

IT 210 Final Project Guidelines and Rubric

Overview

The final project for this course is the creation of a business report using the Final Project Template provided.

Information technology (IT) is a critical component of any contemporary business, whether for managing inventory, communicating with clients and vendors, or sharing information internally. As more consumers take advantage of the convenience and affordability of purchasing goods and services online, businesses need to continually upgrade their IT resources to keep pace with new opportunities while working within the limits of their business model. Throughout this course, we have looked at the ways in which IT impacts business processes, as well as the particular challenges presented by e-commerce and e-business. As an IT specialist, you will play a critical role in helping businesses develop viable solutions to their technology needs.

For the final project, you will imagine that you are an IT business analyst intern at Sharpe Style in the scenario provided and have been asked by the owner to research options for improving the business's performance through the use of technology. Specifically, the owner wants to expand the business's retail presence into online sales and ensure a positive customer experience by incorporating intelligent systems into the website. You will create a business report for business owner Mary Sharpe that analyzes the business's stated and anticipated technology and information system requirements, compares and contrasts different technology solutions available, and provides suggestions on technology opportunities that would support the business venture. You should explain in detail how the different options could help grow the business and/or improve operational efficiency and client satisfaction, using real-world examples and references to support the suggestions. You should also keep in mind that the business owner is not a technology specialist. Consequently, you should use nontechnical language in crafting the business report and remember that the owner may not always know what technology is needed to carry out a particular option or how much it costs.

The project is divided into **four milestones**, which will be submitted at various points throughout the course to scaffold learning and ensure quality final submissions. These milestones will be submitted in **Modules Two, Three, Four, and Five**. The final project will be submitted in **Module Seven**.

In this assignment, you will demonstrate your mastery of the following course outcomes:

- Apply appropriate tools and techniques in documenting users' information technology requirements for conducting business activities on the web
- Analyze challenges that contemporary businesses face when introducing new technologies and information systems for their implications on business process engineering
- Assess how database technology and data warehousing tools can be utilized for reducing costs and improving sales within e-commerce and e-business models
- Compare and contrast options for integrating new web and mobile technology into existing environments for reinforcing information technology's central role in business management
- Craft audience-appropriate messages that effectively communicate information technology needs and solutions for supporting business decision-making

Prompt

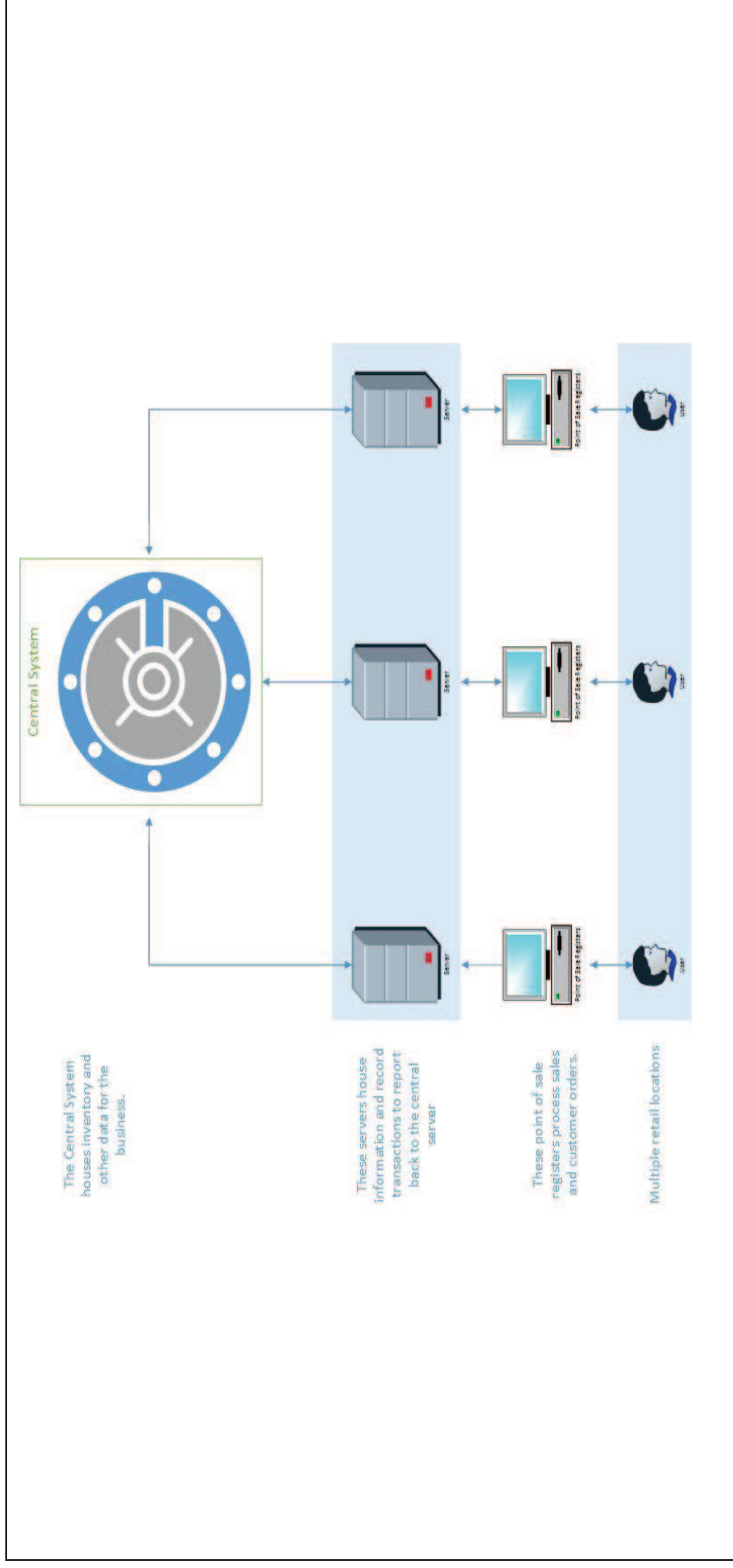
For the final project, you will assist the small-business owner in the scenario below by suggesting options for improving the business's performance through the use of technology.

Sharpe Style Scenario

Owner Profile and Goals: Mary Sharpe is the owner a retail clothing chain called Sharpe Style that has multiple retail locations in the United States. Her background is largely in business, and she has an MBA in Entrepreneurship. She is not a technology specialist. However, she wants to use technology to improve business performance and grow her organization. Mary has two main goals: The first is to expand into online sales as a means to increase revenue. Secondly, she is interested in an intelligent marketing system that is capable of helping customers make decisions about purchases through customer reviews and product details and also capable of suggesting related items or accessories. She is particularly worried about how she will keep track of inventory and keep her business and client data secure. She wants solutions that are inexpensive, easy to implement, and appropriate to the size of her business, while at the same time allowing room for further expansion in case her initial venture into online sales goes well.

Current IT Infrastructure at a Glance: Sharpe Style has multiple retail locations. Each location has multiple registers for processing sales and customer orders. These locations have their own unique servers for storing information and recording transactions made at the registers. These local servers report to one central system that houses inventory and other data for the business. The servers are running Windows software. Sharpe Style also has a website that directs customers to the retail location, advertises sales, and provides coupons that customers can print. It does not contain interactive features or online ordering.

Your Role: IT Business Analyst Intern



Imagine you are an IT business analyst intern at Sharpe Style in the scenario and have been asked to research and make suggestions on the information technology the business will need to undertake for the potential expansion, including any intelligent systems or security features that may need to be incorporated into the website. The business owner does not expect you, as an intern, to make suggestions that encompass the deep level of technical detail that would be expected of a professional IT consultant. Rather, you are expected to provide a high-level view of what would be required to successfully conduct online sales, and you should summarize the options for doing so. Also provide enough detail so the owner can make informed decisions and ask the right questions.

Using reference materials from the course and any additional research you may conduct on your own, write a business report to the business owner outlining how the company can integrate new technology with its existing systems to create a mobile and web sales presence. Be sure to cite your sources both within the document and in a bibliography so the owner can reference additional information once your internship is over. You should also be sure to present concepts and ideas using nontechnical language so that the owner can understand the full implications of your research in making business decisions.

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

- I. **Introduction:** Start your report with a brief summary of what you have been asked to do and your overall approach to the assignment. Be sure to address the following:
 - A. **Context:** Restate your assignment from the business owner and explain why this task is relevant given the role of IT in business management today. Give specific examples to support your answer. For example, how are similar companies using IT to enhance their business performance?
 - B. **Tools and Methods**
 1. How did you go about identifying **solutions** that address the business owner's concerns (e.g., library research, research into competitors' practices, product research)? Be sure to discuss the scope and limitations of your approach and the information you found. You may also want to discuss how the scope and limitations would affect subsequent business decisions.
 2. Describe the system development life cycle (**SDLC**) approach, explaining how it can help document and inform IT decisions in this case.
- II. **Database Needs and Options:** Use this section of your report to assess the business's database needs with respect to the proposed expansion into online sales, and lay out possible solutions for meeting the needs you identified. Specifically, you should address the following:
 - A. What type of **database technology** will the company need to support the new online services? Explain your answer. For example, how will the company keep track of inventory and customer information for sales in the retail versus the online store? Will two separate databases be needed? Will the company need to integrate its database(s) with other software to serve intelligent functions such as inventory tracking, order tracking, or payments?
 - B. Weigh the pros and cons of different solutions for addressing **database needs** in general terms. Justify your response. For example, will the option require migrating data to a new system? Will it require a different server setup? Is the cost of the solution outweighed by the potential benefits in terms of improving efficiency and increasing sales? To illustrate your point(s), you may want to include real-world examples of what has or has not worked for other companies.
- III. **Website Needs and Options:** In this section, you should analyze the business's website needs with respect to the proposed expansion into online sales and lay out possible solutions for meeting the needs you identified. Be sure to address the following:
 - A. What **features** might the business owner want the new website to include? To support your answer, use examples of what other companies in the industry are doing. For example, should the owner consider incorporating intelligent features such as links to product descriptions, product availability, or complementary items for purchase? Should the system automatically post new products to social media? What do most similar businesses do?
 - B. What challenges and needs might the owner face in terms of supporting **mobile computing**? Include a requirements document as an appendix to help support your discussion, using the template provided, and offer real-world examples to illustrate your points. You may also want to consider whether the business needs different solutions to accommodate mobile devices versus a desktop computer.
 - C. Analyze the **security challenges** arising from adding e-commerce to the website, including both internal and external security concerns. Explain your response. For example, what types of systems will the company need to ensure that customer data is secure and that the site is not abused? You may want to consider the security of both data transmission and data storage.
 - D. Compare and contrast available IT **security solutions** to address the needs you identified. What are the advantages and disadvantages to each in terms of supporting the business owner's objectives?

- E. Compare and contrast web and mobile **software packages** and services available for addressing the owner's online needs. What are the advantages and disadvantages to each with respect to business process engineering? To illustrate your point(s), you may want to include real-world examples of what has or has not worked for other companies.
- IV. **Hardware and Software Needs and Options:** Use this section of your report to analyze the business's hardware and software needs with respect to the proposed expansion into online sales and lay out possible solutions for meeting the needs you identified. Specifically, you should address the following:
- A. Analysis of **current IT system**
 1. Explain why it is **important** to consider the current IT infrastructure of the business when integrating new e-commerce features to a website. In your response, be sure to discuss how the business's current IT affects the costs of data storage and processing. You should also discuss how the business's current IT affects customer satisfaction with the purchasing experience (and ultimately sales).
 2. What IT infrastructure (hardware and software) is currently **in place**, and how does that affect business processes? Use the provided IT flowchart in the appendix to help support your discussion.
 - B. Present the different options you considered in a simple **matrix** the business owner can use as a quick reference when making decisions or discussing the potential new site with web designers and include it as an appendix. You may use the template provided or create your own. However, the matrix should clearly communicate the options, their key features, and their pros and cons in language the business owner can understand.
- V. **Additional Considerations:** Use this section to explain other factors the business owner should consider when making IT decisions related to the proposed expansion. Your report should cover the following:
- A. What **compatibility** issues exist with the different options? Be sure to explain your response in terms of how these issues affect the business process. For example, how can the current system be used with the new technology, or, if it cannot, what needs to be done to migrate from the current to the new technology? You may want to include real-world examples of what has or has not worked for other companies to illustrate your point(s).
 - B. What factors should the business owner consider when deciding whether to use **in-house or external** IT resources and services such as cloud computing or companies that specialize in hosting online stores? Be sure to discuss short-term and long-term trade-offs in your response.
- VI. **Conclusion:** In this section, you should summarize your findings for the business owner and suggest some next steps. Specifically, you should do the following:
- A. Suggest how you would go about **selecting** the best options for this business given the IT needs and available solutions you found. Are there particular solutions you would recommend? Why or why not? Use language and arguments that the business owner can easily understand to present your suggestions and justify your response.
 - B. Suggest potential **next steps** for the business in light of your findings, using language the business owner can easily understand. Justify your response. For example, should the business purchase an e-commerce package from a vendor for a comprehensive solution? Should the business owner order additional hardware and/or software to support the expansion internally? Should she consult with a web designer? Why or why not?

Milestones

Milestone One: How Does SDLC Apply to My Final Project?

In **Module Two**, you will examine how the system development life cycle applies to your final project scenario. You will be using the Milestone One section of the template to complete this assignment. **This milestone will be graded with the Milestone One Rubric.**

Milestone Two: What Are My Database Needs and Options?

In **Module Three**, you will be assessing the database needs and options for Sharpe Style. After looking at how the SDLC applies to your final project, a good next step is looking at the data. Think small and see where your requirements take you. Remember that Mary is worried about how she will keep track of her inventory when she migrates into online sales. You will be using the Milestone Two section of the template to complete this assignment. Refer to the Sharpe Style scenario for details on the current state of the company and the business owner's goals. You will assess the type of database technology the company will need to support new online services. **This milestone will be graded with the Milestone Two Rubric.**

Milestone Three: Website Features, Mobile Computing, and Security

In **Module Four**, you will be focusing on the website for Sharpe Style based on what you have learned that week. Your response must address three different aspects of the website: features, mobile computing, and security challenges. Remember that Sharpe Style has a website that directs customers to the retail location, advertises sales events, and provides coupons that customers can print. The main guiding question to consider is, what will the company's website need in order to accommodate online sales? You will be using the Milestone Three section of the template to complete this assignment. Refer to the Sharpe Style scenario for details on the current state of the company and the business owner's goals. **This milestone will be graded with the Milestone Three Rubric.**

Milestone Four: Hardware, Software, and Sharpe Style

In **Module Five**, you will be looking at hardware and software needs and hardware and software options. You will be using the Milestone Four section of the template to complete this assignment. Refer to the Sharpe Style scenario for details on the current state of the company and the business owner's goals. **This milestone will be graded with the Milestone Four Rubric.**

Final Submission: Business Report

In **Module Seven**, you will submit the business report using the Final Project Template. It should be a complete, polished artifact containing **all** of the critical elements of the final product. It should reflect the incorporation of feedback gained throughout the course. **This submission will be graded with the Final Project Rubric.**

Deliverables

Milestone	Deliverable	Module Due	Grading
One	How Does SDLC Affect My Final Project?	Two	Graded separately; Milestone One Rubric
Two	What Are My Database Needs and Options?	Three	Graded separately; Milestone Two Rubric
Three	Website Features, Mobile Computing, and Security	Four	Graded separately; Milestone Three Rubric
Four	Hardware, Software, and Sharpe Style	Five	Graded separately; Milestone Four Rubric
	Final Submission: Business Report	Seven	Graded separately; Final Project Rubric

Final Project Rubric

Guidelines for Submission: Your business report be 3 to 5 pages long (in addition to the appendices and bibliography) and use the Final Project Template provided. It should use double spacing, 12-point Times New Roman font, and one-inch margins. Citations should be formatted according to APA style. Be sure to use nontechnical language and ensure that the report is free of grammatical and typographical errors. Use headings and subheadings to help the business owner find relevant sections quickly.

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	Exemplary (100%)	Proficient (85%)	Needs Improvement (55%)	Not Evident (0%)	Value
Introduction: Context	Meets “Proficient” criteria, and response demonstrates keen insight into the multiple ways in which information technology impacts business, illustrated with examples that are especially relevant, brief, and convincing	Restates assignment, explaining why task is relevant given the role of information technology in business management, and gives specific examples to support answer	Restates assignment, explaining why task is relevant given the role of IT in business management, but does not give specific examples to support answer, or answer contains inaccuracies	Does not restate assignment, explaining why task is relevant given the role of information technology in business management	6.4
Introduction: Tools and Methods: Solutions	Meets “Proficient” criteria and discusses how methods and available information affect subsequent business decision-making	Explains how solutions to address business owner’s concerns were identified and discusses scope and limitations of approach and information	Explains how solutions to address business owner’s concerns were identified, but does not discuss scope and limitations, or response contains inaccuracies	Does not explain how solutions to address the business owner’s concerns were identified	4.8

<p>Introduction: Tools and Methods: SDLC</p>	<p>Meets “Proficient” criteria, and explanation of how the SDLC approach applies to this case includes all steps of the life cycle, not just those that the student is applying directly in the assessment exercise</p>	<p>Describes system development life cycle approach, explaining how it can help document and inform IT decisions in this case</p>	<p>Describes system development life cycle approach, but does not explain how it can help document and inform IT decisions in this case, or response contains inaccuracies or omits key details</p>	<p>Does not describe system development life cycle approach</p>	<p>4.8</p>
<p>Database Needs and Options: Database Technology</p>	<p>Meets “Proficient” criteria and includes a nuanced discussion not only of what is needed but why and how it aligns with business owner’s goals</p>	<p>Assesses type of database technology that the company will need to support new online services and explains answer</p>	<p>Assesses type of database technology that the company will need to support new online services, but does not explain answer, or response contains inaccuracies or omits key details</p>	<p>Does not assess type of database technology that the company will need to support new online services</p>	<p>6.4</p>
<p>Database Needs and Options: Database Needs</p>	<p>Meets “Proficient” criteria and provides real-world examples to support discussion</p>	<p>Weighs pros and cons of different solutions for addressing database needs in general terms and justifies response</p>	<p>Weighs costs and benefits of different solutions for addressing database needs in general terms, but does not justify response, or response contains inaccuracies or omits key details</p>	<p>Does not weigh the costs and benefits of different solutions for addressing database needs in general terms</p>	<p>6.4</p>
<p>Website Needs and Options: Features</p>	<p>Meets “Proficient” criteria, and examples and coverage of features are particularly insightful, comprehensive, and well aligned to the stated goals of the business owner</p>	<p>Describes features the owner might want to include on new website, using examples of what other companies in industry are doing to support answer</p>	<p>Describes features the owner might want on new website, but does not use examples of what other companies are doing to support answer, or response contains inaccuracies</p>	<p>Does not describe features owner might want to include on new website</p>	<p>4.8</p>
<p>Website Needs and Options: Mobile Computing</p>	<p>Meets “Proficient” criteria, and response considers how differences between mobile and desktop computing affect the business owner’s IT needs</p>	<p>Describes challenges and needs that the owner might face in terms of mobile computing, supporting discussion with requirements document in appendix and real-world examples to illustrate points</p>	<p>Describes mobile computing challenges the owner might face, supporting discussion with requirements document in appendix, but does not provide real-world examples, or response contains inaccuracies</p>	<p>Does not describe challenges and needs the owner might face in terms of mobile computing</p>	<p>4.8</p>
<p>Website Needs and Options: Security Challenges</p>	<p>Meets “Proficient” criteria, and analysis is comprehensive, considering security for data transmission to and from the business and for data storage</p>	<p>Analyzes security challenges arising from adding e-commerce to the website, including both internal and external security concerns, and explains response</p>	<p>Analyzes security challenges, including both internal and external concerns, but does not explain response, or response contains inaccuracies</p>	<p>Does not analyze security challenges arising from adding e-commerce, including both internal and external security concerns</p>	<p>4.8</p>

<p>Options: Security Solutions</p>	<p>Meets “Proficient” criteria and provides real-world examples to support discussion</p>	<p>Compares and contrasts available IT security solutions to address needs identified, analyzing advantages and disadvantages to each in supporting owner’s objectives</p>	<p>Compares and contrasts available IT security solutions, but does not analyze advantages and disadvantages in supporting owner’s objectives, or response contains inaccuracies</p>	<p>Does not compare and contrast available IT security solutions to address needs identified</p>	<p>6.4</p>
<p>Options: Software Packages</p>	<p>Meets “Proficient” criteria and provides real-world examples to support discussion</p>	<p>Compares and contrasts web and mobile software packages and services for addressing the owner’s needs, analyzing the advantages and disadvantages to each with respect to business process engineering</p>	<p>Compares and contrasts web and mobile software for addressing the owner’s needs, but does not analyze advantages and disadvantages with respect to business process engineering, or response contains inaccuracies</p>	<p>Does not compare and contrast web and mobile software packages and services for addressing the owner’s needs</p>	<p>4.8</p>
<p>Hardware and Software Needs and Options: Current IT System: Important</p>	<p>Meets “Proficient” criteria, and response demonstrates keen insight into growth needs of business, the limitations of current system, and the resource constraints of a small business</p>	<p>Explains importance of considering current IT infrastructure when integrating new e-commerce features, including how current IT affects costs of data storage and processing and customer satisfaction with purchasing experience (and ultimately sales)</p>	<p>Explains importance of considering current IT infrastructure, but does not include how current IT affects data storage and costs and customer satisfaction/sales, or response contains inaccuracies</p>	<p>Does not explain importance of considering current IT infrastructure when integrating new e-commerce features</p>	<p>6.4</p>
<p>Hardware and Software Needs and Options: Current IT System: In Place</p>	<p>Meets “Proficient” criteria, and response is exceptionally detailed and flowchart is both clear and professional in appearance</p>	<p>Describes IT hardware and software currently in place and how it affects business processes, supporting discussion with IT flowchart in appendix</p>	<p>Describes IT currently in place and how it affects business processes, supporting discussion with IT flowchart in appendix, but response contains inaccuracies or omits key details</p>	<p>Does not describe IT hardware and software currently in place and how it affects business processes, supporting discussion with IT flowchart in appendix</p>	<p>4.8</p>
<p>Options: Matrix</p>	<p>Meets “Proficient” criteria, and matrix is professional in appearance, striking an ideal balance between brevity and appropriate detail for decision making</p>	<p>Presents options in a simple matrix, included in an appendix, in a way that clearly communicates options, key features, and pros and cons in language owner can understand</p>	<p>Presents options in a simple matrix, included in an appendix, but does not do so in a way that clearly communicates options, key features, and pros and cons in language owner can understand, or response contains inaccuracies or inconsistencies</p>	<p>Does not present options in a simple matrix, included in an appendix</p>	<p>6.4</p>

Additional Considerations: Compatibility	Meets “Proficient” criteria and provides real-world examples to support discussion	Analyzes compatibility issues related to the different options presented, explaining response in terms of how the issues affect business processes	Analyzes compatibility issues related to the different options, but does not explain response in terms of effect on business processes, or response contains inaccuracies or omits key details	Does not analyze compatibility issues related to the different options presented	4.8
Additional Considerations: In-House or External	Meets “Proficient” criteria, and response demonstrates keen insight into the balance between growth needs and resource constraints in a small business	Analyzes factors owner should consider when deciding whether to use in-house or external IT resources and services, discussing short-term and long-term trade-offs in response	Analyzes factors owner should consider when deciding between in-house or external IT, but does not discuss short-term and long-term trade-offs in response, or response contains inaccuracies	Does not analyze factors owner should consider when deciding whether to use in-house or external IT resources and services	6.4
Conclusion: Selecting	Meets “Proficient” criteria, and response is realistic, particularly insightful, and well-aligned to the business owner’s needs	Communicates method for selecting best options in light of findings and if particular solutions would be recommended, using language and arguments business owner can easily understand, and justifies response	Communicates method for selecting best options and if particular solutions would be recommended, using language and arguments business owner can easily understand, but does not justify response, or response contains inaccuracies, or justification is cursory	Does not communicate method for selecting best options in light of findings and if particular solutions would be recommended, using language and arguments business owner can easily understand	6.4
Conclusion: Next Steps	Meets “Proficient” criteria, and response is realistic, comprehensive, and well aligned to the business owner’s needs	Suggests potential next steps for the business in light of findings, using language business owner can easily understand, and justifies response	Suggests potential next steps for the business in light of findings, using language business owner can easily understand, but does not justify response, or response contains inaccuracies	Does not suggest potential next steps for the business in light of findings, using language business owner can easily understand	6.4
Articulation of Response	Submission is free of errors related to citations, grammar, spelling, syntax, and organization and is presented in a professional and easy-to-read format	Submission has no major errors related to citations, grammar, spelling, syntax, or organization	Submission has major errors related to citations, grammar, spelling, syntax, or organization that negatively impact readability and articulation of main ideas	Submission has critical errors related to citations, grammar, spelling, syntax, or organization that prevent understanding of ideas	4
Earned Total					100%