Make it happen! (Instructor Version)

**Instructor Note**: Red font color or Gray highlights indicate text that appears in the instructor copy only.

1. Objectives

Explain the operation of the application layer in providing support to end-user applications.

* Students will apply new knowledge of application layer protocols and methods of the TCP/IP layer in streamlining data/network communication.

1. Background /Scenario

Refer to the modeling activity from the beginning of this chapter as the basis for this activity.

Your IP telephones were installed in a half day vs. the full week originally anticipated. Your network has been restored to full capacity and network applications are available for your use. You have the same emails to answer and quotes to write for your manager’s approval.

Use the same scenario you completed in the introduction modeling activity to answer the following questions:

1. **Emails**

* What method(s) can you use to send email correspondence now that the network is working?
* What format will your emails be sent over the network?
* How can you now send the same message to multiple recipients?
* How can you send the large attachments to multiple recipients using network applications?
* Would using network applications prove to be a cost-effective communication method for your corporation?

1. **Quote for Manager’s Approval**

* Because you have desktop application programs installed on your computer, will it be relatively easy to produce the quote your manager needs for the new contract due by the end of the week? Explain your answer.
* When you finish writing the quote, how will you present it to your manager for approval? How will he or she send the quote to the client for their approval?
* Is using network applications a cost-effective way to complete business transactions? Justify your answer.
* Save a hard copy or an electronic copy of your answers. Be prepared to discuss your answers in class.

**Instructor Note:** This Modeling Activity’s purpose is to review the content learned in Chapter 4. The focus is on how the application layer uses network applications to operate effectively.

To save classroom time (for discussion), students may be assigned to complete only one scenario (A. Emails, or B. Quote for Manager’s Approval).

Stress that students must carefully read through the first paragraph of this modeling activity to know the parameters of the assignment.

1. Reflection
2. Having network applications and services available to you may increase production, decrease costs, and save time. Would this be true with the scenario you chose? Justify your answer. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Representative (discussion) answers may look like the following suggestions:

**Emails**:

* What method(s) can you use to send email correspondence now that the network is working? Most likely, POP or IMAP email delivery in conjunction with a network email software program will be used.
* What format will your emails be sent over the network? POP or IMAP
* How can you now send the same message to multiple recipients? The SAME copy of the email can be sent to multiple recipients in a matter of seconds.
* How can you send the large attachments to multiple recipients using the network applications? Write the email, address it to the recipients and send the large attachments with the email (no printing required!).
* Would using network applications prove to be cost-effective communications methods for your corporation? This method would save time, resources, and provide a quality-driven product (everyone gets the same information)

**Quote for Manager’s Approval**:

* You have a word processing, spreadsheet and database program installed locally on your computer. Will it be relatively easy to produce the quote your manager needs for the new contract due by the end of the week? The local workstation software will assist in creating the quote for the manager at no different cost in this scenario.
* When you finish writing the quote, how will you present it to your manager for approval? Usually, it will be sent as an email with attachment(s) to the manager.
* How will he/she send the quote to the client for their consideration for approval? Most likely, it will be emailed to the client (sometimes, though, an additional hard/paper copy or media copy is sent of the quote to the client for their approval or sign-off)
* Is using network applications a cost-effective way to complete business transactions? Using network applications is more time-efficient and does definitely save resources.

**Identify elements of the model that map to IT-related content:**

* Costs involved in daily business production decrease when using network applications
* Time-efficiency is increased if working with network applications
* Quality communication is enhanced by using network applications