Southern New Hampshire University

IT 340 Milestone Two Guidelines and Rubric

The final project for this course is the creation of network recommendations for a potential new office of the Newton Ad Agency. To help you succeed in this project, you will complete two final project milestones that provide the opportunity to draft key sections of the project. In Milestone One, you composed the first and second sections of the project, the introduction and the section on local area network (LAN) topology. Now, in Milestone Two, you will continue your work toward the final project by composing the next two sections of the final project. Section III focuses on the selection of an internet service provider, and section four focuses on hardware and software recommendations**,** printer configurations, and bandwidth.

In this guide to Milestone Two, you will review the final project scenario involving Newton Ad Agency, review the prompt, consider the critical elements that your work should include, and study the rubric that will be used to assess your work.

Final Project Scenario: The Newton Ad Agency is an advertising firm with offices in Austin, Texas; Minneapolis, Minnesota; and New York City, New York. The offices in Austin include a headquarters and a satellite office located two miles away in a rural area.

The Austin headquarters is home to the executive team and 750 employees. The headquarters also stores the corporate data and is the corporate internet backbone. It hosts the IT department that centrally manages all LAN services, including the wireless LAN. The IT department also manages the wide area network (WAN) that connects all of the offices via site-to-site virtual private network (VPN) tunnels.

The Minneapolis and New York offices host about 200 employees each. Approximately 50% of these employees are mobile (i.e., travelling more than 80% of the time). The New York office focuses on producing and disseminating large advertising media content to clients. For this reason, the New York office hosts the corporate media and web servers. The rural satellite office in Austin focuses on billboard ad designs and is connected to the corporate WAN with a wireless point-to-point bridge to the Austin headquarters data center. The rural office is home to 100 employees.

To hire and retain the best talents, Newton Ad Agency allows employees to work from home. This removes the constraint that employees have to live within commuting distance from the firm's offices. Remote and mobile employees are provided access to the corporate network via a VPN client. The VPN client requires employees to have access to reliable internet services to allow for effective collaboration across teams, and for access to media content. The company provides all employees with a laptop with full disk encryption, data loss prevention (DLP), and antivirus software. The IT department manages all corporate laptops and has the ability to log into all systems for support. This means that all laptops are centrally managed by the one IT department.

Due to an increase in opportunities for expansion to new markets, Newton has embarked on an initiative to hire and train new college graduates to support the company's Vision 2020 program. Vision 2020 focuses on global expansion. The initiative is to hire graduates into the marketing, finance, and IT departments.

You were hired as part of the Vision 2020 program and have been working at Newton for some time now. You have spent a considerable portion of your time troubleshooting and analyzing the organization's computer network to keep it running smoothly. Your direct supervisor and lead network administrator have

been very impressed with your skills and fast learning abilities. In order to determine if you are ready to take on more responsibility, you have been asked for your input in regard to the new office location setup project.

Newton is considering adding a new office and is exploring potential locations in Tacoma, Washington; Rochester, New York; or Fayetteville, North Carolina. Your task is to choose **one** of the possible locations and deliver a report to the team with key considerations and recommendations for the setup of the network infrastructure at the new office. This office will be home to 50 employees, including the new executive vice president of sales and marketing. All the possible sites have offices located on the third floor of an office building with access to fiber, cable, and T1 internet service providers. In addition to the standard network, the site must support live video teleconferencing calls with employees based at the other sites, as well as reliably send print jobs to billboard printers located in the satellite office in Austin.

> In Milestone One, you selected an office location. Now, in Milestone Two, you will need to research internet service providers at that location. This will involve internet research. Be sure to cite your research in APA style.

Prompt: Here is the prompt for the final project as a whole:

How would you approach setting up the network at the location you have selected? What considerations are key in informing the systems and resources necessary to meet the organization's needs and support the business goals and objectives?

Keep in mind, however, that your work in Milestone Two involves only Sections III and IV of the final project. Therefore, for Milestone Two, the modified prompt is as follows: Explain key considerations for identifying an internet service provider for the new location and recommend the appropriate provider to match the business case. Then, address considerations and make recommendations regarding hardware and software selection, printer configurations, and bandwidth that address business needs.

Specifically, the following **critical elements** must be addressed:

I. **Internet Service Provider** (Note: This section is based on research into actual providers at the office location that you select)
   A. Explain **key considerations** for identifying an internet service provider for the new location.
   B. Compare at least two internet providers available in the location you have chosen in regard to **speed, security, and reliability**. Be sure to address how these specifics would impact business goals and objectives.
   C. Based on your analysis, determine the appropriate internet provider for this location to meet the **business goals and objectives**. Be sure to explain your reasoning.
II. **Additional Configurations**: In this section, you will address the accompanying considerations for the network based on the needs of the new office location.
   A. Make appropriate **hardware and software** recommendations to meet the needs of the new office location. Be sure to explain your reasoning.
   B. Make appropriate **printer configuration** recommendations to meet the distance printing needs of the new office location. Be sure to explain your reasoning.

C. Make appropriate **bandwidth** and device recommendations to meet the teleconferencing needs of the new office location. Be sure to explain your reasoning.

Rubric

Guidelines for Submission: Your work must be submitted as a 1- to 2-page Microsoft Word document with double spacing, 12-point Times New Roman font, one-inch margins, and APA formatting.

Instructor Feedback: This activity uses an integrated rubric in Blackboard. Students can view instructor feedback in the Grade Center. For more information, review these instructions.

Critical Elements	Attempted With Minimal or No Functional Issue (100%)	Attempted With Significant Functional Issues (75%)	Was Not Evident in Submission (0%)	Value
Internet Service Provider: Key Considerations	Explains key considerations for identifying an internet service provider for the new location	Explains considerations for identifying an internet service provider for the new location, but explanation is cursory, illogical, or contains inaccuracies	Does not explain key considerations for identifying an internet service provider for the new location	15
Internet Service Provider: Speed, Security, and Reliability	Compares at least two internet providers available in the location chosen in regard to speed, security, and reliability, addressing the impact on business goals and objectives	Compares at least two internet providers, but comparison is cursory, illogical, or contains inaccuracies	Does not compare at least two internet providers	15
Internet Service Provider: Business Goals and Objectives	Determines appropriate internet provider for the location to meet the business goals and objectives, explaining reasoning	Determines internet provider for the location, but provider is not appropriate or explanation contains gaps in logic or accuracy	Does not determine internet provider for the location	15
Additional Considerations: Hardware and Software	Makes appropriate hardware and software recommendations to meet the needs of the new office location, explaining reasoning	Makes hardware and software recommendations, but hardware and software is not appropriate or explanation contains gaps in logic or accuracy	Does not make hardware and software recommendations	15
Additional Considerations: Printer Configuration	Makes appropriate printer configuration recommendations to meet the distance printing needs of the new office location, explaining reasoning	Makes a printer configuration recommendations, but printer configuration is not appropriate or explanation contains gaps in logic or accuracy	Does not make a printer configuration recommendations	15

Additional Considerations: Bandwidth	Makes appropriate bandwidth and device recommendations to meet the teleconferencing needs of the new office location, explaining reasoning	Makes bandwidth and device recommendations, but bandwidth or devices are not appropriate or explanation contains gaps in logic or accuracy	Does not make bandwidth and device recommendations	15
Articulation of Response	Submission has no major errors related to grammar, citations, spelling, syntax, or organization	Submission has major errors related to grammar, citations, spelling, syntax, or organization that negatively impact readability and articulation of main ideas	Submission has critical errors related to grammar, citations, spelling, syntax, or organization that prevent understanding of ideas	10
			Total	**100%**