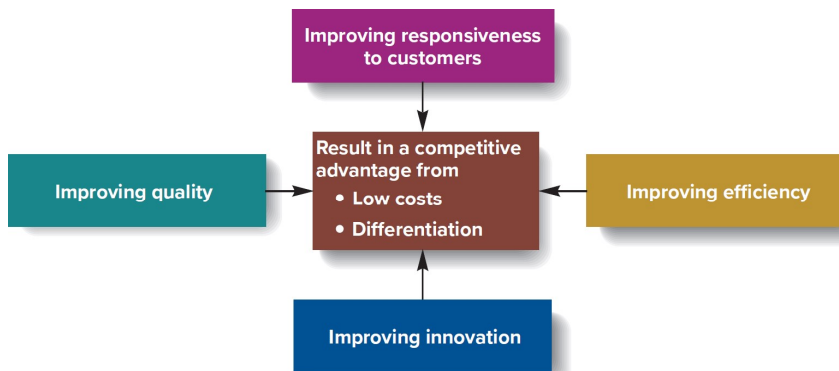


Learning Objectives ²

4. Explain why achieving superior efficiency is so important, and understand the different kinds of techniques that need to be employed to increase efficiency.
5. Differentiate between two forms of innovation, and explain why innovation and product development are crucial components of the search for competitive advantage.

3

Figure 9.1 Four Ways to Create a Competitive Advantage



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Functional Strategies and Value Chain Management ¹

Functional-level strategy:

- Plan of action to improve the ability of each of an organization's departments to performs its task-specific activities in ways that add value to an organization's goods and services.

Functional Strategies and Value Chain Management ²

Value chain:

- The coordinated series or sequence of functional activities necessary to transform inputs such as new product concepts, raw materials, component parts, or professional skills into the finished goods or services customers value and want to buy.

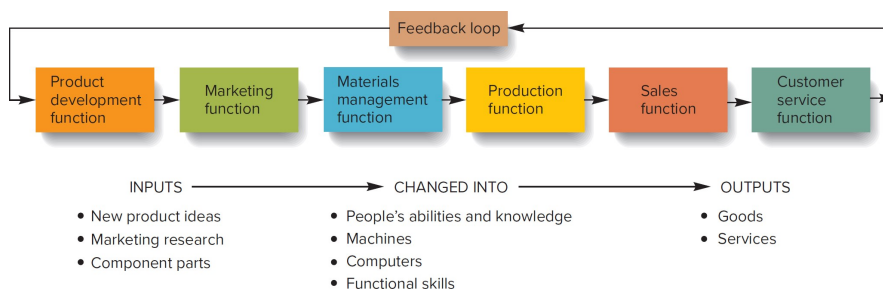
Functional Strategies and Value Chain Management ³

Value chain management:

- Development of a set of functional-level strategies that support a company's business-level strategy and strengthen its competitive advantage.

7

Figure 9.2 Functional Activities and the Value Chain



[Access the text alternative for slide images](#)

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Functional Strategies and Value Chain Management ⁴

Product development:

- Engineering and scientific research activities involved in innovating new or improved products that add value to a product.

Marketing function:

- Once a new product is developed, marketing's task is to persuade customers that a product meets their needs and to convince them to buy it.

Functional Strategies and Value Chain Management ⁵

Materials management function:

- Controls the movement of physical materials from the procurement of inputs through production and into distribution and delivery to the customer.

Functional Strategies and Value Chain Management ⁶

Production function:

- Production function is responsible for the creation, assembly or provision of a good or service—for transforming inputs into outputs.
- Production for physical products generally means manufacturing or assembly.
- Production for services takes place when the service is provided or delivered to the customer.

Functional Strategies and Value Chain Management ⁷

Sales function:

- Plays a crucial role in locating customers and then informing and persuading them to buy the company's products.
- Personal, face-to-face communication, selling to existing and potential customers.

Functional Strategies and Value Chain Management

Customer service function:

- Provides after-sales service and support.
- Can create a perception of superior value by solving customer problems and supporting customers.

What Do Customers Want?

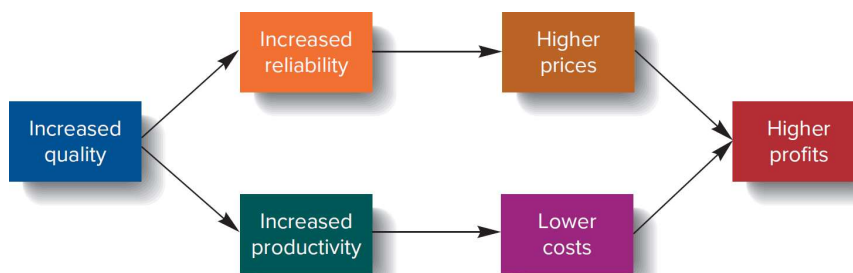
1. A **lower price**.
2. Products that are **high-quality**.
3. **Quick service** and **good after-sales service**.
4. Products with many **useful or valuable features**.
5. Products that are **tailored to their unique needs**.

Customer Relationship Management

Customer relationship management (CRM):

- Technique that uses technology to develop an ongoing relationship with customers to maximize the value an organization can deliver to them over time.

Figure 9.3 Impact of Increased Quality on Organizational Performance



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Total Quality Management

Total quality management (TQM):

- Focuses on improving the quality of an organization's products and stresses that all of an organization's value chain activities should be directed toward this goal.

Steps to Successful TQM Implementation

1. Build organizational commitment to quality.
2. Focus on the customer.
3. Find ways to measure quality.
4. Set goals and create incentives.
5. Solicit input from employees.

Steps to Successful TQM Implementation

6. Identify defects and trace them to their source.
7. Introduce just-in-time inventory systems.
8. Work closely with suppliers.
9. Design for ease of production.
10. Break down barriers between functions.

Six Sigma

- A technique used to improve quality by systematically improving how value chain activities are performed and then using statistical methods to measure the improvement.
- Founded by Motorola.

Example – Meyers Brothers Kalicka (MBK)

MBK values continuous learning, which laid the foundation for involvement with **Six Sigma**. Some senior managers attended a presentation on Six Sigma, and Melyssa Brown, senior manager in the auditing department, underwent the first level of training, earning a “green belt” certification.

Her improvements in the data sharing process improved interaction with clients, reduced the unproductive client hours, and increased delivery of services. She is now looking at streamlining billing and administrative work.

Facilities Layout, Flexible Manufacturing, and Efficiency

Facilities layout:

- Strategy of designing the machine-worker interface to increase operating system efficiency.
- Product.
- Process.
- Fixed Position.

Facilities Layout, Flexible Manufacturing, and Efficiency ²

Flexible manufacturing:

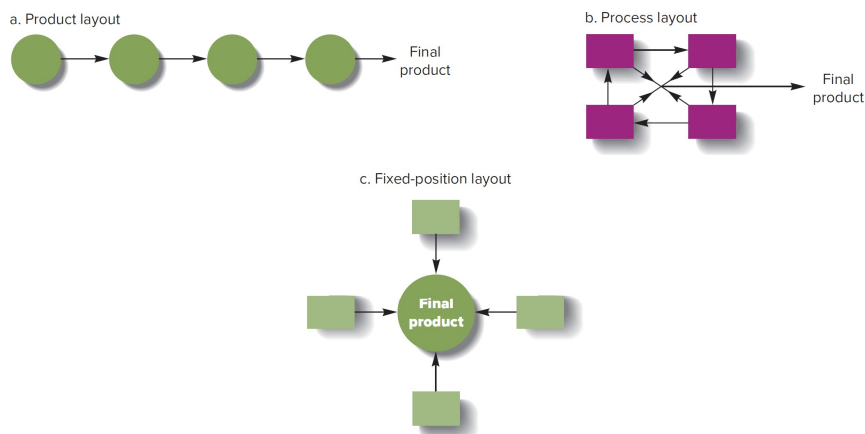
- The set of techniques that attempt to reduce the costs associated with the product assembly process or the way services are delivered to customers.
- Able to produce many more varieties of a product than before, in the same amount of time.
- Example: How patients are routed through a hospital.

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Figure 9.4 Three Facilities Layouts



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Facilities Layout ₁

Product layout:

- Machines organized so that each operation is performed at work stations arranged in a fixed sequence.
- Mass production.
- Car assembly lines.

Facilities Layout ₂

Process layout:

- Self-contained work stations not organized in a fixed sequence.
- Product goes to whichever workstation needed to perform next operation.
- More flexible, less efficient.
- Custom furniture manufacturer.

Facilities Layout ³

Fixed-position layout:

- Product stays in fixed position and components produced at remote stations brought to the product for final assembly.
- Airplane manufacturing.

Just-in-Time Inventory and Efficiency

Just-in-time (JIT) inventory system gets components to the assembly line just as they are needed to drive down costs.

Major cost savings can result from increasing inventory turnover and reducing inventory holding costs.

Self-Managed Work Teams and Efficiency

Self-managed work teams produce an entire product instead of just parts of it.

Team members learn all tasks and move from job to job.

Teams can increase productivity and efficiency.

Process Reengineering and Efficiency

Process reengineering:

- The fundamental rethinking and radical redesign of business processes to achieve dramatic improvement in critical measures of performance such as cost, quality, service, and speed.

Information Systems, the Internet, and Efficiency

Information systems:

Operating efficiencies and a lower cost structure.

Example of Cisco Systems.

Internet: Real-time information.

- Reduces the number of employees, reducing costs.

Two Kinds of Innovation

Quantum product innovation:

The development of new, often radically different, kinds of goods and services because of fundamental shifts in technology brought about by pioneering discoveries.

- Internet and the World Wide Web.
- Fast-casual food.

Two Kinds of Innovation ²

Incremental product innovation:

The gradual improvement and refinement of existing products that occur over time as existing technologies are perfected.

Examples:

- Google's Chrome: thousands of small improvements.

Strategies to Promote Innovation and Speed Product Development ¹

Product development:

- Management of the value chain activities involved in bringing new or improved goods and services to the market.
- **Example:** Monte Peterson, former CEO of Thermos, and the new barbecue grill.

Strategies to Promote Innovation and Speed Product Development ²

Establish cross-functional teams.

Involve both customers and suppliers.

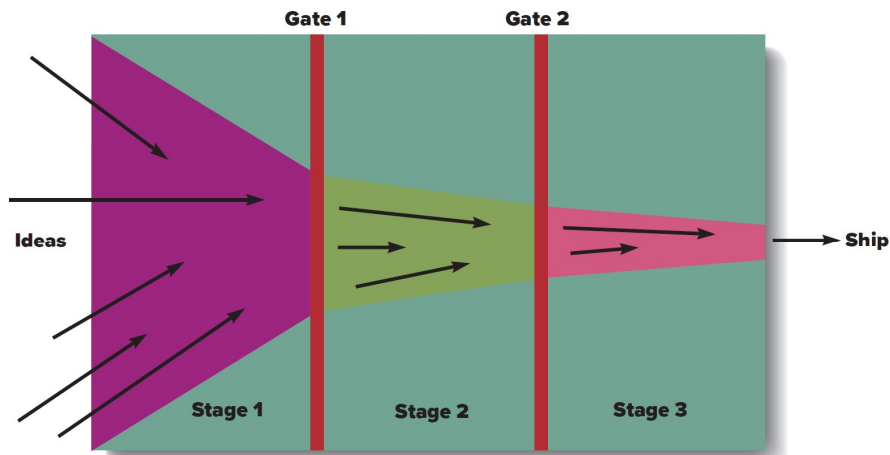
Establish a stage-gate development funnel.

Strategies to Promote Innovation and Speed Product Development ³

Stage-gate development funnel:

- A planning model that forces managers to choose among competing projects so organizational resources are not spread thinly over too many projects.
- **Example:** 3M's 15% rule.

Figure 9.5 A Stage-Gate Development Funnel



[Access the text alternative for slide images](#)

A Stage-Gate Development Funnel

Product development plan:

- A plan that specifies all of the relevant information that managers need in order to decide whether to proceed with a full-blown product development effort.

A Stage-Gate Development Funnel ²

Contract book:

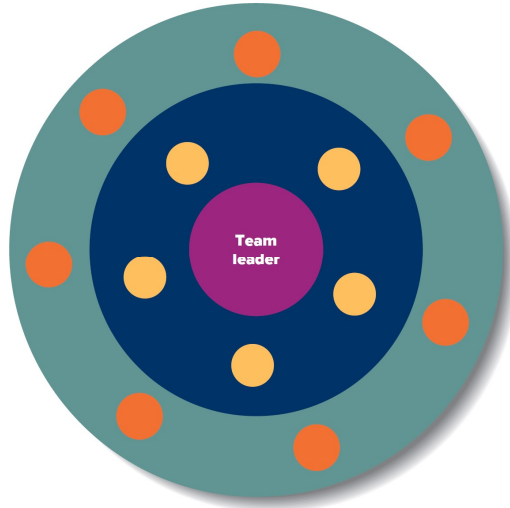
- A written agreement that details product development factors such as responsibilities, resource commitments, budgets, timelines, and development milestones.
- **Example:** 3M team members and top management negotiate contract at launch.

Establish Cross-Functional Teams

Core members:

- Members of a team who bear primary responsibility for the success of a project and who stay with a project from inception to completion.

Figure 9.6 Members of a Cross-Functional Product Development Team



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Figure 9.1 Four Ways to Create a Competitive Advantage – Text Alternative

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The graphic shows four ways to create a competitive advantage.

1. Improving responsiveness to customers
2. Improving efficiency
3. Improving innovation
4. Improving quality

All result in a competitive advantage from low costs and differentiation.

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Figure 9.2 Functional Activities and the Value Chain – Text Alternative

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The graphic shows the functional activities in the value chain.

The graphic shows consecutive boxes, one leading to the next: product development function, marketing function, materials management function, production function, sales function, customer service, and then the feedback loop that leads back to production development function.

Inputs: changed into outputs

Inputs: new product ideas, marketing research, component parts

Changed into: people's abilities and knowledge, machines, computers, functional skills

Outputs: goods and services

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Figure 9.3 Impact of Increased Quality on Organizational Performance – Text Alternative

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In Figure 9.3 the impact of increased quality on organizational performance displays a circuit starting with increased quality leading to either or both increased reliability and increased productivity.

Increased reliability leads to higher prices, which leads to higher profits.

Increased profitability leads to lower costs, which leads to higher profits.

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Figure 9.4 Three Facilities Layouts – Text Alternative

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The three facilities layouts are given as product layout, process layout and fixed-position layout.

Product layout is linear, four elements leading consecutively to the final product.

Process layout is square, each corner moving to the other and relating diagonally, leading to a final product.

Fixed-position layout is a circle in the middle, with four squares acting on it from the top, bottom, and sides.

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Figure 9.5 A Stage-Gate Development Funnel – Text Alternative

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The graphic consists of a box broken into Stage 1, Stage 2, and Stage 3. Stages 1 and 2 are separated by Gate 1. Stages 2 and 3 are separated by Gate 2.

Ideas go into Stage 1, funneling into Stage 2, narrowing in Stage 3, and then out to ship.

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