber Security Awareness Program, a project part of the internship program to create awareness for employees of Shimano on Cyber attacks and methods that Cyber Criminals are using in the modern days. Such as email phishing, SMS phishing, call phishing, fake websites and fake pop-ups.

This project involves developing a presentation deck with the topics on the current, latest methods and showing them how to spot the different Cyber Criminal methods to defend themselves. This project aims to create awareness and educate employees of Shimano, keeping them up to date to understand the attacks and methods that Cyber Criminals use.

The report also summarized the project's progress from creating the presentation deck to presenting and training the employees, any problems encountered, and the final evaluation of the project.

The presentation deck is built with a timeframe of 4 weeks focusing on related topics and essential topics and another 16 weeks to test and run a simulation to see the effectiveness of the training session.

Aside from the cybersecurity training program, this report also summarized what Azzi has done for the past five months in Shimano from Cybersecurity Training, Daily IT operations, Office 365 & Windows 10 upgrade, and Microsoft Teams Training.

Acknowledgement

I want to thank my academic supervisor, Mr. Tan, and my industrial supervisor, Mr. Ron. They allowed me to contribute to Shimano and contribute to the wonderful Cyber Security Awareness project, which helped me gain more in-depth information regarding different topics and learn new things that I have not learned in school. I am thankful to them.

Next, I would like to thank my friend Aaron Choo, who has helped co-develop the entire project from scratch within the scheduled date and helped me research and improve the project's content.

I would also like to thank Regine, Travis, Hong Wee, and Adi for helping me during my internship when I encounter any problems, guiding and teaching me what it is like working in the industry, and I am thankful to them.

Thanks again to those who have helped me during the course of my internship.

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1. Company Profile (brief)

In February 1921, Shozaburo Shimano established Shimano Iron Works in Higashi Minato in Sakai City and began producing bicycle freewheels, which entailed the highest technology level. In 1973, Shimano Singapore was selected as the first overseas factory located at Jurong Industrial Estate in Singapore, which imports raw components and produces components exported to overseas factories for assembling (Shimano, Company History, n.d.). Today, there are 32 consolidated subsidiaries and 11 unconsolidated subsidiaries, and Singapore is also known as one of the primary manufacturing plants aside from Kunshan, China, and Malaysia. Shimano operates globally and supplies magnetic products to help promote bicycle and sports fishing cultures. Its mission statement is to "promote health and happiness through the enjoyment of nature and the world around us" (Shimano, Mission Statement, n.d.) Constitute 70-80% of the global bicycle component market by value, including manufacturing components for road, mountain, track, and hybrid bikes (Wikipedia, n.d.).

The IT department in various factories and subsidiaries of Shimano are communicating with each other to increase the productivity between each factory. Such as using the proposed applications from the headquarters and providing support in a natural disaster or when the network is down. The IT department ensures that the applications are up to date to the latest version to prevent any malicious attacks on the network. This will include the IT department troubleshooting the devices, installing necessary software and patches, and give their support when required during an event or meeting. As the IT department is in charge of the infrastructure, this will also include them to provide support from essential to advanced.

## 2.	Overview of Internship.

During the internship, Azzi has contributed to daily IT operations, such as assisting users with the problems they faced, troubleshooting and providing solutions to each situation, and installing or upgrading programs on users' computers or laptops. This internship has also allowed him to understand how IT operations are managed in the industry. Besides assisting daily IT operations, he has also co-develop Cyber Security Awareness Program, which involves him in researching and using the knowledge that he gained from school to create suitable content. On top of that, he has to present and conduct training lessons to employees of Shimano, ensuring that they understand why Cybersecurity is essential to everyone. After giving and conducting, the trainee has to take a 20 MCQ quiz to see the level of their understanding. This is all possible due to Mr. Ron's support which guided them from scratch, ensuring that Azzi creates a project planner to list out all of the dates and meetings to complete the project on time fully. Aside from creating the cybersecurity training, he has helped the IT department upgrading most of the workstations, laptops, and desktops to the latest versions. He has also created a Microsoft Teams Training guide using Microsoft PowerPoint to guide first-time users.

3. Internship Assignments (list)

Assignment 1 (Cyber Security Awareness)

Assignment 2 (Office 365 & Windows 10 Upgrade)

Assignment 3 (Daily IT operations)

Assignment 4 (Microsoft Teams Training)

Summary of Time Spent and Level of Challenge Ranking

Assignment	Estimated Time Spend (%)	Rank by Level of Challenge (3-most challenging 1 -least challenging)
Assignment 1 (Cyber Security Awareness)	35 %	4
Assignment 2 (Office 365 & Windows 10 Upgrade)	25 %	3
Assignment 3 (Daily IT operations)	25 %	2
Assignment 4 (Microsoft Teams Training)	15%	1

4. Assignment Portfolio

4.1 Assignment 1 (Cyber Security Awareness)

4.1.1 Description of Assignment (include context or business domain)

Cyber Security Awareness aims to raise awareness and educate employees of Shimano regarding the rising numbers of Cyberattacks and share what users have to look out for when encountering the methods used by cybercriminals and how to defend themselves against them.

4.1.2 Purpose or Objective of the Assignment (include expected impact on context or business domain)

This assignment aims to make sure that 580+ employees of Shimano understand and take precautionary actions when they encounter the methods that Cyber Criminal uses. Also, allowing the employee to keep up to date and know that every staff member should learn some basics about cybersecurity to reduce the risk of cyber attacks from occurring.

4.1.3 Tasks carried out (include specification of own role & responsibilities in relation to the team you are working with) in assignment.

Azzi co-develop the Cyber Security Awareness Program, where he is responsible for presenting the final presentation deck. He also contributed to creating the presentation deck using the knowledge he gained from previous modules such as Cyber Security Fundamental during year one, which has helped him a lot. Some of the topics that he has contributed: Phishing & Spear Phishing, Email Phishing, Smishing, Clone Website, Pop-ups, Vishing, How to defend against Phishing, and Social Media advisory. For the topics mentioned, Azzi researches and communicates with Mr. Ron and Aaron to see if the content for each topic is suitable and can be presented to trainees.

Topic #	Presentation Topic Allocation	Presenter		Done by	Notes
1	Why Cyber Security is important	Aaron		Aaron	
2	Malware	Aaron		Aaron	
3	Cyber-attacks (Ransomware)	Aaron		Aaron	WannaCry & Ryuk
4	Phishing & Spear Phishing	Aaron		Both	
5	Email Phishing	Azzi		Both	
6	Smishing	Azzi		Azzi	
7	Clone Website	Aaron		Azzi	
8	Pop-ups	Aaron		Azzi	
9	Vishing	Azzi		Azzi	
10	How to defend against phishing	Azzi		Both	
11	Baiting (USB drop attacks)	Azzi		Azzi	Just for knowledge
12	General device security	Azzi		Aaron	
13	Passwords	Aaron		Aaron	Good password practices
14	Social media	Azzi		Azzi	Terms & conditions of service
15	Freeware	Azzi		Aaron	

Figure 1 Overview of topics done

Project Name	Cyber Security Project
Supervisor	Mr Ron Goo
Start Date	8 March 2021
End Date	6 August 2021

Task	Responsible	Start	End	Revised End Date	Status	Notes
Preparation of slides	Aaron, Azzi	8-Mar	31-Mar	6-Apr	Completed	
Preparation of notes	Aaron	11-Mar	31-Mar	6-Apr	Completed	
Preparation of quiz	Azzi	11-Mar	31-Mar	6-Apr	Completed	
Preparation of quiz (Chinese)	Aaron	7-Apr	14-Apr		Completed	
Material Revision Meeting	Aaron, Azzi	16-Mar	17-Mar		Completed	Go through slides with Mr Ron
HR Meeting	Aaron, Azzi	23-Mar	23-Mar		Completed	Go through slides with Mr Ron and Ms Tiffany
Presentation for Approval	Aaron, Azzi	31-Mar	6-Apr		Completed	Present to Mr Ron & make changes
Training	Aaron, Azzi	7-Apr	20-Apr	6-May	Completed	50 people per English session, 20 per Chinese session
Preparation of phishing email	Aaron, Azzi				Not Started	
Testing (phishing)	Aaron, Azzi				Not Started	

Figure 2 Overview of project planner

4.1.4 Changes required or encountered (if any, during the course of the assignment) and their impact (if any, on the work process) and reasons for the change (include any legal or professional issues encountered and their impact)

Some of the changes that both Azzi and Aaron encountered are trainees who missed the training date and required them to present on a date not indicated on the project planner. This also requires them to prepare more as the extended training dates have many trainees attending the training program. Another change is that the trainees that are from China cannot access the google form due to China policy law. To solve the problem, Azzi was required to create the quiz in a word document and was told to export it to PDF, and by doing this, he will be able to send the examination to the trainees from China via email and mark the quiz manually.

Training Dates	Presenter					
Session 1 - HR	Aaron, Azzi	7-Apr	7-Apr		Completed	Afternoon
Session 2	Aaron, Azzi	12-Apr	12-Apr		Completed	Morning
Session 3	Aaron, Azzi	12-Apr	12-Apr		Completed	Afternoon
Session 4	Aaron, Azzi	13-Apr	13-Apr		Completed	Morning
Session 5	Aaron, Azzi	13-Apr	13-Apr		Completed	Afternoon
Session 6	Aaron, Azzi	15-Apr	15-Apr		Completed	Afternoon
Session 7	Aaron, Azzi	19-Apr	19-Apr		Completed	Morning
Session 8	Aaron, Azzi	19-Apr	19-Apr		Completed	Afternoon
Session 9	Aaron, Azzi	20-Apr	20-Apr		Completed	Morning
Session 10	Aaron, Azzi	20-Apr	20-Apr		Completed	Afternoon
Session 11	Aaron, Azzi	6-May	6-May		Completed	Afternoon
Session 12 (Mandarin)	Mr Ron	21-Apr	21-Apr		Completed	Morning
Session 13 (Mandarin)	Mr Ron	21-Apr	21-Apr		Completed	Afternoon
Session 14 (Mandarin)	Mr Ron	26-Apr	26-Apr		Completed	Morning
Session 15 (Mandarin)	Mr Ron	27-Apr	27-Apr		Completed	Morning
Session 16 (Mandarin)	Mr Ron	6-May	6-May		Completed	Morning (8.30am - 10.30am)

Figure 3 Overview of Session Plans

4.1.5 Knowledge and Skills required for and learnt during the assignment.

Azzi has applied the knowledge and skills that he learned in school from Cyber Security Fundamental, Operating System, and Networking Fundamental to assist him in this assignment. The modules that he learned in school have helped him create and understand the content quickly as he heads up on some topics. He has also discovered new knowledge and skills while co-developing the assignment, such as in-depth knowledge and understanding of specific issues that have not been taught in school before. For example, topics regarding how cybercriminals

achieve certain things using various phone, email, and even SMS to trick victims. Azzi has also learned some presentation skills from his industrial supervisor and time management to keep him on track for the assignment.

4.1.6 Tool(s) used for assignment (eg. tools used for analysis, design, coding, testing, report generation, etc.)

Some of the tools Azzi used in the assignment are Microsoft PowerPoint, which has assisted him in creating the presentation deck and allows him to present to the trainee. Microsoft Excel is another application that helps him in tracking time and also time management. In the Excel file, there are various indicated dates and notes to see the assignment's progress, which helps Azzi's supervisor and Azzi coordinate and understand how the progress is like.

4.1.7 Task(s) completed and Assignment Outcome (is impact on the context or business domain as expected)
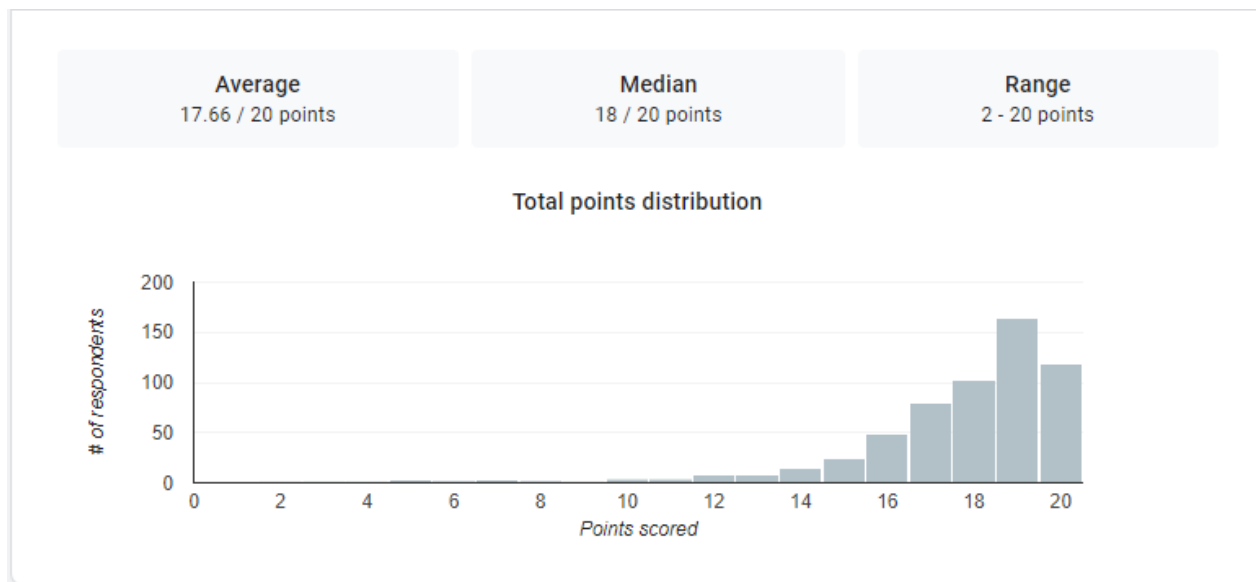
Figure 4 google form quiz result

Aaron and Azzi have presented to 588 trainees with over 11 sessions in English and five sessions presented by Mr. Ron in Mandarin. Among the 588 trainees, the average score of people scoring for the quiz is 17.66/20, and the median is 18/20.

This shows that the presentation deck that Aaron and Azzi presented together is effective and allows the trainees to understand the content delivered to them.

4.1.8 Problems encountered and recommendation(s) for Improvement

Some of the problems Azzi encountered were while working on the presentation deck, that were some misunderstandings and miscommunication between him and Aaron,such as editing the slides without any confirmation which led to a problem that was hard to solve as some of the content deleted were harder to regain back.

During every presentation, the audio system was not working, which required the vendor from an external source to configure, fix and configure the audio system every time. The first session required Azzi and Aaron to present without any microphone or speaker while the vendor was fixing the issue. Some of the sessions required the audio system to be warmed up for around 1 hour for the audio system to be working fully.

As some of the trainees could not attend the session slots allocated to them, Aaron and Azzi presented an extra session and work on other things after the presentation session.

During the final presentation, some trainees could not find their names to complete the quiz. This had made Azzi to think fast and edited the form right away to enable a text box so that trainees who could not find their names would complete the quiz.

Some of the recommendations for improvement are using the Trello board and agile methodology project management processes. Like what was applied and learned during Full Stack development in Year 2.2 . which allows members of the project to update on their progress and enable other members to keep up to date and know what is being changed. This way, it can help him and Aaron smoothly create and complete the project without misunderstanding and miscommunication.

The audio system problem is not easy to fix. That is why Shimano is considering changing the audio system upon moving to the new factory at the end of the year. They hope that by disposing of the old audio system and opting for the latest generation with better quality and build, the problem can be fixed.

Instead of assigning some of the trainees to the slots without confirmation, why not allow the trainees to pick the dates they are comfortable and available to prevent any changes and any last-minute work. This can also save time and also workload on planning the project and launching it.

4.1.9 Reflection

Overall, creating the Cyber Security Awareness program is exciting and valuable for Azzi's personal development as an IT student. This is because Azzi uses the knowledge that he learned in school to apply in the industry and is independent to research for suitable content to create the presentation deck. The Cyber Security Awareness program has also increased and developed Azzi's confidence in presenting as it is one of the required skills and needed in most of the industry. Apart from presenting, he has also learned how to communicate well with every employee to ensure that there is no misunderstanding or miscommunication; this is to ensure that the project/assignment proceeds and ends smoothly.

4.2 Assignment 2 (Office 365 & Windows 10 Upgrade)

4.2.1 Description of Assignment

This assignment requires Azzi to upgrade the PC version, workstation, and desktops of employees who still use outdated Microsoft Office 2016, 2019, and Windows 7.

4.2.2 Purpose or Objective of the Assignment

The purpose of this assignment is to keep the whole factory in compliance. **From 14 January 2020**, Microsoft will no longer provide support and security updates for computers running Windows 7 (Microsoft, n.d.) This will affect computers running Windows 7 to become vulnerable to security risks. By upgrading them to Windows 10, computers will continue to receive updates and security patches from Microsoft.

4.2.3 Tasks carried out (include specification of own role & responsibilities in relation to the team you are working with) in assignment

For this assignment, Azzi has to work with Adi by getting the list of computers to be upgraded to Office 365 or Windows 10. After he retrieved the list of computers, he had to go to each computer/laptop and upgrade it. For Office 365 upgrade, it will take 20-30 minutes depending on the computer/ laptop, and the windows 10 upgrade will take around 3-4 hours. This had become a daily thing for Azzi as there were many computers and laptops required to be upgraded. Azzi has to update the excel sheet on which computers were done and informed Adi of the progress.

Department	Display name	Licenses	Office	User principal name	Current Office vers	Windows Vers	Remarks
BPR		Office 365 E3+Azure Active Directory Premium P1	BPR		O365	WIN 10	Updated to Office 365
BPR		Office 365 E3+Azure Active Directory Premium P1	BPR		O365	WIN 10	Already Office 365
BPR		Office 365 E3+Azure Active Directory Premium P1	BPR		O365	WIN 10	Updated to Office 365
BPR		Office 365 E3+Azure Active Directory Premium P1	BPR		O365	WIN 7	Updated to Office 365
BPR		Office 365 E3+Azure Active Directory Premium P1	BPR		O365	WIN 10	Already Office 365
BPR		Office 365 E3+Azure Active Directory Premium P1	BPR		O365	WIN 10	Updated to Office 365
BPR		Office 365 E3+Azure Active Directory Premium P1	BPR		O365	WIN 10	Already Office 365
BPR		Office 365 E3+Azure Active Directory Premium P1	BPR		O365	WIN 10	Updated to Office 365
BPR		Office 365 E3+Azure Active Directory Premium P1	BPR		O365	WIN 10	Updated to Office 365
BPR		Office 365 E3+Azure Active Directory Premium P1	BPR		O365	WIN 10	Already Office 365
BPR		Office 365 E3+Azure Active Directory Premium P1	BPR		O365	WIN 10	Already Office 365
DE		Office 365 E3+Azure Active Directory Premium P1	DE		OFFICE 2016	WIN 7	Updated to Office 365
DE		Office 365 E3+Azure Active Directory Premium P1	DE		OFFICE 2016	WIN 10	Updated to Office 365
DE		Office 365 E3+Azure Active Directory Premium P1	DE		O365	WIN 7	Updated to Office 365
DE		Office 365 E3+Azure Active Directory Premium P1	DE		O365	WIN 7	Updated to Office 365
DE		Office 365 E3+Azure Active Directory Premium P1	DE		O365	WIN 10	Updated to Office 365
DT		Office 365 E3+Azure Active Directory Premium P1	DT		O365	WIN 10	Updated to Office 365
DT		Office 365 E3+Azure Active Directory Premium P1	DT		O365	WIN 10	Updated to Office 365
DT		Office 365 E3+Azure Active Directory Premium P1	Interactive center		O365	WIN 10	Updated to Office 365
EE		Office 365 E3+Azure Active Directory Premium P1	EE		O365	WIN 7	Already Office 365
FIN		Office 365 E3+Azure Active Directory Premium P1	FIN		O365	WIN 10	Updated to Office 365
FIN		Office 365 E3+Azure Active Directory Premium P1	FIN		O365	WIN 10	Updated to Office 365
FIN		Office 365 E3+Azure Active Directory Premium P1	FIN		O365	WIN 10	Updated to Office 365
FIN		Office 365 E3+Azure Active Directory Premium P1	FIN		O365	WIN 10	Already Office 365
FIN, COST, PUR		Office 365 E3+Azure Active Directory Premium P1	Admin Office		O365	WIN 10	Updated to Office 365
GA		Office 365 E3+Azure Active Directory Premium P1	GA		O365	WIN 10	Updated to Office 365
HR		Office 365 E3+Azure Active Directory Premium P1	HR		O365	WIN 7	Updated to Office 365
HR, GA		Office 365 E3+Azure Active Directory Premium P1	HR		O365	WIN 10	Updated to Office 365
HT		Office 365 E3+Azure Active Directory Premium P1	HT		O365	WIN 10	Updated to Office 365
HT, MS		Office 365 E3+Azure Active Directory Premium P1	HT		O365	WIN 10	Updated to Office 365
IMS, Compliance		Office 365 E3+Azure Active Directory Premium P1	J-SOX/IMS		O365	WIN 10	Updated to Office 365
IPO		Office 365 E3+Azure Active Directory Premium P1	IPO		OFFICE 2016	WIN 10	Updated to Office 365
IPO		Office 365 E3+Azure Active Directory Premium P1	IPO		O365	WIN 10	Updated to Office 365
IPO		Exchange Online (Plan 1)+Azure Active Directory Premium P1	IPO		O365	WIN 10	Already Office 365
IT		Office 365 E3+Microsoft Power Automate Free+Azure Active Directory Premium P1	Information Technology		O365	WIN 10	Updated to Office 365
M&F		Exchange Online (Plan 1)+Azure Active Directory Premium P1	M&F Office		O365	WIN 10	Updated to Office 365
M&F		Office 365 E3+Azure Active Directory Premium P1	MM		O365	WIN 10	Updated to Office 365
M&F		Office 365 E3+Azure Active Directory Premium P1	MM		OFFICE 2019	WIN 10	Updated to Office 365

Figure 5 list of users

Department	Display name	Licenses	Office	User principal name	Current Office vers	Windows Vers	Remarks
MA		Office 365 E3+Azure Active Directory Premium P1	MA		O365	WIN 10	Updated to Office 365
MA		Office 365 E3+Azure Active Directory Premium P1	MA		O365	WIN 10	Updated to Office 365
MA		Office 365 E3+Azure Active Directory Premium P1	MA		O365	WIN 10	Updated to Office 365
MA		Office 365 E3+Azure Active Directory Premium P1	MA		O365	WIN 10	Updated to Office 365
MA		Office 365 E3+Azure Active Directory Premium P1	MA		O365	WIN 10	Updated to Office 365
MA		Office 365 E3+Azure Active Directory Premium P1	MA		O365	WIN 10	Updated to Office 365
MCS Fishing		Office 365 E3+Azure Active Directory Premium P1	MCS Fishing		OFFICE 2016	WIN 10	Updated to Office 365
MCSB		Exchange Online (Plan 1)+Azure Active Directory Premium P1	MCS Bike		OFFICE 2016	WIN 10	Updated to Office 365
MCSB		Office 365 E3+Azure Active Directory Premium P1	MCS BIKE		O365	WIN 10	Updated to Office 365
MCSB		Office 365 E3+Azure Active Directory Premium P1	MCS Bike		O365	WIN 10	Updated to Office 365
MCSB		Office 365 E3+Azure Active Directory Premium P1	MCS Bike		O365	WIN 10	Already Office 365
MCSB		Office 365 E3+Azure Active Directory Premium P1	MCS Bike		OFFICE 2016	WIN 10	Updated to Office 365
MCSB		Office 365 E3+Azure Active Directory Premium P1	MCS Bike		O365	WIN 10	Already Office 365
MCSB		Office 365 E3+Azure Active Directory Premium P1	MCS Bike		O365	WIN 10	Already Office 365
MCSB		Office 365 E3+Azure Active Directory Premium P1	MCS Bike		O365	WIN 10	Updated to Office 365
MCSB		Office 365 E3+Azure Active Directory Premium P1	MCS Bike		O365	WIN 10	Already Office 365
MCSF		Office 365 E3+Azure Active Directory Premium P1	MCS Fishing		O365	WIN 10	Updated to Office 365
MCSF		Office 365 E3+Azure Active Directory Premium P1	MCS Fishing		O365	WIN 10	Updated to Office 365
MCSF		Office 365 E3+Azure Active Directory Premium P1	MCS Fishing		O365	WIN 10	Updated to Office 365
MCSF		Office 365 E3+Azure Active Directory Premium P1	MCS Fishing		O365	WIN 10	Updated to Office 365
MCSF		Office 365 E3+Azure Active Directory Premium P1	MCS Fishing		O365	WIN 10	Updated to Office 365
MCSF		Office 365 E3+Azure Active Directory Premium P1	MCS Fishing		O365	WIN 10	Updated to Office 365
MCSF		Office 365 E3+Azure Active Directory Premium P1	MCS Fishing		O365	WIN 10	Updated to Office 365
MCSF		Office 365 E3+Azure Active Directory Premium P1	MCS Fishing		O365	WIN 10	Updated to Office 365
MCSF		Office 365 E3+Azure Active Directory Premium P1	MCS Fishing		O365	WIN 10	Updated to Office 365
MCSF		Office 365 E3+Azure Active Directory Premium P1	MCS Fishing		O365	WIN 7	Updated to Office 365
MCSF		Office 365 E3+Azure Active Directory Premium P1	MCS Fishing		O365	WIN 10	Updated to Office 365
MCSF		Office 365 E3+Azure Active Directory Premium P1	MCS Fishing		O365	WIN 10	Updated to Office 365
MCSF		Office 365 E3+Azure Active Directory Premium P1	MCS Fishing		O365	WIN 10	Already Office 365
PDA		Exchange Online (Plan 1)+Azure Active Directory Premium P1	PDA		OFFICE 2016	WIN 10	Updated to Office 365
PDA		Exchange Online (Plan 1)+Azure Active Directory Premium P1	PDA		O365	WIN 10	Updated to Office 365
PDA		Office 365 E3+Azure Active Directory Premium P1	PDA		#N/A	#N/A	Updated to Office 365
PDA		Office 365 E3+Azure Active Directory Premium P1	PDA		OFFICE 2016	WIN 10	Updated to Office 365
PDA		Office 365 E3+Azure Active Directory Premium P1	PDA		O365	WIN 10	Updated to Office 365
PDA		Office 365 E3+Azure Active Directory Premium P1	PDA		O365	WIN 10	Updated to Office 365
PDA		Office 365 E3+Azure Active Directory Premium P1	PDA		O365	WIN 10	Updated to Office 365
PDA		Office 365 E3+Azure Active Directory Premium P1	PDA		O365	WIN 10	Updated to Office 365
PDA		Office 365 E3+Azure Active Directory Premium P1	PDA		O365	WIN 10	Updated to Office 365

Figure 6 list of users (cont.)

Department	Display name	Licenses	Office	User principal name	Current Office vers	Windows Vers	Remarks
PDA		Office 365 E3+Azure Active Directory Premium P1	PDA		O365	WIN 10	Updated to Office 365
PDA		Office 365 E3+Azure Active Directory Premium P1	PDA		O365	WIN 10	Updated to Office 365
PDA, PD		Office 365 E3+Azure Active Directory Premium P1	PDA		O365	WIN 10	Updated to Office 365
PE		Exchange Online (Plan 1)+Azure Active Directory Premium P1	PE		OFFICE 2016	WIN 10	Updated to Office 365
PE		Exchange Online (Plan 1)+Azure Active Directory Premium P1	PE		O365	WIN 10	Updated to Office 365
PE		Office 365 E3+Azure Active Directory Premium P1	PE		O365	WIN 10	Updated to Office 365
PE		Office 365 E3+Azure Active Directory Premium P1	PE		O365	WIN 10	Updated to Office 365
PE		Office 365 E3+Azure Active Directory Premium P1	PE		O365	WIN 10	Updated to Office 365
PE		Office 365 E3+Azure Active Directory Premium P1	PE		O365	WIN 10	Updated to Office 365
PE		Office 365 E3+Azure Active Directory Premium P1	PE		OFFICE 2016	WIN 10	Updated to Office 365
PE		Office 365 E3+Azure Active Directory Premium P1	PE		O365	WIN 10	Updated to Office 365
PE		Office 365 E3+Azure Active Directory Premium P1	PE		O365	WIN 10	Updated to Office 365
PP		Office 365 E3+Azure Active Directory Premium P1	PP		O365	WIN 10	Updated to Office 365
QA		Office 365 E3+Azure Active Directory Premium P1	PQA		O365	WIN 10	Updated to Office 365
QE		Office 365 E3+Azure Active Directory Premium P1	QE		O365	WIN 10	Updated to Office 365
R&D-Bike		Office 365 E3+Azure Active Directory Premium P1	R&D-Bike		O365	WIN 10	Updated to Office 365
R&D-Bike		Office 365 E3+Azure Active Directory Premium P1	R&D-Bike		O365	WIN 10	Updated to Office 365
R&D-Bike		Office 365 E3+Azure Active Directory Premium P1	R&D		O365	WIN 10	Updated to Office 365
R&D-Bike		Office 365 E3+Azure Active Directory Premium P1	R&D		OFFICE 2016	WIN 10	Updated to Office 365
R&D-Bike		Office 365 E3+Azure Active Directory Premium P1	R&D		O365	WIN 10	Updated to Office 365
R&D-Bike		Office 365 E3+Azure Active Directory Premium P1	R&D-bike		O365	WIN 10	Updated to Office 365
R&D-Bike		Office 365 E3+Azure Active Directory Premium P1	R&D-Bike		OFFICE 2016	WIN 10	Updated to Office 365
R&D-Bike		Office 365 E3+Azure Active Directory Premium P1	R&D-bike		O365	WIN 10	Updated to Office 365
R&D-Bike		Office 365 E3+Azure Active Directory Premium P1	R&D-Bike		O365	WIN 10	Updated to Office 365
R&D-Bike		Office 365 E3+Azure Active Directory Premium P1	R&D-Bike		O365	WIN 10	Updated to Office 365
R&D-Bike		Office 365 E3+Azure Active Directory Premium P1	R&D-Bike		O365	WIN 10	Updated to Office 365
R&D-Bike		Office 365 E3+Azure Active Directory Premium P1	R&D-Bike		O365	WIN 10	Updated to Office 365
R&D-Bike, SCM Bike Design		Office 365 E3+Azure Active Directory Premium P1	RND		O365	WIN 10	Updated to Office 365
SHIPPING, W&D & PP		Office 365 E3+Azure Active Directory Premium P1	Shipping		O365	WIN 10	Updated to Office 365
STP		Exchange Online (Plan 1)+Azure Active Directory Premium P1	CF		O365	WIN 10	Already Office 365
TC		Office 365 E3+Azure Active Directory Premium P1	SCM		O365	WIN 10	Updated to Office 365
TC		Office 365 E3+Azure Active Directory Premium P1	Tooling Center		O365	WIN 7	Updated to Office 365
TC		Office 365 E3+Azure Active Directory Premium P1	Tooling Center		O365	WIN 7	Updated to Office 365
TC		Office 365 E3+Azure Active Directory Premium P1	Tooling Center		O365	WIN 7	Updated to Office 365
W&D		Office 365 E3+Azure Active Directory Premium P1	FGWH		O365	WIN 10	Updated to Office 365
W&D		Office 365 E3+Azure Active Directory Premium P1	WIP-Out		O365	WIN 7	Updated to Office 365

Figure 7 list of users (cont.)

4.2.4 Changes required or encountered (if any, during the course of the assignment) and their impact (if any, on the work process) and reasons for the change (include any legal or professional issues encountered and their impact)

Some of the changes that Azzi encountered were upon reaching the desktop/laptop. The user decided to reschedule the upgrade, which would push forward the completion date and required him to travel from one department to another to finish and complete the only desktop left. The issue had been reported to Azzi and Adi's supervisor, Mr. Ron, and would send an email to the remaining users who were hard to contact and constantly rescheduling when required to upgrade their computers. Overall the delay of each upgrade will push further the completion date and make Shimano not complying with the standard, as were upgrading to Windows 10 / Office 365 is essential to prevent any security threats.

4.2.5 Knowledge and Skills required for and learnt during the assignment.

Upgrading to Windows 10 and office 365 requires no sophisticated skill, Azzi have to remember the steps between Windows 10 and Office 365 as both of them have different requirement to complete before installing. For Office 365, he has to uninstall the previous version of Microsoft office and prompt the user to log into office.com so that he will be able to download the office 365 installer; once installed, the user can use the application as per usual. This process will usually take 20-30 minutes to complete. As for the Windows 10 upgrade, he will have to uninstall McAfee antivirus, and this is because the antivirus does not support windows 10; the uninstalling process will take 10-15 minutes, soon after uninstalling. He will run the Windows 10 upgrade through a thumb drive created using Rufus; the upgrade process will take Azzi around 3-4 hours, depending on the device. After the upgrade is done, He will run the windows update to check for driver updates and security patches. Some of the skills that he has learned are communication skills, which he learned on how to talk to different people and communicate with them. Azzi has also known about some of the job scopes that other departments do and what they do in their job daily; this has made Azzi willing

to communicate to others and have self-confidence in keeping the conversion ongoing.

4.2.6 Tool(s) used for assignment (eg. tools used for analysis, design, coding, testing, report generation, etc.)

The tools that were used for the assignment are

Microsoft Excel - to see the list of desktops which need to be upgraded, the filter function is useful in helping Azzi update the list.

Microsoft Teams - is used to update the list of desktops and communicate with Adi by updating the list concurrently without any disruption while Adi will be able to see the progress live.

Rufus - to create bootable Windows 10 with selected version as Microsoft does not allow users to pick which version of Windows 10 to install. The reason why Shimano is using the old version is because some of the desktop/laptop does not support the new version and does not have any driver support for them to work.

4.2.7 Task(s) completed and Assignment Outcome (is impact on the context or business domain as expected)

Azzi have upgraded almost 80 percent of computers and laptops to windows 10 and office 365. The numbers of the computers are confidential. Now Shimano is more compliant and is supported with future security updates and patches.

4.2.8 Problems encountered and recommendation(s) for Improvement

Some of the problems encountered by Azzi were upon going and arriving at the department. Some of the users were missing and not at the desk. Even after booking the timing and scheduling a time slot for the upgrade, users gave excuses and kept on rescheduling to prevent the update from being done. Some of the

recommendations for improvement are for him to communicate with Adi and to send an reminder email on the day of the upgrade to prevent any miscommunication, this would allow the upgrade process to keep on track and enable him to complete the upgrade for the rest of the user with ease.

4.2.9 Reflection

This Assignment has made Azzi realise that communication is essential as it can prevent unnecessary problems like rescheduling and postponing other user upgrade slots. Good communication can promote better performance and an overall increase in Azzi productivity. The Cyber Security project has made him confident in sharing with others, such as preparing what to say, as he has planned out what to say even before meeting the user. This is to ensure that the communication is more effective. he gets the message passed to others clearly before the upgrading process he has learned that he must arrange a meeting to proceed with the upgrade as setting a session is one of the best ways to communicate effectively with others. It is to signal that the other party are essential and their time is very precious.

4.3 Assignment 3 (Daily IT operations)

4.3.1 Description of Assignment (include context or business domain)

Daily IT operations aim to assist users in troubleshooting the problems they faced with their laptop hardware or even software issues. Other than user support, Azzi has also helped in configuring new hardware ranging from tablets to workstations by installing software applications to upgrade the laptops and workstations.

4.3.2 Purpose or Objective of the Assignment (include expected impact on context or business domain)

The purpose of this assignment is to support users' problems to improve factory efficiency. By getting low downtime of desktops or workstations, it can help a lot. Another reason is that Shimano will be moving to the new factory in November 2021. This will prepare the IT department to move into the new factory with ease as all equipment and computers are checked and ensure that it is working. Furthermore, it allows Azzi to understand how the moving process works and get experience troubleshooting different devices.

4.3.3 Tasks carried out (include specification of own role & responsibilities in relation to the team you are working with) in assignment

Azzi has contributed to bringing back workstations from other departments, reformatting the workstation, cleaning the computer, and upgrading the PC before giving the department back the workstation. he has also configured newly arrived PC, workstations and tablets that are ready to be deployed and used in the new factory in November. Some of the major problems users faced were slow workstations or computers due to not restarting or letting the device rest. Software installation request that requires admin rights to install software Setting up desktop or laptops for the new hire, also known as deployment.

4.3.4 Changes required or encountered (if any, during the course of the assignment) and their impact (if any, on the work process) and reasons for the change (include any legal or professional issues encountered and their impact).

Some of the changes encountered during the course assignment were some of the devices giving problems or error codes, which delays the configuration process. For example, reinstalling windows 10 on a device that does not support the latest version will lead to the driver not compatible and unable to work. These delayed the returning of machine and impacting the production side; however, the device works after restoring to the older version. The IT department could then return the device to the production side. Another change was required upon receiving the new five tablets for configuring. The charging connector does not support the Singapore Pin Plug, which affects configuring as the Azzi was unable to charge the tablets. This issue had been brought to his supervisor, which would request the vendors for the three-pin plug. This process has delayed the configuration. The problem was solved as soon as the three-pin plug arrived, and Azzi could then configure the tablets and handed them over to the PID department for them to use.

4.3.5 Knowledge and Skills required for and learnt during the assignment.

Knowledge and Skills required for the assignment are basic computer configurations such as installing drivers, software updates, and Windows 10. Communication skills are also necessary to ensure that there is no misunderstanding and ensure that the delivered message is accurate enough and understandable. This is to increase the workflow and efficiency and also to prevent any fights raised. Azzi has applied some of the skills he learned from OSNF, CSF, and networking infrastructure to help him do his part easily as he has the prior knowledge, which is a massive advantage for him.

Some of the skills learnt are improvement in communication skills, which allows him to communicate to users and explain thoroughly what is happening to the device and explain the steps he will do, for example, how the reinstall process works and what adding ram does to the PC. This assignment has also improved

his skills as some devices such as a workstation, tablet, and desktop are very different in industries. Therefore, it has helped to understand that specific processes such as reinstallation of windows are not the same as a standard installation where certain admin rights and permission sets are required to reinstall and configure the device. This will also include getting the MAC to address for the new pc, laptop or any new device which allows the device to access the WiFi.

4.3.6 Tool(s) used for assignment (eg. tools used for analysis, design, coding, testing, report generation, etc.)

Rufus - to create bootable Windows 10 with selected version as Microsoft does not allow users to pick which version of Windows 10 to install. The reason why Shimano is using the old version is because some of the desktop/laptop does not support the new version and does not have any driver support for them to work.

CloneZilla - This tool allows copying of the entire operating system and files that are currently on a device to create an image, from there the image will be used to clone to the same new device which will be easier as upon restoring from the image, every application and the operating system will be installed. This will save a lot of time if there are multiple computers and devices that need to be configured.

Other tools such as inbuilt Windows 10 diagnostic applications which assist Azzi in troubleshooting and finding the main source of the problem.

4.3.7 Task(s) completed and Assignment Outcome (is impact on the context or business domain as expected)

Problems that are being troubleshot are mostly fixed. This will lead to a decreased workload, which the IT department and Azzi can focus on something more substantial and require attention, such as understanding what will happen in the new factory upon moving in November 2021. The IT department and him can also focus on other users who reported facing some problems. With problems fixed and troubleshooting, there will be more service requests from users with different types

of errors and problems which require time to research and attempt to fix the problems.

4.3.8 Problems encountered and recommendation(s) for Improvement.

Some of the problems that Azzi encountered are specific problems that require research and time to find the solution or fix, and some of the issues have no fix. Which requires the full-timer to take over and write a report on what has happened; an example would be one user reported that the laptop is slow. Upon troubleshooting changing the ram and m.2 SSD, he found out that the problem is the computer's motherboard and has to contact the vendor for replacement.

Some of the recommendations for improvement is that users with fundamental problems or errors such as WiFi unable to connect, software installation help should go directly to the IT department, as it can be fixed within 30 minutes. Those with complicated problems such as inability to shut down, the device is lagging or slow; data transfer should request a service ticket. This allows the IT department to be prepared and ready for the problem and not delaying another new service/help request from other users.

4.3.9 Reflection

This assignment has taught Azzi many things on what daily IT operations has to offer, from troubleshooting devices with problems. Configuring a new laptop, desktop and workstation with software essential to the factory workers for use, routing and cable management make everything look clean and tidy. Lastly, manage and operate the devices in the whole factory. This gave him the idea that IT operations are just not configuring the desktop and supporting users with problems; it is much more than the job scope itself. Anything that belongs to the IT department will have them involved in the process, which is essential as the IT department is also in charge of the factory's infrastructure, from handling the server rooms that are scattered in the factory to managing cabling that provides the

connection. This experience has made him understand how the working industry works as he will be joining the workforce upon graduating.

4.4 Assignment 4 (Microsoft Teams Training)

4.4.1 Description of Assignment (include context or business domain)

Allows users in the Shimano factory to stay organized and have conversations with each other using the inbuilt chat system instead of using email to communicate as it is less efficient. Using Microsoft Teams can boost productivity no matter where the users are in the factory; this is one way to increase workload due to the current pandemic.

4.4.2 Purpose or Objective of the Assignment (include expected impact on context or business domain)

Guide users on how to conduct meetings with each other on Microsoft Teams and outlook application, guide them on how conversations within channels and teamwork, and collaborate and edit files on the team. Lastly, recommend online video calling, and they can change the background and share their screen to present.

4.4.3 Tasks carried out (include specification of own role & responsibilities in relation to the team you are working with) in assignment

Azzi has created the training guide presentation deck with the topics from:

- Introduction to Microsoft Teams - introduce what Microsoft Teams can do.

- Sign in and get started - guide users on how to sign in and which email should they use in order for them to collaborate .

- Home page - what will the user see upon login into Microsoft Teams.

- Activity tab - a tab where users can see everything from calls,chat and meeting information.

- Chat and Chat using outlook - guide users on how chat in Microsoft Teams works and how to chat using Microsoft Outlook.

- Teams - tell information regarding which teams they belong to and which channel users can access.

- Calendar - guide users on how they can check when the meeting is and schedule for the day.

- Files - tell users that the files are stored in Microsoft OneDrive and guide them on how to edit files and collaborate with others.

- Create meetings using Microsoft Teams and meetings using Outlook - guide on how to create meetings, from scheduling a meeting to schedule assistants on both Microsoft Teams and Microsoft Outlook.

- Join meetings and change background - guide on how to join a meeting and what to do after joining the meeting such as changing background.

- Screen sharing - upon joining the meeting, guide users on how to share screens.

4.4.4 Changes required or encountered (if any, during the course of the assignment) and their impact (if any, on the work process) and reasons for the change (include any legal or professional issues encountered and their impact).

As this is a short project, some of the changes that Azzi encountered were the order of the presentation slides. That did not make any sense at first; upon having a meeting with Mr Ron, the slides order was then made sense as Azzi had organized them by categories. After receiving endorsement from Mr Ron , the

presentation slides were ready to be sent to the high management for approval and to then distributed to factory workers who were unsure of how to use Microsoft Teams.

4.4.5 Knowledge and Skills required for and learnt during the assignment.

Azzi has self-taught himself how to use Microsoft Teams at the start of the Covid-19 Pandemic, where his lectures and tutorial have moved from physical class to online class using Microsoft Teams. This allows him to create the PowerPoint slide with ease as he understands the process and will explain how to use Microsoft Teams Easily.

One of the skills that he learnt is time management, as this assignment involve him in doing daily IT operations while also doing the project at the same time. This has let him know how much time is spent on a specific task, which results in the assignment completed quickly, and more time can be spent on particular tasks after the project is completed.

4.4.6 Tool(s) used for assignment (eg. tools used for analysis, design, coding, testing, report generation, etc.)

Microsoft Teams - used to test the features of Microsoft Teams and also screenshots to be in PowerPoint for the training guide.

PowerPoint - creation of the training guide that will be given to most of the employees of Shimano who are using Microsoft Teams.

4.4.7 Task(s) completed and Assignment Outcome (is impact on the context or business domain as expected)

Azzi has completed the training guide, which will be distributed to the employees of Shimano who are using Microsoft Teams for their work and increasing productivity as Microsoft Teams is getting used more due to the current pandemic. Doing this

guide can help those using Microsoft Teams for the first time and understand how each specific feature works. Doing this can enhance the factory productivity as right now, during the pandemic, online meetings are much preferred.

4.4.8 Problems encountered and recommendation(s) for Improvement.

The only problem that he faced was that Microsoft Teams have many features that are not available for industry use, such as the new feature of hosting a webinar or using whiteboard during the presentation. This had led to him testing every component and essential part to ensure that the basic elements are working before creating the training guide on Microsoft PowerPoint.

Some of the recommendations include proper planning and discussion before executing the project, as he feels that it is unexpected and rushing to produce the training guide in less than three days.

4.4.9 Reflection

This assignment has made Azzi feel satisfied as he uses his knowledge to create a training guide for others who are first-timers, contributing to helping the factory workers in achieving high productivity and allowing Shimano's workers to adapt to the latest technology or trend. As technology advances, people tend to be left out and unknowingly unaware of using or operating. An example would be Microsoft Teams mentioned above; most of the users in Shimano are not using Microsoft Teams or not heard of Microsoft Teams as the generation gap is enormous. Typically, users in the factory age range from 50 - 60 years old. Creating this training allows workers and users to use Microsoft Teams. It will enable them to boost their productivity and participate in the current technology used amid the Covid-19 Pandemic.

5. Evaluation of Internship

5.1 What has changed since the project charter was written

Since Azzi wrote the project charter, he has been assigned two new assignments/projects: Office 365 & Windows 10 Upgrade (4.2 Assignment 2), where he went around the factory and updated every outdated pc using Office 2016 and Windows 7. Next will be Microsoft Teams Training (4.4 Assignment 4), a one-week project where he created a training guide on using Microsoft Teams. Assignment 3 is one of his side work that involves him in daily IT operations such as troubleshooting, fixing and changing computer rams and helping users who needed help.

5.2 Summary of Achievements of Assignment Objectives (include tasks outstanding)

Assignment 1 (Cyber Security Awareness), Aaron and Azzi presented to 588 employees of Shimano, including local and overseas employees. Among the 588 employees, the average is 17.66 out of 20, 18 out of 20 for the median, which means that almost all of them have passed the quiz on the first attempt. After the training session completed, Azzi created a presentation deck for new hires and presenting to new hires on their first day talking about Cyber Security. Unfortunately, due to the current pandemic Covid-19 phase 2 heightened alert, the orientation on Cybersecurity had been cancelled, which then required Azzi to convert the presentation deck to PDF and send it to users for them to self-learn. Unfortunately, due to the departure of Aaron, the phishing simulation could not be completed; instead, Mr. Ron is planning initiate something upon moving to the new factory. As almost all of the workers in Shimano understand and have some basics on Cyber Security.

Assignment 2 (Office 365 & Windows 10 Upgrade), for this assignment, all of the outdated computers, laptops and workstations have been updated. The total

number of updates cannot be disclosed due to confidential information; some of the outstanding tasks are machines that cannot be corrected. They are required to run for 24 hours a day which left some of the appliances outdated and not compliant with the standards.

Assignment 3 (Daily IT Operations) involves Azzi in daily IT operations such as troubleshooting, assembling new parts and configuring them. The only objective of this assignment is to solve everyday IT problems that are reported to the IT department. Some of the issues include the inability to access email, hard disk unable to read data and laptop battery replacement. There are no outstanding tasks as currently, every problem that is reported are being solved instantly.

Assignment 4 (Microsoft Teams Training), a one-week project, consists of Azzi creating a PowerPoint guide on using Microsoft Teams and the implemented features. The PowerPoint guide is submitted to the higher management to learn how to use Microsoft Teams and those who are using Microsoft Teams for the first time. There are no outstanding tasks for this project as he is only required to create the PowerPoint Guide and submit it to Mr Ron for approval.

5.3 Evaluation of Cyber Security Awareness Program Project Planning and Control of Assignments.

5.3.1 Evaluation of Cyber Security Awareness Program

The technical strength of the Cyber Security Awareness Program is to allow trainees to understand the concept of Cyber Security and make sure that they know the latest trends and methods that Cyber Criminals officially use via the technique of explaining each and one of the methods individually. This way, trainees are not confused and will understand better as each method is presented in detail.

Longer durations of the training can be its weaknesses as the training for Cyber Security Awareness can be around two to three hours, and trainees will be drained out. One of the feedbacks for the training is that it is boring as trainees are required only to be seated down and listen.

The feedback for the training is relatively good as the trainees say that the training is relevant and valuable for them, as the training booklet can guide them in the future if they were to face the same attack methods that were being taught in training.

The Cyber Security Awareness Program has impacted the organization, such as new hires will be introduced to the training, and there will be random tests implemented once the completion of the new factory is done to keep the factory up to date with Cyber trends related to security.

5.3.2 Evaluation of Cyber Security Approach

The training methods and approaches are suitable for Shimano trainees as most of the trainees are 50 - 60 years old. This is because Azzi has realised that it is not just sharing sessions on Cyber Security. Instead, he has to share the knowledge that he gained in School and explains each of the issues in detail and layman

terms, as the trainees would not understand what Azzi is explaining if he were to dive into explaining the topics straight. If he were to do the assignment again, He would have used the same approach. However, he would try to reduce the size of the group, and the timing of the presentation/training session to be shorter as to maximize the questions and answers session, as this part of the training seems to be very rushed.

5.3.3 Review of project/work planning and control

The Cyber Security Awareness Program was co-developed by Aaron and Azzi and is in-charged by Mr Ron to decrease the risk of getting attacked and keeping everyone up to date with knowledge regarding Cyber Security. The project was initially planned by Mr Ron before Aaron and Azzi came into the factory; the purpose of Aaron and Azzi is to prepare the topics and present them to the employees of Shimano. They both had already understood the concept and were using their knowledge to share with others with lower English literacy levels. This way, there will be a connection between the presenter and the trainee. Instead of hiring an outsourced company with high level of English literacy levels and present to the trainees and goes off after the presentation, this would have no connection between the presenter and trainee, overall trainees who are slow learner may be confuse.

5.3.4 Evaluation of achievement of objectives

The training ended up with 588 trainees attending the presentation and training session, and the average is 17.66 scored out of 20 points, 18 scored out of 20 points, and the range is from 2 to 20 points.

Average	Median	Range
17.66 / 20 points	18 / 20 points	2 - 20 points

Total points distribution
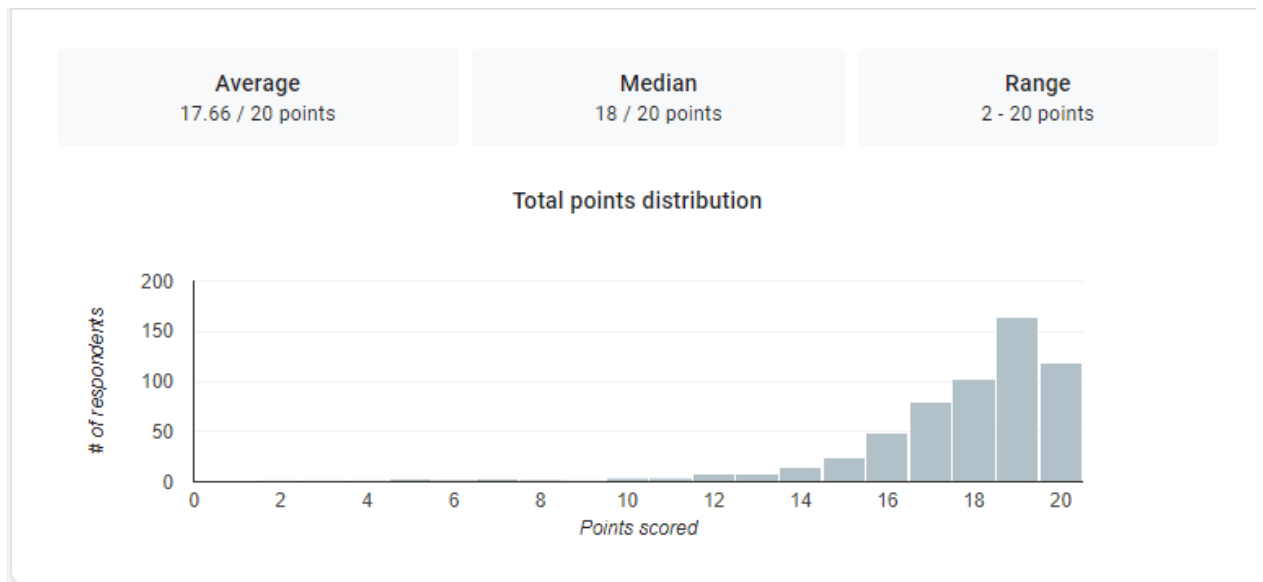
Figure 8 google form quiz result

The image above shows that Azzi and Aaron's training approach is efficient as they explained every topic in detail with layman terms to prevent the trainees from having any confusion; all the hard work for a month has paid off shown promising results. Weekly meetings with Mr Ron to check on the progress and feedback on the training slides to further improve the slides have contributed to the results.

5.4 Evaluation of Office 365 and Windows 10 Upgrade Project Planning and Control of Assignments.

5.4.1 Evaluation of Office 365 and Windows 10 Upgrade.

The implementation of upgrading to Windows 10 ensures that Shimano is up-to-date and compliant as Windows 7 is not supported now; Shimano would again benefit from updating to Windows 10 for improved security in its IT operations. However, mandatory updates that are required for upgrading, such as security patches, are the downside that requires the IT department for maintenance and time. Implementing the Office 365 upgrade improves productivity as users can access files anywhere, which will allow centralized contribution from anywhere in the factory, and different departments can contribute and work on a project from their desks. Like the Window 10 upgrade, Office 365 has improved its security and reduced any security risks.

After the upgrade of Office 365 and Windows 10, there were problems such as users are unable to launch Google Chrome or open Outlook application; after further troubleshooting, it seems that after installing windows 10 and office 365, the process that is running on task manager needed to be stopped for the applications to be working again.

The Office 365 and Windows 10 upgrade has made Shimano more compliant. Almost all of the workstations and desktops will be running on Windows 10; after licensing, more users will get Office 365 and enjoy the benefits. As for the mandatory updates, users can practice updating their desktop or workstation so they will be up-to-date on the latest security patches.

5.4.2 Evaluation of Office 365 and Windows 10 upgrade approach

The approach of upgrading the user's desktop is suitable. First, the IT department will inform the user using email. Users will then schedule a date for an upgrade;

after the schedule was set, Azzi will then perform the upgrade on the scheduled date. This approach is efficient as most users are busy, making this approach allow users to plan and prevent any miscommunication. If he were given a chance to perform the upgrades again, he would prepare the updates according to departments instead of doing the updates individually across departments, and an example would be, asking users of the department to check out the version of Office and Windows that is currently running on their system. After knowing the versions, he can plan out which computer must be upgraded first, and the whole department will be up to date.

5.4.3 Review of project/work planning and control

The Office 365 and Windows 10 upgrade plan was initiated by Mr Ron and Adi for interns attached to the IT department. The purpose is to keep Shimano up-to-date and compliant with the latest security patches and updates. As there is room for manpower, Azzi did the upgrades. Azzi would report to Adi how many desktops and workstations were done.

5.4.4 Evaluation of achievement of objectives.

Azzi will not disclose the total number of the Desktops and Workstation as it is confidential information. Overall, he has upgraded most of the desktops and workstations via scheduling and communicating with users from other departments. This involved him contacting the users via email and performing the upgrade on the scheduled date. he has also learned soft skills such as email writing and also improved in communicating with others.

5.5 Evaluation of Daily IT operations Planning and Control of Assignments.

5.5.1 Evaluation of Daily IT operations

The knowledge and skills that Azzi attained during his course of study in ITE have helped him during his internship in Shimano, such as replacing laptop batteries, m. two SSD, configuring desktops, laptops and workstations to suit the needs of the user. However, some of the downsides that he faced are being unable to communicate with certain users as there are language barriers where he finds it hard to solve the user's problem as he is unable to understand what the user needs.

Almost all of the problems that users had were fixed by Azzi and was appreciated as he put his time and effort into making things right; users from various departments were communicating with him and, in fact, recognized him if they were to see him around the factory.

As every problem that users have faced is usually solved instantly, the expectation of Azzi resolving every problem and issue is achieved; therefore, Azzi should continue the same method or way for Daily IT operations.

5.5.2 Evaluation of Daily IT operations Approach

Every problem reported, such as battery change, laptop faulty, users will make their way to the IT department, and from there, Azzi will troubleshoot to see if the device is having problems or issues. There are no changes to what he can do differently as most users with PC or Laptop issues will make their way to the IT department or Email, and from there, the IT department will follow up.

5.5.3 Review of project/work planning and control

Daily IT operations consist of users going to the IT department and asking anyone in the department for help. Almost all of the issues and problems will be directed to Azzi as he is always available in the department. If there is something that he is unable to solve, he will lead the problem to his supervisor, Mr Ron or his work colleague, Hong Wee, Adi or Jhun.

5.5.4 Evaluation of achievement of objectives

As mentioned earlier, Azzi managed to solve most of the problems complained about or brought by users to the IT department; this was achieved by communicating with users and asking what the problem is and asking relevant questions such as what the user is doing before the problem occur. This will help Azzi find the solution that he needed and will be able to solve the problem.

5.6 Evaluation of Microsoft Teams Training Planning and Control of Assignments.

5.6.1 Evaluation of Microsoft Teams Training

The Microsoft Teams training is a short project duration which consists of 1 week of Azzi developing and submitting to Mr Ron, Azzi's supervisor. The guide consists of a straightforward introduction to Microsoft Teams and videos on features in Microsoft Teams, and an utterly user-friendly guide where users of Shimano can follow along. Improvements that can be done for this assignment are sending the guide to users if they request the installation of Microsoft Teams or Users who are using Teams for the first time. As this assignment is not fully launched, the outcome is still unknown as currently, Shimano is planning to move to the new factory soon by the end of the year.

5.6.2 Evaluation of Microsoft Teams Training Approach

The approach of this assignment by creating a guide in PowerPoint is suitable; however, if Azzi were given a chance to do it again differently, he would make a video guide with subtitles and a voice-over. This way, users can understand easier and better interactions and demos on each feature. However, due to time constraints, the method is not executed.

5.6.3 Review of Microsoft Teams Training project/work planning and control

This Assignment was initiated by Mr Ron, and was developed by Azzi within one week, and consisted of two meetings. During the meeting, Mr Ron and Azzi together test out the features included in the guide. The planning was relatively simple, casual as Mr Ron and Azzi both understand how Microsoft Teams works.

5.6.4 Evaluation of achievement of objectives

As the project is in progress\not fully launched, Shimano is focusing on moving to the new factory where the IT department is in-charge of the infrastructure of the new building. This will require a lot of work and time, which will lead to this assignment being pushed back or until Shimano has moved to the new factory, with users getting new laptops and devices and learning how to use Microsoft Teams. As of now, there are not a lot of users in Shimano who are using Microsoft Teams.

6 Discussion of Learning Experience

6.1 Scope of work and your own contribution to the project (applicable only to group project or working with others)

Azzi has co-developed Cyber Security from scratch, where he and Aaron continuously developed the presentation deck for a month. Some of the topics done by Azzi are Smishing, Vishing, Clone Websites, Pop-ups, and an extensive topic Baiting, also known as USB baiting and Social Media. Azzi created the topics as he has more knowledge to add to the presentation slides. By doing this way, Aaron can use his understanding of different topics, which also benefits both of them. By working together and using the strength of each other, they manage to complete the project together and attained good results.

The rest of the project is solely done by Azzi due to the departure of Aaron from the internship

6.2 Discuss the importance of social interaction and communication skills in the working environment and what you have learned in this respect

Azzi has learned that people tend to focus on what they want to say rather than listening to what the other party or person is saying. He believes that communication and social interaction are essential business skills that employers will seek. This is because communication is the first soft skill that is in demand. Employers would want their staff to deliver messages and information clearly and understand by others, benefiting the company and productivity. The Cyber Security Awareness program has trained Azzi for communicating with others and making sure that the message is clear and understandable. After Azzi completed the Cybersecurity Awareness Program, Azzi used the soft skills to improve in other projects such as Daily IT operations and Office 365 and Windows 10 Upgrade. Communicating has been a daily thing for Azzi as his job scope includes communicating with others and solving problems by listening to others. Azzi

believe that communicating well is valued in Shimano and would help him in his career progression.

6.3 Discuss any professional issues arising and their significance to the project work

Some of the issues encountered by Azzi are planning process of each project can be very time constraining as he is assigned to multitask. This results in Azzi splitting and managing his time on individual projects to improve his productivity. An example would on certain days, and He will be solely focused on one project or task and another task for another day. Another issue that due to the miscommunication, Aaron and Azzi's productivity is lowered due to readjusting and deleting content without each other confirmation. This leads to being lectured by Mr Ron that teamwork is essential as working together can generate an outcome that a single person cannot achieve. Overall the issues have to make Azzi learn and reflect, which he may recall during his career progression.

6.4 Reflect on your learning experience (that which is not covered above) and discuss how useful this experience will be for your future career

This is the first time that Azzi has gone for an internship, and the learning experience that he gained is also a one-time experience that he managed to gain, such as experiencing how IT operations are achieved in the industry ranging from a different company as every company will be the same when it comes to the IT industry. One of the learning experiences is that Azzi can configure different types of devices that can be used for his future career.

Upon getting an unfamiliar device, Azzi will research online and create a document on troubleshooting or training guide. Azzi has also learned time management, which can help him manage his time generously for his future career and daily life. This skill can also help him in the next semester as Azzi will cover many projects. Overall getting work experience will allow Azzi to explore his career options further and allow him to be prepared if he were to join the work industry after his

graduation. Work experience will allow Azzi to develop his skills for the path or career that he is interested in such as Cyber Security Analyst or IT desktop engineer.

7. Conclusion

This internship has allowed Azzi to make Shimano's employees more understanding of topics such as Cyber Security, making them know what to expect when encountering a phishing attempt. As mentioned earlier, the passing of the trainees is high, which means that a presentation deck is a suitable approach and excellent. Another achievement that he has achieved is that he manages to upgrade most of the workstations, desktops and laptops to Office 365 and Windows 10, making the whole factory more compliant and ready to move to the new factory by the end of the year. Microsoft Teams training is an in-progress project that he developed. It will be launched at the end of the year when Shimano is moving to the new factory, which includes users of the various department starting to use Microsoft Teams as Shimano will be getting new devices ranging from Laptops, Workstation and desktops for users to use. An improvement for Cyber Security Awareness Program is that the duration of the planning is short, which is only one month which is short and time constraining. An extended duration would be a good improvement as Azzi, and Aaron can plan more and make the presentation deck perfected. Another recommendation is that the trainee participants could be decreased to 20 people instead of 50+ people in one session because trainees cannot ask questions due to time constraints. As for Microsoft Teams training, what he can recommend is to create a video guide with subtitles and voice over as this can help the user better and allow them to understand more on each feature. Office 365 and Windows 10 upgrade would be recommended to do the upgrade remotely. It is fast and efficient, but because some desktops are not connected to the company network, the remote upgrade will not be possible. However, as Shimano moves to the new factory, updates to Windows 11 can be done remotely as most of the systems are new and connected to the network. Overall Azzi have benefited from this internship, improving his communication skills by communicating with other users with Shimano celebrating their 100 years anniversary, he has learned a lot from different people with different job scopes and prospect. As mentioned earlier this internship opportunity has made him ready for work after graduating, most of the experiences and lesson that he has learnt

cannot be gained in school however he will be able to only experience through internship or a full-time job. he believes that the experiences and takeaways from this internship can be used to help his career in the future.

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Appendices