



Demystifying Networking
Prof. Sridhar Iyer
Department of Computer Science and Engineering
Indian Institute of Technology, Bombay

Lecture - 03
Discussing the CEO's Problem

Welcome to the week 1 of the course. In the previous week, we saw that Amir who owns sports equipment company received the order from Manali to ship some sports equipment to Manali. Now this order was first process by the billing department which took care of the payment then the order was processed by the dispatch and packaging department. So, the key takeaway here is that the billing department knows its billing process and their dispatch department is aware of packaging and sending the order. So, every layer of the company knows its own function and they send the order to the next layer as they are done with the order.

At the end of previous week we had also asked you a question to think about and give your answers in the discussion forum. Based on that we have a reflection question for you what we want is to go through the question, think about it, pause the video, write your answers and then continue with the video.

(Refer Slide Time: 01:18)

Reflection Spot  

Which of the following are valid solutions to the challenge of “the shipment is heavy for a single person” in delivering the materials correctly on time ?

- a. As all shipments are modular, they can be taken in parts by the same person on multiple trips.
- b. As all shipments are modular, they can be taken in parts by multiple people in individual trips.

Demystifying Networking | CS75

Which of the following are valid solutions to the challenge of “the shipment is heavy for a single person” in delivering the materials correctly on time? Option a - As all shipments are modular, they can be taken in parts by the same person on multiple trips. Option b - As all

shipments are modular, they can be taken in parts in multiple people in individual trips. Pause here for a moment, think about both the options and pick one which you think is correct and then continue with the video.

So, some of you might have picked option a. While option a is a valid option, it is not efficient because one individual has to travel multiple times, which is time consuming and not practical. I agree and if you look at option b, this seems to be a much more efficient option as the shipment will be sent in time. As all the people are turning at the same time and some parts of the shipment could be sent via cheaper transport mediums. So, it could be efficient on the cost aspect.

So, continuing in with the same examples, there were a lot of other challenges too like, every delivery person could carry only 30 kgs of goods with them. Hence, I will discuss in the forum, the entire order of the huge weight had to be broken down into orders of 30 kgs.

Also, if we number those smaller modules while they are been broken down, then it will help in keeping track at the other end also. It is easier for reassembling.

Exactly. And that would also help if one of the orders got misplaced, they could track that order back or send a replacement for that order.

Right.