The Strategic Management Frameworks

Arnoldo Hax
Alfred P. Sloan Professor of Management
The Frameworks for Competitive Positioning

- Porter
- Resource-Based View of the Firm
- The Delta Model
Porter's Framework for Explaining the Profitability of a Business

- Competitive Positioning
  - Achieving sustainable competitive advantage

- Industry Structure
  - Factors affecting industry profitability

- Strategy Formulation and Implementation
  - Defining and executing the managerial tasks
Elements of Industry Structure: Porter’s Five-Forces

**Barriers to Entry**
- Economies of scale
- Product differentiation
- Brand identification
- Switching cost
- Access to distribution channels
- Capital requirements
- Access to latest technology
- Experience & learning effects

**Government Action**
- Industry protection
- Industry regulation
- Consistency of policies
- Capital movements among countries
- Custom duties
- Foreign exchange
- Foreign ownership
- Assistance provided to competitors

**Power of Suppliers**
- Number of important suppliers
- Availability of substitutes for the supplier's products
- Differentiation or switching cost of supplier's products
- Supplier's threat of forward integration
- Industry threat of backward integration
- Supplier's contribution to quality or service of the industry products
- Total industry cost contributed by suppliers
- Importance of the industry to supplier's profit

**Power of Buyers**
- Number of important buyers
- Availability of substitutes for the industry products
- Buyer's switching costs
- Buyer's threat of backward integration
- Industry threat of forward integration
- Contribution to quality or service of buyer's products
- Total buyer's cost contributed by the industry
- Buyer's profitability

**Rivalry Among Competitors**
- Concentration & balance among competitors
- Industry growth
- Fixed (or storage) cost
- Product differentiation
- Intermittent capacity increasing
- Switching costs
- Corporate strategic stakes

**Barriers to Exit**
- Asset specialization
- One-time cost of exit
- Strategic interrelationships with other businesses
- Emotional barriers
- Government & social restrictions

**Availability of Substitutes**
- Availability of close substitutes
- User's switching costs
- Substitute producer's profitability & aggressiveness
- Substitute price-value

**Intense of Rivalry**

Figure by MIT OCW.
Porter’s Five-Forces Model Applied to the Pharmaceutical Industry in the Early 1990s

**Barriers to Entry (Very Attractive)**
- Steep R&D experience curve effects
- Large economies-of-scale barriers in R&D and sales force
- Critical mass in R&D and marketing require global scale
- Significant R&D and marketing costs
- High risk inherent in the drug development process
- Increasing threat of new entrants coming from biotechnology companies

**Bargaining Power of Suppliers (Very Attractive)**
- Mostly commodities
- Individual scientists may have some personal leverage

**Intense of Rivalry & Competition (Attractive)**
- Global competition concentrated among fifteen large companies
- Most companies focus on certain types of disease therapy
- Competition among incumbents limited by patent protection
- Competition based on price and product differentiation
- Government intervention and growth of "Me-too" drugs increase rivalry
- Strategic alliances establish collaborative agreements among industry players
- Very profitable industry, however with declining margins

**Threat of Substitutes (Mildly Unattractive)**
- Generic and "Me-too" drugs are weakening branded, proprietary drugs
- More than half of the life of the drug patent is spent in the product development and approval process
- Technological development is making imitation easier
- Consumer aversion to chemical substances erodes the appeal for pharmaceutical drugs

**Bargaining Power of Buyers (Mildly Unattractive)**
- The traditional purchasing process was highly price insensitive: the consumer (the patient) did not buy, and the buyer (the physician) did not pay
- Large power of buyers, particularly plan sponsors and cost containment organizations, are influencing the decisions to prescribe less expensive drugs
- Mail-order pharmacies are obtaining large discounts on volume drugs
- Large aggregated buyers (e.g., hospital suppliers, large distributors, government institutions) are progressively replacing the role of individual customers
- Important influence of the government in the regulation of the buying process

**Summary Assessment of the Industry Attractiveness (Attractive)**
- Generic and "Me-too" drugs are weakening branded, proprietary drugs
- More than half of the life of the drug patent is spent in the product development and approval process
- Technological development is making imitation easier
- Consumer aversion to chemical substances erodes the appeal for pharmaceutical drugs
- Government intervention and growth of "Me-too" drugs increase rivalry
- Strategic alliances establish collaborative agreements among industry players
- Very profitable industry, however with declining margins

Figure by MIT OCW.
Make a business in an attractive industry where you can excel; then excel by achieving a low cost of differentiation through unique activities.

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**THE VALUE CHAIN**

**SUPPORT ACTIVITIES**

- Firm Infrastructure
- Human Resource Management
- Technology Development
- Procurement

**PRIMARY ACTIVITIES**

- Inbound logistics
- Operations
- Outbound logistics
- Marketing & sales
- Service

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Figure by MIT OCW.
# Merck's Value Chain

## Management Infrastructure
- Very strong corporate culture
- One of America's best managed companies
- Superb financial management & managerial control capabilities
- Very lean structure
- Highly concerned about ethics, ecology, and safety

## Human Resources Management
- Friendly & cooperative labor relations
- Strong recruiting programs in top universities
- Excellent training & development
- Excellent rewards & health-care programs

## Technology Development
- Technology leader; developer of break-path drugs (e.g., Vasotec, Sinement, Mevacor)
- Intensive R&D spending
- Strengthening technological & marketing capabilities through strategic alliances (Astra, DuPont, and Johnson & Johnson)
- Fastest time-to-market in drug discovery and drug approval processes

## Procurement
- Vertical integration in chemical products

<table>
<thead>
<tr>
<th>Inbound Logistics</th>
<th>Manufacturing</th>
<th>Outbound Logistics</th>
<th>Marketing &amp; Sales</th>
<th>Service</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Increasing manufacturing flexibility and cost reductions</td>
<td>Acquisition of Medco provides unique distribution capabilities and information technology support</td>
<td>Marketing leadership</td>
<td>Medco's service excellence has attracted major corporations and health-care organizations as clients.</td>
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<td>Stressing quality and productivity improvements</td>
<td>Medco is the number one mail-order firm</td>
<td>Large direct sales staff</td>
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<td></td>
<td>Global facilities network</td>
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<td>Global marketing coverage</td>
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## Marketing & Sales
- Marketing leadership
- Large direct sales staff
- Global marketing coverage
- Leverage through Medco, including powerful marketing groups and sales forces, and proprietary formulary
- Medco IT infrastructure and database, covering patients, physicians, and drug uses
- Strategic alliances

## Service
- Medco's service excellence has attracted major corporations and health-care organizations as clients.

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Figure by MIT OCW.
There are two ways to compete: Low Cost or Differentiation

The efficiency of the low cost provider’s cost structure allows pricing below the average competitor, which in the long run may put average competitors out of business.

This is why the alternative to low cost needs to be differentiation, offering unique product attributes that the customer values and will pay a premium for.

Best Product
However, the Total Customer Solutions positioning offers a possible preferred alternative by introducing significant cost savings (and/or revenue increases) to the customer.
Critical Elements in Porter’s Frameworks

Focus of Strategic Attention

Types of Competitive Advantage

Basic Unit of Competitive Advantage

Porter

Industry/ Business

Low cost or Differentiation

Activities
Pick a business in an attractive industry in which you can excel. Notice that Porter’s Framework stressed rivalry and competition. Therefore, an attractive industry is one in which we can achieve as close to a monopolistic position as possible. In turn, the message of the value chain is to achieve sustainable advantage by beating your competitors, if not in all, at least in those activities that are most crucial to competition.

Strategy is War!
The Resource-Based View of the Firm Framework
Resources can be classified into three broad categories:

- **Tangible assets** are the easiest to value, and often are the only resources that appear on a firm’s balance sheet. They include real estate, production facilities, and raw materials, among others. Although tangible resources may be essential to a firm’s strategy, due to their standard nature, they rarely are a source of competitive advantage. There are, of course, notable exceptions.
Resources can be classified into three broad categories (Cont’d)

• **Intangible assets** include such things as company reputations, brand names, cultures, technological knowledge, patents and trademarks, and accumulated learning and experience. These assets often lay an important role in competitive advantage (or disadvantage), and firm value.
• Organizational capabilities are not factor inputs like tangible and intangible assets; they are complex combinations of assets, people, and processes that organizations use to transform inputs into outputs. The list of organizational capabilities includes a set of abilities describing efficiency and effectiveness: low cost structure, “lean” manufacturing, high quality production, fast product development.

Source: David Collis and Cynthia Montgomery
A RESOURCE-BASED APPROACH TO STRATEGY ANALYSIS: A PRACTICAL FRAMEWORK

1. Identify and classify the firm's resources. Appraise strengths and weaknesses relative to competitors. Identify opportunities for better utilization of resources.

2. Identity the firm's capabilities: What can the firm do more effectively than its rivals? Identify the resources inputs to each capability, and the complexity of each capability.

3. Appraise the rent-generating potential of resources and capabilities in terms of: i) their potential for sustainable competitive advantage, and ii) the appropriability of their returns.

4. Select a strategy which best exploits the firm's resources and capabilities relative to external opportunities.

5. Identify resource gaps which need to be filled. Invest in replenishing, augmenting and upgrading the firm's resource base.

Figure by MIT OCW.
THE RESOURCE-BASED VIEW-ELEMENTS OF COMPETITIVE ADVANTAGE

- **UNIQUE COMPETENCIES**
  - Supported by resources and capabilities owned by the firm
  - Generating Value
  - Retaining Value

- **SUSTAINABILITY**
  - Lack of substitution and imitation by competitors
  - Sustaining Value
  - Value not Offset by Costs

- **APPROPRIABILITY**
  - Retention of value created inside the firm

- **OPPORTUNISM/TIMING**
  - Offsetting the cost of acquiring resources and capabilities

Figure by MIT OCW.
Develop resources and capabilities which are rare, valuable, non-tradeable, that form the basis of the core competencies of the firm; make those resulting advantages sustainable by precluding imitation or substitution from competitors; appropriate the resulting economic rent by preventing negative hold-up and slack conditions; and make sure that the implementation process is done in such a way that its associated costs do not upset the resulting benefits.

It is Strategy by Real Estate!
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<th>Resource-Based View</th>
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<td>Core Products, Strategic Architecture</td>
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<td>Comparison Among Strategy Frameworks</td>
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<td>Adaptive Processes: Operational Effectiveness, Customer Targeting, Innovation</td>
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<td>Real Estate</td>
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<td>Bonding</td>
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The Delta Model - An integrative strategic framework

- System Lock In
  - Total Customer Solution
    - Best Product
      - Customer Segmentation and Customer Value Proposition
      - Bundle of Competencies
      - Mission of the Business
        - Business Scope
        - Core Competencies
      - Competitive Positioning
        - Activities that drive profitability
      - Industry Structure
        - External factors determining industry attractiveness
    - Business
      - The Strategic Agenda
      - Innovation
      - Customer Targeting
    - Operational Effectiveness
      - Adaptive Processes Strategic Agenda
      - Aggregate and Granular Metrics
      - Experimentation and Feedback
  - Business Scope
  - Core Competencies

The Adaptive Processes: Linking Strategy with Execution

Business Model

Innovation
- The process of new product development
- Should ensure a continuous stream of new products and services to maintain the future viability of the business

Customer Targeting
- The management of the customer interface
- Identification and selection of attractive customers and enhancement of customers’ performance
- Should establish best revenue infrastructure for their product

Operational Effectiveness
- The production and delivery of products and services to the customer
- Should produce the most effective cost and asset infrastructure to support the chosen strategic position of the business
• **Operational Effectiveness:** This process is responsible for the delivery of products and services to the customer. In a traditional sense, this includes all the elements of the internal supply chain. Its primary focus is on producing the most effective cost and asset infrastructure to support the desired strategic position of the business. In a more comprehensive sense, operational effectiveness should expand its external scope to include suppliers, customer, and key complementors, thus establishing an extended supply chain. This process is the heart of a company’s productive engine as well as its source of capacity and efficiency.
• **Customer Targeting:** This process addresses the business-to-customer interface. It encompasses the activities intended to attract, satisfy, and retain customers, and ensures that customer relationships are managed effectively. Its primary objectives are to identify and select attractive customers and to enhance their performance, either by helping to reduce their costs or increase their revenues. The ultimate goal of this process is to establish the best revenue infrastructure for the business.
• **Innovation:** This process ensures a continuous stream of new products and services to maintain the future viability of the business. It mobilizes all the creative resources of the firm— including its technical, production, and marketing capabilities— to develop an innovative infrastructure for the business. It should not limit itself to the pursuit of internal product development, but should extend the sources of Innovation to include suppliers, customers, and key complementors. The heart of this process is the renewal of the business in order to sustain its competitive advantage and its superior financial performance.
The Role of Adaptive Processes
In supporting the Strategic Positioning of the Business

<table>
<thead>
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<th>Strategic Positioning</th>
<th>Best Product</th>
<th>Total Customer Solutions</th>
<th>System Lock-In</th>
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</table>
| **Best Product**      | • Best Product Cost
  • Identify product cost drivers
  • Improve stand alone product cost | • Best Customer Benefits
  • Improve customer economics
  • drivers
  • Improve horizontal linkages in the
  • components of total solutions | • Best System Performance
  • Improve system performance
  • drivers
  • Integrate complementors in
  • improving system performance |
| **Target Distribution Channels** | • Target Distribution Channels
  • Maximize coverage through
  • multiple channels
  • Obtain low cost distribution
  • Identify and enhance the
  • profitability of each product by
  • channel | • Target Customer Bundles
  • Identify and exploit opportunities to
  • add value to key customers by
  • bundling solutions and customization
  • Increase customer value and possible
  • alliances to bundle solutions
  • Select key vertical markets
  • Examine Channel ownership options | • Target System Architecture
  • Identify leading complementors
  • in the system
  • Consolidate a lock-in position
  • with complementors
  • Expand number and variety of
  • complementors |
| **Product Innovation** | • Product Innovation
  • Develop family of products
  • based on common platform
  • First to market, or follow rapidly-
  • stream of products | • Customer Service Innovation
  • Identify and exploit joint development
  • linked to the customer value chain
  • Expand your offer into the customer value
  • chain to improve customer economics
  • Integrate and innovate customer care
    • functions
  • Increase customer lock-in through
  • customization and learning | • System Innovation
  • Create customer and system lock-
    • in, and competitive lock-out
  • Design propriety standard within
    • open architecture
    • Complex interfaces
    • Rapid evolution
    • Backward compatibility |
### Examples of The Role of Adaptive Processes in Supporting the Strategic Options of the Triangle

#### STRATEGIC POSITIONING

<table>
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<th>•Total Customer Solutions</th>
<th>•System Lock-In</th>
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<td>•Superlative Low Cost Infrastructure</td>
<td>•Integrating the Customer Infrastructure</td>
<td>•Uniqueness of Facilities with Dominant 1st Mover</td>
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<td>•Southwest Airlines</td>
<td>•EDS</td>
<td>•Rural Wal-Mart</td>
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<td>•Nucor</td>
<td>•Castrol</td>
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<tr>
<td>•Superior Joint Innovation with Customer</td>
<td>•National Starch</td>
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<tr>
<td>•Early Digital Equipment Corp.</td>
<td>•3M</td>
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<tr>
<td>•Endless Chain of Internal Innovation</td>
<td>•Superior Joint Innovation with Customer</td>
<td>•Owning the Complementors</td>
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<td>•National Starch</td>
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<td>•Microsoft-Intel</td>
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The Elements of the Delta Model

The Triangle
- The source of the strategic options

Business Mission
- Product scope
- Market scope (customer, consumer, channel)
- Complementor scope
- Geographical scope
- Core competencies

Industry Structure
- Relevant industry focus

Competitive Positioning
- Relevant value chain
- Focus

Business Strategic Agenda

Adaptive Process Priorities
- OE
- CT
- I

Aggregate/Granular Metrics

Experimentation & Feedback

The Three Strategic Options

Best Product
Total Customer Solution
System Lock-In

Driver
Customer Industry
Complementor Industry

Internal value chain:
- Business

Integrated value chain:
- Business & customer

Systems value chain:
- Business complementor and customer

Figure by MIT OCW.
Porter’s Five Forces Model

NEW ENTRANT

Threat of New Entrants

BARGAINING POWER OF SUPPLIERS

Bargaining Power of Suppliers

Intensity of Rivalry

BARGAINING POWER OF BUYERS

Bargaining Power of Buyers

INTENSITY OF RIVALRY

THREAT OF SUBSTITUTES

Threat of Substitutes

SUBSTITUTES

BUYERS

SUPPLIERS

PORTER'S FIVE FORCES MODEL

Figure by MIT OCW.
A) Create a powerful 10x force to change the rules of the game. Reject imitation of competitors, a product-centric mentality, & a commoditization mindset.

B) Generate significant barriers around the customer through a unique customer value proposition based on deep customer segmentation, & customer and consumer understanding.

C) Do not use competitors as a central benchmark to guide your strategic actions. The key industries to concentrate on are those of your customers, suppliers and complementors. Strategy is not war with your competitors; it is love with your customers, suppliers, consumers, & complementors.

D) Develop & nurture the integrated value chain with your key suppliers and customers. Being in all the power of B2B and B2C to accomplish this objective. This is critical for customer lock-in.

E) Add a new player: the complementors. Seek complementor support and investment in your business. Make them key partners in seeking the delivery of Total Customer Solutions. Extend the unique value proposition to include complementors, as well as suppliers. This is the key for obtaining complementor lock-in, competitor lock-out, and ultimately, System Lock-In.

F) If your customers, suppliers, and complementors are numerous and fragmented you could also provide them with state-of-the-art management practices and a wealth of information and intelligence that they could never acquire otherwise. Your lock-in will be admirably enhanced.

Figure by MIT OCW.
The Required Resources and Capabilities for the Delta Model

1. First and foremost, you need a deep customer and consumer understanding obtained via a detailed segmentation and supported by aggregated and granular metrics.

2. This understanding should also be extended to critical suppliers and complementors. Do not get trapped in your industry trends alone.

3. The implementation of the new business model is realizable mostly because the opportunities and potentials offered by the Internet and its associated technologies: e-business, e-commerce, e-systems. The appropriation of this skill is essential.
4. Create the dynamic and entrepreneurial environment of risk-taking and reward-sharing originated by the professional challenges associated with the “new technologies.”

5. The ultimate output is the development and implementation of unique and exciting value propositions for all the key players: customers, consumers, suppliers, and complementors. The first mover advantage is overwhelming. You have to be fast.