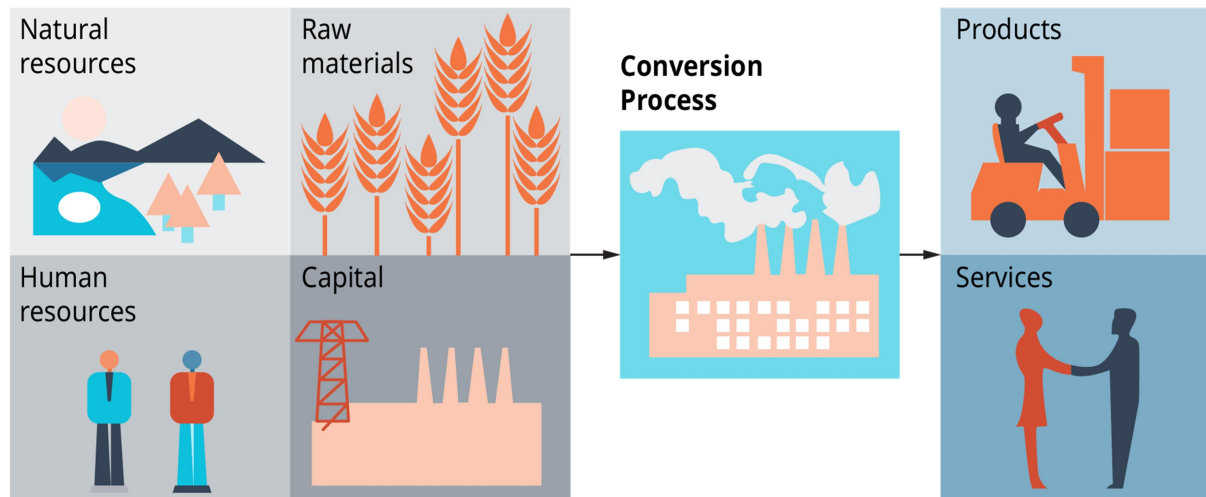


L1: Introduction and Overview of Industrial Management & Production System

Production, the creation of products and services, is an essential function in every firm. Production means transformation of inputs, such as natural resources, raw materials, human resources, and capital, into outputs, which are products and services. This process is shown in figure. Managing this conversion process is the role of Industrial management.

Inputs

(factors of production)



Production Process for Products and Services

The goal of customer satisfaction is an important part of effective production and operations. In the past, the manufacturing function in most companies was inwardly focused. Manufacturing had little contact with customers and didn't always understand their needs and desires. In the 1980s, many industries, such as automotive, steel, and electronics, lost their customers to foreign competitors because their production systems could not provide the quality customers demanded. As a result, today most of the companies, both large and small, consider a focus on quality to be a central component of effective operations management.

Stronger links between marketing and manufacturing also encourage production managers to be more outwardly focused and to consider decisions in light of their effect on customer satisfaction. Service companies find that making operating decisions with customer satisfaction in mind that can be a competitive advantage.

Industrial managers, the people charged with managing and supervising the conversion process, play a vital role in today's firm. They control about three-fourths of a firm's assets, including inventories, wages, and benefits. They also work closely with other major divisions of the firm, such as marketing, finance, accounting, and human resources, to ensure that the firm produces its goods profitably and satisfies its customers. Marketing personnel help them decide which products to make or which services to offer. Accounting and human resources help them face the challenge of combining people and resources to produce high-quality goods on time and at reasonable cost. They are involved in the development and design of goods and determine what production processes will be most effective.

Industrial Management & Production systems involve three main types of decisions, typically made at three different stages:

- 1. Production planning.** The first decisions facing operations managers come at the planning stage. At this stage, managers decide where, when, and how production will occur. They determine site locations and obtain the necessary resources.
- 2. Production control.** At this stage, the decision-making process focuses on controlling quality and costs, scheduling, and the actual day-to-day operations of running a factory or service facility.
- 3. Improving production and operations.** The final stage of operations management focuses on developing more efficient methods of producing the firm's goods or services.

All three decisions are on-going and may occur simultaneously. In the detailed session of the course, we will take a closer look at the decisions and considerations firms face in each stage of production and operations management.

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