



CASE CHALLENGE BRIEF

MAKING EFFECTIVE DECISIONS: SIEMENS

Business & Challenge Overview

Siemens USA is a subsidiary of the global powerhouse Siemens AG. As the company's largest subsidiary, Siemens USA has focused on electrification (process of charging something with electricity), automation (minimizing human interaction) and digitalization (converting information into a digital format) for more than 160 years. Siemens has more than 60 manufacturing sites in the United States and Mexico. They deliver energy-efficient, resource-saving technology solutions for industry, hospitals, utilities, cities and manufacturers.

The Motion Control division, headquartered in Alpharetta, GA is one of Siemens USA's many divisions. This division provides a complete portfolio of best-in-class hardware and software technology solutions such as drives and motors as well as motion control and machine tool automation for virtually any industrial manufacturing application including mining, oil & gas, metals processing and pulp and paper.

Siemens is leading the way with its advancements in digitalization — demonstrating how software and hardware integrated across the digital enterprise increase competitiveness by shortening time-to-market, increasing flexibility and boosting efficiency.

The goal of the General Manager (GM) of North American Operations for Siemens Motors is to *effectively drive profitability for the business*. The GM needs to make a decision about whether Siemens can *increase revenue* while *lowering costs* by changing the existing **inventory** model.

Currently, products from the Motion Control division are sold directly to **end-user** companies as well as to **resellers** and **Original Equipment Manufacturers (OEMs)**. The motors are manufactured in Mexico, and then the inventory is shipped to Memphis, TN where it is warehoused in a Siemens-owned facility. Products are then distributed to customers across the country. While the current inventory model works, the GM wonders if there is a way to drive profitability by changing the model.

We need your help! The General Manager of North American Operations for Siemens has asked your team to *make a decision* about the inventory model.

As part of the **Supply Chain** Team that oversees inventory planning, you and your teammates need to determine

DEFINITIONS

Inventory: products held for future sale

End-User: the person/company who actually uses a particular product

Resellers: a person or company that sells something they have bought to someone else

Original Equipment Manufacturers (OEM): maker of a system that includes other companies' subsystems

Supply Chain: the sequence of processes involved in the production and distribution of a product



What inventory model will most effectively increase revenue and/or lower expenses for Siemens going forward?

Should Siemens:

- (1) maintain the current single warehouse location managed internally*
- (2) Single warehouse utilizing current space but managed externally*
- (3) outsource to multiple warehouse locations managed externally*
- (4) consider another inventory model?*

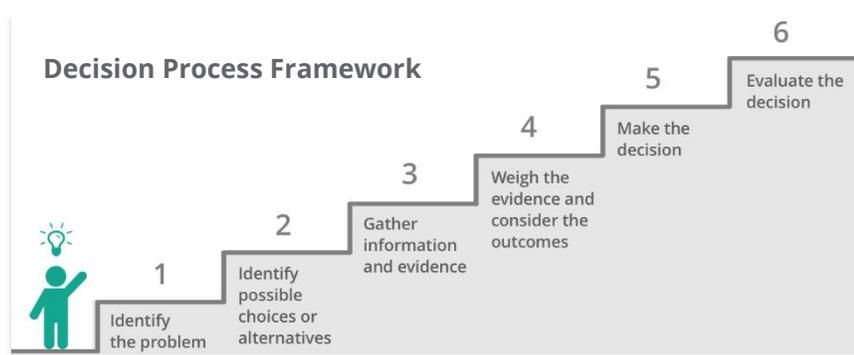
To make an effective decision, you will need to gather and weigh information about the costs involved, contract commitments and other non-financial impacts. You will work through the **Decision Process Framework** to evaluate your options and decide on the best course of action for the company. Finally, you'll provide details demonstrating why your recommendation is best for the Motion Control division and present it to the General Manager of North American Operations for Siemens Motors. In addition, you will create a short presentation to one of the stakeholders (customers, employees or board of directors, explaining why this option is the best for the company and how it will impact the stakeholder.

DEFINITIONS

Managed Internally: run by employees of the company

Managed Externally: run by employees of another company hired for this purpose

Outsource: obtain (goods or a service) from an outside supplier, especially in place of an internal source



Let's decide on an inventory model strategy for the Motion Control division of Siemens!



Checklist

UNDERSTAND THE PROBLEM

- Write down what you know about the problem.
- Review what exactly the company is asking for with your team.

RESEARCH & EXAMINE PROBLEM

- Following the *Decision Process Framework*, you have already covered the **Identify the problem** and **Identify possible choices** steps. Now continue the process by **Gathering information and evidence**. List what you need to know to understand what is causing the problem or contributes to the solution. Use the following questions as a starting point:
 - *What are the goals of the company concerning this decision?*
 - *What are the costs, benefits, risks and rewards connected with each inventory model?*
 - *What do you know about the current contracts/commitments with the existing location?*
 - *How much would it cost to break the current contracts?*
 - *What are the costs to transport from the Mexico to the warehouse in Memphis vs. to multiple warehouses?*
 - *What is the cost savings for distribution to customers from warehouses closer to markets with high density?*
 - *What is the cost to use multiple third-party vendors vs. operating our own warehouse?*
 - *What key non-financial should be considered?*
 - *What key considerations will determine the success of the successful inventory model?*
 - *What other non-financial aspects of the decision are related to the challenge?*
- Identify resources for getting the information you need to examine the problem fully and assign research tasks to your team.
- Compile research results into one document that everyone on your team can access.

CREATE SOLUTION

- Based on your research and information gathered, **weigh the evidence and consider the outcomes**:
 - *Which inventory model would provide the most cost savings and/or revenue increase?*
 - *Why is it a better option?*
 - *What are the pros and cons?*
 - *Is there another option that Siemens should consider?*
- With your team, **make a decision** or recommendation on the inventory model.
- Finally, **evaluate the decision** by considering the **risks/rewards**:
 - *What assumptions support your plan?*
 - *Are there any risks to your proposal?*



- With your team, test your solution by brainstorming possible complications. *How can those be minimized?*
- As a group, discuss your findings and decision on the best offering, making sure to do the following:
 - Describe the **goals** of the company relating to this decision.
 - Outline the **pros / cons, trade-offs and implications**.
 - Develop a **recommendation** for which option to take and provide rationale for your decision.
 - Identify **risks** to success and ways to mitigate the risk.
 - Create a PowerPoint presentation outlining your solution/examples (total presentation time is no more than 3-5 minutes).
 - Create a 1-2 minute presentation to one of the stakeholders (customers, employees or board of directors) explaining why this is the best option for the company and how it will impact the stakeholder.
- Your solution should also include the following:
 - Answers to all parts of the challenge question.
 - Explanation of why your solution is the best strategy.
 - Evidence that demonstrates why the solution will work.
 - Reasoning for choosing the recommended inventory model.
 - Discussion of what discoveries/decisions were made at each step of the decision process.
 - A detailed recommendation for Siemens that addresses the key considerations for the inventory model, including the potential cost savings and/or revenue increase.

CREATE PRESENTATION / DEMONSTRATION

- Create a presentation to share your solution with the company. Be sure to include the following:
 - A clear explanation of the challenge and your solution.
 - Visuals or media that clarify information or engage your audience (for example: pictures, tables, charts, etc.).
- Prepare to present
 - Assign individual sections of the presentation to each team member.
 - Practice delivering your section of the presentation professionally and confidently.
 - Rehearse the entire presentation as a team.
 - Think through possible questions the company might have about your solution and how you might answer.
 - Make any updates to your presentation that will strengthen your solution and make it clearer.
- Review the Case Challenge Presentation Rating Sheet, and use it as a guide as you develop and rehearse your presentation