

# SAMPLE CASE STUDY—NETWORK DESIGN

# FBLA NETWORK DESIGN CASE STUDY

# **PARTICIPANT INSTRUCTIONS**

- 1. You have 20 minutes to review the case.
- 2. Presentation time is seven minutes. At six minutes the timekeeper will stand and hold up a colored card indicating one minute is left and at seven minutes the timekeeper will stand and hold up a colored card indicating time is up.
- 3. The judges will have a three-minute question and answer period following the presentation.
- 4. Each team member will be given two note cards. A flip chart also will be available.
- 5. All members of the team must participate in the presentation, as well as answer the questions.

# **PERFORMANCE INDICATORS**

- Logical solution is selected and presented with positive and negative aspects of its implementation given
- Alternatives are recognized with pros and cons stated and evaluated
- Thoughts and statements are well organized and clearly stated; appropriate business language is used
- Demonstrates ability to effectively answer questions



#### **CASE STUDY SITUATION**

# **Background Information**

Big Breeze Coffee is a local coffee roaster who sells their coffee online and within their retail coffee shop. The full-service coffee shop is a large, multi-story facility located within a busy commercial district. The location is a social gathering spot during all hours of the day and is near capacity 90% of time. Each of the four floors measures 100 feet wide by 250 feet deep. There are staircases and elevators located at each end of the facility and the middle of the store. There are two brewing stations. The two halves of the store are mirror images of one another. The design and layout is very basic to accommodate for plenty of table seating. There is no outside seating available.

# Scenario

Your company has been contacted by Big Breeze Coffee to develop a proposal for installing a network that can adequately handle up to 200 devices at one time. The system should have open access for all guests and a separate system that is secure for customers who join the companies loyalty program. The facility should have multiple access points and a backup system should be in place. Emphasis should be placed on the efficiency of the system and how the team can guarantee the new system will work as prescribed. The team will present their proposal to the owners of big Breeze Coffee.

# Other Useful Information

- List the steps for determining network design needs.
- Describe security systems to protect computer networks
- Explain the need to document actions taken. Examples include backups, virus protection, and software distribution.

# Things to consider

You must address the following in your presentation:

- Describe the backup and disaster recovery for computer system and the purpose for having one.
- Describe the product mix for an effective network system
- Define productivity standards for network systems

Complete your proposal to include as much detail as possible as well as justification as to your selections. Diagram and explain your physical network and computer design as well as the logical network design (server installation, domain layout, etc.).



# FBLA NETWORK DESIGN CASE STUDY JUDGE'S INSTRUCTIONS

### JUDGING THE PRESENTATION

- 1. This is a team presentation event where the students will read a case study and present the case and suggestions to the judges.
- 2. Review the "Judges' Instructions" and the "Case Study Situation."
- 3. Judges will serve as the owners of a new branch of a national pest extermination company.
- 4. After introductions, the participant team will begin its presentation.
- 5. Teams have up to 7 minutes to present. Penalty points are assigned if a team goes over the time limit.
- 6. Judges have three minutes for questions and answers following the presentation.
- 7. Please ask each team at least one question, but not necessarily the same questions.
- 8. You will close the event by thanking the participants for their input.
- 9. Complete the rating sheet.

### JUDGES' INSTRUCTIONS

# **Background Information**

Big Breeze Coffee is a local coffee roaster who sells their coffee online and within their retail coffee shop. The full-service coffee shop is a large, multi-story facility located within a busy commercial district. The location is a social gathering spot during all hours of the day and is near capacity 90% of time. Each of the four floors measures 100 feet wide by 250 feet deep. There are staircases and elevators located at each end of the facility and the middle of the store. There are two brewing stations. The two halves of the store are mirror images of one another. The design and layout is very basic to accommodate for plenty of table seating. There is no outside seating available.

## Scenario

The team (members) has been contacted by Big Breeze Coffee (judges) to develop a proposal for installing a network that can adequately handle up to 200 devices at one time. The system should have open access for all guests and a separate system that is secure for customers who join the companies loyalty program. The facility should have multiple access points and a backup system should be in place. Emphasis should be placed on the efficiency of the system



and how the team can guarantee the new system will work as prescribed. The team will present their proposal to the owners of big Breeze Coffee.

# Other Useful Information

- List the steps for determining network design needs.
- Describe security systems to protect computer networks
- Explain the need to document actions taken. Examples include backups, virus protection, and software distribution.

# Things to consider

Members must address the following in the presentation:

- Describe the backup and disaster recovery for computer system and the purpose for having one.
- Describe the product mix for an effective network system
- Define productivity standards for network systems

Members need to complete a proposal to include as much detail as possible as well as justification as to their selections. Diagrams and explanations of the physical network and computer design as well as the logical network design (server installation, domain layout, etc.) can also be included.

# Judge's Questions

During the role-play performance, feel free to ask any of the following questions:

- 1. Please explain what standards your team used in determining which system to use.
- 2. What parts of the system can we downgrade easiest to stay within budget?
- 3. What makes your proposal different than the others we have talked to?

After the members complete their presentation, the chair will conclude the role-play by thanking them for their work. There is no right or wrong answer to the event. However, in a team event, the ability of the team members to work together to come to a consensus, based on the facts provided (and those that you care to add) should be the basis for the score. The individual or team should present its suggestions with clarity and conviction.

Feel free to enhance the story as much as you want, but if you enhance it for one, make sure you enhance it for all the groups.