Economics of Strategy, 7th Edition

By: David Besanko, David Dranove, Mark Shanley, and Scott Schaefer

Notes By: Anton Zitz

High Level Summary

1. This text evaluates strategy through the foundation of several key economic principles to make sense of Company's decisions and actions and argues mastering these principles is a key to understanding and assessing strategy.
2. The key economic principles discussed in depth included economies of scale and scope, transaction-cost economics (for vertical integration decision), entry, and commitment and agency issues.
3. To successfully formulate and implement strategy you must consider classes of issues such as firm boundaries (both horizontal and vertical), market and competitive analysis, positioning and dynamics. and internal organization of the firm.

Summation of Key Themes and Takeaways

Costs are an important focus area in business analysis to learn about its unit economics, competitive advantage, and strategic decision making.

1. Fixed and variable costs differ in that variable costs increase as output increases but fixed costs do not. Analyzing fixed and variable costs are ***hard*** for several reasons: some costs have both fixed and variable components; some costs are semi-fixed in that they are fixed *within* a certain interval but variable *between* intervals; some costs may be fixed and not sensitive to output, but are based on other decisions management makes; and in the short-term most costs are fixed but in the long-term most costs are variable as firms can adjust operations.
2. Average costs are total costs divided by output and can rise, stay flat, or fall with respect to output and may give you some insight into possible scale economies. Marginal costs represent the incremental cost of selling one more unit of output. When making decisions, it is important for Companies to differentiate between the two. To realize lower average costs, a firm must have throughput whether its increasing output or its user base to realize scale economies.
3. Sunk costs are costs that cannot be avoided no matter what decision is made. Avoidable costs are just the opposite. When making a decision, a manager should ignore sunk costs and only focus on avoidable costs but many don't. Whether or not a cost is sunk depends on the decision being made and the options at hand. Sunk costs and fixed costs are not necessarily the same. Sunk costs are valuable to study as they can affect many strategic decisions such as pricing, rivalry among firms, entry and exit, market structure, scale, and new technology.
4. Economic costs need to be considered when making decisions not only accounting costs. Economic costs usually involve assessing what the opportunity cost is of deploying something to its next best use.

Demand can be influenced by prices, substitutes, complements, incomes, tastes, quality, and advertising and demand sensitivity to price is measured by elasticity.

Economies of scale and scope are important concepts to understand that determine horizontal boundaries of the firm and are related to business strategy.

1. Economies of scale and scope result in costs savings either through increased output (scale) or through increasing the variety of goods and services sold (scope); the source of scale and scope

economies are indivisible fixed costs that cannot be scaled down. Special sources of economies of scale and scope include density, purchasing, advertising, research and development, and cube-square rule.
2. Production processes that are capital intensive are much more likely to display economies of scale and scope than processes that are material and/or labor intensive.
3. Firms looking to drive a single activity are focused on economies of scale whereas a firm focused on driving a set of related activities are focused on driving economies of scope.

The learning curve represents reductions in costs and improved pricing from accumulating experience over time.

Vertical boundaries involve the make-or-buy decision for the firm: what activities should the firm buy from the market and what activities should it perform itself? Keep in mind there are a range of alternatives here and this decision is not actually binary.

1. At the highest level, the make-or-buy decision is a tradeoff between costs savings of performing the activity internally balanced by increasing internal agency costs versus the transaction costs of engaging with the market and concerns about information and being held up by a trading partner.
2. This decision is resolved considering information, coordination and holdup problems: if these problems do not exist, a firm can use the market. If they do exist, can they be mitigated or eliminated using contracts (which favors the market) or governance (which favors making).
3. The firm exists in the first place because of transaction costs: the time and expense of negotiating, writing, and enforcing contracts and the costs that come from a company exploiting a contract.

Market structure can range from perfectly competitive markets to monopolistically competitive to oligopoly and monopoly and is measured by the number and distribution of firms. The structure of the market dictates strategy and how firms do (or do not) interact with one another. Prices and margins are usually higher in concentrated industries.

1. For a firm to compete with one another, it must mean the strategic choices of one firm affect another and this can occur directly or indirectly.
2. Products and services can be vertically differentiated (just better) or horizontally differentiated which not only affects competition but where a firm is choosing to position itself.

Think of market entry as an investment in which the entrant must sink some capital that may not be recovered in hopes of a long-term positive NPV opportunity. Barriers to entry are the sum of sunk costs and expectations about post-entry competition. Barriers to entry can be structural such as having lower cost or superior access to an asset or they or can be strategic from actions a firm takes such as aggressive pricing or strategic bundling.

1. Barriers to entry usually result from some form of asymmetry: sunk costs the incumbent has incurred that the entrant must now bear.
2. Sunk costs can arise from entry and create economies of scale but they don't have to.

Commitments are important strategic actions a firm can take to elicit a response form the competition and establish a reputation. When making commitments, flexibility can be an important factor and is often expressed by delaying important decisions and taking advantage of real options.

A market structure can only be partially explained by the relationship between market size and minimum efficient scale. John Sutton theorizes sunk costs and scale economies are important, but consumers tend to gravitate towards brands and brand building activities require significant sunk costs explaining why consumer markets result in a handful of large brands and many smaller niche players. Sutton also points out these sunk cost investments are not determined by some production technology, but by management decisions making them "endogenous sunk costs". Two categories of these endogenous sunk costs include advertising and research and development.

Michael Porter's Five Forces is an industry analysis that looks at economic profitability for the average firm a strong force implies eroded economics profits. The Five Forces are: entry, substitutes and complements, buyer power, supplier power, and internal rivalry which is driven by the four other forces. Strategically, a Company should not take a strong force head-on, but rather position itself where the force is the weakest or try to insulate itself from a force. A good complement to the Five Forces framework is looking at a firm's "Value-Net" for an ecosystem-based business.

A firms' economic profitability comes from a combination of its market economics (determined by Five Forces) and its relative cost and benefit position. To understand Value Creation (Consumer Surplus + Producer Surplus), you need analyze the drivers of benefits and costs. For the benefit, you need to determine what drives the benefit and how does it fill needs better than substitutes. For the cost, you need to determine what costs are sensitive to scale or learning economies. A firm can create value by performing activities differently or by performing them better by leveraging its resources and capabilities. A firm's strategic position is chosen and represents the "how" and "where" of value creation. The how is will the firm create value via cost leadership, benefit leadership, or both? The where is will the firm seek to create value with a broad coverage strategy or a narrow coverage strategy? A broad coverage strategy involves offering a wide array of products to a wide array of customers and is predicated on achieving economies of scope. A narrow coverage strategy focuses on creating value by selling a narrow range of products to a narrow range of customers and can make sense if the customer is overserved or if the firm is pursuing scale or learning economies in a market niche. A firm is more likely in control of its positioning than it is of its market economics.

Most products rely on two benefit strategies: vertical differentiation which is when a product is unambiguously better than another leaving price aside and horizontal differentiation which is when a product is tailored to a customer's idiosyncratic tastes or needs. The internet has lowered search costs for search, experience, and credence goods with some interesting effects: it has likely raised the price elasticity of demand in many industries but the internet has also made strategies around horizontal differentiation more possible through ad targeting and data accumulated on customers. Google and Facebook do not even sell products but rather the attention of their audiences to advertisers who end up ceding some of their profits to these companies. As data gets more detailed and ad targeting gets better, these advantages will only increase without a direct relationship with the consumer.

Sustaining competitive advantage depends on an advantage that is not well understood or difficult to imitate. The key to maintaining profitability relies in having a defensible business and one that deters entry. This can be done by possessing resources and capabilities that allow you to compete asymmetrically against others or the business has barriers from isolating mechanisms: economic

forces that prevent an advantage from being copied or neutralized. Adaptability of a company is an important trait to sustaining long-term advantage.

1. Isolating mechanisms can be grouped into impediments to imitation such as patents, access, scale and early mover advantages such as learning economies, reputation, switching costs, and network effects.
2. For a technology to be disruptive, it really needs to change value creation ("B-C") in a way the incumbent cannot respond to the entrant.

Performance based incentives can solve hidden information problems in principal-agent relationships within organizations but they have limits.

Organizational structure is an important consideration in driving strategy and can often reveal not only why a firm is successful but why it may be failing especially if the strategic environment changes around them. Stated simply: structure should follow strategy. Four typical organizational structures include the U-form structure, M-form structure, Matrix structure and the Network structure. The U-form looks to drive economies of scale by dividing the organization by functions such as production, marketing, and distribution. The M-form is a divisional structure that usually develops from a U-form with the business unit making operational decisions and corporate focused on strategic decisions and capital allocation. The Matrix form will organize along multiple dimensions depending on economies of scale and scope. Finally, a Network structure may limit scope economies but is meant to be flexible and typically used by technology companies.

1. Organizing dimensions of the firm driven by considerations about economies of scale, scope, and learning balanced by transaction costs, agency costs, and a consideration of firm boundaries.

Firms operate within both an internal context driven by power and culture. A culture can be an asset until it isn't which usually occurs because of some exogenous industry change. Many firms operate in an external environment based on "industry logics", a sort of culture for an industry but it isn't clear if firm practices come from industry logics or firm practices drive industry logics.

Key Takeaways By Chapter

Preface

1. This book argues there is a set of business principles that apply at all times to all sectors of the economy and sound management of these principles will lead to success and not some blind adherence to the "strategy du jour".
2. This book serves as an economic foundation for strategic analysis and the principles covered in this book related to strategy include **economies of scale, transaction-cost economics, oligopoly theory, entry, commitment, incentives for innovation, and agency.**

Introduction

1. **Book's Objective: is to study and analyze strategy from the perspective of economics.**
2. A key element of strategy is making decisions not only about what to do, but what not to do and how you face those trade-offs will determine if you achieve success in the long-term.
    a. Insight: At its core, business is really about decision making.
    b. Connection: Michael Porter explains that facing trade-offs is a key linchpin of strategy making it stronger and also alludes to the face part of strategy entails what an organization will not do.

3. **Central Theme: you can learn a lot by studying the durable economic principles that appear in many strategic situations and this value shows up in how firms compete and organize themselves and allows you to develop a more secure foundation for making good strategic decisions.**
4. The need to study principles is important because it is difficult to take one firm's experience and analogize it to what makes all firms successful that often appear in books such as *Good to Great* for example.
    a. Connection: *The Halo Effect* by Phil Rosenzwieg is a book that actually emphasizes the dangers of this sort of thinking.
5. What we are really seeking to understand is what works in advance, and not what works in hindsight and a good strategy textbook can provide general principles that underlie strategic decisions but success depends on **matching principles and conditions.**
6. Although there can be some element of "luck" in strategy is usually about using the right strategies to exploit the right profit opportunities at the right time; attached to this idea is that a firm needs to be adaptable as nothing is static.
7. **To successfully formulate and implement strategy a firm must confront four classes of issues:**
    a. Boundaries of the firm: What should the firm do, how large should it be, and what businesses should it be in?
        i. These boundaries extend in three different directions: horizontal, vertical, and corporate.
            1. Horizontal: how much of the product market should the firm serve? Be a mass market provider or serve some niche?
            2. Vertical: what activities should the firm preform itself and what should it purchase?
            3. Corporate: what is the set of distinct businesses the firm should compete in?
    b. Market and competitive analysis: What is the nature of the markets in which a firm competes and the nature of the competitive interactions of firms in those markets?
    c. Positioning and dynamics: How should the firm position itself to compete, what should be the basis of its competitive advantage, and how should it adjust over time?
        i. Positioning is how you compete at a point in time (i.e. low cost or differentiated)
        ii. Dynamics is how firm accumulates resources and capabilities and how it reacts.
    d. Internal Organization: how should the firm organize its structure and systems internally?

Economics Primer: Basic Principles

1. A firm has control over internal functions such as finance, marketing, and production but has no direct control over market share or profits; **the market and economic relationships determine if the firm's decisions translate into success**.
    a. Connection: Michael Porter says the economic success of a business is determined by the underlying economics of the industry and can be assessed using the "Five Forces Framework" and at the Company level success will be determined by how the Company positions itself relative to the "Five Forces".
2. Costs
    a. Fixed and variable costs are different in that variable costs increase as output increases and fixed costs do not.
    b. When analyzing fixed and variable costs you must keep three important points in mind:
        i. The dividing line between the two can be very fuzzy because 1) certain costs (i.e. maintenance, advertising, and promotion) may have fixed and variable

components and other costs are 2) semifixed which means they are fixed over certain ranges of output and variable over other ranges of output; in other words it is fixed within certain internals but variable between intervals.

1. Insight: A good example of semifixed costs is delivery costs of filling trucks can go down as a truck gets filled, but the incremental unit of output could result in a new truck.
2. This is an obvious point, but keep in mind that if a firm increases it capacity, its fixed costs will not remain fixed so this is always a moving target in a sense.

ii. Even though a cost may be fixed (in that it is not sensitive to the level of output), it can still be affected by other decisions a firm makes.

1. Examples could include hanging wire to connect utility customers that do not depend on the KW produced by the utility and advertising spend which can be discretionary but have a fixed element.

iii. Whether costs are fixed or variable really depend on the time period that the given decisions are contemplated with the implication that costs are a lot more "fixed" in the short-term than in the long-term as a firm can readjust its activities and physical capital to align with a new business environment.

1. There is always more flexibility in the "long-term" and this can make more costs "variable" that appear "fixed".
2. The book provides an example of airline fare discounting and what costs are fixed and then can be changed as the time period extends (i.e. its workers have been hired, schedule set, and plane leased).

c. Average costs and marginal costs

i. Average costs (AC) vary with output and will usually rise (diseconomies of scale), fall (economies of scale), or remain constant (constant returns to scale) as output goes up.

ii. Minimum efficient scale (MES): the smallest level of output at which scale economies have been exhausted.

1. Connection: Michael Porter contends that Company's only have to be "big enough" which means they rarely dominate and this "big enough" is usually around 10% of the market. The error here is to assume there is just one scale curve in the industry but that is often not the case. Most industries have multiple scale curves each based on serving different needs.

iii. Marginal cost refers to the rate of change in total cost with respect to output and often depends on the total volume of output.

1. **Businesses often treat average cost and marginal costs as if they are same and they are not and this can distort decision making.**

iv. When AC decreasing as a function of output, marginal cost is less than average cost and AC is at a minimum when MC = AC.

d. The importance of time period: long-run versus short-run costs functions

i. Significant Point: to realize lower average costs, the firm must not only build a larger plant *but also* achieve sufficient *output* so the large plant is indeed the optimal one.

1. Insight: In the new economy, I interpret this as having the most users (or subscribers) and having the cost advantage depends on that throughput but just expressed on the demand side.

ii. Sometimes it is assumed that scale economies inherent in a production process were limited or non-existent, ***but*** the firm is merely not selling enough output to capture them so the value of ***throughput*** is important.

1. **Firms cannot fully support economies of scale unless they have sufficient inputs for production and distribution to get their products to market.**
2. Insight: Putting this on its head, users are needed to drive cost advantages otherwise you are not getting throughput on your investments.

e. Sunk costs

i. Managers should only consider costs that the decision actually affects as some costs will be incurred no matter what decision is made and cannot be avoided and these are called sunk costs.

1. The opposite is *avoidable costs* and can be avoided if certain choices are made.

ii. Sunk costs and decision making: a decision make should ignore sunk costs when making a decision and consider only avoidable costs.

iii. Factors to keep in mind while examining sunk costs:

1. Whether a cost is sunk or not depends on the decision being made and the options at hand and can be dynamic. For example, the book explains the cost of the ink cartridges are sunk with regard to the current pricing decision but were not sunk at the point during which they were considering buying them.
2. Sunk costs and fixed costs are not the same and they can be confused. For example, you need a locomotive and a crew whether you haul 1 car or 25 and represents a fixed cost. However, the locomotive cost is not sunk as you can repurpose the locomotive to another railroad or another route.

iv. Sunk costs important for analyzing strategy and particularly for:

1. Rivalry among firms.
2. Entry and exit decisions.
3. New technology decisions.

f. Economic versus Accounting Costs

i. Business decision making should not only consider accounting costs but also economic costs which is captured in the concept of opportunity costs.

1. The economic costs of deploying resources in a particular activity is the value of the next best foregone alternative use of those resources.
    a. The book provides an example of raw material selling at below market value is that cost of goods sold wouldn't be cost but rather selling the materials at market reflects which reflects the foregone opportunity.

ii. Accounting statements are useful in many ways but the concept of opportunity cost provides best basis for good economic decisions when the firm must choose among competing alternatives.

iii. Specific examples:

1. If a business could be liquidated for $100 million and investors would expect to earn an 8% return and the value of its assets decline by 1% per year, the opportunity cost of not deploying funds in another investment would be $9 million.
2. A business someone starts that generates $150,000 in profit but instead could have been employed at a salary of $200,000 a year.

3. Demand and Revenues
    a. Demand is affected by certain variables such as the price of the product, the prices of related products (substitutes), incomes and tastes of consumers, product quality, advertising, and various other factors.
    b. The law of demand states that price and quantity demanded will have an <u>inverse</u> relationship.
        i. <u>Exception:</u> This law may not hold if high prices confer prestige, enhance a products image, or when consumers use price to infer quality.
            1. <u>Connection:</u> In *Alchemy*, Rory Sutherland explains you can use marketing to either justify a high price or detoxify a low price.
    c. Elasticity of demand measures how sensitive quantity demanded of a product is to a change in the product's price (Can be mathematically expresses as inelastic demand <1 and elastic demand is > 1).
        i. Factors that would make demand for a product <u>elastic</u> include:
            1. Little opportunity for differentiation and the ease with which consumers can compare price (i.e. airline fares).
            2. Expenditures on the product are a large % of a consumers' budget so they are incentivized to shop around (i.e. cars, appliances, etc.).
            3. The product is an input into a final good whose demand is very elastic (i.e. components for personal computers).
        ii. Factors that would make demand for a product <u>inelastic</u> include:
            1. Comparisons for substitute products are difficult because product is complex and / or the product has many performance dimensions.
            2. For one reason or another (i.e. tax deduction or insurance), the buyer only pays a fraction of the full price.
            3. A buyer would incur significant switching costs by switching to a substitute product (i.e. Office software).
            4. A product could be an input into something with switching costs (i.e. toner to a copier).
        iii. Brand-level versus industry-level Elasticities
            1. Just because demand for product is inelastic doesn't mean each seller of product is facing inelastic demand.
            2. The answer depends on what a firm expects its rivals to do; if they match demand facing seller should be inelastic if not it could be elastic.
    d. <u>Total and Marginal Revenue:</u> although one would assume marginal revenue is always positive, one must consider in selling incremental units not only the price on the next unit sold, but also the reduced revenue on all the previous units sold (economists call this the revenue destruction effect).
        i. This is because most firms face a downward sloping demand curve.
4. The theory of price and output determination by a profit-maximizing firm:
    a. Pricing and output decisions are assumed to have a profit motive.

b. If MR>MC, the firm can increase profit by selling more and lowering its price.
c. If MR<MC, the firm can increase profit by selling less and raising its price
d. If MR=MC, the firm cannot increase profits and must be at optimal levels.
e. Substituting MR for price elasticity of demand can help guide pricing decisions:
    i. A firm should lower price when price elasticity of demand exceeds the reciprocal of its contribution margin whereas a firm should raise its price when price elasticity of demand is lower than the reciprocal of its contribution margin.
        1. The lower a firms' PCM, the greater price elasticity of demand must be to for price cutting strategy to raise profits.
f. Pricing takeaway: The lower a firm's PCM (i.e. because its marginal costs are high), the greater its price elasticity of demand must be to make a price-cutting strategy effective.

5. The theory of perfectly competitive markets
    a. Assumes products are not differentiated and there is free entry and exit and all firms are price takers.
    b. A firm in a perfectly competitive market faces a horizontal demand curve although the industry faces a downward sloping one and most should product to the point at which MR = MC.
        i. Connection: In *Microeconomics* by Geoffrey Mankiw he said to keep in mind for a commodity / differentiated product that the price you pay is usually pretty close to the marginal cost to make the product.
        ii. Insight: Keep in mind that although perfect competition is a good theory, but very few markets are actually perfectly competitive; in other words, some imperfection exists but it might be slight.
    c. There is not opportunity for economic profit as industry adjusts whereas there may be accounting profit.
    d. Firms facing this must position themselves in a way they are protected from imitation and entry and is covered in Chapters 9-11.
6. Game Theory
    a. The mindset in a perfectly competitive market is very different than that of in a consolidated market: in a PC market, a company won't consider how rivals react so much as the trajectory of future prices and how to maximize it whereas in consolidated industries a key part of decision making is considering how rivals will react.
    b. Prisoners dilemma: when each party pursuing its own interest imposes a cost on the other party leaving them both worse off.
    c. Decisions represented by a matrix is fine but often better represented by a tree because decision making is sequential.

PART ONE: FIRM BOUNDARIES

Chapter 1: The Power of Principles: A Historical Perspective

1. General economic principles behind business strategy are enduring but business practices evolve with the changing environment; this chapter illustrates this by diving into the business climates of three distinct periods: 1840, 1910, and 2009.
2. Business in 1840 consisted of numerous intermediaries as there was substantial price risk, infrequent transactions, and scarcity of information regarding sales and prices of comparable goods.
    a. Infrastructure (i.e. transportation, communication, and finance) was not great and this led to the dominance of small family run firms and markets were local.
    b. Railroads were still fragmented and waterway routes were limited and used for long distance transportation. As a result, producers were limited to local markets.

c. Postal service was the dominant mode of long-distance communication and relied on horse and stagecoach; the telegraph was expensive and was only used for important time-sensitive information.
d. Capital markets were not developed and cost of capital was high so most businesses were sole proprietorships or partnerships.
e. Production technology was very underdeveloped and use of standardized parts was just beginning; scale intensive industries and high-volume production did not exist.
f. Government was involved in large infrastructure but not in regulation yet.
g. Businesses had limited production which served local markets and without the right transportation infrastructure and access to large markets there was no need for mass production technologies; with no communication infrastructure, information on prices was hard to come by and there wasn't much credit so businesses stayed small.

3. Business in 1910 was helped by mass production technologies that lead to high volume and low-cost manufacturing of goods feasible with railroads allowing mass distribution for producers to reach widely scattered customers and telephone and telegraphs improving long distance communications. As a result, manufacturing become more vertically integrated and multi-division firms were set up.
    a. Finance got better as securities markets developed, credit bureaus were formalized complemented by innovations in monitoring and reporting business activities.
    b. Government began to get more involved in regulation such as corporate law, antitrust, and worker safety.
    c. Expanded infrastructure had the effect of allowing firms to expand their markets, product lines, and production scale and technologies allowed this type of production possible and made scale viable with improved financing.
4. Business today has resulted in vertically integrated firms declining and often alliances and joint ventures work better than M&A.
    a. Air, rail and ground transportation are well coordinated and better communication and data processing technology have enabled container shipping. New cities have grown by relying on air transport in spite of poor rail and water connections (i.e. Atlanta).
    b. Communications improvements allow for global scale, and have improved both worker productivity and *reduced coordination costs*.
    c. Finance is very well developed and advanced as well.
    d. Production technology today with technologies such as CAD have made low cost, tailor-made production feasible.
    e. Market size has increased with demand from developing nations and firms focus on a narrow range of activities and enjoy economies of scale.
5. Business Conditions and Strategy
    a. Just as business conditions change, so too does strategy but the principles needed to arrive at successful strategies do not change.
    b. Insight: The recipe may change, but the ingredients don't!

Chapter 2: The Horizontal Boundaries of the firm

1. The horizontal boundaries of the firm are an important microeconomic concept and closely related to business strategy.
2. This chapter seeks to understand the sources of economies of scale and scope and this understanding is critical for formulating and assessing competitive strategy.
3. The source of economies of scale and scope arise from spreading fixed costs over an even-greater volume of output; these fixed costs arise from indivisibilities which is when an input into the

production of a good or service cannot be scaled down below a certain minimum size and results in fixed costs.

a. Indivisibilities are more likely to arise when a production process is capital intensive (production capital) and less likely when it relies on materials or labor. Following this point are two helpful rules of thumb, but keep in mind they are not always true.
    i. Substantial product specific economies of scale are likely when production capital is intensive and minimal product specific economies of scale are likely when production is materials or labor intensive.
b. Economies of scale occur when average costs decline over a range of output during the production process for a specific good or service.
    i. Typically, we thing of industry cost curves as "U-shaped", but empirical research reveals that they are more likely "L-shaped" once a firm reaches its minimum efficient scale ("MES")
    ii. Cost curves are likely "U-shaped" in the short run as firms will bump up against capacity constraints, but in the long-run they are more likely "L-shaped" as short-run economies of scale rely on increasing output and long-run economies of scale rely on better technology, with high fixed costs upfront and low variable costs as production expands.
    iii. Economies of scale can determine market structure, entry, and internal organization of firms.
c. Economies of scope occur when a firm achieves savings as it increases the variety of goods and services it produces; The consequence would be a firm producing many products has lower average costs than a firm producing just a few.
    i. When someone says a Company needs to "leverage core competencies" or "compete on capabilities" this can provide a signal that it may have economies of scope.
    ii. Many companies have economies of scope in certain or in many of the activities they perform; for example, Tesco has economies of scope in warehousing and distribution, Apples has economies of scope in design and engineering, and Ikea has economies of scope in product design.
d. Key Points related to economies of scale and scope:
    i. They can arise at any point in the production process from the acquisition of raw materials to distribution and retailing.
    ii. Indivisibilities can give rise to fixed costs and can exist at various levels within a firm: at the product level, at the plant level, or even at the multi-plant level.
    iii. Throughput is a key for a business that must rely on economies of scale or scope for its strategy to be successful.
        1. Adequate throughput requires access to raw materials, transportation infrastructure, warehousing and adequate market demand which may be spurred on by sales and marketing if necessary.
        2. Insight: in the economy, leveraging demand side economies of scale is not successful without direct access to users.

4. Adam Smith: individuals or firms will not make specialized investments unless the size of the market justifies it.
    a. Insight: This is similar to the idea that realizing economies of scale requires throughput from a cost perspective and making specialized investments or differentiating a product or

service requires the "sub-market" to be big enough to justify those investments (it really comes back to incentives).

b. In the real world, larger markets generally support more narrow specialization whether that market is examined from the perspective of geography or product.

5. Special Sources of Economies of Scale and Scope[1]
    a. Economics of Density: these are cost savings that arise in a transportation network due to increasing the density of customers and can result in two ways: 1) serving more people in a set geographic area, increasing density and lowering average costs, or 2) reducing the size of the area served while keeping the amount of customers the same, increasing density and lowering average costs.
        i. Insight: I believe increasing density will be the key to economies of scale in the final-mile and food delivery businesses.
    b. Purchasing: these are often referred to as "purchasing" or "bulk" discounts as a company gains scale. A supplier may not care about the distribution of who buys its product but, in some case, may care due to the 1) fixed costs relating to writing a contract, setting up a production run, and delivering the product, 2) bulk purchasers has more to gain by shopping around and getting the best price (largest $ savings), and 3) costly disruptions to operations
        i. A way small firms can take steps to offset their lack of scale is by joining a purchasing cooperative such as in the case of True Value or even Village Super Markets (Shop Rite).
            1. Insight: In the internet economy, cloud providers such as Amazon Web Services and Microsoft Azure are basically cooperative of computing power and give smaller firms economies of scale.
        ii. In other cases, smaller firms may have an advantage by not carrying a wide array of drugs to play suppliers off one another (i.e. Merck v. Pfizer).
    c. Advertising:
        i. Advertising cost per consumer: (cost of sending a message / (# of potential customers receiving a message) / (number of actual customers as a result of a message) / (# of potential customers receiving a message).
            1. The advantage here lies in having a lower cost of sending a message (the first term) or because they have a higher advertising reach (the second term).
        ii. Term 1: Fixed costs associated placing an ad include preparation of the ad and the negotiation with the broadcaster; if these costs similar between a national and local ad buy then these costs can be spread over more customers.
            1. These advantages have likely eroded with internet marketing but opportunities still exist with live sporting events.
            2. Connection: As Ben Thompson has stated, although internet marketing has made it easier to target potential customers, many of these brands are actually ceding the value to Facebook and Google who spent the R&D and aggregated the demand to make this targeting viable.
        iii. Term 2: Even when two firms have national reach, the larger one (more locations) can derive an advantage because there more physical locations to meet that demand. It can essentially convert potential customers into active customers.

[1] The first four sources involve the spreading of fixed costs over greater volumes and the final two do not.

iv. Umbrella Branding is a valuable economy of scope in marketing where a firm's ad can be more effective if customers make inferences about a new product a company is marketing based on associations with existing products.
    1. Insight: this would seem most "leveragable" with regard to branding expenses.

d. Research and development: the nature of engineering and scientific research projects give ruse to some minimum feasible size to an R&D project and R&D department.
    i. Example 2.4 The Pharmaceutical Merger Wave: A case in text describes a slight misunderstanding in the rationale of pharmaceutical mergers wherein most assumed companies were buying "R&D" budgets, but the rationale was to leverage fixed costs of travel by sales representatives.
        1. Insight: I took this to mean there could be scope economies in travel and salesperson salary costs.

e. Physical properties of production: the "cube-square rule" is a geometric law wherein many production processes, the capacity is proportional to the volume of the production vessel, whereas the total cost of producing capacity is related the surface area of the vessel.
    i. The text provides an example related to surface area of pipelines which increase linearly with transportation costs, but throughput through the pipeline expands faster lowering average costs.
    ii. Insight: Other processes that could exhibit this include warehousing (as cost to make depends on surface area) and brewing beer (volume of tanks determines output).

f. Inventories: This could apply to traditional inventory such as parts or non-traditional inventory such as customer service people; firms doing a high level of volume can centralize inventories keeping these costs lower and having the same level of stockouts as a smaller firm.

6. Firms that remain focused on a **single activity** are trying to drive economies of scale whereas a firm focused on driving a set of **related activities** are looking to drive economies of scope.
    a. Insight: Focusing on a firm's activities and its value chain will likely provide a good sense check on stated strategy.
7. Complementarities is a term used to describe synergies (economies of scope) in an organization's practices or its activities where the "whole is greater than the sum-of-the-parts" and Michael Porter uses the term "strategic fit" to describe this.
    a. The book cites the example of Southwest with its focus on turnaround time and how it structured its assets (standardized aircraft) operations (lack of catering) to maximize its advantage. This is attractive as it can be very difficult for a rival to copy.
8. Sources of Diseconomies of Scale
    a. Labor Costs and Firm Size: larger firms generally pay more in labor costs (>~10%) but also have lower churn and opportunities to move up.
    b. Spreading Specialized Resources too thin: unique person spread too thin or when a firm expands its operations without duplicating some specialized input; this is another way of saying the short-run cost curve is U-shaped and pushed beyond minimum efficient scale.
    c. Bureaucracy: information flows can be slow and departments are fighting for limited corporate resources.
9. The Learning Curve refers to advantages that flow from accumulating experience and know-how.
    a. This applies in many different industries; for example, a manufacturer can learn approximate tolerances for producing a system component, a retailer can about consumers

tastes, or an accounting firm can learn about the idiosyncrasies of its client's inventory management. The takeaway here is this can manifest itself in many different ways.

b. The way a firm can tangibly use learning economies is through lower costs, higher quality, or even more effective pricing and marketing.
    i. Insight: Current examples that come to mind include streaming services such as Netflix and Disney and applied to either their expenses (i.e. programming or marketing) or its other business lines in the case of Disney to make the ecosystem stronger.
c. Experienced gained by going down the learning curve is based on cumulative output and median slopes estimated from studies is ~0.80, implying ~20% reduction in cost.
d. Firms can enable or encourage learning economies by adopting practices such as sharing information, establishing work rules, and reducing turnover.
e. The nature of the learning has specific effects on employees: task-specific learning means workers can shop their skills and capture some value through increased wages whereas is the learning is firm-specific they cannot.
f. Economies of scale refer to ability to perform an activity at a lower unit cost when performed at a larger scale at a particular point in time whereas learning economies refer to cost reductions due to accumulating cumulative experience over time.
    i. Managers who do not properly distinguish economies of scale from learning economies can draw incorrect inferences about the benefits of size in a market.
        1. Example: If a large firm has lower unit costs due to economies of scale, any production cutbacks could be costly whereas if you have learning economies a product cutback likely will not affect your unit costs as much.
        2. Example: if a firm enjoys a cost advantage due to a capital-intensive production process labor turnover may not be a big concern, but if it enjoys lower costs due to a learning a complex labor-intensive production process turnover could be a big concern.

10. Diversification arguments usually rely on economies of scope and can come from spreading a firm's underutilized organizational resources to new areas.
    a. A firm's internal capital market is the cash flow it generates to fund projects and assumes a firm's head office can be effective bankers / capital allocators.
        i. Combining a cash rich business with a cash poor business allows profitable investments without accessing external sources of capital and can also contribute to competition "asymmetries"
    b. An interesting tell: If a firm funds a project in its "internal capital market" it will likely generate more attractive returns than a project it funds with outside capital due to the asymmetric information the firm possesses.
    c. Growth represents an asymmetry between management and investors in that it may benefit management by getting larger, but it may not benefit shareholders due to returns (agency problems) so growth is not good in of itself as it may be profitable or unprofitable.
    d. Market for corporate control will drive value down by amount company overpays for a deal and investor expectations about the future and serves as a "check" on value destructive actions.
        i. Connection: Non-GAAP newsletter stated that bad capital allocation will not drive a valuation down, but the persistence of bad capital allocation will and also the way in which capital allocation, strategy, and decision making are communicated

within the investment community. Note that the market for corporate control can help keep this in check.

e. The research in favor of diversification is weak but usually works if it drives economies of scope, but more broadly diversified firms have not fared well.
    i. Insight: Always keep in mind that investors can diversify at a much lower cost (both explicit and implicit) than a company can so the argument for diversification needs to be compelling. From a capital allocation perspective, this makes the rationale for dividends and stock buybacks a much better use of capital that ill thought out diversification.

Chapter 3: The Vertical Boundaries of the firm

1. A key strategy question is the organization of the vertical chain: the process that begins with the acquisition of raw materials and ends with the distribution and sale of finished goods and services.
2. Decisions about vertical boundaries define the activities the firm performs itself versus what is relies on the market for. This is often stated as the "Make-or-Buy" decision.
3. Make-or-Buy
    a. There are many ways to success with this decision given various examples choose different paths and are successful; for example, some firms are highly integrated: Kimberly Clark owns the forest lands, mills timber, and produces consumer paper products whereas other firms perform a very narrow set of activities: Leo Burnett created Tony the Tiger and only focuses on creating brand icons for CPG companies.
    b. Example 3.1: What Apples "Makes" and What It "Buys" for the iPhone
        i. Raw materials for the phone are both made and bought: some components outsourced to other firms (i.e. the display) but the processor is designed by Apple but made by someone else. The software is developed by Apple and they acquired Siri which is a software integration.
        ii. Production: Contracted out to Foxconn.
        iii. Marketing: Apple had an outside marketing firm but recently moved marketing back in house.
        iv. Distribution: a lot of this done through Apple stores, but they also rely on other retailers such as Target, Best Buy, and even stores of wireless carriers.
    c. In economics when discussing the vertical chain, activities are described as both upstream and downstream with the earlier steps upstream and the later steps downstream.
        i. For example, ESPN is downstream to the NFL, but upstream to a MVPD.
        ii. Two identical chairs may go through the same set of steps, but the organization of the firms may be very different and this is where sources of value can arise from.
            1. Connection: In *Understanding Michael Porter* by Joan Magretta, she uses the example of firms that are in the wheelchair industry and contrast how their vertical activities are organized.
    d. It is best to think of the make-or-buy decision as a continuum as shown in Figure 3.1 in the text with the relationship going from less to more "integrated".
        i. Arms-length market transactions.
        ii. Long-term contracts.
        iii. Strategic alliances / JVs.
        iv. Parent / subsidiary relationships.
        v. Perform activity internally.
    e. Example 3.2: Licensing Biotechnology Products

i. Big Pharma and Biotech companies have a unique relationship in that Pharma provides infrastructure, sales and marketing, and customers to Biotech through licensing relationships. In other words, Pharma provides access to demand and they have expertise in regulatory approval because of relationships with physicians and scale economies in sales and travel expenses.

f. Key Point: The make or buy decision is not about eliminating steps from the vertical chain but rather deciding which firms perform which steps and only so much profit can be squeezed from a vertical chain; the decision is really about the most efficient production in the vertical chain overall.

g. Benefits and Costs of Using the Market (Table 3.1)
   i. Benefits: Market firms can achieve economies of scale that sometimes cannot be achieved internally and market firms are subject to the wrath of the market and must innovate to survive and not this pressure may not be on firms' who perform some activity internally.
   ii. Costs: Coordination of production flows difficult, private information leaked, and costs of transacting with market firms that may be avoided by moving it in-house.
   iii. Key Point: The make versus buy decision is a tradeoff between exploiting economies of scale and discipline versus "transaction costs" of coordinating with the outside and leaking private information.

4. Reasons to Buy
   a. Companies will buy a service to exploit scale and learning economies that they themselves either couldn't replicate or replicate as fully as a market firm could; a market firm may have proprietary information or patents that allow it to produce at a lower costs and take advantage of scale by aggregating customers in a way a firm itself could not or should not.
   b. Companies will buy a service to either stem or avoid agency and influence costs.
      i. Agency costs can arise from differing incentives between owners and managers and an example is internal cost centers in a company that are insulated from competitive pressures of the market as they have a "committed customer" for its inputs.
      ii. Influence costs stem from corporate infighting to prioritize projects can be a drain on resources.
      iii. Organization design is important: when doing an M&A transaction, special attention should be paid to the design of the organizations that will be combined.
5. Reasons to Make
   a. Companies will typically "make" something because of weaknesses in contracts and the costs involved in negotiating, writing, and enforcing contracts.
   b. A contract defines conditions of exchange and are used to enforce trust and set expectations when dealing with another party.
      i. For a contract to be effective, it depends not only on the completeness of the contract but the available body of contract law.
         1. Few real-world contracts are completely and that is because of:
            a. Bounded rationality: refers to the limited ability of people to process information, deal with complexity, and pursue rational aims. To me, this means people cannot anticipate every conceivable scenario.
            b. Performance Measurement: sometimes in contracts it is hard to express or measure some performance measure.

c. Asymmetric information: refers to when not all parties are on equal footing and some parties can distort information.

2. The body of contract law makes it possible for transactions to occur when contracts are complete and the UCC code establishes broad measures or baselines for contracts. This is helpful, but it is also not perfect and litigation can be very expensive.

c. Companies will choose to "make" if the coordination of production flows through the vertical chain involve complementary decisions that fit together.
   i. Examples include a timing fit (i.e. the launch of a Heineken marketing campaign must coincide with increased production and distribution by its bottlers), sequence fit (i.e. the steps in a medical treatment protocol), technical specification fit (i.e. a sunroof of a car that must properly fit into the roof opening), and color fit (i.e. the tops in a spring fashion lineup must match the bottoms).
   ii. When products and services have specific design attributes any errors can result in huge losses in economic income.
   iii. Example 3.5: Nightmares at Boeing: the 787 Dreamliner
      1. An overreliance on outsourcing doomed Boeing and resulted in coordination problems and losses.

d. Companies will make products due to private information being leaked such as production know-how, product design, or customer information. Patents may seem like a silver bullet, but it is possible to invent around them.
   i. Connection: Ben Thompson talks about how Compaq invented around IBM protocol in one of his daily updates.

e. Companies will choose to make because of transaction costs imposed by going to the market are just too large.
   i. As Ronald Coase established, transaction costs are one of the reasons firm exist in the first place as everything cannot be left to the market.
   ii. Transaction costs include the time and expense of negotiating, writing, and enforcing contracts as well as costs explicit and implicit costs from parties who opportunistically exploit contracts.

f. Relationship Specific Assets (RSA), transaction costs, and the holdup problem.
   i. An RSA is an asset that supports a particular transaction and cannot be redeployed without reducing productivity or entailing extra costs.
   ii. An RSA gives rise to quasi rents which is the extra profit a firm gets when it deploys assets for the intended used instead of the next best alternative use.
      1. Takeaway: a firm's opportunity cost by deploying RSA's to next best use.
   iii. When a part has quasi-rents, it can be "held up" with the trading partner taking some of those rents for itself and this is tempting when contracts are not complete.
   iv. The holdup problem raises the costs of market transactions by making negotiations more contentious, causing companies to invest in safeguards so they are not exploited, causing distrust, and leading to underinvestment which undermines optimization of the vertical chain (they basically don't go "all-in").

6. A useful decision tree for the buy versus make decision is in Figure 3.3 asks if market firms are available, can these relationships be impeded by information, coordination, or holdup problems?
   a. If these problems do not exist, use the market.
   b. If these problems do exist, can they be mitigated or eliminated via contract which favors using the market or governance which favors integration?

Chapter 4: Integration and Its Alternatives

1. What Does It Mean to Be "Integrated"?
    a. As established in the last chapter, Contracts are often incomplete and result in problems of coordination, information leakage, and holdup problems that lead to inefficient production and make integration necessary.
    b. The Property Rights Theory of the Firm (PRT) states that integration determines the ownership and control of assets and it through ownership and control that firms are able to exploit contractual completeness. Integration matters are it determines who controls resources, makes decisions, and allocates profits when contracts are incomplete and trading partners disagree.
        i. Further implications are that ownerships affects productive efficiency and if contracts were complete, ownership would not matter.
            1. Connection: In the book, *Prediction Machines* they made the comment that artificial intelligence will allow for more "ifs" and could provide the ability to make contracts more complete so I wonder if this makes ownership less important. The authors use the example of large airlines contracting with regional providers and the concerns from weather. They also mention AI will affect the vertical boundaries of firms and more effective contracting could effectively make large airlines more "asset light".
    c. PRT asserts vertical integration is desirable when one firms' investment in RSA's has a significantly greater impact on the value created in a vertical chain and whoever can add more value should have ownership and control. If two firms contribute similar value, then they probably should not integrate.
2. Governance
    a. Just as contracts delegate decision rights and assets between firms, governance delegates decision rights and assets within a firm. When decision makers are in the same organization, contracting inefficiencies do not disappear, you need governance to do that and a good governance system seek to reward good behavior and blunt selfish incentives.
    b. An important aspect of governance is that of delegation: how to make decisions about using physical assets and human capital and whether those decisions are made at the local level or central office.
    c. Some Merger Implications using PRT:
        i. If a merger between firm A and B depends on specialized knowledge of managers of firm B, then B should acquire A or be given decision making authority if not acquired.
        ii. If success depends on the combined assets and the minimizing coordination and holdup problems then the decision making should be centralized.
        iii. Finally, if success depends equally then the firms should remain independent.
        iv. Takeaway: When analyzing an M&A deal, the post-merger organization structure is important and really depends on: what are you trying to accomplish or maximize and the structure should reflect that?
3. Making the Integration Decision
    a. Vertical integration is interesting to study because it can obviously differ across industries (i.e. aluminum is more vertically integrated than steel), but can also differ across firms within the same industry (i.e. Hyundai is more vertically integrated than

Honda), and the level of vertical integration can differ across different types of "transactions" within the same firm (i.e. in the United States, firms tends to outsource transportation services to a much greater degree than either warehousing or inventory management).

i. Connection: The level of vertical integration between firms within the same industry have interesting competitive implications in that they become asymmetric and can compete and / or respond differently, have different cost structures, and thus pricing. This is something you are seeing with all the streaming services being launched. No one other than Netflix is trying to profit off of streaming directly. Disney, Amazon, and AT&T using their streaming services in service to other businesses.

ii. Takeaway: Perhaps US firms outsource transportation services more because the opportunities for economies of scale and scope are more limited?

b. The integration decision requires balancing tradeoffs between technical efficiency (i.e. the least cost production process) and agency efficiency (i.e. the extent to which goods and services in the vertical chain are organized to minimize coordination, information, agency, and transaction costs) and minimizing the sum of these costs.

c. Some Powerful Conclusion about Vertical Integration

i. Scale & Scope Economies: If the firm is unable to capitalize from investments in up-front, indivisible fixed and sunk-costs and take advantage of economies of scale and scope, they should rely on outside market specialists as they will gain less from vertical integration.

ii. Product Market Share & Scope: A firm with the large share of the product market will benefit more from vertical integration than a firm with a smaller share of the market. Relatedly, a firm with multiple product lines will benefit more from vertical integration in the production of shared components.

iii. Asset Specificity: The firm will gain more from vertical integration when the production process involves investments in relationship specific assets.

4. The real-world evidence tells you forward integration more likely for products that require specialized investments in facilities and in productive and human capital and less so when those investments are not needed. *This also tells you if a firm relies on outside sales and distribution its product is not too specialized.*

a. Automobiles: components that require more engineering effort imply more asset specificity and that means they are more likely to be vertically integrated.

b. Aerospace: greater design specificity and complexity of the component as measured by its performance dimensions implies it is more likely to be manufactured internally.

c. Electronic Components: More time invested in terms of training and learning about the product imply product sales will be done in house. Additionally, it is easier to measure performance internally.

d. Regional Airlines: Owned regional airlines tend to be more integrated into a carriers' network because of high disruption costs related to adverse weather.

e. Automobiles redux: Although there are higher initial gains to outsourcing production the ability to improve performance is harder unless you move production in house. The luxury car industry shows that there are diminishing marginal returns to outsourcing over time as it impairs your ability to respond and make changes quickly.

5. Double Marginalization: a situation in which two firms with market power (i.e. an input supplier and a manufacturer) both prices above marginal cost so the price of the final good

exceeds the price that would maximize joint profits for both. The implication is if these two firms combined it could price based on marginal cost of production and maximize profits and output.

6. Alternatives to Vertical Integration
    a. A tapered integration is a mixture of vertical integration of market exchange in which you "buy some and make some". The attraction is you can access what you need through both internal and external channels to make sure you aren't held up and also keep internal exchange honest. The downside is this is not the most "production efficient" and coordination problems could still exist.
    b. The franchising model is good if you want to grow quickly and realize economies of scale in purchasing, branding and advertising. This structure also works when the local market knowledge is important.
    c. Strategic alliances and joint ventures work as an alternative when comprehensive contracting is costly, hard, and / or complex, involves creating relationship specific assets, local relationships may be important, and the market is transitory or uncertain. These relationships are based on reciprocity and trust.
        i. Connection: A good example of this today is autonomous vehicle technology and the structure is most likely driven by complexity and cost.
    d. Implicit contracts are understandings built on trust and reciprocity that one party will not take advantage of another. An example in book states that a firm wouldn't re-trade over $200,000 in one year if it earns $100,000 more by doing business with a firm versus its next best option because that relationship is valued at $2 million ($100,000 at a 5% discount rate).
7. Business Groups

PART TWO: MARKET AND COMPETITIVE ANALYSIS

Chapter 5: Competitors and Competition

1. Competitor Identification and Market Definition
    a. Competitors are firms' whose strategic choices directly affect one another, but firms can actually compete indirectly as well. For example, if Mercedes reduces the price on one of its SUVs it can cause Acura to do the same and then that may cause Jeep to lower its prices. In this example, Jeep and Mercedes would be indirect competitors. Additionally, it is important to remember firms compete in both input and output markets and competition in those different submarkets may be subject to different conditions.
        i. Connection: In *Understanding Michael Porter*, the point is made that you do not only compete for profits directly, but you compete for profits in your entire value chain.
    b. The Basics of Market Definition and Competitor Identification
        i. The DOJ uses the concept of small but significant non-transitory increase in price (SSNIP) as a criterion with small being defined as greater than 5% and non-transitory being defined as longer than one year and concept provides a conceptual way to determine if a proposed merger should go through.
    c. Putting Competitor Identification into Practice
        i. SSNIP is based on the concept of economic substitutes: if products X and Y are substitutes, it follows that an increase in the price of product X and no price increase in Product Y would imply an increase in the quantity demanded of product Y and decrease in that of product X.

ii. Substitutes works in forms of degree: products can either be "perfect" substitutes, close substitutes or even less so depending on the following conditions:
    1. They have the same or similar product performance characteristics: what they do for customers.
    2. They have the same or similar occasions for use: when, where, and how a product or service is used.
    3. They are sold into the same geographic market, but this factor may now be less important and depends on the nature of the product (i.e. digital).

d. Empirical Approaches to identify substitutes include analyses such as cross-price elasticity and diversion analysis.

2. Measuring Market Structure
    a. Market structure refers to both the number and distribution of firms in a market and is measured by tools such as the N-firm concentration ratio and the Herfindhal index which takes into account changes in the sizes of the largest firms and is used in M&A regulatory analysis.
3. Market Structure and Competition
    a. Market structure can profoundly affect both the conduct and performance of the firms within it and is defined as the Structure, Conduct, and Performance Framework (SCP) and markets structures can range from perfect competition to monopoly.
    b. In a perfectly competitive market, prices will be driven down to marginal costs because there are usually many sellers, consumers perceive products to be homogenous, and there is excess capacity in the industry.
        i. These conditions usually explain customer behavior well: if there are many sellers, prices will usually fall, people will switch if products are homogenous, and prices will go down if excess capacity exists sellers are looking to "put to use" and this is further exacerbated if excess capacity is "specialized".
    c. In a monopolistic industry structure, a monopolist faces little or no competition in its output market whereas a monopsonist faces little or no competition in its input market. Additionally, a monopolist sets a price with litter regard for how other firms will respond and usually results in a higher price and / or reduced quantity.
    d. In monopolistic competition, there are many sellers and they all assume its actions won't affect others and each seller offers a differentiated product that may give it some degree of pricing power. Differentiation exists and is effective because consumers make choice on factors other than ***price*** and have ***idiosyncratic*** wants and needs. Prices are generally set at a customers' willingness to switch.
        i. If a product is vertically differentiated, the product is unambiguously better or worse than competing products (i.e. strong stitching or ad-supported streaming) and all consumers will value this durability, but they may not all be willing to pay the same for it.
        ii. If a product is horizontally differentiated, consumers prefer it to competing products for reasons other than price.
            1. Connection: Rory Sutherland would say consumers prefer a brand to merely avoid a disastrous experience.
            2. Horizontal differentiation is possible because consumers have different preferences from one another and value different things: people who like suits may like a conservative versus a stylish one and another consumer may want and SUV whereas another wants good gas mileage.

3. The degree of horizontal differentiation is a function of the magnitude of consumer search costs which is how hard or easy it is for consumers to learn about the alternatives. This presents a dilemma in that you can use advertising to reduce search costs but it also reduces opportunities for horizontal differentiation.
    a. Insight: The internet has almost certainly reduced search costs and some opportunities for horizontal differentiation but has also made targeting consumers easier.

e. In an oligopoly, the actions of individual firms materially affect the overall market and careful consideration of how other firms will respond to actions are important and this makes this market structure very different from all others.
    i. Two models discussed in the text are Cournat Quantity Competition and Bertrand Price Competition and Cournat assumes output decision made in advance and Bertrand assumes capacity is not a consideration.

f. The revenue destruction effect is a reduction in revenue from all customers who would have bought as a higher price when you set prices lower. This is essentially capturing less consumer surplus as measured by revenue and results in firms producing too much with lower prices.

4. Evidence on market Structure and Performance: studies note than prices tend to be higher in concentrated markets and prices are strongly related to industry structure. Price-cost margins tend to be much lower in more competitive markets.

Chapter 6: Entry & Exit

1. Some Facts About Entry and Exit
    a. Static examine where a firm exists at one point in time whereas dynamics is about how decisions evolve over time.
    b. Whether an entrant is an existing or a new firm can affect the relevant response.
    c. Generally speaking, entry and exit will be pervasive depending on the industry, entrants and "exiters" tend to be smaller than established firms, most entrants do not survive, and entry and exit rates vary by industry.
        i. Key lessons to keep in mind include management must account for entry in strategic planning, most new ventures fail quickly indicating a low base rate of success, and management should know the entry and exit conditions for the industry.
2. Entry and Exit Decisions: Basic Concepts
    a. Its useful to think of **entry as an investment** where the entrant must sink some capital in that may not end up being fully recovered, but the entrant hopes for "post-entry profits": revenues in excess over ongoing expenses and sunk entry costs.
        i. Insight: entrant is looking for an NPV positive opportunity.
    b. Certain sunk cost can arise when entering a market such as the costs of specialized capital equipment to government licenses and can give rise to economies of scale, but they don't have to.
        i. An important point to keep in mind: fixed costs and sunk costs are not the same; fixed costs are only sunk if they are not recoverable and some sources of scale economies may not be fixed costs and they could be sunk, but don't have to be.
        ii. The sum of sunk costs and expectations about "post-entry" competition determine whether there are barriers to entry.

c. Entry barriers can be either structural or strategic: a structural entry barrier is when a company has a natural cost advantage, a marketing advantage, or favorable regulation blocking entry (usually exogenous) or strategic entry barriers when the incumbent takes aggressive action to deter entry. These barriers either raise sunk entry costs or reduce expectations about "post-entry" profitability.
    i. Entry barriers usually result from asymmetries of some kind in that the incumbent has incurred sunk entry costs of some kind but the entrant has not (i.e. sunk marketing and brand building costs or the accumulated relationships built up over time with customers and suppliers).
    ii. Example 6.1 How the Japanese Broke into the U.S. Car Market: US car manufacturers historically built larger and more luxurious vehicles thus deterring entry from foreign competition. However, changing conditions and tastes led to foreign entry with declines in incomes, focus on new factors such as safety, costs, and efficiency allowing Japanese manufacturers to get a foothold in the market.
d. To assess entry conditions, the incumbent must understand the magnitude of structural entry barriers and consider the likely consequences of strategic entry barriers.

3. Types of Structural Entry Barriers
    a. An incumbent is protected from entry if it controls an essential resource or channel in the vertical chain and it can use that resource more effectively than newcomers; this advantage can occur at any stage in the vertical chain from the acquisition of raw materials to getting the final goods to market. This also includes items such as patents or non-obvious production processes.
        i. Connection: Ben Thompson talks about how large incumbent CPG companies leveraged shelf space to serve the roles of *discovery and distribution* in the world of analog retail which allowed them to sell existing products and launch new ones more quickly and easily. However, in online DTC commerce, Facebook and Google serve the discovery and distribution roles and now have that point of leverage commoditizing some of CPG's historical advantage in the online channel.
    b. An incumbent is protected if it is operating at or beyond the MES as it will have a substantial cost advantage due to economies of scale and scope over smaller entrants. Large *sunk costs* lead to intense competition.
    c. An incumbent can be protected because of umbrella marketing due to the marketing advantages of incumbency given it has lower sunk marketing costs than the entrant and that advantage can be used for negotiation in the vertical chain as well to achieve widespread product distribution.
        i. Insight: The marketing advantages of incumbency serve as not only an entry barrier, but as a cheap means to introduce new products to grow and achieve widespread distribution of new and existing products but this advantage has been made irrelevant in the online channel. It has been argued part of Amazon's strategy is to make brands less important which would reduce this entry barrier further.
    d. If a firm decides to exit a business, it must compare the profits from deploying its assets in the next best alternative use relative to remaining in the market and exit barriers can stem from sunk costs such as labor or purchasing agreements. If the marginal costs of remaining in a business are low, the firm will likely remain in the market but if they could "start over" they probably wouldn't remain in it. Finally, governments can impose exit barriers.
        i. Insight: The high fixed / low marginal cost structure explains airlines well and why it is such a fierce and challenging business to compete in.

4. Entry-Deterring Strategies
    a. Limit and predatory pricing are two strategies firms can employ to either prevent firms from entering or driving rivals out and provide a signal to future rivals to think twice about entering. These strategies can appear irrational but are really about signaling and establishing a reputation.
    b. Incumbent firms can raise entry barriers by employing strategic bundling when a firm uses its power to block or deter entry into related markets when it sells a combination of goods and services at a price less than what it would cost to buy the items separately.
        i. Insight: Strategic bundling is a way to leverage economies of scope a firm may have to deter or block entry and examples include McDonald's Happy Meals, a Netflix subscription, or even insurance. I believe this has become a more prevalent tactic in digital commerce given reductions in marginal costs and the ability to target diverse consumer tastes makes the logic of bundling evident.
        ii. Firms will use bundling for convenience (i.e. see connection below) or marketing purposes as it reduces the risk of marketing in single goods.
            1. Connection: This concept was discussed in a Harvard Business Review article by Michael D. Smith and Rahul Telang in which they explain Netflix is not in the business of selling individual movies to many different customers but instead in the business of selling many different movies to individual customers in bundles. Bundling allows Netflix to *better predict* how customers will value the average bundle as opposed to making guesses about how customers value individual movies and price discriminate accordingly using the "Windowing" model that studios use today.
    c. Example 6.4 Entry Barriers and Profitability in the Japanese Brewing Industry: The Japanese brewing industry is protected by brand, government licenses, and distribution system of mom and pops that lacks variety.
5. Entry deterring behavior can be separated between raising entry costs and changing entrants' expectations about post entry profits. A firm can raise entry cost by reducing price while moving down the learning curve, a lot of advertising to create brand loyalty, and securing patents and a firm can change expectations about post entry competition by establishing reputation, signaling, pricing or holding excess capacity. Good entry-deterrence checklist on Table 6.3 (pp 209).
6. Market size, market growth and entry are intertwined: if a market is small and not growing that can deter entry. If a market grows quickly and large, new firms will enter. Entry can also be tied to technology and the sunk cost investment involved.

Chapter 7: Dynamics: Competing Across Time

1. Chapter Summary: this chapter examines the importance of commitment, discusses how firms can both achieve, and why they are unable to coordinate pricing, and ends with a discussion of how industries evolve and the role MES and endogenous sunk costs play in that evolution.
2. This chapter analyzes microdynamics, the unfolding of competition over time among a small number of firms and macrodynamics, the evolution of a market structure.
3. Microdynamics
    a. The Strategic Benefits of Commitment assume an effective commitment will restrict freedom by limiting options and / or making options so unattractive you wouldn't use them.
        i. In order to be effective, a strategic commitment must alter the strategic decisions of rivals and must be *irreversible, visible, understandable, and credible*.

ii. A firm that chooses some action and the rival chooses the opposite one is a strategic substitute and can be something such as an output decision. A firm that chooses some action and rivals do the same or more of it is a strategic complement and usually involve a pricing, advertising, or even an R&D decision.
    1. Connection: Grubhub recently announced that it would give 10% cash back on all its food delivery orders and I would consider this a somewhat tough commitment, but it is not irreversible. Other firms have not responded so it can be considered a strategic substitute given the reactions of its competitors to date indicating it may have a profitable strategic effect.
iii. For a commitment to have a profitable (unprofitable) strategic effect it must be tough (not soft) and whether the choice results in strategic complements (substitutes). Note: Table 7.1 on page 220 has a taxonomy of commitment strategies.

b. The Informational Benefits of Flexibility
    i. Strategic commitments are made under conditions of uncertainty and can be hard to reverse so preserving flexibility and optionality are important considerations.
    ii. Example 7.2 (Commitment at Nucor & USX: The Case of Thin-Slab Casting): In reviewing this case, I learned analyzing prior commitments is an important part of forecasting how the competition *may respond*. Nucor correctly reasoned that USX would not adopt the new casting technology because of its prior commitment to modernize existing facilities and that choice constrained USX's future options.
    iii. Firms can preserve flexibility by either *staging large investments into smaller increments* and by *delaying important decisions* to see how the markets plays out (i.e. the use of real options). For example, Anheuser Busch purchased minority interests in emerging market brewers to learn the markets and filter those that deserved larger investments.
        1. Real Option Example: Hewlett Packard used to customize its ink-jet printers to particular foreign markets but do so at the factory and then ship them to their final destinations. This was both risky and expensive as the company would mis-forecast demand and either ship too few or too many resulting in lost sales or inventory write-downs. Now, the company sends partially assembled printers to large overseas warehouses and then customizes them once it has definitive orders. This is done at a ***higher production cost*** to HP, but these costs are likely less than those of ***mis-forecasting demand***.
            a. Takeaway: Firms can take advantage of real options by altering the configuration of internal processes and physical capital but this is a skill to not only recognize it but properly asses the tradeoff. Real options exist but they are not free.

c. A Framework for Analyzing Commitments
    i. Positioning analysis examines the direct effects of commitment and its results in in regard to consumer value and efficiency / costs.
    ii. Sustainability analysis determines the strategic effects of commitment and how the competition will respond.
    iii. Flexibility analysis incorporates uncertainty into positioning and sustainability analysis by examining the learn to burn ratio: the rate at which firms receive new

information versus the need to make sunk costs investments. A high learn to burn ratio implies a high degree of flexibility and the rate of option decay is low.

iv. Judgement analysis examines a firm's decision making and any possible biases the firm may have. It also classifies errors into type 1 and type 2 errors: type 1 errors are passing on projects that were good and type 2 is projects that were accepted that shouldn't have been.

1. Judgement & Organization Design: Centralized decision-making results in more type 1 errors and decentralized results in more type 2 errors.

d. Competitive Discipline: A lot of firms adopt "tit for tat" pricing as its simple and easy to describe and understand.

e. Firms coordinate on the right price by using focal points and getting the industry to focus on certain areas and this works best if the variables are salient and easy to identify the target.

4. There are many impediments to coordination that prevent firms from getting along even if they'd like to do so.
    a. A firm can simply misread their rivals by mistakenly believing its rival is charging one price but it is really charging another or a firm misunderstands the reasons for its rivals pricing decision or its own change in market share. The lesson is that firm should take the time to understand the full scope of pricing changes before they react.
    b. Firms may be unable to coordinate pricing due to the lumpiness of orders and given they occur infrequently and / or have a lag, there are fewer competitive interactions and less feedback making price cutting more attractive.
    c. Firms may be unable to coordinate price is the information about sales transactions are private. In addition, other agreements such as trade allowances of credit terms can affect pricing but they may not be apparent. If a product is *customized*, it will be difficult to see if a competitor is cooperating or if a transaction is *secret or complex*.
    d. If a firm is in a volatile demand environment, price cutting will be harder to verify as firm can only observe its own volume and pricing.
5. Firms may not be able to sustainability keep cooperative pricing because of asymmetries: firms are not identical because they may have ***different costs or be vertically differentiated*** and thus there may be no single focal point on price. Even if they can agree on a price, differences in costs, capacity or product quality will affect incentive to abide by an agreement and if customers are ***price sensitive*** the temptation to cut prices is intense. Note: Table 7.2 on page 223 provides a good overview of Market Structure Conditions and Pricing Sustainability.
6. Firms can facilitate competitive pricing by certain practices such as price leadership where a firm takes lead in establishing pricing and establishes a focal point. Another practice in advance announcement of pricing changes before they take effect (i.e. FedEx and UPS). Another tactic is most favored nations clauses that grant a buyer will pay the lowest price the seller charges (i.e. prevalent in media). A final practice is uniform delivered prices where a firm quotes a delivered price and absorbs the freight charges itself.
7. Where Does Market Structure Come From?
    a. Microeconomic states economies of scale and MES relative to market size will predict and explain market structure: the larger the sunk costs of establishing production relative to market size will result in a market structure with fewer firms. Some examples include R&D and manufacturing costs in commercial airframe manufacturing and large purchasing and distribution economies in retail chains and e-commerce.

b. Fewer firms imply higher sunk costs and thus higher prices unless technology changes somehow.
c. Stated another way, the number of firms is *positively correlated* with demand and *negatively correlated* with MES.

8. Sutton's Endogenous Sunk Costs
    a. Sutton argues market structure is not solely a function of market size and production technology. He believes sunk costs and scale economies are important, but consumers gravitate toward brand name products and brand building activities (i.e. creating and maintaining consumer brands) require large sunk costs investments.
    b. The MES for branded products can be large and the size of the branding investment is not determined by some technology like in production but instead chosen by the firm itself and he calls these *"endogenous sunk costs"*.
        i. This theory explains well how many branded consumers markets start with many small firms and evolve into a split between a handful of leading brands and a large number of niche competitors. The big winners get bigger quickly and there is an element of path dependence to this.
        ii. This theory also helps explain how branded consumer markets are more concentrated today than they were a century ago: long ago, firms relied on a sales force to promote their products, but this was a labor-intensive process that displayed few scale economies, so the MES was within reach for smaller firms. Once broadcast media developed, firms could invest in developing and maintaining a brand image and reach millions of potential consumers and although this required substantial sunk cost investments it also had large scale economies.
    c. Innovation and Market Evolution: Sutton also believed R&D is another endogenous sunk cost and effectively raises the MES of entry.
        i. Insight & Connection: This is a large weapon employed by technology companies today. Technology companies *bear R&D at a Company-level, but can amortize the costs at a customer level keeping the competition out*. Balancing this out, at some point an entrant can employ a disruptive technology to enter but it needs to change the cost structure to be effective and the incumbent may be unwilling or unable to respond.
    d. Learning and Industry Dynamics: Learning is not enough to maintain a dominant position and the leader needs to take advantage of its competitors "forgetting". They can do this if they move quickly down the learning curve to steal business so smaller players "forget" the skills they learned and their costs increase. This comes down to a leader aggressively growing and moving down the learning curve.

Chapter 8: Industry Analysis

1. Introduction
    a. Industry analysis allows one to asset both industry and firm performance as well as both isolate factors affecting vertical trading relationships and horizontal competitive relationships and determine how changes in the business environment may affect performance.
        i. Connection: Michael Porter believes you are not only competing for profits with your direct competition, but also in your value chain.
    b. A five forces analysis looks at the strength of economic relationships and is assumed to be zero sum whereas "Coopetition" looks at a firm's "value net" and assumes more aggregate

value can be create via cooperation between a company, its supplier, distributors and possible competitors.

i. Connection: Given the increased relevance of platform and ecosystem business models, the "Coopetition" complement should become a much more valuable part of strategic analysis.

c. Limitations of a five forces analysis include a) paying little attention to the demand side (but it does focus on substitutes and complements), b) focuses on the industry and not the company level, c) is qualitative in nature, and d) does not consider the role of the government.

d. "Strong" forces in a five forces analysis are bad as they eliminate industry profits.

e. A five-forces analysis is supposed to represent the profitability for the "average" firm and entry, substitutes / complements, supplier, and buyer power can intensify internal rivalry.

2. Performing a Five-Forces Analysis

a. Internal Rivalry

i. You must define the product and geographic scope of the market.

ii. Firms compete on both price and non-price dimensions, but price competition is especially destructive. Non-price competition can take the form of driving up fixed costs (i.e. product development) or raising marginal costs (i.e. product features), but sometimes these costs can be "passed-on" to the customer and result in less profit erosion. On the other hand, price competition is more likely to erode profits since you can reduce costs and maintain "price-cost" margins.

1. Insight: If I were to put a "hierarchy of harm" together it would go: 1) price competition, 2) marginal cost increases, and 3) fixed cost increases.

iii. Why would a firm lower its prices?

1. It could be for several reasons such as 1) many sellers indicating low barriers to entry, 2) industry demand is stagnant or declining, 3) firms have different costs structures or are asymmetric in other ways, 4) firms have excess capacity, 5) products are not differentiated and / or have low switching costs, 6) strong exit barriers, and 7) high price elasticity of demand.

b. Entry

i. Entry erodes profit by dividing demand among more sellers and decreases market concentration to create more rivalry.

ii. Entry barriers can be exogenous created by technology (i.e. capital costs) or endogenous determined by the decisions of firms (i.e. R&D, advertising).

iii. Factors that affect entry include: 1) economies of scale / high MES if the industry value chain requires production, 2) brand and reputation supported by advertising and can be leveraged with economies of scope if it's a consumer based industry, 3) access to key inputs such as technological know-how, raw materials, distribution, or even locations, 4) going down the experience curve, and 5) network effects / installed base.

c. Substitute and complementary products

i. Substitutes and complements influence demand and substitutes erode profits by stealing share and intensifying rivalry whereas complements may boost demand for the product in questions.

1. Insight: Complements and complementors are important to network and ecosystem-based businesses.

ii. Factors to consider when assessing substitutes and complements include: 1) whether they are available, 2) price: value characteristics of substitutes and complements, and 3) price elasticity of demand.

d. Supplier Power and Buyer Power
    i. Industry profits can be eroded if the upstream supplier is concentrated or downstream customers are locked into relationship specific investments.
    ii. Factors that must be considered include: 1) competitiveness of the input market, 2) relative concentration of upstream and downstream suppliers, 3) purchase volume of suppliers, 4) availability of substitute inputs, 5) RSA's by the industry and its suppliers, 6) threat of forward integration, and 7) ability of suppliers to price discriminate.

e. When you are in an industry, the best strategy for coping with the five forces do not involve taking them head on but rather insulating yourself from them.
    i. Connection: This can be done in many ways and ranges from positioning yourself to a different customer base (i.e. Progressive with "at risk" insurance bets) or performing different activities than your competition to create superior value (i.e. Enterprise with its "off-airport" focus).

3. Applying the Five Forces: Some Industry Analyses
    a. Chicago Hospital Markets
        i. Location of hospital as differentiation.
        ii. Insight: You may be able to use contract length as proxy as sales frequency and lumpiness.
    b. Airframe Manufacturers
        i. Insight: Firms with different lines of business could serve as a source of economies of scope and other asymmetries (i.e. Boeing with military aircraft).
        ii. Barriers to entry in this industry include economies of scale (i.e. development costs) and learning / experience curves.
    c. Sports Leagues
    d. Professional Service Firms
4. Note: Appendix with a checklist for doing a five forces analysis is on page 273.

PART THREE: STRATEGIC POSITION AND DYANAMICS

Chapter 9: Strategic Positioning for Competitive Advantage

1. The intro starts with excellent example contrasting how several airlines are positioned, with American Airlines are a hub and spoke carrier with a frequent flier program and yield management capability, Southwest as a point to point, efficient, and low cost carrier, and with Jet Blue with a customer segment strategy focused on New Yorkers with some cost advantage. This example illustrates several fundamentally different ways in which firms can position themselves to compete.
2. This chapter begins by defining the concept of competitive advantage an argues a firm must have one to create more value than its rivals. Next, it focuses on the economic and organizational logic of two broad approached to positioning: cost leadership and benefit leadership. Finally, the chapter introduces tools to diagnose a firm's benefit and cost position as well as provide a description of broad versus focus coverage strategies.
3. Competitive Advantage and Value Creation: Conceptual Foundations
    a. The drivers of economic profitability are 1) market economics and 2) value created relative to the competitors which is dependent on the relative cost and benefit position.

b. <u>A firm will have a competitive advantage when they create and deliver more economic value than its competition and capture some portion of it; thus, competitive advantage will show up on the Company's P&L.</u>

c. Value created is the difference between the perceived benefit (B) and the cost to deliver the benefit (C) and benefit is based on perception, intangible factors, idiosyncratic tastes, and trade-offs depending on the product or service in question.

d. Value Created = Consumer Surplus – Producer Surplus

i. (B-P) – (P-C), and C is inputs such as labor, capital, and raw materials.

e. Value Creation and Competitive Advantage: even if your "B-C" is positive that does not mean you will make a profit as you may have competition. You need to create a level of "B-C" that your competition <u>cannot replicate</u>.

i. In theory the highest level of B-C should win the market but there are usually ways to segment markets and customers to prevent this from happening and this is why niche offerings can be profitable.

4. Analyzing Value Creation
   a. To understand value creation, you need to understand the underlying <u>drivers</u> of benefits and costs.
      i. <u>Benefits:</u> you need to know what drives the consumer benefit and how is the firm's product serving needs better than substitutes?
      ii. <u>Cost:</u> Which costs are sensitive to production volume, how do they change with cumulative experience, or develop over time?
   b. <u>Example 9.2: Kmart versus Walmart</u>: This case discussed how Kmart responded to Walmart by simply lowering prices, but it didn't have Walmart's supply chain, so when Walmart responded it resulted in not only no market share increase, but also lower margins. They simply could not <u>replicate</u> the level of "B-C" Walmart had.
   c. <u>Example 9.3: The Emergence of Uber and the Demise of the Taxi</u>: Uber and AirBnB digitized trust and reputation and Uber creates value by acting as a platform that matches demand with supply.
5. Value Creation and the Value Chain
   a. The value chain depicts the firm as a set of value creating activities that deliver some level of "B-C". These activities usually include things such as inbound logistics, production, outbound logistics, marketing and sales, and service. These core activities are usually complemented by support functions (i.e. firm infrastructure, HR, technology, and procurement).
      i. As you go through the chain, you can look at where value is added and cost to see where the value is.
   b. Value Creation, Resources, and Capabilities
      i. Broadly speaking, there are two ways to create value: a company can configure its value chain <u>differently</u> than its rivals (i.e. Enterprise Rent a Car or Progressive Insurance) or a company can configure its value chain the same way, but perform activities more <u>effectively</u> than rival do by possessing *resources* and *capabilities* its competitors <u>lack</u>.
         1. <u>*Resources*</u> tend to be firm specific assets such as patents, trademarks, brand name, installed base, culture, and workers with firm specific expertise. Other assets can be replicated.
         2. <u>*Capabilities*</u> are activities a firm does well relative others and can be things such as brand promotion (i.e. Virgin), sourcing / procurement or the firm's

ability to manage either linkages between elements of the value chain or coordinate activities across it. These can be done when it is valuable across multiple products and services, embedded across organizational routines and they are tacit.

   c. Example 9.4: Creating Value at Enterprise Rent-a-Car: They created value by carving out a unique position in non-airport rental and tailored their activities around that. They had good relationships with body shops and insurance companies.

6. Strategic Positioning: Cost Advantage and Benefit Advantage
   a. Lower cost is likely to be a more profitable positioning strategy when they are limited opportunities for perceived benefit, consumers are price sensitive, and the product is a search good.
      i. There are many opportunities outside of the core product or service to differentiate in areas such as financing, after-sales service, location, and delivery.
   b. Superior benefits likely to be more profitable when price premium paid for enhancing benefits, it is economically beneficial through either scale or learning to carve out a niche, and the product is an experience good.
   c. A firm's ability to create a distinctive bundle of value will determine if it can outperform its competitors.
   d. A key area to avoid is being "stuck in middle" where you achieve elements of benefit and cost leadership but achieve neither.
      i. Connection: This usually indicates you are not making trade-offs. You cannot satisfy every customer.
7. Diagnosing Cost and Benefit Drivers.
   a. Both costs and consumer benefits drive value creation.
   b. Cost drivers can explain why costs vary among firms and can be classified into the several categories.
      i. Cost drivers related to firm size, scope, or cumulative experience.
         1. Indivisible input costs a frequent source here.
      ii. Cost drivers independent of firm size, scope, or cumulative experience.
      iii. Cost drivers related to the vertical organization of the business and the related agency and transaction costs.
   c. Benefit drivers increase the perceived benefits and can lower the user / transaction costs of a product and exist along several dimensions: 1) physical characteristics of the product, 2) quantity and characteristics of complementary goods (i.e. training, warranties, and maintenance), 3) characteristics associated with the sale or delivery of the good, 4) consumer expectation or perception of the product's performance, and 5) image of the product.
8. Strategic Positioning: Broad Coverage versus Focus Strategies
   a. Strategic position involves the **how** (will we focus on cost leadership, benefits leadership, or both?) and **where** (will we seek to create value across of broad scope of market segments or focus on a narrow set of segments?) of value creation.
      i. Tool: Industry segmentation matrix characterizes industry across customer groups and product varieties.
   b. A **broad** coverage strategy wants to serve all customers groups with a broad set of product and services and the economic logic of this strategy relies on economies of scope in production, distribution, and marketing.

c. A **focus** strategy offers a narrow set of products or serves a narrow set of customers (can also do both) and are classified in different ways.
    i. Customer specialization: offers an array of related products to a narrow class of customers and success depends on how whether customer segment is overserved or underserved. For example, Microsoft Word underserves technical papers and United and American overserve leisure travelers.
    ii. Product specialization: offers a limited set of product varieties to a diverse customer group and logic is based on exploiting economies of scale and learning economies in that niche. For example, ZS with sales and marketing consulting.
    iii. Geographic specialization: offers a variety of related products within a narrowly defined geographic segment and assumes brand can offset scale advantages of larger players.
d. A focus strategy can insulate you from competition depending on demand and market size of a product or service as only one or two firms may be able to operate profitably.

Chapter 10: Information and Value Creation

1. This chapter focuses on benefit enhancement as a strategy and comes in roughly two varieties: vertical differentiation which is an enhancement for the benefit of *all* customers that is unambiguously better. For example, everyone would prefer BMW to Fiat is price were not a consideration. Another variety is horizontal differentiation and is when firms alter certain attributes so some customers perceive it offers more benefits while others perceive it offers less. Although it may be obvious, a benefit strategy cannot succeed unless consumers know about a product's benefits.
2. The "Shopping Problem" describes the consumer goal is to the find the seller offering the highest level of "B-P" and that is done through search. Two types of search are sequential search which is learning about one seller at a time while simultaneous search is learning about many goods at once.
    a. The internet has significantly lowered the cost of search allowing consumers to move from sequential to simultaneous search more often and raising the price elasticity of demand in many industries.
    b. The main types of goods include search goods, experience goods, and credence goods.
        i. Search goods are where consumers can easily compare characteristics and are usually commodities and include items such as gasoline and printer paper.
        ii. Experience goods are where consumers cannot easily compare product characteristics and value information form others; consumers learn about quality after purchasing the product and include automobiles, consumer electronics, and entertainment.
        iii. Credence cannot easily evaluate quality even after purchasing and using the product and include products like auto repairs, medical services, and educational services.
3. Consumers want information and these good types have different strategies for the types of information they will disclose. For example, search good make it easy by posting prices and experience goods voluntarily disclose quality ratings in an attempt to signal. Other times, companies do not disclose information and use warranties as a signal to quality. Advertising can also be used as a quality signal.
    a. Example 10.2: The Evolution of Branding in Appliance Retailing: Initially, Sears held a strong position in appliance retailing but as quality improved and television allowed firms to create brands and get more of that value. Paradoxically, it is cheaper to start a brand

today but that makes entry also easier and many of these brands cede their profit to Facebook and Google.

4. Report Cards are a tool that create value by making it easier for consumers to get information and put a value on quality. They allow consumers to identify high quality sellers and this ability to identify quality will give sellers incentive to improve quality if it is valued. They also serve as a sorting mechanism to identify customers with a higher WTP. Although helpful, report cards do have some measurement issues.
5. Certifiers create value by helping consumers find the best sellers and try to extract some of this value by charging for it. Many e-commerce businesses offer certification as a complement to their core business (i.e. Amazon with reviews). It's important for certifiers to be accurate and unbiased, but many things stand in the way of this.
6. With the right information, matchmakers can match sellers of horizontally differentiated good to consumers whose idiosyncratic needs are satisfied by these sellers and it very important for experience goods. In a lot of ways, the internet is the new town square. If your strategy is vertical differentiation, a seller will include strong certification results in their marketing. It is harder to "match make" with a horizontal differentiation strategy because you need to know individual tastes but the internet is making this easier with ad targeting. If data is accumulated on your spending habits this targeting is made easier.
7. Example 10.6: The Netflix Challenge: Blockbuster initially had scale economies in purchasing and inventory and did not have an incentive to rush into DVDs. The economics of DVDs wiped out Blockbuster's scale economies as studios set the price for DVDs far below that of VHS tapes and Netflix's distribution footprint had more scale economies for DVD distribution that Blockbuster's brick and mortar footprint. When Netflix pivoted to streaming, they began gaining subscribers and using algorithms to aggregate demand and that provided them lower per subscriber costs for content.
8. Several internet companies don't even sell products but make money and create value by selling the attention of its users such as Google, Facebook, and Craigslist.
    a. Companies that "make things" enjoy a variable level of profits as they grow the gap between the price they charge and their variable production costs. However, powerful players in the vertical chain can take some of those profits via increased advertising costs as Facebook and Google have done. As targeting gets better they will likely try to take more profits.
        i. Connection: Ben Thompson states that Google and Facebook invested in the R&D and have the inventory to capture this value in the vertical chain in the form of higher advertising (CAC to media buyers) and profits to them.

Chapter 11: Sustaining Competitive Advantage

1. Intro: FedEx essentially invented the "overnight business" and UPS eventually entered this business by studying FedEx's operations closely. UPS initially focused on the "longer-than-overnight" business but used its scale economies with its existing fleet and lower costs and higher margins to copy FedEx. In response, FedEx responded by developing a ground business. This story is meant to introduce the threats to sustained profits and how firms can guard against them and then digs into long run threats of innovation.
2. Market Structure and Threats to Sustainability
    a. Perfectly Competitive (PC) and Monopolistically Competitive Markets (MC): In an MC market, the seller maximizes profits by pricing above marginal costs and incumbents in both these markets can do little to preserve profits unless they can **deter** entry. One strategy for deterring entry in these markets is to create endogenous sunk costs through branding

and other strategies. Industry conditions such as high fixed costs and pricing tend to be absent from these markets.

b. Other Structures: You can benefit from luck but this will likely regress to the mean.
c. Profits at high profit firms tend to go down and profits at lower profit firms tend to up, but they do not converge to a mean. So, profitability regresses but only to a point.
d. Security in your market can only result to a difficult to understand or imitate advantage.

3. The Resource-Based Theory of the Firm emphasizes asymmetries in the resources and capabilities to sustain competitive advantage.
    i. Resources include things such as assets, production factors, patents, brand names, and installed base.
    ii. Capabilities are activities that firm does better than competitors.
    b. Resources and capabilities do not alone confer competitive advantage; advantage must persist despite efforts by the competition to duplicate or neutralize it and could involve asymmetry.
    c. For a competitive advantage to be sustainable, it must be underpinned by resources and capabilities that are scarce and imperfectly mobile. Imperfectly mobile implies a resource is scarce and cannot sell itself to the highest bidder whereas a mobile resource can freely move (i.e. free agents in baseball). Other example could include know-how acquired in cumulative experience and a firm's reputation.
    d. Cospecialized is when a resource is worth more to a firm who can use it in a way that the sum-of-the-parts is greater than the whole. For example, a lot of network-based airline carriers have wholes worth more than the sum-of-their-parts.
    e. Example 11.1: Coffee, Tea, or Starbucks: Starbucks excels are selling and promoting coffee culture and its true capability is it can create a great experience. When it acquired Teavana the question is can this be replicated for tea drinking? For coffee, Starbucks only had to alter "where" people drink but for tea they need to recreate the "where" and also increase consumption.
4. Isolating Mechanisms can be described as economic forces that limit the extent to which a competitive advantage can be duplicated or neutralized and can be classified as impediments to imitation and early-mover advantages. These are barrier to entry, but really barriers to imitation at a firm level.
    a. Impediments to Imitation
        i. Legal Restrictions such as patents or trademarks. The purchase of these would only make sense and profitable if you had the right resources and capabilities to add to what you are buying.
        ii. Superior Access to input, customers, or anything in the value chain (i.e. raw materials or information or know how) that allows you to deliver a quality and / or cost advantage. This could even take the form of contracts of even location. The access part is important but you need unique knowledge or ability to use scarce resources.
        iii. Market size and scale economies: imitation may be deterred when MES relative to the market size is large and scale-based barriers to imitation are most likely when the market is for specialized products and services. Ironically, if demand grows too much this barrier will evaporate.
        iv. Intangible barriers to imitation such as causal ambiguity (why a firm creates more value is obscure and imperfectly understood), dependence on historical circumstances (capabilities that are developed because of the unique history of the

firm in the case of Southwest Airlines and regulation), and social complexity (advantages that cannot be replicated because of interpersonal relationships of managers and / or relationships with customers and suppliers).

b. Early-Mover Advantages
    i. Learning Curve allows you to lower costs and improve product and subject to a positive feedback loop.
    ii. Reputation + Buyer Uncertainty equal an isolating mechanism where people do not want uncertainty and won't take a chance on products they don't know.
    iii. Buyer Switching Costs are accumulated habits that will cause a customer to be reluctant to switch and many firms try to foster this by using loyalty programs or developing complementary products and services.
    iv. Network Effects are when consumers place a higher value as more consumers use something and can be either actual or virtual networks.
        1. Actual networks are based on connections (i.e. the telephone system) and virtual networks are not physically linked so connections are driven by complements. An installed base a key to driving virtual network effects.
        2. Discussion of network standards: Easier to knock off a standard in virtual markets by offering superior quality, options, or tapping into complementary goods markets.

c. Example 11.4 Building Blocks of Sustainable Advantage (LEGO): Lego has a brand, switching costs, and patents / trademarks. Its business then eroded and it has moved back into complements to have success again.

5. Imperfect Imitability and Industry Equilibrium: To asses profit opportunities in a particular market, you must not only consider average profitability but also unsuccess firms (i.e. survivorship bias). If one takes an "ex ante" perspective and entry is free, the firm must have unique resources and capabilities.
6. Firms must create advantage before they sustain it but then can be subject to creative destruction. Joseph Schumpeter said markets have periods of calm punctuated by fundamental "shocks" and "discontinuities" that destroy old sources of advantage and replace them with new ones.
    a. Disruptive technologies are not incremental improvements but entirely new technologies that drastically lower costs in the "B-C" equation. Are larger firms doomed? It depends on the following:
        i. Productivity Effect: Can the firm be productive and use its sheet size and scope to win, or is it too difficult?
        ii. Sunk Cost Effect: an asymmetry that exists between a firm who has already commitment to a technology or product concept versus one that is still deciding.
            1. In reality, sunk costs should be ignored when making a decision but this causes inertia that favors sticking with the current technology.
            2. The firm that has not decided will compare the costs of all alternative technologies and is not biased.
                a. Connection: We saw this bear itself out in the USX / Nucor Case Study when USX made investments to upgrade its existing mills.
        iii. Replacement Effect: assumes entrant will be more motivated to develop new technology to capture profits and replace incumbent whereas incumbent only replaces "itself". The opportunity costs to the incumbent are higher than that of the entrant.

iv. Efficiency Effect: compares loss in profits when a monopolist one of two competitors or profits of a duopolist.

7. Innovation and the Market for Ideas
    a. There is a market for ideas if 1) the technology cannot be easily stolen by others and 2) specialized assets such as marketing or manufacturing must be used in conjunction with the innovative product.
    b. Resources, capabilities, assets, and value capture: if production and marketing capability are plentiful, most of the value will go to the innovator, but if these resources are scarce value will flow to firm adding value.
        i. This tug of value capture will occur within the vertical chain and be determined by the relative positions of resources and capabilities by the parties in discussion.
8. Evolutionary Economics and Dynamic Capabilities
    a. A firm must continually maintain, improve upon, and adapt its capabilities to exploit and create new sources of competitive advantage and exploit profit opportunities.
        i. Takeaway: Netflix has done this with moving from DVD's to streaming and then from licensing streaming content to developing its own content.
    b. As time passes, the range of outcomes compresses on windows of opportunity in developing new products or technologies.
        i. Connection: Alex Danco paper explains something similar happens in raising capital at a higher valuation. It decreases your optionality as a narrower range of outcomes is considered "acceptable".
9. The Environment
    a. Porter views competition as an evolutionary process and believes a firm's home market plays a factor that can promote or impede its ability to compete in global markets.
        i. Factor conditions: how specialized a nations factors of production may be.
        ii. Demand conditions: unique factors may make them good at making products such as Japan's focus on quiet AC units given its densely populated nation.
        iii. Related supplier or support industries: close coordination and relationships with suppliers.
        iv. Strategy, structure, and rivalry: in Germany and Switzerland most institutional ownership, share prices do not move much and thus they tend to be longer-term and invest in research and innovation. Also, domestic US Airlines better positions to compete internationally because they receive no subsidies.

PART FOUR: INTERNAL ORGANIZATION

Chapter 12: Performance Measurement and Incentives

1. The Principal-Agent Relationship is when the agent is hired by the principal to take action / make decisions on the principal's behalf and there are many of these relationships. There are many difficulties embedded in this relationship such as 1) different objectives between that of the principal and the agent and 2) problems of hidden action and hidden information.
    a. If you could write complete contracts this wouldn't be an issue, but this is not practical and entails the same problems of vertical integration versus market exchange discussed in Chapters 3 and 4 so this not only an issue in the vertical chain but within the organization.
    b. Monitoring is typically imperfect and expensive and adding a monitor adds a level, making it less efficient.
2. Performance-Based incentives can help with hidden information problems, but are also subject to problems. For example, performance measures can be subject to random factors and they may fail to capture all aspects of performance.

a. If you want to pay for performance and the employee is affected by random factors, you must compensate the employees for variability in pay and this is a tradeoff between risk and incentives.
    i. These incentives will be correlated to risk tolerance of the employee, the variance of the performance, and the marginal cost and returns to effort.
3. Growth can be an issue: as size of a partnership grew, growth lowered productivity.
4. To reduce free-rider problems, an organization needs to keep teams small, work together for a long time, and vary the underlying tasks done.
    a. Example 12.6 (Teams and Communication in Steel Mills): Broader job tasks and frequent job rotation improve communication and the sharing of ideas to reduce costs and possible improve products.

Chapter 13: Strategy and Structure

1. Introduction: The way firm choose to organize itself matters for success in implementing strategic choices. You need to get the right information to the right people to respond to competitive pressure and maintain the proper linkages in resources and capabilities. In other words, your structure needs to follow your strategy. Pepsi reorganized a few times as they felt they were not properly economizing on sales and marketing efforts; in another reorganization they believed national coordination of manufacturing helped achieved economies of scale in production and so it made sense to organize across ***functional*** lines whereas regional coordination increased Pepsi's effectiveness in negotiating with large purchasers so sales was justified in organizing across ***geographic*** lines. The organization really needs to tie into what you are trying to achieve or maximize.
2. An Introduction to Structure
    a. The level of collaboration determines the optimal structure and at a certain size, group self-management becomes too costly.
    b. Complex hierarchies are needed when a firm is pursuing economies of scale or scope. It can become complicated and involves two related problems:
        i. Departmentalization: putting workers into subgroups
            1. This can be organized by functions, inputs, geography, or time of work and is associated with firm boundaries: for example, if a firm acquires a new business it will be reflected in an expansion and if a firm decides to outsource, it will remove activities and individuals and place it outside the firm's boundaries.
            2. A consideration or organization should be economies of scale and scope: a firm can organize its R&D by combining several projects together or it may be better organized around production or how customers best use products. In short, the spend should be focused on how to leverage benefits and / or get leverage on its costs.
            3. Apple and Sony: Apple was able to succeed in music with the iPod because of the tight integration of hardware and content even though Sony had both hardware (i.e. the Walkman) and content assets (i.e. a music label). Sony was able to maximize economies in each segment individually but the real payoff was in the "integration" and the synergies between the two. The takeaway is that Sony was not set up organizationally to achieve this.
        ii. Coordination of activities: within and between subgroups and how to achieve firm's objectives.

1. Two areas you are balancing here are coordination which involves managing the flow of information and control which involves the location of the decision making and the authority.
    a. Approaches to coordination include autonomy (i.e. divisions) that a responsible for profit and loss and this structure is set up well for M&A; another approach is lateral relationships across units and this makes sense if you are pursuing economies of scale and scope.
    b. Authority is usually classified between centralized and decentralized decision making, but even these distinctions do not apply uniformly.
        i. A wider span of control implies a more decentralized structure.
        ii. Activities that you manage intensely and are critical for your success tend to be not scalable and are not decentralized.

c. Example 13.1 (ABB's Matrix Organization): The firm reorganized around both product and geography with a dual reporting structure. This structure reduced manufacturing costs and targeted R&D funding better. A drawback of this structure was the rapidity of decision making but the company embarked on a robust information sharing system to combat this.
d. Types of Organizational Structures include the U-form, M-form, matrix, and network structures.
    i. The Functional or U-form structure implies you organize by function, but coordination is difficult to maintain so you need a headquarters to make strategic decisions. Allows for specialization of labor to drive economies of scale in manufacturing, marketing, and distribution.
    ii. The Multidivisional Structure or M-form structure sets up autonomous divisions led by a HQ and assisted by a corporate staff who provide information about the internal and external business environment. An M-form often develops from U-form as organization becomes more complex. The divisions tend to focus on operational decisions with corporate focusing on more strategic matters. The firm's internal capital market allows a division to "compete" for capital subject to agency costs.
    iii. In a Matrix Structure, a firm organizes along multiple dimensions and can be done in many different ways. This structure is valuable when economies of scale or scope or agency considerations provide a compelling rational to do so. Note: see Pepsi justification in the introduction of this chapter.
    iv. A Network Structure places an emphasis on flexibility and relationships between workers. Modular business units are self-contained but can be linked together thorough a technology standard and are driven by network effects. This structure may limit scope economies, but also can diffuse and offload R&D risks and costs (i.e. developers) and make organizations more adaptable to changes in underlying technology. The effect of modularity is to increase possibilities for cooperative action by reducing search, monitoring, and controlling costs without significantly increasing transaction costs.

3. Structure–Environment Coherence

a. An organization's design is contingent on the relationships between the business, its environment, the capabilities of the firm and this is dynamic over time.
b. Information processing: management by exception done at corporate and the "level of exception" determines who makes the decision and how high up the chain it goes.
c. Firms should seek to internalize activities when the information is of critical performance.
d. Organizational structure needs to follow strategy so it depends what you are trying to do. For example, if you have benefit leadership contingent on being close to customers, you will likely favor a decentralized structure. In another example, if you are pursuing cost leadership, you want to scale economies and likely need to centralize decision making and organize by function. Tying this all together, if you are pursuing both, you may need a matrix structure.
e. What usually happens is a business environment changes, which means a firm needs to change its strategy and that likely leads to changing how a firm is organized.
f. Initially, as firm were trying to realize economies of scale, they organized around a U-Form structure to drive scale economies in production, marketing, and distribution. Then, this gave way to the M-Form as firms expanded overseas and the administrative burden became too much.

4. Structure Follows Strategy
    a. In M&A deals, you have to carefully account for how target is incentivized when you pursue a synergy program.
5. Insight: studying how a firm is organized can not only provides strategy clues but it can also provide insight as to why a business is struggling. This could serve as a good complement to fundamental analysis.

Chapter 14: Environment, Power, and Culture

1. Introduction: Firms act within a broader social context involving culture and power relations within a firm determining its social context and the external content includes regulatory environment and relationships with other firms.
2. The Social Context of Firm Behavior
3. The internal context determines the formal and informal mechanisms that accomplish internal goals and involved both power and culture.
    a. Power can be described as the ability to accomplish goals without an explicit contract. Authority is different from power and comes from contractual decision making and dispute resolution rights a firm has. Influence refers to the use of power in a given situation by an individual.
        i. Example 14.1: The Sources of Presidential Power: They come from 1) influence, 2) professional reputation, and 3) prestige among the public.
        ii. Do Successful Organizations Need Powerful Managers?
            1. Accumulation of power is **helpful** when 1) there are high agency costs in coordinating managers and lower-level employees and 2) the firm's environment is relatively stable.
            2. Accumulation of power is **harmful** when 1) there are high agency costs in coordinating levels of upper management and 2) the firm's environment is unstable.
        iii. Example 14.3: Power in the Boardroom Why Let CEO's Choose Directors? Departure can and will be used as a bargaining chip by "irreplaceable" managers. Other findings from this study include more independent directors tend to be added after a period of underperformance, board independence trends to decline the

longer a CEO has held the position, and the probability a CEO is fired for poor performance is greater when there are more independent directors.
        1. Insight: A good "power tell" is when someone holds both the Chairman and CEO titles and is good for evaluating power dynamics in a Company.
    b. Culture can be defined as the values, beliefs and norms shared by its members and how it influences employee behaviors. **For culture to actually create value, it must be linked to the way the firm creates value for the customer and cannot be easily imitated.**
        i. Culture can create value for a firm by *complementing* formal control and lowering monitoring costs and *shaping* the preferences of individuals to a common set of goals reducing negotiations, bargaining, and fostering competition.
        ii. Culture can be a strong glue in good times but can unravel the firm in bad times. If a firm's strategy fits with its environment, the culture can make the firm better and more efficient but if the environment changes this can cause intertie.
            1. Connection: Some level of this is likely occurring right now with legacy media companies.
        iii. Culture and M&A integration: culture clashes in M&A can be deal killers and it is usually because parties are not cooperating because tasks are interdependent. The unfortunate part is this where the best opportunities for scale and scope economies exist so these must be handled deftly and be closely monitored when developing integration plans.
        iv. Is a good culture caused by a good strategy or vice versa? The causality is difficult to detect.
            1. Connection: *The Halo Effect* by Phil Rosenzwieg is a book that actually emphasizes this very issue.
4. External Context, Institutions, and Strategies
    a. Institutions and Regulation usually involve compliance costs which entail both direct costs and increased business cost due to noncompliance, and foregone opportunities.
    b. Interfirm Resource Dependence Relationships: firms develop relationships and may become dependent based on asymmetries around information, resources, and capabilities. Note: A strong reputation can be important and usually results from substantial sunk costs.
    c. Industry Logics are the beliefs, values, and behavioral norms that govern an industry. Essentially this is culture that unfolds over time, but at an industry level. This could be a strength or a detriment. The belief system that unfolds could be a product of industry economics, or it can shape industry economics but it is hard to isolate. Logics can certainly influence firms but usually involve multiple stimuli.
    d. Example 14.7: Preserving Culture in the Face of Growth: The Google IPO: Bankers use IPO's as a tool to take care of good clients and underprice IPO's, but Google did a Dutch auction to properly determine a clearing price.

What I got out of it

1. Costs are an important and possibly understudied consideration around evaluating a firm's strategic actions, its competitive advantage, and ultimate profitability.
    1. For example, understanding the nature of fixed and variable costs will help you understand not only industry economics but unit economics for a company.

    2. The importance of both sunk and opportunity costs to understand a firm's strategy, entry and exit decisions, and competitive dynamics.
2. Scale, scope, and learning economies are important business considerations that drive decisions around strategy, boundaries a firm chooses, and its organizational structure. In addition, scale, scope, and learning economies can also help explain an industry structure, the nature of competitive advantages, and strategic decisions such as entry, exit, and commitment.
3. A firm controls internal functions such as production, marketing, and finance but has no direct influence over market share or profits for it is the economic relationships that determine if a firm's decisions translate to success.
4. It is important to understand Value Creation (Benefits – Costs) and how a company can choose benefit leadership, cost leadership, or both to try and attain a competitive advantage and capture a portion of the value it creates.
    1. When a company chooses its strategic positioning, going wide or deep in a niche ties back to economic considerations around scale, scope, and learning economies.