

Group 13

Member:

- Daravid Ngauv
- Vattanak Tong
- Kuyeang Tea
- Chandararith Hing
- Pichchansomanea Khloeung

## **Q4: Network**

### **1. If you are assigned to be a manager at a company, which network topology that you use to set up in your company?**

We will be opening a cloth company, therefore, star topology will be the most suited one. Star topology is the type of wired network that is easy to set up, relatively inexpensive, and provides more redundancy than other topologies. And in star topology, all computers do not connect to each other, instead it connects to hub or switch, so if one cable happens to break or fail or if there is a network failure on one computer, only the computer that is connected to that cable is unable to use the network and the others will continue to work normally. It is also easier to control from a central console since they are all connected to the same hub or switch, therefore if there's any problem, the management software just needs to communicate with the switch or hub to get full traffic management features. What is more, we can also add a new host or remove one with ease. Though, it may cost a big sum of money due to the length of cables that are needed to wire to the main hub or switch.

### **2. Determine the devices you may use: how many computers, routers, repeaters, hub.**

For that clothing company, We will use one switch in the center to make a star topology and use six more switches as an extension to each department. One or more routers are connected to the center of the switch to send the data of that company to the internet.

Below are the number of computer that is needed in each department:

- Sale and marketing department: should have two computers or more.
- Design department: should have two or more computers.
- Accounting and Finance: should have two computers or more.
- Production and Operation: should have more than one computer (base on the size of that company).
- Quality control: should have more than one computer (base on the size of that company).
- Information technology department: should have two computers or more.

**3. Determine how many departments, staff you may need to run the business.**

For a clothing company, the departments that are needed are:

- Sales & marketing: is probably one of the most important departments of any company, as it could help grow the company's reputation and popularity through advertisement. This department also oversees business activities and processes that help the company run effectively and efficiently. This department would need the most people, so it should be more than 2 staff.
- Design: This department has the responsibility of coming up with ideas for their apparel products. People with bright, new ideas are essentially needed for this department as their designs need to be unique and also good-looking in order to catch the attention of the customer. This department needs 2 or more designers, for good quality products.
- Accounting & Finance: This department will be the one who'll keep note of every transaction, meaning from the company's expenditure, the company's profit, the staff's salary and so on. This department needs about 2 staff members or more.
- Production & Operations: This department will handle all the manufacturing work. So it will need more than one staff.
- Quality Control: This department has the responsibility to ensure that the products that have been made are up to the standard quality. Same goes to Production and Operations, it may need more than one staff.
- IT: Technology is also vital in every corporation or company. This department will be responsible for setting up and maintaining the stability of the company's network in order for it to run smoothly and keep the business going strong. They will also be the one to set up and configure the company's hardware and software too.

On top of that, if there is an app or a website, this department will also handle creating the infrastructure and maintain its stability too. This department needs 2 staff or more.

Flowchart:

