

Capstone Project Overview

Project Purpose

This project's purpose is to empower you to leverage your knowledge and skills and apply them to a start-up e-commerce information technology infrastructure. As part of this integrated effort, you will identify the hardware and software components of the e-commerce infrastructure, develop infrastructure design and implementation plans, and summarize your learnings in an executive presentation to potential investors.

Background Information

For the purpose of the Capstone project, you are to serve as the Chief Technology Officer (CTO) of a hypothetical e-commerce start-up company of your design. A venture capital group has funded this innovative start-up.

The CEO has given you 60 days to deliver an information technology project plan in anticipation of the company locating to a new facility. Since this is a start-up company, currently no building or technology infrastructure exists to support the business. All information technology (hardware and software) must be implemented in a hosted solution, an on-site solution, or a hybrid model. The CEO expects you to integrate different technologies from a variety of partners and incorporate industry best practices to develop the company's technological systems.

Additional company background information:

Company Information	Current Status	Growth Projections (over next two years)
Facility Type	New facility is a two-story, stand-alone building.	--
Number of Employees	10	30
Revenue	\$5 million	\$30 million

Course Project Deliverables

You are responsible for completing a sequential series of five course project deliverables, culminating in a comprehensive project plan and executive presentation.

Here is a brief description of each of the five course project deliverables:

1. Project Plan Inception

In the first course project deliverable you will create a 5–7 page project plan inception document outlining the project specifics, such as company background information, company business, and an overview of the company's information systems infrastructure. You will also develop a high-level supporting block diagram of your company's information systems infrastructure. Finally, you will be responsible to use Microsoft Project to create a Gantt chart identifying the project's major and minor tasks, illustrating dependency relationships between activities.

Submission Requirements:

- Project Plan Inception (MS Word).
- Gantt Chart (MS Project).

2. Business Requirements

In the second course project deliverable you will use a template to develop a 5–7 page business requirements document for your e-commerce company. This assignment is part of the overall information systems project plan you are creating. As part of this document, you will describe the company's:

- Functional business requirements, or scope, and scope control.
- Non-functional business requirements, such as governance, risk, and compliance.
- Technical requirements necessary to integrate various e-commerce infrastructure components.

You will identify potential risks, constraints, and assumptions. To round out this deliverable, you will use Microsoft Project to update the Gantt chart you previously created with the major and minor tasks identified in the business requirements document.

Submission Requirements:

- Business Requirements (MS Word).
- Gantt Chart (MS Project).

3. Infrastructure Design

In the third course design project deliverable you will create an 8–10 page infrastructure design document that considers the key elements of software, hardware, security, and business process flow for your e-commerce start-up company. In addition, you will use graphical tools to create a supporting data flow diagram (DFD). You will finish off this project deliverable by using Microsoft Project to update the Gantt chart you previously created with the major and minor tasks identified in the infrastructure design document.

Submission Requirements:

- Infrastructure Design (MS Word).
- Gantt Chart (MS Project).

4. System Implementation

The fourth course project deliverable focuses on the project's construction phase. In this deliverable you will develop an 8–10 page system implementation document for your e-commerce company. This document will include the engineering, furnishing, and installation (EFI) technical aspects of your e-commerce company's information systems infrastructure. As part of this document, you will use graphical tools to:

- Design the logical and physical layout of the e-commerce company's information systems.
- Illustrate the possible placement of key infrastructure elements with internal and external connectivity.

You will also develop a detailed comprehensive bill of materials for the project's implementation and document the methodology and process to include the engineering, furnishing, and installation of the identified inventory. You will finish out this course project deliverable by using Microsoft Project to update the Gantt chart you previously created with the major and minor tasks identified in the system implementation document.

Submission Requirements:

- System Implementation (MS Word).
- Gantt Chart (MS Project).

5. Comprehensive Project Plan and Executive Presentation

The fifth and final course project deliverable is the final stage of your project plan development. This is the culmination of all of the work you have done to date in the course. You will leverage all previous deliverables and integrate them into one comprehensive 8–10 page project plan. The project plan's purpose: convince your start-up company's executive team and the venture capital group to approve and fund your project. As part of this course deliverable, you will accompany your project plan with an executive presentation that summarizes in a compelling and persuasive fashion the key selling points of your solution. You will close out this project deliverable by using Microsoft Project to update the project Gantt chart to include all major and minor tasks necessary to execute the project.

Submission Requirements:

- Comprehensive Project Plan (MS Word).
- Executive Presentation (MS PowerPoint).
- Gantt Chart (MS Project).