Business Policy & Strategy Dr. Richard C. Insinga, April 2011

### Lecture #5

### Plan for Lecture #5

- Key points from Lecture #4
- Topics for tonight
  - Porter's Chapter 14 The Strategic Analysis of Vertical Integration
  - Article Barney's Firm Boundaries
  - Article Coase's New Economics
  - Article Insinga & Werle's Linking Outsourcing to Business Strategy

### **Key Points from Lecture #4**

- Evolution of management theories
  - scientific management
- Industry evolution
  - Product life cycle
  - Framework for forecasting industry evolution
- Book Bright's Practical Technology Forecasting
  - Methods
  - Substitution curve
- Porter's Chapter 13 Competition in Global Industries
  - Definition of the global industry
  - Sources of and impediments to global competitive advantage
- Book Porter's Competitive Advantage of Nations
  - Geographic clusters of expertise
  - Benefits of sophisticated domestic demand and competition
  - The Value Chain

# The Strategic Analysis of Vertical Integration

Chapter 14 of Porter's book

### **Vertical Integration**

- Vertical integration is the combination of technologically distinct product, distribution, selling, and/or other economic processes within the confines of a single firm.
- As such, it represents a decision by the firm to utilize internal or administrative transactions rather than market transactions to accomplish its economic purposes.

### Vertical Integration (cont'd)

- In theory, all of the functions we now expect a corporation to perform could be performed by a consortium of independent economic entities, each contracting with a central coordinator, which itself needs to be little more than a desk and a single manager.
  - Such an approach has been labeled a "virtual corporation."
- In most situations, however, firms find it advantageous to perform a significant proportion of the administrative, productive, distributive, or marketing processes required to produce their products or services in-house rather than through contracts with a series of independent entities.

### Vertical Integration (cont'd)

- This chapter examines the economic and administrative consequences of vertical integration in order to help the manager determine the appropriate degree of vertical integration in a strategic context and to guide decisions to vertically integrate or disintegrate.
- In addition, there are some "halfway" measures in vertical integration to be considered:
  - Tapered integration is when the firm produces some of its own requirements internally and contracts for the rest.
  - Quasi-integration is the use of debt or equity investments to create alliances between vertically related firms without full ownership.

### Vertical Integration (cont'd)

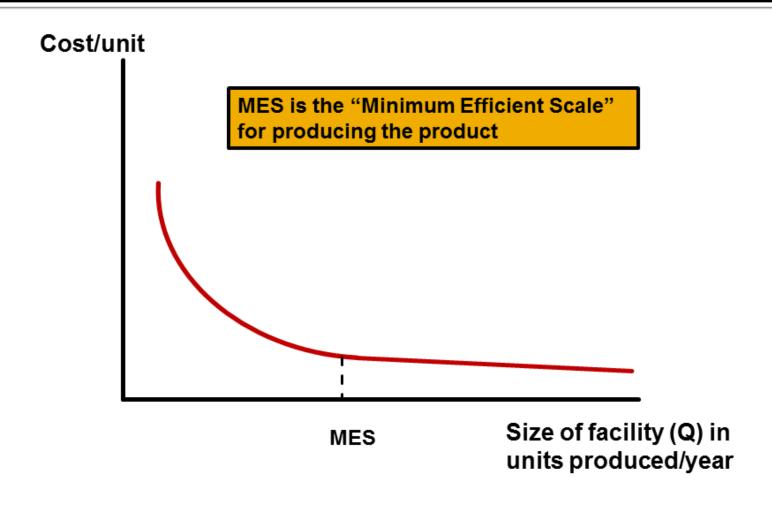
 To find the strategically appropriate extent of vertical integration for the firm requires balancing the economic and administrative benefits of vertical integration with the economic and administrative costs.

## Strategic Benefits and Costs of Vertical Integration

 Vertical integration has important generic benefits and costs which need to be considered in any decision but whose significance will depend on the particular industry.

- The benefits of vertical integration depend, first of all, on the volume of products or services that the firm purchases from or sells to the other firms relative to the size of an efficient production facility.
  - The volume may be sufficient to support in-house operations instead.

### **Minimum Efficient Scale**



### Strategic Benefits of Integration

#### Economies of Combined Operations

- If the volume of throughput is sufficient to reap economies of scale, the most commonly cited benefit of vertical integration is the achievement of economies, or cost savings.
- By putting technologically distinct operations together, the firm can sometimes gain efficiencies.

#### Economies of Internal Control/Coordination

- The costs of scheduling, coordinating operations, and responding to emergencies may be lower if the firm is integrated.
- There is also more trust placed in an insider to keep the needs of the firm in mind.

#### Economies of Information

- Integrated operations may reduce the need for collecting some types of information about the market, or more likely, may reduce the overall cost of gaining information.
- The fixed costs of monitoring the market and predicting supply, demand, and prices can be spread over all parts of the integrated firm, whereas they would have to be borne by each entity in an unintegrated firm.

#### Economies of Avoiding the Market

- By integrating, the firm can potentially save on some of the selling, price shopping, negotiating, and transaction costs of market transactions.
- Although there will usually be some negotiating in internal transactions, its cost should not be nearly as great as that of selling to or purchasing from outside parties.
  - No sales force and no marketing or purchasing departments and, moreover, no advertising is needed.

#### Economies of Stable Relationships

- Both upstream and downstream stages, knowing that their purchasing and selling relationship is stable, may be able to develop more efficient, specialized procedures for dealing with each other that would not be feasible with an independent supplier or customer.
  - Specialized procedures can included dedicated, specialized logistical systems, special packaging, unique arrangements for record keeping and control, and other potentially cost-saving ways of interacting.

#### Tap into Technology

- Vertical integration can allow a firm to tap into technology that is part of the efforts to produce its products.
- In some circumstances, it can provide close familiarity with technology in upstream or downstream businesses that is crucial to the success of the base business, a form of economy of information.
  - Sometimes cost-saving technological ways of integrating processes are discovered.

#### Assurance of Supply and/or Demand

- Vertical integration assures the firm that it will receive available supplies in tight periods or that it will have an outlet for its products in periods of low overall demand.
- Although vertical integration can reduce the uncertainty of supply and demand, and hedge the firm against fluctuations in prices, this does not mean the internal transfer prices should not reflect market disturbances, i.e., transfer prices should reflect market prices.

#### Offset Bargaining Power

- If the firm is dealing with suppliers and customers who wield significant bargaining power and, but charging higher prices for their products, reap excess returns on investment, it may pay for the firm to integrate even if there are no other savings from integration.
- In addition, integration can reveal the true costs of the activity and may lead the firm to further efficiencies.

### Strategic Costs of Integration

#### Increased Operating Leverage

- Vertical integration increases the proportion of a firm's costs that are fixed.
- If the firm were purchasing an input from the market, for example, all of the costs of the input would be variable costs.
- If the input is produced internally, the firm must bear any fixed costs involved in its production, even if a downturn or some other cause reduces the demand for that input.

#### Reduced Flexibility to Change Partners

- Vertical integration means that the fortunes of a business are at least partly tied to the ability of its inhouse supplier or customer (who might be the distribution channel) to compete successfully.
- Technological changes, changes in product design, strategic failures, or managerial problems can create a situation where
  - the in-house supplier is providing a high-cost, inferior, or inappropriate product or service or
  - the in-house customer or distribution channel is losing position in its market and thus its suitability as a customer.

#### Capital Investment Requirements

- Vertical integration consumes capital resources, whereas dealing with an independent entity uses the investment capital of outsiders.
- Vertical integration must yield a return that is greater than or equal to the cost of capital of the acquiring firm, adjusting for the risks.

#### Loss of Access to Information

- By integrating, the firm may cut itself off from the flow of technology from its suppliers or customers.
- Integration usually means that a company must accept responsibility for developing its own technological capability rather than piggybacking on others.
- This can be a considerable risk when there are numerous independent suppliers or customers doing research.

#### Difficulties in Maintaining Balance

- The productive capacities of the upstream and downstream units in the firm must be held in balance or potential problems arise.
- The stage of the vertical chain with excess capacity (or excess demand) must sell some of its output (or purchase some of its inputs) on the open market or sacrifice market position.
  - However, this step may be difficult because the vertical relationship often compels a firm to sell or buy from its competitors.
  - They may be reluctant to deal with the firm for fear of getting second priority or to avoid strengthening their competitor's position.

#### Dulled Incentives

- Vertical integration means that buying and selling will occur through a captive relationship.
  - The incentives for the upstream business to perform may be dulled because it sells in-house instead of competing for the business.
  - Conversely, the business buying internally from another unit in the company may not bargain as hard as it would with an outside vendor.
- The difficulty just discussed leads to the "bad apple" problem where the upstream or downstream unit is sick and its problems spill over to its healthy partner.

#### Differing Managerial Requirements

- Businesses can be different in structure, technology and management despite having a vertical relationship.
- Since vertically linked businesses transact business with each other, there is a subtle tendency to view them as similar from a managerial point of view, but that is a mistake.
  - Organizational structure, controls, incentives, capital budgeting guidelines, and a variety of other managerial techniques from the base business may not be appropriate for the vertically integrated unit.

### Illusions in Vertical Integration Decisions

- A strong market position in one stage can automatically be extended to another stage.
  - Only if the integration produced some tangible benefits would integration result in an improvement in market power of the combined businesses.
- It is always cheaper to do things internally.
  - Not necessarily. There are many potential hidden costs and risks in vertical integration that may be avoided by dealing with outside firms.

## Illusions in Vertical Integration Decisions (cont'd)

- It always makes sense to integrate when in a highly competitive industry.
  - Firms in such an industry are earning low returns and are competing vigorously to improve quality and serve customers. Vertical integration can dull incentives in such a demanding market.
- Vertical integration can save a strategically sick business.
  - Although a strategy of vertical integration can bolster the strategic position of a business under certain conditions, it is rarely a sufficient cure for a strategically sick business. If one link is sick, the sickness is likely to spread to the other healthy units.

## Illusions in Vertical Integration Decisions (cont'd)

- Managerial experience in one part of the vertical chain automatically qualifies management to direct upstream or downstream units.
  - The managerial characteristics of vertically integrated businesses are often extremely different. A false sense of security growing out of the proximity of the business can lead to the destruction of the upstream or downstream business, simply by the process of applying the managerial approaches of a dissimilar business.