

## Competitive Advantages I

### Supply and Demand

#### THE DIFFERENTIATION MYTH

According to an axiom of managerial wisdom, commodity businesses are to be avoided. Any operation in which sellers offer essentially identical products to price-sensitive customers faces an intense struggle for economic survival and must accept a lower than average level of profitability.

Strategic thinking often seems to start with this admonition: Do not allow yourself to be trapped in a commodity business. Fledgling business majors are taught that the essential first step in formulating any legitimate business plan is to differentiate your product from that of the competition. But on its own, differentiation as a strategy to escape the woes of commodity businesses has one major flaw—it doesn't work.

Differentiation may keep your product from being a generic commodity item, but it does not eliminate the intense competition and low profitability that characterize a commodity business. Although nature of the competition may change, the damage to profit persists because the problem is not lack of differentiation, but the absence of barriers to entry. Understanding the significance of barriers to entry and how they operate is the key to developing effective strategy.

There is probably no product in the world more successfully differentiated from its global competitors than a Mercedes-Benz automobile. Many newly installed heads of state seek to buttress their positions by

acquiring at least one; the more grandiose opt for a fleet. Branding is a primary tactic for product differentiation, and the Mercedes-Benz star may be the most widely recognized symbol for quality in the global marketplace. Cadillac once had an equivalent position in the United States, and its name entered the vernacular as a mark of quality—"the Cadillac of burgers" (Nat Cole's commentary on a P. J. Clarke hamburger in the 1950s), "the Cadillac of bassinets" ([www.epinions.com](http://www.epinions.com)), "the Cadillac of PCs" (*BusinessWeek*, May 19, 1999). And yet, despite the recognition and the associations with quality, Mercedes-Benz and Cadillac have not been able to translate the power of their brands into exceptionally profitable businesses. In fact, their economic performance is not distinguishable from those mundane commodity businesses everyone tries so assiduously to avoid.

The process by which high returns are eroded is straightforward. In the case of automobiles, it began in the years after World War II, when Cadillac (with Lincoln in the United States) and Mercedes-Benz dominated their local markets and made exceptional profits. Those profits attracted other companies to enter these markets, seeking a share of the high returns. In the American luxury car market, the first entrants of scale were the Europeans—Mercedes, Jaguar, BMW in the 1970s—soon followed by the Japanese—Acura, Lexus, Infiniti in the 1980s.

If luxury cars had been a commodity business, the entry of new competitors would have undermined prices. But that is not what happened. Cadillacs and Lincolns continued to sell for premium prices, even after the entry of the imports. This was because the imports did not, as a rule, undercut them on price. But with a wider variety of luxury cars available, the sales and market shares of Cadillac and Lincoln began to decline. Meanwhile, the fixed costs of their differentiation strategy—product development, advertising, maintaining dealer and service networks—did not contract. As a result, the fixed cost for each auto went up, and the overall profit margin per car dropped. Cadillac and Lincoln found themselves selling fewer cars with lower profit margins. Their profitability shrank even though their products were thoroughly differentiated.

This process—in which prices remain stable, while sales fall and fixed costs per unit sold rise—differs from that which operates in a price-driven (commodity) market, but the ultimate effect on profitability is the same.

In the luxury car business, the decline did not happen all at once. When the first European brands entered the market, Cadillac and Lincoln lost some of their sales and saw their margins erode. But after this first wave, returns were still high enough to attract additional entrants. Inevitably, more competitors showed up, this time as carriage trade versions of Hondas, Toyotas, and Nissans.

The flood of entrants would only cease when lucrative profit opportunities in the luxury car market vanished. These opportunities would disappear only after entrants had fragmented the market to such an extent that high fixed costs per unit eliminated any extraordinary profit. When financial returns in this market became ordinary, the attraction ceased and entry stopped.

Given a process like this, it should be no surprise that even a brand as renowned as Mercedes-Benz has produced no better than average financial returns. By itself, product differentiation does not eliminate the corrosive impact of competition. Well-regarded brands are no better protected than commodities. High returns attract new entrants, or expansion by existing competitors, or both, in all markets. The inexorable nature of this process leads to our most important statement of strategic principle:

If no forces interfere with the process of entry by competitors, profitability will be driven to levels at which efficient firms earn no more than a “normal” return on their invested capital. It is barriers to entry, not differentiation by itself, that creates strategic opportunities.

#### EFFICIENCY MATTERS

This proposition has several significant implications. The first is the connection between *efficiency* and survival in all markets where there are no barriers to entry.

In copper, steel, or bulk textiles, it is clear that if a company cannot produce at a cost at or below the price established in the market, it will fail and ultimately disappear. Since the market price of a commodity is

determined in the long run by the cost levels of the most efficient producers, competitors who cannot match this level of efficiency will not survive. But essentially the same conditions also apply in markets with differentiated products.

Product differentiation is like lunch; it doesn't come for free. Companies must invest in advertising, product development, sales and service departments, purchasing specialists, distribution channels, and a host of other functions to distinguish their offerings from those of their competitors. If they cannot operate all these functions efficiently, then they will lose out to better-run rivals. The prices their products command and/or their market share will trail those of their competitors. As a consequence, the return they earn on the investments made to differentiate their products will fall below that of their more efficient competitors.

When the successful companies expand, which they inevitably do, market shares of less efficient firms decline further. Even if they can continue to charge a premium price, the returns they earn on their investments in differentiation will fall.

Ultimately, when the returns no longer justify the investment, the less efficient companies will struggle merely to stay afloat. This has been the history of many industries with differentiated products—cars, appliances, retailing, beer, airlines, office equipment, and many others. Only a few successful competitors survive, and many once-dominant firms—General Motors, Zenith, A&P, Coors, Kmart, PanAm—decline, sometimes terminally.

The need for efficiency when products are differentiated is no less crucial than when they are commodities, and it is more difficult to achieve. In a commodity business, efficient operations are largely a matter of controlling production costs. Marketing requirements are usually minimal. With differentiated products, efficiency is a matter both of production cost control and effectiveness in all the functions that underlie successful marketing.

Competition extends to dimensions beyond simple cost control. A company in a differentiated business has to manage product and packaging development, market research, a product portfolio, advertising and promotion, distribution channels, and a skilled sales force, and do it all

without wasting money. Unless something interferes with the processes of competitive entry and expansion, efficient operations in all aspects of the business are key to successful performance.

The second implication of our basic proposition involves understanding the nature of a “normal” return. Investors in a business need to be compensated for the use of their capital. To be “normal,” the return to capital should be equivalent to what the investor can earn elsewhere, suitably adjusted for risk. If investors can earn a 12 percent return by buying stocks in companies with average risk, then the companies have to earn 12 percent on their own average risk investments. Otherwise, investors will ultimately withdraw their capital. In practice, a management that produces a lower rate of return can hang on for many years before the process runs its course, but in the long run—and “normal” implies the average return over a period of years—the company will succumb.

### **BARRIERS TO ENTRY AND COMPETITIVE ADVANTAGES**

Barriers to entry lie at the heart of strategy. The first task in our simplified approach to strategic thinking is to understand what barriers are and how they arise. It is essential to distinguish between the particular skills and competences that a firm may possess and genuine barriers to entry, which are characteristics of the structural economics of a particular market.

The skills and competencies of even the best-run companies are available to competitors, at least in theory. Systems can be replicated, talent hired away, managerial quality upgraded. All these are ultimately parts of the operational effectiveness of the company.

Strategy, on the other hand, is concerned with structural barriers to entry. Identifying those barriers and understanding how they operate, how they can be created, and how they must be defended is at the core of strategic formulation. If barriers to entry exist, then firms within the barriers must be able to do things that potential entrants cannot, no matter how much money they spend or how effectively they emulate the practices of the most successful companies. In other words, firms

### **ENTRY, EXIT, AND LONG-RUN PROFITABILITY**

There is a reverse side to the entry and expansion process in industries without barriers to entry: exit and contraction. Just as extraordinary profits attract new competitors or motivate existing ones to expand, below-average profits will keep them away. If the process is sustained long enough, the less efficient firms within the industry will wither and disappear. But these two processes are not symmetrical. As any family with children knows, it is far easier to buy kittens and puppies than to drown them later. In business, the kittens and puppies are new plants, new products, new capacity of all sorts, and they are much more fun to acquire than to close down.

Because of this asymmetry, it takes longer for an industry with excess capacity and below-average returns to eliminate unnecessary assets than it does for an industry with above average returns to add new capacity. Periods of oversupply last longer than periods in which demand exceeds capacity. Though in the long run companies do need to provide investors with returns commensurate with the level of risk—to earn their cost of capital—the long run can extend beyond what anyone other than management would regard as reasonable. The problem is compounded by the longevity of new plants and products. For mature, capital-intensive businesses, these time spans are apt to be longer than for younger industries that require less in the way of plant and equipment.

Commodity businesses are generally in the mature camp, and part of their poor performance stems from their durability, even after they are no longer earning their keep. But the powerful driving force is the dynamics of entry and exit, not the distinction between commodities and differentiated products. Competitors with patient capital and an emotional commitment to the business can impair the profitability of efficient competitors for years, as the history of the airlines industry attests.

within the barriers must enjoy competitive advantages over potential entrants.

Although often treated as separate aspects of strategy, barriers to entry and competitive advantages are essentially alternative ways of de-

scribing the same thing. The only necessary qualification to this statement is that barriers to entry are identical to *incumbent* competitive advantages; whereas *entrant* competitive advantages—situations in which the latest firm to arrive in the market enjoys an edge (the benefit of the latest generation of technology, the hottest product design, no costs for maintaining legacy products or retired workers)—are of limited and transitory value.

Once an entrant actually enters a market, it becomes an incumbent. The same types of advantages it employed to gain entry and win business from existing firms—cutting-edge technology, lower labor costs, hotter fashions—now benefit the next new kid on the block. If the last firm in always has the advantage, there are, by definition, no barriers to entry and no sustainable excess returns.

Because competitive advantages belong only to the incumbents, their strategic planning must focus on maintaining and exploiting those advantages. Meanwhile, any firms bold enough to enter markets protected by barriers to entry ought to devise plans that make it less painful for incumbents to tolerate them than to eliminate them.

#### TYPES OF COMPETITIVE ADVANTAGES

There are really only a few types of genuine competitive advantages. Competitive advantages may be due to superior production technology and/or privileged access to resources (supply advantages). They may be due to customer preference (demand advantages), or they may be combinations of economies of scale with some level of customer preference (the interaction of supply-and-demand advantages, which we discuss in chapter 3). Measured by potency and durability, production advantages are the weakest barrier to entry; economies of scale, when combined with some customer captivity, are the strongest.

In addition, there are also advantages emanating from governmental interventions, such as licenses, tariffs and quotas, authorized monopolies, patents, direct subsidies, and various kinds of regulation. Television broadcast licenses, for example, convey powerful competitive advantages to their holders. Designation as a “Nationally Recognized Statisti-

cal Rating Organization” by the Securities and Exchange Commission helps Standard & Poor’s, Moody’s, and several smaller agencies maintain their dominance in the market for credit ratings, despite the steep fees they charge. Even in the most liberal economy, the state is an actor from whom some benefit more than others. Government favor aside, the other sources of competitive advantages are rooted in basic economic conditions.

#### SUPPLY ADVANTAGES: COMPETITIVE COSTS

One way a market incumbent obtains a competitive advantage is by having a lower cost structure that cannot be duplicated by potential rivals. The incumbent can earn attractive returns under prevailing market conditions—prices and sales levels—but potential entrants, thanks to their higher cost structures, cannot.

Such an advantage deters most sensible firms from entering the incumbent’s market. If some foolishly optimistic companies make the attempt anyway, the incumbent, taking advantage of its lower cost structure, can underprice, outadvertise, outservice, or otherwise outmarket them. Ultimately, the would-be entrants fail and exit the market, leaving a discouraging lesson for any who would follow them.

Lower cost structures are due either to lower input costs or, more commonly, proprietary technology. In its most basic form, proprietary technology is a product line or a process that is protected by patents. During the term of the patent, protection is nearly absolute. Patent infringement penalties and legal fees make the potential costs to a would-be entrant impractically high, perhaps even infinite.

Historically, Xerox in copiers, Kodak and Polaroid in film, and pharmaceutical companies in a range of medicines have enjoyed these kinds of advantages for the lives of their product patents. Process patents may be equally powerful. Alcoa was able to monopolize the aluminum market for many years through patents on processes, and DuPont has a history of economic success based on both process and product patents. But patents expire, generally after seventeen years. Thus, cost advantages based on patents are only sustainable for limited periods. Com-

pared to IBM's long-term dominance in computers, from the late 1950s to 1990, for example, or Coca-Cola's century-long history in the soda market, patent protection is relatively brief.

Outside of pharmaceuticals, patent-protected positions are relatively rare. Even within pharmaceuticals, "me-too" products—how many selective serotonin reuptake inhibitors are there on the market?—tend to undermine technological advantages. But patents are not the only source of advantages from proprietary technology.

In industries with complicated processes, learning and experience are a major source of cost reduction. The percentage of good yields in most chemical and semiconductor processes often increases dramatically over time, due to numerous small adjustments in procedures and inputs. Higher yields mean lower costs, both directly and by reducing the need for expensive interventions to maintain quality. The same adjustments can trim the amount of labor or other inputs required. Companies that are continually diligent can move down these learning curves ahead of their rivals and maintain a cost advantage for periods longer than most patents afford.

But, as with patents, there are natural limits to the sustainability of these learning-based proprietary cost advantages. Much depends on the pace of technological change. If it is swift enough, it can undermine advantages that are specific to processes that quickly become outdated. Cost advantages thus have shorter life expectancies in rapidly changing areas like semiconductors, semiconductor equipment, and biotechnology.

On the other hand, if technological change slows down as an industry matures, then rivals will eventually acquire the learned efficiencies of the leading incumbents. In the 1920s, RCA, manufacturing radios, was the premier high-tech company in the United States. But over time, the competitors caught up, and radios became no more esoteric to make than toasters. In the long run everything is a toaster, and toaster manufacturing is not known for its significant proprietary technology advantages, nor for high returns on investment.

Further, simple products and simple processes are not fertile ground for proprietary technology advantages. They are hard to patent and easy

to duplicate and transfer to other firms. If a particular approach to production and/or service can be fully understood by a few employees, competitors can hire them away and learn the essentials of the processes involved.\* If the technologies are simple, it is difficult for the developer to make the case for intellectual theft of proprietary property since much of the technology will look like "common sense." This limitation is particularly important in the vast and growing area of services—medical care, transaction processing, financial services, education, retailing—that account for roughly 70 percent of global economic activity. The technology in these fields tends to be either rudimentary or else it has been developed by specialist third parties. Technology that is truly proprietary must be produced within the firm. Markets in which consultants or suppliers, such as NCR in retailing, are responsible for most product or process innovations cannot be markets with substantial cost advantages based on technology, because the advantages are available to anyone willing to pay for them.

This is why the idea that information technologies will be the source of competitive advantages is misguided. Most of the innovations in information technology are created by firms like Accenture, IBM, Microsoft, SAP, Oracle, and a number of smaller and more specialized companies that make their living by disseminating innovations as widely as they can. Innovations that are common to all confer competitive advantages on none. Some firms may make better use of those innovations, but that is a matter of organizational effectiveness, not competitive advantage.

If cost advantages rooted in proprietary technology are relatively rare and short-lived, those based on lower input costs are rarer still. Labor, capital in all its various forms, raw materials, and intermediate inputs are all sold in markets that are generally competitive. Some companies have to deal with powerful unions that are able to raise labor costs. They may also face an overhang of underfunded pension and

\* When Samuel Slater brought Richard Arkwright's cotton mill technology from England to Pawtucket, Rhode Island, in 1789, he carried the machine designs in his head. He was breaking English laws against the export of any technology, whether machines or the knowledge to build them.

retiree health-care liabilities. But if one company can enter the market with nonunion, low-benefit labor, others can follow, and the process of entry will eliminate any excess returns from lower labor costs.

Unionized firms may stagnate or die, yet the survivors enjoy no competitive advantages. The first company to find a lower cost of labor in a country such as China may gain a temporary benefit over rivals who are slower to move, but the benefit soon disappears as others follow.

Access to cheap capital or deep pockets is another largely illusory advantage. One lesson the Internet boom taught is how easy it can be to raise money. Companies with barely plausible business plans had virtually unlimited access to capital at rates that proved ridiculously cheap, given the risks of new and untested businesses. But that easy funding did not assure them success.

History is full of companies driven out of business by more efficient competitors—steel producers, appliance manufacturers, small-scale retailers, and nationwide chain stores. But only a small number of companies have been forced to the wall by competitors whose sole advantage was their deep pockets. In many cases, the putatively deep-pocketed firms—such as IBM, AT&T, Kodak, Japan Inc.—have chiefly hurt themselves by spending lavishly on mistaken ventures in part because they simply had the money.

An argument sometimes made, especially during the high tide of Japanese incursions into the U.S. and European manufacturing sectors, is that some companies or sectors enjoy preferred access to capital, making capital “cheap” for them. This access is often underwritten by government, as in the case of Airbus. Sometimes the “cheap” capital is based on access to funds that were raised in the past at unusually low costs. But the real cost of funds in these cases is not “cheap.”

If capital markets at large offer 10 percent returns on investments, then investing capital in projects that return 2 percent is a money loser—an 8-percentage-point loser—even though the funds may have cost only 2 percent to raise. Taking advantage of “cheap” capital in this way is a stupidity, not a competitive advantage. Like all stupidities not underwritten by a government, it is unlikely to be sustainable for very long.

In the absence of government support, the notion of “cheap” capital is an economic fallacy. “Cheap” capital that is due to government sup-

port is best thought of as just another competitive advantage based on a government subsidy.

Some companies do have privileged access to raw materials (e.g., Aramco) or to advantageous geographical locations (e.g., United Airlines at Chicago’s O’Hare International Airport). These advantages, though, tend to be limited both in the markets to which they apply and in the extent to which they can prevent competitive entry. Aramco can make more profit on a barrel of oil than Norway’s Statoil, but so long as demand for oil is high enough, it can’t keep Statoil out of the market. And United cannot extend its strong position at O’Hare to other airports.

The same is true for exceptional talent. The studio that has signed up a Julia Roberts or a Tom Cruise enjoys a competitive advantage over other studios when it comes to opening a new movie, although even stars of this magnitude are no guarantee of success. However, like other advantages based on special resources, this one is limited in several ways. First, star power is ultimately owned not by the studio but by the stars themselves. They can sign with whomever they like for the next film. Second, stars lose their appeal or their contracts expire. And there are no barriers to entry in creating the next Julia Roberts or Tom Cruise, as the armies of aspiring actors and agents attest. Third, the value of any star is limited to a particular audience and does not translate into broad market dominance.

These basic limitations apply equally to other special resources like rich mineral deposits or advantageous leases on desirable locations. With few exceptions, access to low-cost inputs is only a source of significant competitive advantage when the market is local, either geographically or in product space. Otherwise, it is not much help as a barrier to entry.

#### **DEMAND ADVANTAGES: CUSTOMER CAPTIVITY**

For an incumbent to enjoy competitive advantages on the demand side of the market, it must have access to customers that rivals cannot match. Branding, in the traditional sense of a quality image and reputation, by itself is not sufficient to establish this superior access. If an entrant has an equal opportunity to create and maintain a brand, the

incumbent has no competitive advantage and no barrier impedes the process of entry.

Competitive demand advantages require that customers be captive in some degree to incumbent firms. This captivity is what gives the incumbent its preferred access. In a cigarette ad of some years ago—when there still were cigarette ads—smokers proclaimed that they “would rather fight than switch.” Every company would love to have customers with this kind of loyalty.

It may not be impossible for entrants to lure loyal customers away from an incumbent. They can cut prices to the bone, or even give the product away to induce people to try it. They can tie it in to other products and otherwise make it desirable. But customer captivity still entails a competitive advantage because entrants cannot attract customers under anywhere near the same terms as the established firms.

Unless they have found a way to produce the item or deliver the service at a cost substantially below that of the incumbent, which is not likely, either the price at which they sell their offerings or the volume of sales they achieve will not be profitable for them, and therefore not sustainable. The incumbent has a competitive advantage because it can do what the challenger cannot—sell its product at a profit to its captive customers.

There are only a limited number of reasons why customers become captive to one supplier.

#### HABIT

Cigarette smoking is an addiction; buying a particular brand is a habit. Habit leads to customer captivity when frequent purchases of the same brand establish an allegiance that is as difficult to understand as it is to undermine. Cigarette smokers have their brands, though in a pinch they will light up a substitute; such is the pull of the addiction.

Soda drinkers are also loyal. To someone who generally asks for coffee, tea, or water, Coca-Cola and Pepsi taste pretty much alike. Yet each cola has its devotees, and they are generally firm in their commitments. Coca-Cola decided to reformulate and sweeten the drink in the 1980s, to stem the loss of young and therefore uncommitted cola lovers to Pepsi.

It made the change only after extensive taste tests among its own drinkers convinced them that the New Coke taste had more support. But when the company actually introduced New Coke and took the traditional drink off the shelves, Coca-Cola loyalists were furious. After some months of indecision, the company reversed course and reestablished Classic Coke, as it was briefly called, as the flagship brand. Coca-Cola was lucky to escape the problem it had created. As a rule, it isn't wise to antagonize captive customers.

For reasons that are not entirely evident, the same kind of attachment does not extend to beer drinkers. People who normally buy Coors or Budweiser for their homes, and order it when they eat in local restaurants, are only too eager to have a Corona or a Dos Equis in a Mexican restaurant, or a Tsingtao in a Chinese one, which may explain why Anheuser-Busch bought a stake in Tsingtao. Yet the cola drinker seldom thinks of asking for Great Wall Cola or some such brand.

Habit succeeds in holding customers captive when purchases are frequent and virtually automatic. We find this behavior in supermarkets rather than automobile dealers or computer suppliers. Most consumers enjoy shopping for a new car, and the fact that they owned a Chevrolet last time, or a BMW, doesn't mean they won't test-drive a Ford or a Lexus.

Both personal computer buyers and IT managers shop for replacement hardware on the basis of price, features, and dependability, not whether their current machines are IBMs, Dells, or HPs. They do need to think about compatibility with their existing software, but that is a legacy situation and a switching-cost issue and does not mean that they are creatures or captives of habit.

Habit is usually local in the sense that it relates to a single product, not to a company's portfolio of offerings. The habitual user of Crest toothpaste is not necessarily committed to Tide or any of the other Procter & Gamble brands.

#### SWITCHING COSTS

Customers are captive to their current providers when it takes substantial time, money, and effort to replace one supplier with a new one. In

the computer era, software is the product most easily associated with high switching costs. The costs can become prohibitive when they involve not simply the substitution of some computer code, proprietary or commercial, but the retraining of the people in the firm who are the application users.

In addition to all the extra money and time required, any new system is likely to bump up the error rate. When the applications involved are critical to the company's operations—order entry, inventory, invoicing and shipping, patient records, or bank transactions—few want to abandon a functioning system, even for one that promises vast increases in productivity, if it holds the threat of terminating the business through systemic failure, the ultimate “killer app.”

These costs are reinforced by network effects. If your computer system must work compatibly with others, then it is difficult to change to an alternative when others do not, even if the alternative is in some ways superior. The move will be costly, to ensure continued compatibility, and perhaps disastrous if the new system cannot be meshed with the existing one.

Software is not the only product or service that imposes substantial switching costs on customers and thus gives the incumbent a leg up on potential competitors. Whenever a supplier has to learn a great deal about the lives, needs, preferences, and other details of a new customer, there is a switching cost involved for the customer, who has to provide all this information, as well as a burden on the supplier to master it. This is one reason that clients don't switch lawyers lightly. Likewise, doctors who become comfortable prescribing a particular medicine may be reluctant to substitute a new drug with which they are less familiar, despite all the brochures and entreaties from the drug detail person.

Standardized products, especially if the standards are not proprietary, are one antidote to high switching costs, which is why customers like them. In its glory days, the IBM mainframe was built out of IBM components, ran an IBM operating system, used IBM-produced applications programs, and was even leased from IBM. Moving from one IBM computer to another was difficult, but switching to a new system entirely was perilous and daunting. Switching became easier as other companies

offered compatible peripherals, applications programs, and financing. And the whole edifice began to collapse when new firms found ways to link desktop machines, built to open standards—thanks to IBM's design decision for its PC—into useable systems.

Changing credit cards used to require careful timing. Old card balances had to be paid off before the new credit facility became available. Then the card issuers began to offer preapproval and to encourage balance transfers. Costs of switching were reduced or eliminated, and competition in the industry intensified.

#### SEARCH COSTS

Customers are also tied to their existing suppliers when it is costly to locate an acceptable replacement. If the need is a new refrigerator, the search costs are minimal; information and ratings on competitive products are easily available. But for many people, finding a new doctor involves more than looking in the yellow pages or even in a health-care network directory. There is no ready source of the kind of information a prospective patient wants, and given the personal nature of the relationship, no alternative to direct experience.

High search costs are an issue when products or services are complicated, customized, and crucial. Automobile insurance is basically a standardized product, so much coverage at so much cost, with concern for the reliability of the underwriter alleviated by state regulation. Home ownership insurance, by contrast, is more detailed, and can involve the kind of coverage, the deductibles, special schedules of items included or excluded, the creditworthiness of the insurance company, its history of payment for claims, and other issues.

All these details foster an aversion to change. Only homeowners made seriously unhappy by their insurer's premium or level of service are going to take the trouble to search for a replacement, especially since the penalty for picking an inadequate insurer may be substantial. In this case, the real relationship may be with a trusted broker, not the actual underwriter, so the broker may enjoy the benefits of customer captivity because of the high switching costs.



For businesses, the more specialized and customized the product or service, the higher the search cost for a replacement. Professional services, which also may involve an intense level of personal contact, fit into this category, as do complicated manufacturing and warehousing systems. It is easier to upgrade with a current vendor or continue with a law firm even when not totally satisfied, because finding a better one is costly and risky. To avoid the danger of being locked in to a single source, many firms develop relationships with multiple suppliers, including professional service providers.

Taken together, habits, switching costs, and search costs create competitive advantages on the demand side that are more common and generally more robust than advantages stemming from the supply or cost side. But even these advantages fade over time. New customers, by definition, are unattached and available to anyone. Existing captive customers ultimately leave the scene; they move, they mature, they die. In the market for teenage consumables, existing customers inevitably become young adults, and a new, formerly preteen, generation enters the market largely uncommitted. The process is repeated throughout the life cycle, putting a natural limit on the duration of customer captivity. Even Coca-Cola, as we shall see, was vulnerable to Pepsi when the latter discovered “the Pepsi Generation.” Only a very few venerable products like Heinz ketchup seem to derive any long-term benefit from some intergenerational transfer of habit.

## Competitive Advantages II

### Economies of Scale and Strategy

#### **ECONOMIES OF SCALE AND CUSTOMER CAPTIVITY**

The competitive advantages we have described so far are uncomplicated. An incumbent firm may defeat entrants either because it has sustainably lower costs or, thanks to customer captivity, it enjoys higher demand than the entrants. Together, these two appear to cover fully the revenue and cost elements that determine profitability. But there is an additional potential source of competitive advantage. In fact, the truly durable competitive advantages arise from the interaction of supply-and-demand advantages, from the linkage of economies of scale with customer captivity. Once the firm understands how these operate together—sometimes in ways that are surprisingly contrary to commonly held beliefs about the attractiveness of growing markets—it can design effective strategies to reinforce them.

The competitive advantage of economies of scale depend not on the absolute size of the dominant firm but on the size difference between it and its rivals, that is, on market share. If average costs per unit decline as a firm produces more, then smaller competitors will not be able to match the costs of the large firm even though they have equal access to technology and resources so long as they cannot reach the same *scale* of operation. The larger firm can be highly profitable at a price level that leaves its smaller competitors, with their higher average costs, losing money. The cost structure that underlies these economies of scale