



Overview

A coherent technological innovation strategy leverages the firm's existing competitive position and provides direction for future development of the firm.

Formulating this strategy requires:

- Appraising the firm's environment.
- Appraising the firm's strengths, weaknesses, competitive advantages, and core competencies.
- Articulating an ambitious strategic intent.

External Analysis.

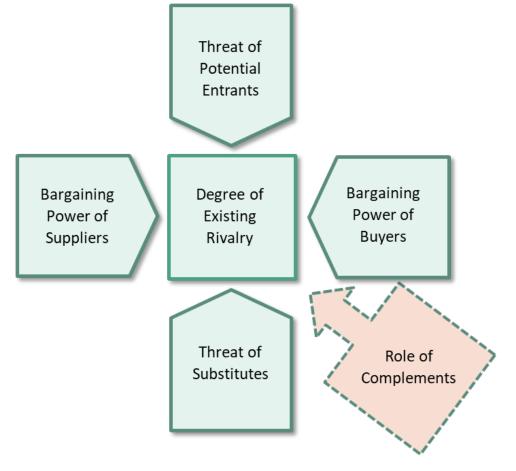
- Two common methods are Porter's Five-Force Model and Stakeholder Analysis.
- Porter's Five-Force Model.
 - 1. Degree of existing rivalry. Determined by number of firms, relative size, degree of differentiation between firms, demand conditions, exit barriers.
 - 2. Threat of potential entrants. Determined by attractiveness of industry, height of entry barriers (for example, start-up costs, brand loyalty, regulation, etc.).
 - 3. Bargaining power of suppliers. Determined by number of suppliers and their degree of differentiation, the portion of a firm's inputs obtained from a particular supplier, the portion of a supplier's sales sold to a particular firm, switching costs, and potential for vertical integration.

- 4. Bargaining power of buyers. Determined by number of buyers, the firm's degree of differentiation, the portion of a firm's inputs sold to a particular buyer, the portion of a buyer's purchases bought from a particular firm, switching costs, and potential for vertical integration.
- 5. Threat of substitutes. Determined by number of potential substitutes, their closeness in function and relative price.
- Recently Porter has acknowledged the role of complements. Must consider:
 - a. how important complements are in the industry.
 - b. whether complements are differentially available for the products of various rivals (impacting the attractiveness of their goods), and
 - c. who captures the value offered by the complements.

Five-Force Model plus Complements.



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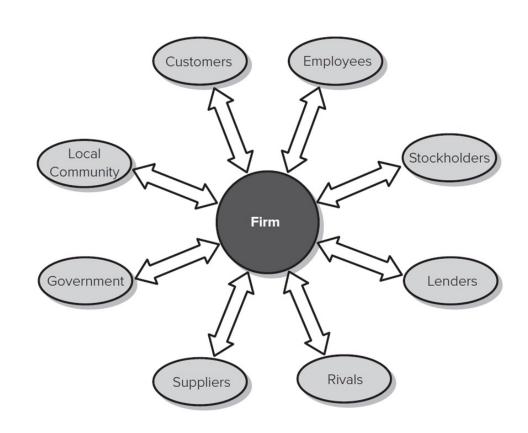


Source: Adapted from Michael Porter, Competitive Strategy: Techniques for Analyzing Industries and Competitors.

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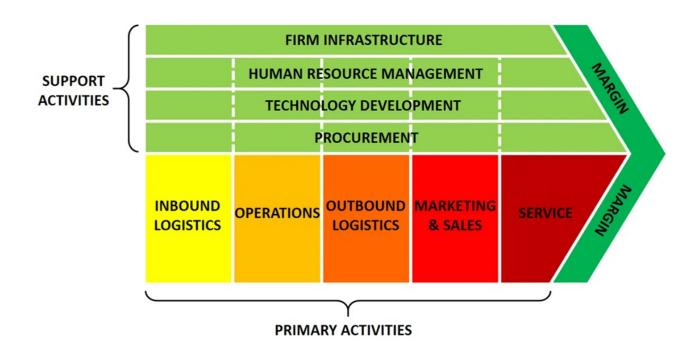
Stakeholder Analysis.

- 1. Who are the stakeholders?
- 2. What does each stakeholder want?
- 3. What resources do they contribute to the organization?
- 4. What claims are they likely to make on the organization?



Internal Analysis.

1. Identify the firm's strengths and weaknesses. It's helpful to consider each element of value chain.



Source: Michael Porter, Competitive Advantage: Creating and Sustaining Superior Performance.

Competitive advantage



It refers to the unique attributes, resources, or capabilities that enable an organization to outperform its competitors in a specific market or industry. This advantage can manifest in various ways, such as offering better products or services, lower prices, superior customer service, or faster delivery, among others. The ability to sustain and defend this advantage over time is essential, as it allows a company to maintain profitability and market leadership.

1. Assess which strengths have potential to be sustainable competitive advantage.



Resources are difficult (or impossible) to imitate when they are:

- Tacit.
- Path dependent.
- Socially complex.
- Causally ambiguous.

Identifying Core Competencies and Capabilities 1

Core Competencies: A set of integrated and harmonized abilities that distinguish the firm in the marketplace.

Competencies typically combine multiple kinds of abilities.

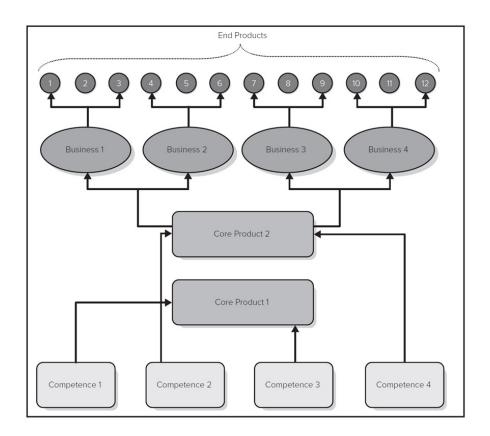
Several core competencies may underlie a business unit.

Several business units may draw from same competency.

Core competencies should:

- Be a significant source of competitive differentiation.
- Cover a range of businesses.
- Be hard for competitors to imitate.

Identifying Core Competencies and Capabilities 2



Source: C. K. Prahalad and G. Hamel, "The Core Competence of the Corporation," **Harvard Business Review**, May–June 1990.

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Risk of Core Rigidities

When firms excel at an activity, they can become over committed to it and rigid.

Incentives and culture may reward current competencies while thwarting development of new competencies.

Dynamic capabilities are competencies that enable the firm to quickly respond to change.

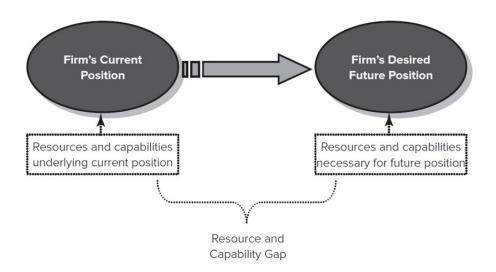
 For example, firm may develop a set of abilities that enable it to rapidly deploy new product development teams for a new opportunity; firm may develop competency in working with alliance partners to gain needed resources quickly.

Strategic Intent

Strategic Intent.

A long-term goal that is ambitious, builds upon and stretches firm's core competencies, and draws from all levels of the organization.

- Typically looks 10 to 20 years ahead, establishes clear milestones.
- Firm should identify resources and capabilities needed to close gap between strategic intent and current position.



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Tesla, Inc. in 2021

Tesla was founded in 2003 by Martin Eberhard, an entrepreneur who wanted to create a faster, sexier electric car. In 2004, Elon Musk agreed to fund the company and became Chairman of the Board. A few years later Eberhard left and Musk became CEO.

In 2021, Tesla had grown into a company with almost \$32 billion in annual revenues that produced multiple car models, owned Solar City, produced energy storage systems (for example, Powerwall) and solar roofs. Tesla had additionally announced several future products, including trucks, a new sports car, and a full self-driving system.

The company's expansion into multiple product lines and rapid production capacity expansion created large capital requirements for the firm.

Tesla's cars had rapidly attracted a large and loyal fan base and sales were growing at an impressive rate. But was Tesla trying to do too much too quickly?

Discussion Questions:

- 1. What were Musk's and Eberhard's goals in founding Tesla?
- 2. How would you characterize competition in the auto industry?
- 3. What do you think are Tesla's core competencies? Does it have any sources of sustainable competitive advantage?
- 4. What is your assessment of Tesla's moves into (a) mass-market cars, (b) batteries (car batteries and Powerwall), (c) solar panels? Please consider both the motivation for the moves, and the opportunities and challenges for Tesla to compete in these businesses.
- 5. Do you think Tesla will be profitable in all of these businesses? Why or why not?
- 6. What do you think Tesla's (or Elon Musk's) strategic intent is?



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