

FAKULTI TEKNOLOGI MAKLUMAT DAN KOMUNIKASI UNIVERSITI TEKNIKAL MALAYSIA MELAKA BITS 3363 – NETWORK SECURITY PROJECT MANAGEMENT

ASSIGNMENT 1

Title: Project Management Context and Process

(Group name - domain area: client name)

example Group XYZ - Logistics Company - DHL / FedEX/Lalamove

Assessment: [Assignment 1] - (5%) - [PO7, P4]

GROUP MEMBERS (MAXIMUM 6 PERSONS IN A GROUP)

- 2. (B032010456)
- 3. (B032110327)
- 4. (B032110394)
- 5. (B032110272)
- 6. (B0xxxxxxxxx)

INSTRUCTIONS

- Maximum 6 students in a team. If you have no team, you are allowed to do the assignment alone.
- The domain area is logistics and the network security service is randomly picked by one of the group member.
- Assignment 1 is part of the Project Report documentation.

ASSIGNMENT QUESTIONS

The purpose of assignment 1 is to design organizational structure and demonstrate the process involved in providing network security services for data security against cyber-attacks and cyber-threats in the networking environment. Assignment 1 consists of three parts that is part A and B.

S

Part A

• Describe your organizational context:

About us

Ask Siber is a company that provides IT consulting services. Our company, which has offices in major cities throughout Malaysia, was founded in 2021 by a team of students from the University Technical Malaysia Melaka.

Purpose

Our mission is to assist organizations of all sizes in protecting their digital worlds by empowering them to embrace the digital world with confidence and providing them with the tools and resources they need to stay safe online.

Services

Ask Siber offers the following cybersecurity services:

- Risk assessments
- Security architecture design
- Security awareness training
- Incident response
- Penetration testing
- Vulnerability assessments
- Managed security services
- Security consulting

SWOT Analysis

strengths

- Experienced and certified security professionals
- Comprehensive range of cybersecurity services
- Global reach
- Strong reputation for customer service

weaknesses

- · Relatively new company
- Smaller than some of its competitors

opportunities

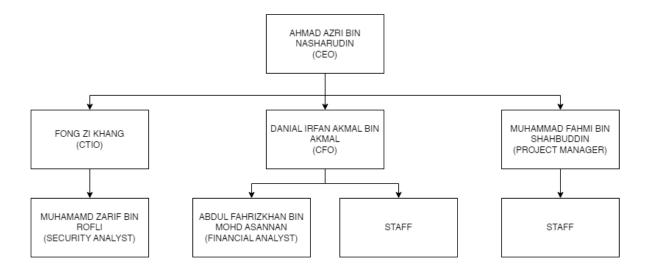
- Growing demand for cybersecurity services
- · Expansion into new markets
- Development of new cybersecurity services

threats

- Evolving cybersecurity threat landscape
- Increasing competition from other cybersecurity companies
- Economic downturn

Our team of experienced and skilled security professionals is committed to providing our clients with the highest quality services possible. We have a proven track record of success, and we are proud to have helped hundreds of organizations protect themselves from cyber-attacks.

Functional Organization Chart



 Explain about the potential entity who may related in the network security project development such as customer, distributor, competitor, supplier and others. - azri.

DHL is our primary customer and key stakeholder for the ftp hosting that we offer. The services included in the ftp hosting such as securing FTP, free SSL certificate, custom domain, client branding, and many more. This will help them to enhance their overall operations. The common operations that will be enhanced by the FTP hosting are shipment tracking, inventory management, and delivery routes optimization. Our distributor, FileZilla, helps us distribute the FTP service to our client. They support the whole operations by providing testing and quality assurance, network security assessment, and support & maintenance. While our company remains in control of FTP hosting, our distributor complements our work by providing expertise in specific areas. Our competitors in the market right now will have a significant impact on our service in various ways, both directly and indirectly. Their potential actions might be benchmarking & learning, exploiting vulnerabilities, corporate espionage and monitoring security practices. Another important entity in our company is our supplier, compared to distributor, our supplier serves a different role in our operation. Our supplier provides both software and hardware components, tools, and technologies necessary for setting up and maintaining our FTP hosting service. They could provide FTP server, security hardware, software and hardware encryption. Our company also collaborate with other entities such as Cybersecurity Malaysia (CSM). We work together to develop security plans that align with their requirements and national cybersecurity guidelines. This plan outlines the protocols, security measures, best practices, etc.

Explain your external context. - FONG

- Competitive landscape:
- o The FTP hosting market is highly competitive, and there are many more well-known, professional, and larger companies than us. Intense competition may also cause the market price of FTP hosting to decline, resulting in a decline in our profits.
- Legal environment:
- o FTP hosting services must comply with all applicable regulations, including those related to data privacy and security. The new PDPA law and the public's increasing emphasis on data privacy require FTP hosting services to become more professional and obtain more third-party certifications, such as ISO
- Technology landscape:
- New technologies require us to spend more personnel costs to train employees, and the cost and time of maintaining long-term FTP systems have also become more expensive.

• Describe your project context:

0	Describe the environment that the project is carried outfor
	example, A new is setting up to overcome the problem of
	in the logistics company, named as As a
	consultant company, called as, we deliver for
	Our consultant company has corporate values of, and
	, which focuses on FONG

DHL is a leading logistics company and needed a secure and reliable file sharing solution, but their existing file sharing system was outdated and insecure and did not meet their needs. To solve this problem, DHL is setting up a new FTP hosting service.

As a consulting company, ASK Siber provides FTP hosting consulting services to DHL. We help DHL plan, design and implement their FTP hosting services. We also provide them with security assessments, training and support services.

ASK Siber's corporate values are professionalism, integrity and innovation. We are committed to providing our customers with high quality and secure FTP hosting solutions.

Describe the factor that influence the project completion, for example, the hardware cost is expensive, due to huge expenditure, planning to purchase lower price hardware is proposed. The brand of hardware has been replaced with for a better cost management.
 fahmi

o Identify your **client's nature of business** such as the product or service that your client provides to its customer. What is your client size of company (enterprise or limited liability or corporations or joint venture)? Pan

DHL is a German multinational logistics company that is part of the Deutsche Post DHL Group. The company is headquartered in Bonn, Germany and operates in over 220 countries worldwide. DHL is one of the world's largest logistics companies, with over 600,000 employees. The company provides a wide range of logistics services, including international express delivery, freight forwarding, supply chain management, and e-commerce logistics solutions.

Next, DHL's international express delivery services are used by businesses and individuals to send packages and documents around the world. The company's freight forwarding services help businesses to move packages by air, sea, or land. DHL's supply chain management services help businesses to optimize their supply chains and reduce costs. DHL's e-commerce logistics solutions help businesses to grow their online sales by providing them with the tools and expertise they need to fulfill orders quickly and efficiently.

- Describe your temporal context: 1
 - Describe the lesson learned, pre-project politics involvement,
 blueprints and government policies that may affect the network
 security project in logistics. FONG

The continued development of AI technology in 2023 may bring many conveniences and improvements or more challenges and difficulties to the project.

Influence within the Company

- Training of new and old employees: New technologies emerge and are updated every year.

 The speed of employees mastering new technologies will affect the progress of the project.
- Employee turnover: Skilled employees may leave, and new employees may be less efficient or skilled than old employees.
- Management changes or disagreements: lack of unified and effective management will inevitably affect project development.

Government Policy

- Sudden public holidays: For example, the Sultan of Johor will declare a holiday due to victory in a football match, etc. Sudden holidays will increase personnel costs and slow down project progress.
- Government policy changes: CSM safety standards may change with the development of new technologies, which will cause project standards to change and make it impossible to proceed.

Customer Requirements

- Unreasonable demands from customers: Customers always want free and better things, and
 convincing customers to comply with the contract terms and negotiation will delay the
 completion of the project.
- Customer Feedback: The more customer dissatisfaction there is, the longer the project will take to complete.

Part B

• List the process group phase as shown in Table 1. Brainstorm each task of each process in providing data security against cyber-attacks or cyber-threats in the networking environment. For every task has its own project charter. Table 2 gives an example of a stakeholder analysis.

Table 1: Process List -

Phase	Process	Tasks		
1	Initiation	- Goals, Missions and Visions settings (Example)		
	Irfan	- Stakeholder Analysis (Table 2) (Example)		
	ZK	- Mapping of Goals and Technical Tasks (Example)		
		- Project Charter (Example)		
		- Kick-off Meetings (Example)		
2	Planning	 Planning objectives and scope 		
	zarif	 Planning of hiring talent 		
		 Planning the setup configurations 		
		 Planning the incident response 		
		 Plan budget and resource allocation 		
3	Executing -	- Server deployment and configuration with security measures.		
	azri	- Create and manage user accounts and permissions for clients		
		and administrators.		
		- Set up monitoring and logging tools to track server		
		performance, security events, and user activities.		
4	Controlling	- Proceed with Security patch management to update that solve		
	– khan	code vulnerability		
	-fahmi	- Immediate incident response		
		- Security monitoring		
		- Compliance audits and reporting		
5	Closing	- Finalize all deliverables and hand them over to the client.		
		- Close out all contracts and agreements		
		- Conduct a project postmortem		

1. INITIATION

a. Missions, Visions and Goals

- i. Mision: To provide our customers with the most comprehensive and effective FTP security solutions.
- ii. Vision: To be the world's leading power of secure and reliable FTP services for the logistic company.

iii. Goals:

- 1. To prevent all data breaches and cyberattacks on DHL's FTP servers and networks.
- 2. To protect DHL's customers' data and privacy.
- 3. To maintain compliance with all applicable cybersecurity regulations.

b. Stakeholder Analysis

Stakeholders	Stakeholder type	Priority & Justifications	Stakeholder needs
Senior Management DHL	Primary High priority. level policies practices to ac sustainability		Improvement in ROI or net profit through sales growth and increase in revenue.
Employee DHL	Primary	High priority. Employees carry out the tasks by following the protocol and policies, thus allowing a company to do business.	Employees require income from the company as well as other benefits, such as health insurance.
Government and Regulator	Secondary	High priority. Regulated matters, participate in policy- making exercises, reporting regulated services performance.	Collecting taxes from companies. Company's contribution to the country's gross domestic product (GDP).
Shareholder and Investor	Primary	High priority. Allows a company to have financial security.	Communicate transformation strategy & progress, financial results, business performance.
Suppliers, Business Partner and Industry	Primary	High priority. Improve diversity and promote responsible sourcing strategies	Engagement and communication plan
Customers	Primary	High priority. A customer's satisfaction with a courier service decides whether they	A customer that uses a courier service expects their parcel to be delivered correctly, in good

	will keep using the	condition, and in a
	service.	timely manner.

c. Mapping of Goals and Technical Task

No.	Goals	Technical Task
1.	Enhance data security and integrity of FTP transfers	 Implement secure FTP protocols Replace traditional FTP with FTPS to encrypt data transfers and protect against eavesdropping and manin-the-middle attacks. Deploy strong encryption algorithms, such as AES-256 or RSA-2048, to safeguard sensitive data during transmission. Utilize digital certificates to authenticate the identity of both the FTP client and server, ensuring secure communication and preventing impersonation attacks. Enforce strict access controls for FTP services Restrict access to FTP servers using firewalls, access control lists (ACLs), or network segmentation to limit access to authorized users and devices. Implement role-based access control (RBAC) to grant users only the minimum level of access necessary to perform their tasks, preventing unauthorized access and data leaks. Utilize strong authentication methods, such as multifactor authentication (MFA), to verify the identity of users and prevent unauthorized access to FTP accounts.
2.	Strengthen network security and monitoring for FTP services	 Deploy intrusion detection and prevention systems (IDS/IPS) Install and configure IDS/IPS systems to monitor network traffic for suspicious activity and potential cyberattacks related to FTP services. Utilize network traffic analysis tools to identify anomalies, patterns, and signatures associated with known FTP-based attacks. Implement real-time alerts and automated responses to block or quarantine suspicious traffic and prevent potential data breaches. Implement network segmentation and demilitarized zone (DMZ) Segment the network to isolate FTP servers from other critical systems, reducing the attack surface and minimizing the potential impact of a compromised FTP server. Establish a DMZ to create a controlled environment for external access to FTP services, enhancing security and preventing unauthorized access to internal networks.

		 Implement strict access controls and monitoring within the network to detect and prevent unauthorized activities and potential attacks.
3.	Enhance employee awareness and training for FTP security	 Provide comprehensive cybersecurity training for employees Educate employees on the importance of data security and the potential risks associated with FTP services. Train employees in proper password management, secure file handling practices, and the recognition of phishing attempts or social engineering tactics. Emphasize the importance of reporting suspicious activity and potential cyberattacks promptly to IT security Implement clear data handling and usage policies. Establish clear guidelines for handling, storing, and transferring sensitive data using FTP services. Define acceptable usage practices for FTP services and prohibit unauthorized access or data sharing. Regularly communicate data security policies and procedures to employees to ensure compliance and adherence to security measures.

Project Charter (Initiation)

Project Title: FTP service

Project Start Date: 1/1/2023 Project Finish Date: 1/2/2023

Budget Information: RM 50 000

Project Manager: Manuel Ugarte

Project Objectives: Mapping of goals and technical task

Success Criteria:

- A mapping of the project goals and technical tasks is created and documented.
- The mapping is shared with the project stakeholders and approved.

Approach:

- The project team will meet to discuss the project goals and technical tasks.
- The team will identify the dependencies between the tasks and create a mapping of the goals and tasks.
- The mapping will be documented and shared with the project stakeholders for approval.

Roles and Responsibilities:

Name and Signature	Role	Position	Contact Information
Manuel Ugarte	 Identify and engage key stakeholders. Develop a communication plan for the project. Facilitate the mapping of goals and technical tasks workshop. 	Project Manager	Manu@gmail.com 011-23234545
Abu	 Creates and updates documentation related to the mapping of project goals and technical tasks. Ensures that the documentation is clear, concise, and easy to understand. Reviews and approves the final documentation. 	Technical Writer	Abuuu@gmail.com 019-76765544
Siti Sarah	 Analyze the project goals and technical tasks to identify dependencies and risks. Develop a plan for mitigating risks. Document the project goals and technical 	Business Analyst	SitiSarah@gmail.com 012-45458989

	tasks in a clear and concise manner.		
	 Review and provide feedback on the mapping of goals and technical tasks. 		
Comments:	none		

Project Charter (Planning)

Project Title: FTP service	
Project Start Date: 2/2/2023	Project Finish Date: 2/5/2023
Budget Information: RM 100 00	00
Project Manager: Muhammad Za	arif Bin Rofli

Project Objectives: Planning of hiring talent

Success Criteria:

- Talent Acquisition Timeline: Success is defined as the ability to plan and execute the hiring process within a specified timeline, ensuring positions are filled promptly.
- Quality of Hires: Measure the success of hiring talent by tracking the performance, job satisfaction, and retention rates of new hires. Success is achieved when a significant percentage of hires meet or exceed performance expectations and show long-term commitment.
- Candidate Experience: Measure the satisfaction and experience of candidates throughout the hiring process. Success is achieving high satisfaction scores, indicating a positive and professional candidate experience.
- Compliance and Legal Requirements: Ensure that the hiring process complies with all relevant laws and regulations, including equal employment opportunity laws and anti-discrimination measures. Success is full compliance and avoiding any legal issues related to the hiring process.

Approach:

- Collaborate with department heads and managers to identify and document the organization's talent needs, including skills and competencies required for various positions.
- Develop clear, accurate, and up-to-date job descriptions for each position to be filled, including responsibilities, qualifications, and key performance indicators.
- Continuously track the performance of hires and gather feedback from hiring managers to make ongoing improvements to the hiring process.
- Provide regular progress reports to key stakeholders, and make adjustments to the hiring process as needed to meet the success criteria and objectives outlined above

Roles and Responsibilities:					
Name and Signatur e	Role	Position	Contact Information		

Zarif	 Responsible for overseeing the entire project, including planning, execution, and monitoring. Coordinate activities, manage 	Project Manager	zarif420@gmail.com 012-3456789
	resources, and ensure that the project stays on track and aligns with the objectives.		
Scott McKay	 Defining talent needs, developing job descriptions, and providing expertise in the hiring process. Rnsure that hiring practices are in line with HR policies and legal requirements. 	Human Resources (HR) Manager	smcckay@gmail.com 019-8765432
Ibrahim Jabar	 Managing the technical aspects of the recruitment process. Responsible for configuring and maintaining the online application system, ensuring data security, and managing the FTP service for handling candidate information 	IT Team	i.jabar@gmail.com 014-23456798

Comments: none		

Project Charter (Executing)

Project Title: FTP service

Project Start Date: 3/5/2023 Project Finish Date: 3/12/2023

Budget Information: RM 300 000

Project Manager: Van Persie

Project Objectives: Server deployment and configuration with security measures.

Success Criteria:

- High Uptime: The FTP service should have a high uptime, with minimal to no unplanned downtime. For example, you might set a target of 99.9% or higher uptime over a specific time period, such as a month or a year.
- Data Transfer Speed: Aim for efficient data transfer speeds, depending on the needs of your users. You might set a goal for a certain minimum transfer rate, like 10 MB/s.
- User Satisfaction: Gather user feedback and aim for a high satisfaction rate. This could be measured through surveys or feedback forms with a target satisfaction score.

Approach:

- Successful deployment of at least 10 servers.
- Implementation of robust security measures.

- Completion within the allocated budget.				
Roles and l	Respor	nsibilities:		
Name and Signature	Role		Position	Contact Information
Van Persie	•	Develop the project plan, including a timeline and budget allocation. Define the project objectives, success criteria, and key performance indicators (KPIs). Coordinate and communicate with other team members, stakeholders, and vendors.	Project Manager	rvp@gmail.com 011-39035085
Sarah Wilson	•	Select and procure the necessary server hardware and software components based on project requirements.	System administrator	Sarah@gmail.com 011-34438989

	 Install and configure the operating system on the servers. Implement security measures, including firewalls, access controls, and encryption. 		
Ollie Watkins	 Plan and set up the network infrastructure required for the server deployment. 	Network administrator	<u>Watkin@gmail.com</u> 012-32329999
	 Configure network devices such as routers and switches to optimize data transfer speeds. 		
	 Implement redundancy and failover solutions to ensure high availability of the FTP service. 		

Comments: none

Assessment: [Assignment 1] - (5%) - [PO7, P4]

Project Charter (Controlling)

Project Title: FTP service

Project Start Date: 4/12/2023 Project Finish Date: 4/3/2024

Budget Information: RM 100 000

Project Manager: Abdul Fahrizkhan bin Mohd Asannan

Project Objectives: Proceed with Security patch management to update that solve code vulnerability.

Success Criteria:

- Security patches should be applied in a timely manner. This means that patches are evaluated and deployed promptly after their release to minimize the window of vulnerability.
- Patches should be thoroughly tested in a controlled environment to ensure they don't introduce new issues or conflicts with existing software.
- Regular reporting should be in place to track the status of patch deployments, including successful updates and any failures. Continuous monitoring for vulnerabilities is also important.

Approach:

- Identify and prioritize code vulnerabilities
- Perform complete system and data backups
- Locate the relevant security patches

Roles and Responsibilities:			
Name and Signature	Role	Position	Contact Information

		1	T
Abdul Fahrizkhan bin Mohd	 Coordinate the efforts of all stakeholders. 	Project Manager	Afk@gmail.com 011-5678 9870
Asannan	 Develop a comprehensive plan for patch management. 		
	 Ensure that patches are applied according to the 		
	schedule.Monitor the progress and		
	address any issues.Document the entire process.		1.1004560
John Albado	 Ensure that patch management aligns with security protocols. 	Security Officer	John23456@gmail.com 012-7845 6120
	 Implement security measures to address vulnerabilities. 		
	 Monitor for potential security incidents. 		
Marcos William	• Perform vulnerability assessments.	IT and Security Teams	MW098767@gmail.com 017-2233 0011
	 Test patches in a controlled environment. 		
	 Deploy patches in the production environment. 		
	 Monitor for any adverse effects or security incidents. 		
	 Report issues and feedback to the project 		
	manager.		

Comments: The project need to be thoroughly check and monitor for the next 24-hours

Project Charter (Closing)

Project Title: FTP service

Project Start Date: 5/3/2024 Project Finish Date: 5/4/2024

Budget Information: RM 50 000

Project Manager: Theo Walcott

Project Objectives: Conduct project postmortem

Success Criteria:

Project postmortem is conducted and documented.

• Findings of the postmortem are shared with the project stakeholders.

Approach:

- The project team will meet to discuss the project and identify areas for improvement.
- The findings of the postmortem will be documented and shared with the project stakeholders.

Roles and Responsibilities:					
Name and Signatur e	Role	Position	Contact Information		
Theo Walcott	 Coordinates with the client to schedule the closing meeting. Ensures that all deliverables are complete and meet the client's requirements. Prepares the closing agenda and distributes it to all stakeholders. 	Project Manager	Theowalcott@gmail.com 019-98980011		
Maguire	 Reviews and approves all closing documentation Signs and distributes all closing documentation Disburses funds to the seller and other parties involved in the transaction. 	Client representat ive	HarryMag@gmail.com 017-54541212		
Safiq Rahim	 Reviews and approves all contracts and agreements. Provides advice and guidance on legal matters related 	Legal counsel	SafiqR@gmail.com 012-3630506		

Γ

	to the closing process. • Represents the project owner's interests in any		
	negotiations or disputes that may arise during the closing process.		
Comments: none			