# Five Forces Model

Based Upon Michael E. Porter's Work

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# Chapter 1

# Michael Porter

For the American wrestling ring announcer, see Michael Porter (professional wrestling). For the Australian rules footballer, see Michael Porter (footballer). For the English footballer, see Mick Porter.

**Michael Eugene Porter** (born May 23, 1947)[2] is the Bishop William Lawrence University Professor at The Institute for Strategy and Competitiveness, based at the Harvard Business School. He is a leading authority on competitive strategy and the competitiveness and economic development of nations, states, and regions. Michael Porter's work is recognized in many governments, corporations and academic circles globally. He chairs Harvard Business School's program dedicated for newly appointed CEOs of very large corporations.

## 1.1 Early life

Michael Eugene Porter received a BSE with high honors in aerospace and mechanical engineering from Princeton University in 1969, where he graduated first in his class and was elected to Phi Beta Kappa and Tau Beta Pi. He received an MBA with high distinction in 1971 from Harvard Business School, where he was a George F. Baker Scholar, and a PhD in business economics from Harvard University in 1973.

Porter said in an interview that he first became interested in competition through sports. He was on the NCAA championship golf squad at Princeton and also played football, baseball and basketball growing up.[3]

Porter credits Harvard professor Roland "Chris" Christensen with inspiring him and encouraging him to speak up during class, hand-writing Porter a note that began: "Mr. Porter, you have a lot to contribute in class and I hope you will." Porter reached the top of the class by the second year at Harvard Business School.[3]

At Harvard, Porter took classes in industrial organization economics, which attempts to model the effect of competitive forces on industries and their profitability. This study inspired the Porter five forces analysis framework for analyzing industries.[3]

## 1.2 Career

Michael Porter is the author of 18 books and numerous articles including *Competitive Strategy*, *Competitive Advantage*, *Competitive Advantage of Nations*, and *On Competition*. A six-time winner of the McKinsey Award for the best *Harvard Business Review* article of the year, Professor Porter is the most cited author in business and economics.[4]

Porter stated in a 2010 interview: "What I've come to see as probably my greatest gift is the ability to take an extraordinarily complex, integrated, multidimensional problem and get arms around it conceptually in a way that helps, that informs and empowers practitioners to actually do things."[3]

### 1.2.1 Competition among nations

Porter wrote "The Competitive Advantage of Nations" in 1990. The book is based on studies of ten nations and argues that a key to national wealth and advantage was the productivity of firms and workers collectively, and that the national and regional environment supports that productivity. He proposed the "diamond" framework, a mutually-reinforcing system of four factors that determine national advantage: factor conditions; demand conditions; related or supporting industries; and firm strategy, structure and rivalry. Information, incentives, and infrastructure were also key to that productivity.[5]

During April 2014, Porter discussed how the United States ranks relative to other countries on a comprehensive scorecard called "The Social Progress Index", an effort which he co-authored.[6] This scorecard rated the U.S. on a comprehensive set of metrics; overall, the U.S. placed 16th.[7]

### 1.2.2 Healthcare

Porter has devoted considerable attention to understanding and addressing the pressing problems in health care delivery in the United States and other countries. His book, *Redefining Health Care* (written with Elizabeth Teisberg), develops a new strategic framework for transforming the value delivered by the health care system, with implications for providers, health plans, employers, and government, among other actors. The book received the James A. Hamilton award of the American College of Healthcare Executives in 2007 for book of the year. His *New England Journal of Medicine* research article, "A Strategy for Health Care Reform—Toward a Value-Based System" (July 2009), lays out a health reform strategy for the U.S. His work on health care is being extended to address the problems of health care delivery in developing countries, in collaboration with Dr. Jim Yong Kim and the Harvard Medical School and Harvard School of Public Health.

### 1.2.3 Consulting

In addition to his research, writing, and teaching, Porter serves as an advisor to business, government, and the social sector. He has served as strategy advisor to numerous leading U.S. and international companies, including Caterpillar, Procter & Gamble,[8] Scotts Miracle-Gro, Royal Dutch Shell, and Taiwan Semiconductor. Professor Porter serves on two public boards of directors, Thermo Fisher Scientific and Parametric Technology Corporation. Professor Porter also plays an active role in U.S. economic policy with the Executive Branch and Congress, and has led national economic strategy programs in numerous countries. He is currently working with the presidents of Rwanda and South Korea.

Michael Porter is one of the founders of The Monitor Group, a strategy consulting firm that came under scrutiny in 2011 for its past contracts with the Muammar Gaddafi-led regime in Libya and alleged failure to register its activities under the Foreign Agents Registration Act. In 2013 Monitor was sold to Deloitte Consulting through a structured bankruptcy proceeding.

### 1.2.4 Non-profit

Michael Porter has founded three major non-profit organizations: Initiative for a Competitive Inner City – ICIC[9] in 1994, which addresses economic development in distressed urban communities; the Center for Effective Philanthropy, which creates rigorous tools for measuring foundation effectiveness; and FSG-Social Impact Advisors, a leading non-profit strategy firm serving NGOs, corporations, and foundations in the area of creating social value. He also currently serves on the Board of Trustees of Princeton University.

## 1.3 Honors and awards

In 2000, Michael Porter was appointed a Harvard University Professor, the highest professional recognition that can be awarded to a Harvard faculty member.[10] In 2009, he was awarded an honorary degree from McGill University.

## 1.4 Criticisms

Porter has been criticized by some academics for inconsistent logical argument in his assertions.[11] Critics have also labeled Porter's conclusions as lacking in empirical support and as justified with selective case studies. They have also claimed that Porter fails to credit original creators of his postulates originating from pure microeconomic theory.[4][12][13][14] Others have argued Porter's firm-level analysis is widely misunderstood and mis-taught.[15]

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- Cluster development
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- National Diamond
- Strategic planning
- Strategic management
- Social Progress Index
- Techno cluster
- Smart, Connected Products

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- Summary Biography from Global Leaders
- Biography at Harvard Business School Faculty Pages – Accessed October 15, 2012
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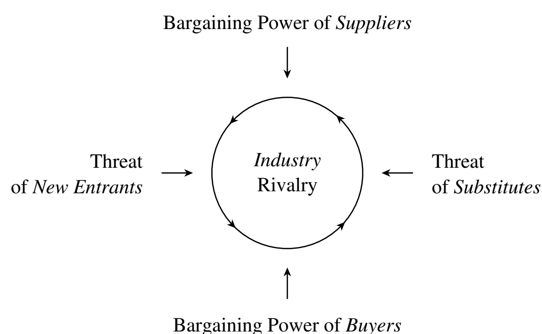
# Chapter 2

# Porter five forces analysis




*A graphical representation of Porter's five forces*

**Porter five forces analysis** is a framework that attempts to analyze the level of competition within an industry and business strategy development. It draws upon industrial organization (IO) economics to derive five forces that determine the competitive intensity and therefore attractiveness of an Industry. Attractiveness in this context refers to the overall industry profitability. An "unattractive" industry is one in which the combination of these five forces acts to drive down overall profitability. A very unattractive industry would be one approaching "pure competition", in which available profits for all firms are driven to normal profit. This analysis is associated with its principal innovator Michael E. Porter of Harvard University.

Porter referred to these forces as the micro environment, to contrast it with the more general term macro environment. They consist of those forces close to a company that affect its ability to serve its customers and make a profit. A change in any of the forces normally requires a business unit to re-assess the marketplace given the overall change in industry information. The overall industry attractiveness does not imply that every firm in the industry will return the same profitability. Firms are able to apply their core competencies, business model or network to achieve a profit above the industry average. A clear example of this is the airline industry. As an industry, profitability is low and yet individual companies, by applying unique business models, have been able to make a return in excess of the industry average.

Porter's five forces include - three forces from 'horizontal' competition: the threat of substitute products or services, the threat of established rivals, and the threat of new entrants; and two forces from 'vertical' competition: the bargaining power of suppliers and the bargaining power of customers.

Porter developed his Five Forces analysis in reaction to the then-popular SWOT analysis, which he found unrigorous and *ad hoc*.[1] Porter's five forces is based on the Structure-Conduct-Performance paradigm in industrial organizational economics. It has been applied to a diverse range of problems, from helping businesses become more profitable to helping governments stabilize industries.[2] Other Porter strategic frameworks include the value chain and the generic strategies.

## 2.1 Five forces

### 2.1.1 Threat of new entrants

Profitable markets that yield high returns will attract new firms. This results in many new entrants, which eventually will decrease profitability for all firms in the industry. Unless the entry of new firms can be blocked by incumbents (which in business refers to the largest company in a certain industry, for instance, in telecommunications, the traditional phone company, typically called the "incumbent operator"), the abnormal profit rate will trend towards zero (perfect competition).

The following factors can have an effect on how much of a threat new entrants may pose:

- The existence of barriers to entry (patents, rights, etc.). The most attractive segment is one in which entry barriers are high and exit barriers are low. Few new

firms can enter and non-performing firms can exit easily.

- Government policy
- Capital requirements
- Absolute cost
- Cost disadvantages independent of size
- Economies of scale
- Economies of product differences
- Product differentiation
- Brand equity
- Switching costs or sunk costs
- Expected retaliation
- Access to distribution
- Customer loyalty to established brands
- Industry profitability (the more profitable the industry the more attractive it will be to new competitors)

### 2.1.2 Threat of substitute products or services

The existence of products outside of the realm of the common product boundaries increases the propensity of customers to switch to alternatives. For example, tap water might be considered a substitute for Coke, whereas Pepsi is a competitor's similar product. Increased marketing for drinking tap water might "shrink the pie" for both Coke and Pepsi, whereas increased Pepsi advertising would likely "grow the pie" (increase consumption of all soft drinks), albeit while giving Pepsi a larger slice at Coke's expense. Another example is the substitute of traditional phone with a smart phone.

Potential factors:

- Buyer propensity to substitute
- Relative price performance of substitute
- Buyer switching costs
- Perceived level of product differentiation
- Number of substitute products available in the market
- Ease of substitution
- Substandard product
- Quality depreciation
- Availability of close substitute

### 2.1.3 Bargaining power of customers (buyers)

The bargaining power of customers is also described as the market of outputs: the ability of customers to put the firm under pressure, which also affects the customer's sensitivity to price changes. Firms can take measures to reduce buyer power, such as implementing a loyalty program. The buyer power is high if the buyer has many alternatives. The buyer power is low if they act independently e.g. If a large number of customers will act with each other and ask to make prices low the company will have no other choice because of large number of customers pressure.

Potential factors:

- Buyer concentration to firm concentration ratio
- Degree of dependency upon existing channels of distribution
- Bargaining leverage, particularly in industries with high fixed costs
- Buyer switching costs relative to firm switching costs
- Buyer information availability
- Force down prices
- Availability of existing substitute products
- Buyer price sensitivity
- Differential advantage (uniqueness) of industry products
- RFM (customer value) Analysis
- The total amount of trading

### 2.1.4 Bargaining power of suppliers

The bargaining power of suppliers is also described as the market of inputs. Suppliers of raw materials, components, labor, and services (such as expertise) to the firm can be a source of power over the firm when there are few substitutes. If you are making biscuits and there is only one person who sells flour, you have no alternative but to buy it from them. Suppliers may refuse to work with the firm or charge excessively high prices for unique resources.

Potential factors are:

- Supplier switching costs relative to firm switching costs
- Degree of differentiation of inputs

- Impact of inputs on cost or differentiation
- Presence of substitute inputs
- Strength of distribution channel
- Supplier concentration to firm concentration ratio
- Employee solidarity (e.g. labor unions)
- Supplier competition: the ability to forward vertically integrate and cut out the buyer.

### 2.1.5 Intensity of competitive rivalry

For most industries the intensity of competitive rivalry is the major determinant of the competitiveness of the industry.

Potential factors:

- Sustainable competitive advantage through innovation
- Competition between online and offline companies
- Level of advertising expense
- Powerful competitive strategy
- Firm concentration ratio
- Degree of transparency

## 2.2 Usage

Strategy consultants occasionally use Porter's five forces framework when making a qualitative evaluation of a firm's strategic position. However, for most consultants, the framework is only a starting point or "checklist." They might use value chain or another type of analysis in conjunction.[3] Like all general frameworks, an analysis that uses it to the exclusion of specifics about a particular situation is considered naive.

According to Porter, the five forces model should be used at the line-of-business industry level; it is not designed to be used at the industry group or industry sector level. An industry is defined at a lower, more basic level: a market in which similar or closely related products and/or services are sold to buyers. (See industry information.) A firm that competes in a single industry should develop, at a minimum, one five forces analysis for its industry. Porter makes clear that for diversified companies, the first fundamental issue in corporate strategy is the selection of industries (lines of business) in which the company should compete; and each line of business should develop its own, industry-specific, five forces analysis. The average Global 1,000 company competes in approximately 52 industries (lines of business).

## 2.3 Criticisms

Porter's framework has been challenged by other academics and strategists such as Stewart Neill. Similarly, the likes of ABC, Kevin P. Coyne and Somu Subramaniam have stated that three dubious assumptions underlie the five forces:

- That buyers, competitors, and suppliers are unrelated and do not interact and collude.
- That the source of value is structural advantage (creating barriers to entry).
- That uncertainty is low, allowing participants in a market to plan for and respond to competitive behavior.[4]

An important extension to Porter was found in the work of Adam Brandenburger and Barry Nalebuff of Yale School of Management in the mid-1990s. Using game theory, they added the concept of complementors (also called "the 6th force"), helping to explain the reasoning behind strategic alliances. Complementors are known as the impact of related products and services already in the market. [5]The idea that complementors are the sixth force has often been credited to Andrew Grove, former CEO of Intel Corporation. According to most references, the sixth force is government or the public. Martyn Richard Jones, whilst consulting at Groupe Bull, developed an augmented 5 forces model in Scotland in 1993. It is based on Porter's model and includes Government (national and regional) as well as Pressure Groups as the notional 6th force. This model was the result of work carried out as part of Groupe Bull's Knowledge Asset Management Organisation initiative.

Porter indirectly rebutted the assertions of other forces, by referring to innovation, government, and complementary products and services as "factors" that affect the five forces.[6]

It is also perhaps not feasible to evaluate the attractiveness of an industry independent of the resources a firm brings to that industry. It is thus argued (Wernerfelt 1984)[7] that this theory be coupled with the Resource-Based View (RBV) in order for the firm to develop a much more sound strategy. It provides a simple perspective for accessing and analyzing the competitive strength and position of a corporation, business or organization.

## 2.4 See also

- Coopetition
- National Diamond
- Value chain

- Porter's four corners model
- Industry classification
- Nonmarket forces
- *Economics of Strategy*

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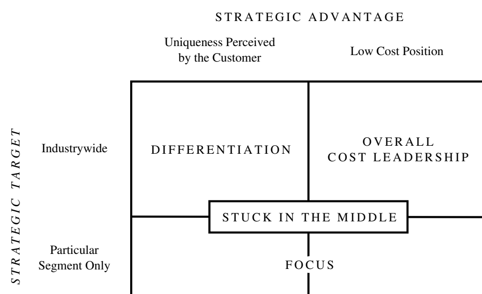
# Chapter 3

# Porter’s generic strategies

**Porter’s generic strategies** describe how a company pursues competitive advantage across its chosen market scope. There are three/four generic strategies, either lower cost, differentiated, or focus. A company chooses to pursue one of two types of competitive advantage, either via lower costs than its competition or by differentiating itself along dimensions valued by customers to command a higher price. A company also chooses one of two types of scope, either focus (offering its products to selected segments of the market) or industry-wide, offering its product across many market segments. The generic strategy reflects the choices made regarding both the type of competitive advantage and the scope. The concept was described by Michael Porter in 1980.[1]

## 3.1 Concept




*Michael Porter’s Three Generic Strategies*

Porter wrote in 1980 that strategy target either cost leadership, differentiation, or focus.[1] These are known as Porter’s three generic strategies and can be applied to any size or form of business. Porter claimed that a company must only choose one of the three or risk that the business would waste precious resources. Porter’s generic strategies detail the interaction between cost minimization strategies, product differentiation strategies, and market focus strategies.[1]

Porter described an industry as having multiple *segments* that can be targeted by a firm. The breadth of its targeting refers to the *competitive scope* of the business. Porter defined two types of *competitive advantage*: lower cost or differentiation relative to its rivals. Achieving competitive advantage results from a firm’s ability to cope with the five forces better than its rivals. Porter wrote: "[A]chieving competitive advantage requires a firm to make a choice...about the type of competitive advantage it seeks to attain and the scope within which it will attain it.” He also wrote: “The two basic types of competitive advantage [differentiation and lower cost] combined with the scope of activities for which a firm seeks to achieve them lead to three *generic strategies* for achieving above average performance in an industry: cost leadership, differentiation and focus. The focus strategy has two variants, cost focus and differentiation focus.”[2] In general:

- If a firm is targeting customers in most or all segments of an industry based on offering the lowest price, it is following a cost leadership strategy;
- If it targets customers in most or all segments based on attributes other than price (e.g., via higher product quality or service) to command a higher price, it is pursuing a differentiation strategy. It is attempting to differentiate itself along these dimensions favorably relative to its competition. It seeks to minimize costs in areas that do not differentiate it, to remain cost competitive; or
- If it is focusing on one or a few segments, it is following a focus strategy. A firm may be attempting to offer a lower cost in that scope (cost focus) or differentiate itself in that scope (differentiation focus).[2]

The concept of choice was a different perspective on strategy, as the 1970s paradigm was the pursuit of market share

(size and scale) influenced by the experience curve. Companies that pursued the highest market share position to achieve cost advantages fit under Porter's cost leadership generic strategy, but the concept of choice regarding differentiation and focus represented a new perspective.[3]

## 3.2 Origins

Empirical research on the profit impact of marketing strategy indicated that firms with a high market share were often quite profitable, but so were many firms with low market share. The least profitable firms were those with moderate market share. This was sometimes referred to as the hole in the middle problem. Porter's explanation of this is that firms with high market share were successful because they pursued a cost leadership strategy and firms with low market share were successful because they used market segmentation to focus on a small but profitable market niche. Firms in the middle were less profitable because they did not have a viable generic strategy.

Porter suggested combining multiple strategies is successful in only one case. Combining a market segmentation strategy with a product differentiation strategy was seen as an effective way of matching a firm's product strategy (supply side) to the characteristics of your target market segments (demand side). But combinations like cost leadership with product differentiation were seen as hard (but not impossible) to implement due to the potential for conflict between cost minimization and the additional cost of value-added differentiation.

Since that time, empirical research has indicated companies pursuing both differentiation and low-cost strategies may be more successful than companies pursuing only one strategy.[4]

Some commentators have made a distinction between cost leadership, that is, low cost strategies, and best cost strategies. They claim that a low cost strategy is rarely able to provide a sustainable competitive advantage. In most cases firms end up in price wars. Instead, they claim a best cost strategy is preferred. This involves providing the best value for a relatively low price.

## 3.3 Cost Leadership Strategy

This strategy involves the firm winning market share by appealing to cost-conscious or price-sensitive customers. This is achieved by having the lowest prices in the target market segment, or at least the lowest price to value ratio (price compared to what customers receive). To succeed at offering the lowest price while still achieving profitability and a high return on investment, the firm must be able to operate at a lower cost than its rivals. There are three main ways to achieve this.

The first approach is achieving a high asset utilization. In service industries, this may mean for example a restaurant that turns tables around very quickly, or an airline that turns around flights very fast. In manufacturing, it will involve production of high volumes of output. These approaches mean fixed costs are spread over a larger number of units of the product or service, resulting in a lower unit cost, i.e. the firm hopes to take advantage of economies of scale and experience curve effects. For industrial firms, mass production becomes both a strategy and an end in itself. Higher levels of output both require and result in high market share, and create an entry barrier to potential competitors, who may be unable to achieve the scale necessary to match the firms low costs and prices.

The second dimension is achieving low direct and indirect operating costs. This is achieved by offering high volumes of standardized products, offering basic no-frills products and limiting customization and personalization of service. Production costs are kept low by using fewer components, using standard components, and limiting the number of models produced to ensure larger production runs. Overheads are kept low by paying low wages, locating premises in low rent areas, establishing a cost-conscious culture, etc. Maintaining this strategy requires a continuous search for cost reductions in all aspects of the business. This will include outsourcing, controlling production costs, increasing asset capacity utilization, and minimizing other costs including distribution, R&D and advertising. The associated distribution strategy is to obtain the most extensive distribution possible. Promotional strategy often involves trying to make a virtue out of low cost product features.

The third dimension is control over the value chain encompassing all functional groups (finance, supply/procurement, marketing, inventory, information technology etc..) to ensure low costs.[5] For supply/procurement chain this could be achieved by bulk buying to enjoy quantity discounts, squeezing suppliers on price, instituting competitive bidding for contracts, working with vendors to keep inventories low using methods such as Just-in-Time purchasing or Vendor-Managed Inventory. Wal-Mart is famous for squeezing its suppliers to ensure low prices for its goods. Other procurement advantages could come from preferential access to raw materials, or backward integration. Keep in mind that if you are in control of all functional groups this is suitable for cost leadership; if you are only in control of one functional group this is differentiation. For example Dell Computer **initially** achieved market share by keeping inventories low and only building computers to order via applying Differentiation strategies in supply/procurement chain. This will be clarified in other sections.

Cost leadership strategies are only viable for large firms with the opportunity to enjoy economies of scale and large production volumes and big market share. Small businesses can be cost focus not cost leaders if they enjoy any advantages conducive to low costs. For example, a local restaurant in a low rent location can attract price-sensitive customers if it offers a limited menu, rapid table turnover and employs staff on minimum wage. Innovation of products or processes may also enable a startup or small company to offer a cheaper product or service where incumbents' costs and prices have become too high. An example is the success of low-cost budget airlines who despite having fewer planes than the major airlines, were able to achieve market share growth by offering cheap, no-frills services at prices much cheaper than those of the larger incumbents. At the beginning for low-cost budget airlines choose acting in cost focus strategies but later when the market grow, big airlines started to offer same low-cost attributes, cost focus became cost leadership! [5]

A cost leadership strategy may have the disadvantage of lower customer loyalty, as price-sensitive customers will switch once a lower-priced substitute is available. A reputation as a cost leader may also result in a reputation for low quality, which may make it difficult for a firm to rebrand itself or its products if it chooses to shift to a differentiation strategy in future.

## 3.4 Differentiation Strategy

Differentiate the products/services in some way in order to compete successfully. Examples of the successful use of a differentiation strategy are Hero, Honda, Asian Paints, HUL, Nike athletic shoes (image and brand mark), BMW Group Automobiles, Perstorp BioProducts, Apple Computer (product's design), Mercedes-Benz automobiles, and Renault-Nissan Alliance.

A differentiation strategy is appropriate where the target customer segment is not price-sensitive, the market is competitive or saturated, customers have very specific needs which are possibly under-served, and the firm has unique resources and capabilities which enable it to satisfy these needs in ways that are difficult to copy. These could include patents or other Intellectual Property (IP), unique technical expertise (e.g. Apple's design skills or Pixar's animation prowess), talented personnel (e.g. a sports team's star players or a brokerage firm's star traders), or innovative processes. Successful differentiation is displayed when a company accomplishes either a premium price for the product or service, increased revenue per unit, or the consumers' loyalty to purchase the company's product or service (brand loyalty). Differentiation drives profitability when the added price of the product outweighs the added expense to acquire the product or service but is ineffective when its uniqueness is easily replicated by its competitors.[6] Successful brand management also results in perceived uniqueness even when the physical product is the same as competitors. This way, Chiquita was able to brand bananas, Starbucks could brand coffee, and Nike could brand sneakers. Fashion brands rely heavily on this form of image differentiation.

Differentiation strategy is not suitable for small companies. It is more appropriate for big companies. To apply differentiation with attributes throughout predominant intensity in any one or several of the functional groups (finance, purchase, marketing, inventory etc..).[5] This point is critical. For example GE uses finance function to make a difference. You may do so in isolation of other strategies or in conjunction with focus strategies (requires more initial investment).[5] It provides great advantage to use differentiation strategy (for big companies) in conjunction with focus cost strategies or focus differentiation strategies. Case for Coca Cola and Royal Crown beverages is good sample for this.

### 3.4.1 Variants on the Differentiation Strategy

The **shareholder value model** holds that the timing of the use of specialized knowledge can create a differentiation advantage as long as the knowledge remains unique.[7] This model suggests that customers buy products or services from an organisation to have access to its unique knowledge. The advantage is static, rather than dynamic, because the purchase is a one-time event.

The **unlimited resources model** utilizes a large base of resources that allows an organisation to outlast competitors by practicing a differentiation strategy. An organisation with greater resources can manage risk and sustain profits more easily than one with fewer resources. This provides a short-term advantage only. If a firm lacks the capacity for continual innovation, it will not sustain its competitive position over time.

## 3.5 Focus strategies

This dimension is not a separate strategy for big companies due to small market conditions. Big companies which chose applying differentiation strategies may also choose to apply in conjunction with focus strategies (either cost or differentiation). On the other hand, this is definitely appropriate strategies for small companies especially for those wanting to avoid competition with big ones.

In adopting a narrow focus, the company ideally focuses on

a few target markets (also called a segmentation strategy or niche strategy). These should be distinct groups with specialised needs. The choice of offering low prices or differentiated products/services should depend on the needs of the selected segment and the resources and capabilities of the firm. It is hoped that by focusing your marketing efforts on one or two narrow market segments and tailoring your marketing mix to these specialized markets, you can better meet the needs of that target market. The firm typically looks to gain a competitive advantage through product innovation and/or brand marketing rather than efficiency. A focused strategy should target market segments that are less vulnerable to substitutes or where a competition is weakest to earn above-average return on investment.

Examples of firm using a focus strategy include Southwest Airlines, which provides short-haul point-to-point flights in contrast to the hub-and-spoke model of mainstream carriers, United, and American Airlines.

## 3.6 Recent developments

Michael Treacy and Fred Wiersema (1993) in their book *The Discipline of Market Leaders* have modified Porter's three strategies to describe three basic "value disciplines" that can create customer value and provide a competitive advantage. They are operational excellence, product leadership, and customer intimacy.

A popular post-Porter model was presented by W. Chan Kim and Renée Mauborgne in their 1999 Harvard Business Review article "Creating New Market Space". In this article they described a "value innovation" model in which companies must look outside their present paradigms to find new value propositions. Their approach complements most of Porter's thinking, especially the concept of differentiation. They later went on to publish their ideas in the book Blue Ocean Strategy. Thus it is difficult, but not impossible, to topple a firm that has established a dominant standard.

## 3.7 Criticisms of generic strategies

Several commentators have questioned the use of generic strategies claiming they lack specificity, lack flexibility, and are limiting.

Porter stressed the idea that only one strategy should be adopted by a firm and failure to do so will result in "stuck in the middle" scenario.[8] He discussed the idea that practising more than one strategy will lose the entire focus of the organization hence clear direction of the future trajectory could not be established. The argument is based on the fundamental that differentiation will incur costs to the firm which clearly contradicts with the basis of low cost strategy and on the other hand relatively standardised products with features acceptable to many customers will not carry any differentiation[9] hence, cost leadership and differentiation strategy will be mutually exclusive.[8] Two focal objectives of low cost leadership and differentiation clash with each other resulting in no proper direction for a firm. In particular, Miller[10] questions the notion of being "caught in the middle". He claims that there is a viable middle ground between strategies. Many companies, for example, have entered a market as a niche player and gradually expanded. According to Baden-Fuller and Stopford (1992) the most successful companies are the ones that can resolve what they call "the dilemma of opposites". Furthermore, Reeves and Routledge's (2013) study of entrepreneurial spirit demonstrated this is a key factor in organisation success, differentiation and cost leadership were the least important factors.

However, contrarily to the rationalisation of Porter, contemporary research has shown evidence of successful firms practising such a "hybrid strategy".[11] Research writings of Davis (1984 cited by Prajogo 2007, p. 74) state that firms employing the hybrid business strategy (Low cost and differentiation strategy) outperform the ones adopting one generic strategy. Sharing the same view point, Hill (1988 cited by Akan et al. 2006, p. 49) challenged Porter's concept regarding mutual exclusivity of low cost and differentiation strategy and further argued that successful combination of those two strategies will result in sustainable competitive advantage. As to Wright and other (1990 cited by Akan et al. 2006, p. 50) multiple business strategies are required to respond effectively to any environment condition. In the mid to late 1980s where the environments were relatively stable there was no requirement for flexibility in business strategies but survival in the rapidly changing, highly unpredictable present market contexts will require flexibility to face any contingency (Anderson 1997, Goldman et al. 1995, Pine 1993 cited by Radas 2005, p. 197). After eleven years Porter revised his thinking and accepted the fact that hybrid business strategy could exist (Porter cited by Prajogo 2007, p. 70) and writes in the following manner.

Though Porter had a fundamental rationalisation in his concept about the invalidity of hybrid business strategy, the highly volatile and turbulent market conditions will not permit survival of rigid business strategies since long-term establishment will depend on the agility and the quick responsiveness towards market and environmental conditions. Market and environmental turbulence will make drastic implications on the root establishment of a firm. If a firm's business strategy could not cope with the environmental and market contingencies, long-term survival becomes unrealistic. Diverging the strategy into different avenues with the view to exploit opportunities and avoid threats cre-

ated by market conditions will be a pragmatic approach for a firm.[10][12][13] Critical analysis done separately for cost leadership strategy and differentiation strategy identifies elementary value in both strategies in creating and sustaining a competitive advantage. Consistent and superior performance than competition could be reached with stronger foundations in the event "hybrid strategy" is adopted. Depending on the market and competitive conditions hybrid strategy should be adjusted regarding the extent which each generic strategy (cost leadership or differentiation) should be given priority in practice.

## 3.8 See also

- Critique of generic strategies and their limitations, including Porter - "Generic strategies: a substitute for thinking?"

Orcullo, Jr., N. A., Fundamentals of Strategic Management

## 3.9 References

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# Chapter 4

# Competitive advantage

**Competitive advantage** is a business concept describing attributes that allow an organization to outperform its competitors. These attributes may include access to natural resources, such as high grade ores or inexpensive power, highly skilled personnel, geographic location, high entry barriers, etc. New technologies, such as robotics and information technology, can also provide competitive advantage, whether as a part of the product itself, as an advantage to the making of the product, or as a competitive aid in the business process (for example, better identification and understanding of customers).

## 4.1 Overview

Michael Porter defined the two types of competitive advantage an organization can achieve relative to its rivals: lower cost or differentiation. This advantage derives from attribute(s) that allow an organization to outperform its competition, such as superior market position, skills, or resources. In Porter's view, strategic management should be concerned with building and sustaining competitive advantage.[1]

Competitive advantage seeks to address some of the criticisms of comparative advantage. Porter proposed the theory in 1985. Porter emphasizes productivity growth as the focus of national strategies. Competitive advantage rests on the notion that cheap labor is ubiquitous and natural resources are not necessary for a good economy. The other theory, comparative advantage, can lead countries to specialize in exporting primary goods and raw materials that trap countries in low-wage economies due to terms of trade. Competitive advantage attempts to correct for this issue by stressing maximizing scale economies in goods and services that garner premium prices (Stutz and Warf 2009).[2]

The term competitive advantage refers to the ability gained through attributes and resources to perform at a higher level than others in the same industry or market (Christensen and Fahey 1984, Kay 1994, Porter 1980 cited by Chacarbaghi and Lynch 1999, p. 45).[3] The study of such advantage has attracted profound research interest due to contemporary issues regarding superior performance levels of firms in the present competitive market conditions. "A firm is said to have a competitive advantage when it is implementing a value creating strategy not simultaneously being implemented by any current or potential player" (Barney 1991 cited by Clulow et al.2003, p. 221).[4]

Successfully implemented strategies will lift a firm to superior performance by facilitating the firm with competitive advantage to outperform current or potential players (Passemard and Calantone 2000, p. 18).[5] To gain competitive advantage, a business strategy of a firm manipulates the various resources over which it has direct control and these resources have the ability to generate competitive advantage (Reed and Fillippi 1990 cited by Rijamampianina 2003, p. 362).[6] Superior performance outcomes and superiority in production resources reflects competitive advantage (Day and Wesley 1988 cited by Lau 2002, p. 125).[7]

Above writings signify competitive advantage as the ability to stay ahead of present or potential competition. Also, it provides the understanding that resources held by a firm and the business strategy will have a profound impact on generating competitive advantage. Powell (2001, p. 132)[8] views business strategy as the tool that manipulates the resources and create competitive advantage, hence, viable business strategy may not be adequate unless it possess control over unique resources that has the ability to create such a unique advantage.

## 4.2 Generic competitive strategies

### 4.2.1 Cost leadership strategy

The goal of cost leadership strategy is to offer products or services at the lowest cost in the industry. The challenge of this strategy is to earn a suitable profit for the company, rather than operating at loss and draining profitability from

all market players. Companies such as Walmart succeed with this strategy by featuring low prices on key items on which customers are price-aware, while selling other merchandise at less aggressive discounts. Products are to be created at the lowest cost in the industry. An example is to use space in stores for sales and not for storing excess product.

### 4.2.2 Differentiation strategy

The goal of differentiation strategy is to provide a variety of products, services, or features to consumers that competitors are not yet offering or are unable to offer. This strategy gives a direct advantage to the company which is able to provide a unique product or service that none of its competitors are able to offer. An example is Dell which launched mass-customizations on computers to fit consumers' needs. This allows the company to make its first product to be the star of its sales.

### 4.2.3 Innovation strategy

Porter describes innovation strategy as determining how, and to what degree, firms use innovation to deliver a unique mix of value and achieve competitive advantage.[9] The goal of innovation strategy is to leapfrog other market players by the introduction of completely new or notably better products or services. This strategy is typical for technology start-up companies which often intend to "disrupt" the existing marketplace, obsoleting the current market entries with a breakthrough product offering. It is harder for more established companies to pursue this strategy because their product offering has achieved market acceptance. Apple has been a notable example of using this strategy with its introduction of iPod personal music players, and iPad tablets. Many companies invest heavily in their research and development programs to achieve such statuses with their innovations.

### 4.2.4 Operational effectiveness strategy

The goal of operational effectiveness as a strategy is to perform internal business activities better than competitors, making the company easier or more pleasurable to do business with than other market choices. It improves the characteristics of the company while lowering the time it takes to get the products on the market with a great start.

## 4.3 See also

- Resource-based view
- Core competency
- Economies of scale
- Comparative advantage
- Value chain
- Differentiation (economics)
- Cost leadership
- Tacit knowledge

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## 4.5 Further reading

- *Competitive Advantage: Creating and Sustaining Superior Performance* by Michael E. Porter
- *Creating Competitive Advantage: Give Customers a Reason to Choose You Over Your Competitors* by Jaynie L. Smith
- *Using MIS* by David M. Kroenke pages 71–77
- *Unraveling The Resource-Based Tangle* by Peteraf M. & Barney J (2003). Managerial and Decision Economics 24. doi:10.1002/mde.1126
- Erica Olsen (2012). *Strategic Planning Kit for Dummies, 2nd Edition*. John Wiley & Sons, Inc.
- *Profit from the Core: Growth Strategy in an Era of Turbulence* by Chris Zook and James Allen
- *Beyond the Core: Expand Your Market Without Abandoning Your Roots* by Chris Zook
- *Unstoppable: Finding Hidden Assets to Renew the Core and Fuel Profitable Growth* by Chris Zook
- *Value Migration: How to Think Several Moves Ahead of the Competition* by Adrian Slywotzky

## 4.6 External links

- Competitive Advantage
- Porter and Competitive Advantage
- Competitive Advantage in Business

# Chapter 5

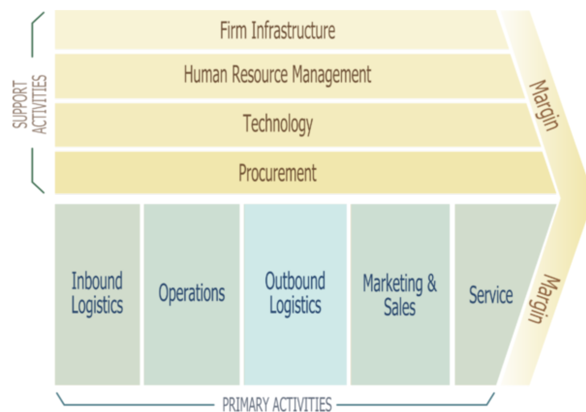
# Value chain

A **value chain** is a set of activities that a firm operating in a specific industry performs in order to deliver a valuable product or service for the market. The concept comes from business management and was first described and popularized by Michael Porter in his 1985 best-seller, *Competitive Advantage: Creating and Sustaining Superior Performance*.[1]

> The idea of the value chain is based on the process view of organizations, the idea of seeing a manufacturing (or service) organization as a system, made up of subsystems each with inputs, transformation processes and outputs. Inputs, transformation processes, and outputs involve the acquisition and consumption of resources - money, labour, materials, equipment, buildings, land, administration and management. How value chain activities are carried out determines costs and affects profits.
> — IfM, Cambridge[2]

The concept of value chains as decision support tools, was added onto the competitive strategies paradigm developed by Porter as early as 1979.[3] In Porter's value chains, Inbound Logistics, Operations, Outbound Logistics, Marketing and Sales, and Service are categorized as primary activities. Secondary activities include Procurement, Human Resource management, Technological Development and Infrastructure (Porter 1985, pp. 11–15).[1][2]

According to the OECD Secretary-General (Gurría 2012)[4] the emergence of global value chains (GVCs) in the late 1990s provided a catalyst for accelerated change in the landscape of international investment and trade, with major, far-reaching consequences on governments as well as enterprises (Gurría 2012).[4]




*Michael Porter's Value Chain*

## 5.1 Firm-level

The appropriate level for constructing a value chain is the business unit,[5] not division or corporate level. Products pass through a chain of activities in order, and at each activity the product gains some value. The chain of activities gives the products more added value than the sum of added values of all activities.[5]

The activity of a diamond cutter can illustrate the difference between cost and the value chain. The cutting activity may have a low cost, but the activity adds much of the value to the end product, since a rough diamond is significantly less valuable than a cut diamond. Typically, the described value chain and the documentation of processes, assessment and auditing of adherence to the process routines are at the core of the quality certification of the business, e.g. ISO 9001.

A firm's value chain forms a part of a larger stream of activities, which Porter calls a *value system*. A value system, or an industry value chain, includes the suppliers that provide the inputs necessary to the firm along with their value chains. After the firm creates products, these products pass through the value chains of distributors (which also have their own value chains), all the way to the customers. All parts of these chains are included in the value system. To

achieve and sustain a competitive advantage, and to support that advantage with information technologies, a firm must understand every component of this value system.

### 5.1.1 Primary activities

- Inbound Logistics: arranging the inbound movement of materials, parts, and/or finished inventory from suppliers to manufacturing or assembly plants, warehouses, or retail stores
- Operations: concerned with managing the process that converts inputs (in the forms of raw materials, labor, and energy) into outputs (in the form of goods and/or services).
- Outbound Logistics: is the process related to the storage and movement of the final product and the related information flows from the end of the production line to the end user
- Marketing and Sales: selling a product or service and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large.
- Service: includes all the activities required to keep the product/service working effectively for the buyer after it is sold and delivered.

### 5.1.2 Support activities

- Procurement: the acquisition of goods, services or works from an outside external source
- Human Resources Management: consists of all activities involved in recruiting, hiring, training, developing, compensating and (if necessary) dismissing or laying off personnel.
- Technological Development: pertains to the equipment, hardware, software, procedures and technical knowledge brought to bear in the firm's transformation of inputs into outputs.
- Infrastructure: consists of activities such as accounting, legal, finance, control, public relations, quality assurance and general (strategic) management.

### 5.1.3 Physical, virtual and combined value chain

Competitive advantage cannot be understood by looking at a firm as a whole. It stems from the many discrete activities a firm performs in designing, producing, marketing, delivering and supporting its product. Each of these activities can contribute to a firm's relative cost position and create a basis for differentiation.

Michael Porter[6]

The value chain categorizes the generic value-adding activities of an organization. The activities considered under this product/service enhancement process can be broadly categorized under two major activity-sets.

1. Physical/traditional value chain: a physical-world activity performed in order to enhance a product or a service. Such activities evolved over time by the experience people gained from their business conduct. As the will to earn higher profit drives any business, professionals (trained/untrained) practice these to achieve their goal.
2. Virtual value chain: The advent of computer-based business-aided systems in the modern world has led to a completely new horizon of market space in modern business-jargon - the cyber-market space. Like any other field of computer application, here also we have tried to implement our physical world's practices to improve this digital world. All activities of persistent physical world's physical value-chain enhancement process, which we implement in the cyber-market, are in general terms referred to as a virtual value chain.

In practice as of 2013, no progressive organisation can afford to remain stuck to any one of these value chains. In order to cover both market spaces (physical world and cyber world), organisations need to deploy their very best practices in both of these spaces to churn out the most informative data, which can further be used to improve the ongoing products/services or to develop some new product/service. Hence organisations today try to employ the **combined value chain**.

**Combined Value Chain** = Physical Value shown in sample below.

This value-chain matrix suggests that there are a number of opportunities for improvement in any business process.

## 5.2 Industry-level

An industry value-chain is a physical representation of the various processes involved in producing goods (and services), starting with raw materials and ending with the delivered product (also known as the supply chain). It is based on

the notion of value-added at the link (read: stage of production) level. The sum total of link-level value-added yields total value. The French Physiocrats' *Tableau économique* is one of the earliest examples of a value chain. Wasilly Leontief's Input-Output tables, published in the 1950s, provide estimates of the relative importance of each individual link in industry-level value-chains for the U.S. economy.

## 5.3 Global value chains (GVCs)

Main article: Global value chain

### 5.3.1 Cross border / cross region value chains

Often multinational enterprises (MNEs) developed global value chains, investing abroad and establishing affiliates that provided critical support to remaining activities at home. To enhance efficiency and to optimize profits, multinational enterprises locate "research, development, design, assembly, production of parts, marketing and branding" activities in different countries around the globe. MNEs offshore labour-intensive activities to China and Mexico, for example, where the cost of labor is the lowest.(Gurría 2012)[4] the emergence of global value chains (GVCs) in the late 1990s provided a catalyst for accelerated change in the landscape of international investment and trade, with major, far-reaching consequences on governments as well as enterprises.(Gurría 2012)[4]

### 5.3.2 Global value chains (GVCs) in development

Through global value chains, there has been growth in interconnectedness as MNEs play an increasingly larger role in the internationalisation of business. In response, governments have cut Corporate income tax (CIT) rates or introduced new incentives for research and development to compete in this changing geopolitical landscape.(LeBlanc et al. 6)[7]

In an (industrial) development context, the concepts of Global Value Chain analysis were first introduced in the 1990s (Gereffi et al.)[8] and have gradually been integrated into development policy by the World Bank, Unctad,[9] the OECD and others.

Value chain analysis has also been employed in the development sector as a means of identifying poverty reduction strategies by upgrading along the value chain.[10] Although commonly associated with export-oriented trade, development practitioners have begun to highlight the importance of developing national and intra-regional chains in addition to international ones.[11]

For example, the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) has investigated strengthening the value chain for sweet sorghum as a biofuel crop in India. Its aim in doing so was to provide a sustainable means of making ethanol that would increase the incomes of the rural poor, without sacrificing food and fodder security, while protecting the environment.[12]

## 5.4 Significance

The value chain framework quickly made its way to the forefront of management thought as a powerful analysis tool for strategic planning. The simpler concept of value streams, a cross-functional process which was developed over the next decade,[13] had some success in the early 1990s.[14]

The value-chain concept has been extended beyond individual firms. It can apply to whole supply chains and distribution networks. The delivery of a mix of products and services to the end customer will mobilize different economic factors, each managing its own value chain. The industry wide synchronized interactions of those local value chains create an extended value chain, sometimes global in extent. Porter terms this larger interconnected system of value chains the "value system". A value system includes the value chains of a firm's supplier (and their suppliers all the way back), the firm itself, the firm distribution channels, and the firm's buyers (and presumably extended to the buyers of their products, and so on).

Capturing the value generated along the chain is the new approach taken by many management strategists. For example, a manufacturer might require its parts suppliers to be located nearby its assembly plant to minimize the cost of transportation. By exploiting the upstream and downstream information flowing along the value chain, the firms may try to bypass the intermediaries creating new business models, or in other ways create improvements in its value system.

Value chain analysis has also been successfully used in large petrochemical plant maintenance organizations to show how work selection, work planning, work scheduling and finally work execution can (when considered as elements of chains) help drive lean approaches to maintenance. The Maintenance Value Chain approach is particularly successful when used as a tool for helping change management as it is seen as more user-friendly than other business process tools.

A value chain approach could also offer a meaningful alternative to evaluate private or public companies when there is a lack of publicly known data from direct competition, where the subject company is compared with, for example, a known downstream industry to have a good feel of its value by building useful correlations with its downstream companies.

## 5.5 Use with other Analysis Tools

Once value has been analysed and the contributing parts of the organisation have been identified, other models can be used in conjunction with the Value Chain to assess how these areas can either be improved or capitalised upon.

For example, a SWOT analysis can be used within the "Outbound Logistics" Function to understand what its strengths and weaknesses are, and what opportunities there may be to improve that area, or identify the threats to what may be a critical part of the value delivery system.

Equally, other models can be used to assess performance, risk, market potential, environmental waste, etc.

## 5.6 SCOR

The Supply-Chain Council, a global trade consortium in operation with over 700 member companies, governmental, academic, and consulting groups participating in the last 10 years, manages the Supply-Chain Operations Reference (SCOR), the *de facto* universal reference model for Supply Chain including Planning, Procurement, Manufacturing, Order Management, Logistics, Returns, and Retail; Product and Service Design including Design Planning, Research, Prototyping, Integration, Launch and Revision, and Sales including CRM, Service Support, Sales, and Contract Management which are congruent to the Porter framework. The *SCOR* framework has been adopted by hundreds of companies as well as national entities as a standard for business excellence, and the U.S. Department of Defense has adopted the newly launched **Design-Chain Operations Reference** (DCOR) framework for product design as a standard to use for managing their development processes. In addition to process elements, these reference frameworks also maintain a vast database of standard process metrics aligned to the Porter model, as well as a large and constantly researched database of prescriptive universal best practices for process execution.

## 5.7 Value Reference Model

A Value Reference Model (VRM) developed by the trade consortium Value Chain Group offers a proprietary information model for value chain management, encompassing the process domains of product development, customer relations and supply networks.

The integrated process framework guides the modeling, design, and measurement of business performance by uniquely encompassing the plan, govern and execute requirements for the design, product, and customer aspects of business.

The Value Chain Group claims VRM to be next generation Business Process Management that enables value reference modeling of all business processes and provides product excellence, operations excellence, and customer excellence.

Six business functions of the value chain:

- Research and development
- Design of products, services, or processes
- Production
- Marketing and sales
- Distribution

This guide to the right provides the levels 1-3 basic building blocks for value chain configurations. All Level 3 processes in VRM have input/output dependencies, metrics and practices. The VRM can be extended to levels 4-6 via the Extensible Reference Model schema.

## 5.8 See also

- Agricultural value chain
- Beneficiation
- Business unit
- Calculating Demand Forecast Accuracy
- Delta Model
- Demand chain
- Industry information
- Marketing strategy
- Porter 5 forces analysis
- Porter generic strategies

- Strategic management
- Value grid
- Value
- Value migration
- Value network
- Value shop

Human Resource value chain is to help improve business performance by applying the full capabilities of people.

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## 5.11 External links

- Media related to Value chain diagrams at Wikimedia Commons
- Using a Value Chain Analysis in Project Management

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