






# Production Systems

Example	Primary Inputs	Transformation	Outputs
<b>Computer Factory</b> 	Hard drives, computer memory, computer chips, keyboards, cases, power supply, DVD drives, central circuit board, boards for network and Internet access and graphics, monitors, and software	Assembles components to meet customer orders, including specialized orders for hardware and software	Desktop or laptop computers
<b>Trucking Firm</b> 	Trucks, personnel, buildings, fuel, goods to be shipped, packaging supplies, truck parts, utilities	Packages and transports goods from sources to destinations	Delivered goods
<b>Retail Store</b> 	Buildings, displays, scanners, merchandise, personnel, supplies, utilities	Attracts customers, stores goods, sells products	Merchandise sold
<b>Automobile Body Shop</b> 	Damaged autos, paints, supplies, machines, tools, buildings, personnel, utilities	Transforms damaged auto bodies into facsimiles of the originals	Repaired automobile bodies
<b>County Sheriff's Department</b> 	Personnel, police equipment, automobiles, office furniture, buildings, utilities	Detects crimes and brings criminals to justice	Lower crime rates and peaceful communities

# Strategic Importance of the Production Function

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- A **vital function** is necessary for generating money to pay employees, lenders, and stockholders.
  - Production is a vital function.
- Effective production and operations management can:
  - lower a firm's costs of production.
  - boost the quality of its goods and services.
  - allow it to respond dependably to customer demands.
  - enable it to renew itself by providing new products.

# Mass, Flexible, and Customer-Driven Production

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- **Mass Production**— a system for manufacturing products in large quantities through effective combinations of employees, with specialized skills, mechanization, and standardization
- **Flexible Production**— more cost-effective for producing smaller batches using information technology, communication, and cooperation
- **Customer-Driven Production**— evaluating customer demands in order to make the connection between products manufactured and products bought