
CHAPTER 10 The Manufacturing Flow Management Process

Manufacturing flexibility provides the ability to make a variety of products in a timely manner in response to changes in demand.

Overview

Manufacturing flow management is the supply chain management process that includes all activities necessary to achieve and manage manufacturing flexibility in the supply chain and to move products through production operations efficiently. Manufacturing flexibility provides the ability to make a variety of products in a timely manner in response to changes in demand. Successful implementation requires managing beyond the four walls of the factory. In this chapter, we describe the manufacturing flow management process and show how it can be implemented within a company and managed across the supply chain. We examine the activities of each sub-process; evaluate the interfaces with the other supply chain management processes and key members of the supply chain; and provide examples of successful implementation.

After reading this chapter you should be able to:

- Understand how complexity affects manufacturing activities across the supply chain and how manufacturing flexibility can counter these complexities.
- Describe the strategic manufacturing flow management process.
- Recognize the five generic manufacturing strategies and how the degree of flexibility compares across these strategies.
- Explain the importance of establishing the appropriate level of flexibility in the manufacturing flow management process and how to do it.
- Determine push/pull boundaries and decoupling points.
- Identify how constraints affect the manufacturing flow management process.
- Explain how the manufacturing flow management process can affect Economic Value Added (EVA[®]).
- Describe the operational manufacturing flow management process.
- Recognize why the manufacturing flow management process needs to be cross-functional and the role that each organizational function plays.
- Explain how customers and suppliers can be integrated into the manufacturing flow management process.
- Understand why the manufacturing flow management process needs to be cross-functional, what functions should be involved, and what role each plays.
- Explain how customers and suppliers can be integrated into the manufacturing flow management process.