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Consumer Behavior in the Future

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In the not-too-distant future, rapid advances in technology, escalating global competition, and rising consumer expectations for quality, speed of response, and customization will require companies to substantially rethink their business models. One thing is clear: the future will be substantially different from the present. Society went through dramatic change and upheaval as a result of the transition from the agricultural age to the industrial age; the transition to the information age will be accompanied by even greater change. That transition is well underway, but still remains in its early stages.

The emerging consensus about the future of today's various information industries is that they will converge because they are all increasingly based on digital electronic technology. The vision revolves around the presence of an interactive broadband digital "highway" terminating in very high resolution multimedia display terminals in consumers' homes and workplaces. The viewer would be in control of content scheduling and selection; information would not, for the most part, be "broadcast" (except for live events); rather, it would be stored in digital "video servers" to be viewed or downloaded on demand. For a detailed discussion of some of the characteristics of future "information malls," see Sheth and Sisodia (1993).

Today's World Wide Web (WWW) represents a crude approximation of the capabilities and functionality that are expected to be widely deployed by the middle of the next decade. It is serving as a very large test bed for companies and as a "training platform" for consumers to learn new modalities of interaction and consumption.

From the perspective of consumers, the primary impact of the deployment of such an infrastructure will be to ease the often severe time and place constraints that are currently placed on them. No longer will goods and services be offered primarily at the convenience of the seller; "anytime, anywhere" purchasing as well as consumption will become commonplace.

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These impacts will become more acute as communication bandwidths rise exponentially and terminal equipment becomes simultaneously more powerful, sophisticated, easier to use, affordable, and portable (smarter, easier, cheaper and smaller). Once the appropriate hardware is in place and the telecommunications infrastructure has been established, an enormous range of services can be exchanged at nominal incremental cost, such as location-independent shopping and banking, computer-mediated education, and training, professional consultations, and various informational, entertainment, and leisure services. This combination of technologies is likely to become quite widespread in the United States by the year 2005, and in other advanced countries by 2010.

Changing consumer behavior will make it necessary for the marketing function to change dramatically as well. In fact, we believe that the marketing function will be at the center of change; marketing will become increasingly decentralized and fully integrated into business operations. Marketing and its institutions have a great deal to lose as well as many opportunities to make dramatic gains. We believe that successful marketing in this new environment will involve "monocasting" or "pointcasting" of communications, "mass customization" of all marketing mix elements, a high degree of customer involvement and control, and far greater integration between marketing and operations. There will be more efficient utilization of marketing resources, reduced customer alienation resulting from misapplied marketing stimuli, increased pressure to deliver greater value, and intense jostling for the loyalties of "desirable" customers. In this chapter, we present a framework for analyzing the types of changes we expect to see emerge in the future, speculate about the impacts of these changes on consumer behavior, and suggest how the marketing function will have to respond.

FORCES DRIVING CHANGES IN CONSUMER BEHAVIOR

Two major forces influence consumer behavior, evolving technology, and changing lifestyles and demographics. These are respectively described below.

Supply Side: Technology Evolution

Undoubtedly, the pace of technological evolution in recent years is having and will continue to have a great impact on the lives of consumers. Rudy Puryear, a senior information technology strategist at Andersen Consulting, describes the new age as the "age of less." Technology allows consumers to go shopping without going to the store (storeless); travel without a ticket (ticketless); work without going to an office (officeless), and so on. Three aspects of technology are of particular significance.

Production Technology. Breakthroughs in production technology, such as CAD-CAM, flexible manufacturing systems, and just-in-time production are affecting competitive marketing in a number of ways. For example, they are redefining the limits of quality, greatly increasing the level of affordability for many products, enabling a higher level of customization, and providing customers with a great deal of variety. Other significant technologies in this arena include photorealistic visualization, groupware (e.g., conferencing systems across design functions and across design, manufacturing and sales), virtual reality, design-for-manufacturability-and-assembly databases, component performance history databases, and 3-D physical modeling technologies such as stereolithography.

Distribution Technology. Recent innovations in distribution technology include (1) computer-assisted logistics (CALS), (2) the refinement of scanner and other product identification and tracking technologies, (3) electronic data interchange (EDI), (4) point-of-sale (POS) terminals linked to vendors, (5) expert systems, (6) satellite-based locational systems, (7) automated retail and warehouse ordering, and (8) flow-through logistics. Benefits include (1) reduced damages, (2) reduced supplier and distributor wholesale inventories, (3) warehousing, transportation, administrative, and manufacturing efficiencies, (4) reduced "forward buying," (5) better market coverage, (6) fewer stockouts and distress sales, (7) more refined target marketing, and (8) faster response to market trends.

Technologies for Personal Use. Technologies having the fastest gains in price–performance are those intended for personal rather than institutional use. Personal information devices have been riding and will continue to ride a steep experience curve based on the unique "economics of electronics." One of the fundamental properties of such technologies is their inverse economies of scale; the smaller the unit, the greater the price–performance. This is due to the fact that smaller units can be produced in mass quantities with very low (sometimes near-zero) variable costs. Large units, on the other hand, tend to be produced in small volumes and retain a significant proportion of variable costs. Thus, today's personal computers offer far more by way of "MIPS per dollar" than do today's mainframes or supercomputers; video games and other lower end consumer devices tend to offer even better price–performance than that.

Consumers will rely heavily on these technologies, while producers will rely on a mix of personal and institutionally oriented technologies. As the power and pervasiveness of the technologies at their command grow, consumers will be in the hitherto unique and unaccustomed position of controlling a far greater share of the information and communication flow between the buyer and seller than ever before. In other words, consumers can and will have more information about product providers in most cases than providers will have about consumers;

far from being passive "targets" of marketing activity, consumers will dictate the timing and modality of communications, and they will determine the time and place of any resulting transaction.

Demand Side: Lifestyle and Demographic Changes

Broad demographic shifts are underway that are causing gradual but major changes in society. These macro-level changes have a major impact on individual consumer behavior.

Negative Growth Birth Rates and Rising Median Age in Developed Countries. The birth rate in the United States has been falling for more than two decades. The decline in the birth rate began in 1965, when the arrival of "the pill" caused the fertility rate to fall by 30 percent in one year. The legalization of abortion a decade later caused another precipitous drop.

Wolfe (1996) described this phenomenon as "deyouthing—an historically unprecedented event going relatively unnoticed." During the 1990s, the number of adults under the age of 35 will decline by 8.3 million. This transition is having a major effect on consumption patterns. For example, as a result of deyouthing, the housing industry has shrunk dramatically; new housing starts have declined from 1.8 million per year in the 1970s to less than a million currently.

Other developed nations are experiencing even more severe effects from this trend because they tend to have much lower levels of immigration than the United States (more than 90 percent of the population growth in the United States between 1990 and 2050 will be due to immigration). Populations in most developed countries are actually shrinking. The trends for Japan are especially ominous. Between 1990 and 2030 alone, the number of Japanese under the age of 50 will decrease by some 24 million people, a net 26 percent loss of population. Birth rates in less developed countries by and large continue above the replacement level, although the overall trend is downward.

The differences in median ages across countries can be quite dramatic. The median age of adults in the United States is now 43 and will reach 50 in less than two decades. According to Wolfe (1996), the "psychological center of gravity" (PCG) is a five-year window around this median age of adults, or 38 to 48. He suggests that this PCG defines the primary tendencies of a culture; for the United States, this suggests that middle-age values and perspectives will increasingly come to dominate the national psyche. In particular, older consumers tend to respond more favorably to relationship marketing approaches than do younger consumers.

More Women in Workforce. Full-time working women now represent 56 percent of all women and will represent 65 percent by the year 2000.

This has put tremendous pressure on the "traditional" family. The old model was that women would stop working when they decided to have kids. The new model is that most women MUST work if they want to have kids.

As a result of the loss of its anchor (i.e., a full-time homemaker), the family as a unit of social and consumption analysis is becoming obsolete. As single-person or dual-career households proliferate, the need to define a separate existence or space will result in highly individualistic lifestyles and behaviors, even within family units. We will increasingly have to look at individual behavior; family members exhibit more of a roommate lifestyle. This will increase the need for personalized attention to each household.

Also as a result of this trend, most households are now relatively time poor and money rich; any time marketers impose a time or place constraint, the market will react negatively. Time in particular will become the most precious commodity. As activities compete for time, consumers will redesign tasks that consume too much time and embrace time-saving and time-shifting technologies. They will demand hassle-free ("get it right the first time") service on demand.

Cooking in the home is quickly becoming a dying art; nobody does it anymore (almost). A third of our meals are eaten out now; this will rise to two-thirds. Of this remaining two-thirds, 50 percent are not cooked by us at all. The kitchen is increasingly the communication center of the house rather than the food center.

The increased numbers and visibility of women in the workplace have led to a gradual blurring of gender distinctions. For men, jewelry, cosmetics, personal care items, and plastic surgery are all growth markets.

Lifestyle, Income, and Ethnic Diversity. By 2000, only 55 percent of the U.S. population will be WASPs. Hispanics are the fastest growing group and will be the largest minority by that time. African Americans will remain at 12 percent, whereas the percentage of Asians will grow. California and Texas will become white-minority states.

As a result of the changing ethnic make-up of U.S. society, several changes are underway. In many sectors, neglected ethnic markets are becoming lead markets; for example, salsa and other Mexican sauces now sell more than ketchup. The local grocery store is now a world bazaar, something that requires extraordinary logistic systems. Increasing cultural diversity is leading to a clash of value systems: the Protestant work ethic versus other values. There are also increasing linguistic problems, especially in schools and the workplace.

Although we will still have a sizable middle class, there will be a sharp dichotomy between the rich and poor. A large percentage of the population will be affluent, and a sizable group will be below the official poverty level. The middle class will decline from 60 percent of the population in 1950 to 30 percent in 2000. The affluent class will go from 10 percent to 30 percent. As a result of such polarization, we will see simultaneous growth at the extremes: more and

more premium products, and more economical ones as well. Products will also have to become more customized. Price ranges in product categories are getting ever wider; for example, in 1960 soups ranged from 19 cents to 59 cents per serving, whereas in 1990 they ranged from 39 cents to $4.00.

Other Demand-side Shifts

Numerous other demand-side shifts are taking place that will have enormous influence. Among them, five stand out.

Increase in Regional Differences. The population shift to the Sunbelt and to small towns, with their respective differences in climate, value structure, and even occupation, will widen the cultural differences in parts of the country. The United States is apt to more closely resemble Europe, where regions vary significantly in growth, employment, language, and consumption values.

Increased Stress. The blurring of traditional family roles, the increase in autonomy, older age, and the need to manage time all point toward a society that will have higher levels of stress, both at home and work. Stress, in turn, will generate productivity issues and behavioral problems, such as drug and alcohol abuse.

Greater Concern for Privacy. People will become more aware of their lack of privacy and potential loss of individual rights. As the social norms of a previously homogeneous society give way to pluralistic and diverse values, the legal rights of individuals will be emphasized.

Emphasis on Safety and Security. Concern for personal and public safety will rise sharply, partly because of the aging population and partly because of income redistribution. Additionally, as more people live alone, they will feel more vulnerable. Law enforcement will remain a major social issue.

Entrepreneurial Spirit. Opportunities created by exploding new technologies and the rise in niche markets will encourage personal entrepreneurship. As a result, small businesses will continue as the dominant component of societal change in terms of new business formation, employment growth, political power, regulatory policy, and personal wealth.

THE IMPACT ON CONSUMER BEHAVIOR

Already we can see that human behavior is changing rapidly as a result of the latest technological revolution; changes in marketplace behavior will

naturally follow. As people start to change the way they work, communicate, and spend their leisure time, they will undoubtedly exert strong pressure on companies to change the way they do business with them. Accustomed to always being within electronic reach of their family and colleagues, they will chafe at marketers who demand adherence to rigidly defined modes of commerce. Used to instantaneous response to their requirements for information and entertainment, they will scarcely tolerate delays of weeks or months to receive a desired product. Being able to optimize their lifestyle factors more and more, they will shun clothing retailers who fail to meet their size or color requirements a third of the time. Capable of "doing more with less" with constantly improving technology, they will resent the high costs (primarily in time and effort) of acquiring the goods and services they need.

Clearly, future consumers will be dramatically different from past or even present consumers. They will be more demanding, more time-driven, more information intensive, and highly individualistic.

A combination of a ubiquitous broadband digital communications network and high-definition display terminals will further accelerate changes in consumer behavior. With targeted, interactive digital media in the future, advertisers will be able to "mass customize" their messages as well as allow for user interaction and input. Consumers are already migrating to direct marketing systems in huge numbers. With the deployment of advanced technologies, this trend will accelerate. When consumers can "walk" down a virtual grocery shopping aisle on their HDTV set and click on the products they want, huge numbers are bound to respond. This can be taken a step further; virtual reality linked to a broadband pipe creates "telepresence," so that users can actually "travel" to other places and experience different things.

Such elements of virtual reality will help, but will not be a prerequisite. One-way home shopping via television is already a large business; with much higher resolutions and more interactivity, it will take over a larger share of retailing's current domain. While enhancing convenience, such systems will also lead buyers to make more informed purchases. For one thing, buyers will gain immediate access to a variety of independent buying services, providing distributed expertise on demand. Because of interactive advertising, buyers will be much more active in seeking even marketer-provided information.

From Time-bound and Location-bound Marketing to Time-free and Location-free Marketing

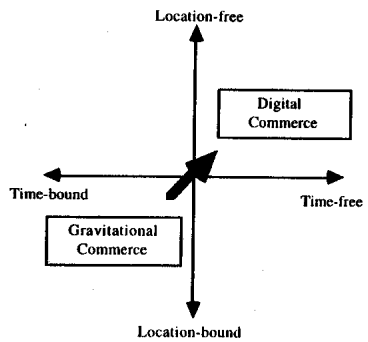
Commerce today, for the most part, tends to be time and location bound. That is, transactions are constrained to occur at particular times and/or at particular locations. If the consumer is unable to transact at those times or those locations, the transaction either will not occur at all, or will occur between the consumer and another supplier. Even if the transaction does occur, that is, the

consumer is able to comply with the time and place requirements set by the supplier, it will often force undesirable trade-offs on the consumer. In other words, the consumer may have no choice, and hence complies, but is left with a latent sense of dissatisfaction. Most consumers have numerous ways to spend that same time, and the location constraint imposes an additional burden on the time, effort, and expense of making oneself physically available to make the transaction.

As anyone who has lived through the past two decades can attest, time and place constraints are slowly giving way, under the pressure of increasingly hectic consumer lifestyles, heightened competition, and myriad enabling technologies. Behavioral barriers to the adoption of alternative modes of interacting, be they based on ingrained habits or perceived risks, have become increasingly porous.

We believe that this forward momentum will result in a positive feedback loop that will accelerate the rate of consumer migration toward alternative modes of transacting. Although no positive feedback loop can persist forever, we believe that a period of rapid, even explosive, growth lies ahead in this arena. It will subside only as a large majority of consumers have been converted to the new model of commerce. (See Figure 2.1.)

Figure 2.1. Past and Future Modes of Marketing



We are, then, in the midst of a sea-change from gravitational commerce, demarcated by its time and location constraints upon customers, to an era of digital commerce, which will be almost entirely free of those constraints. The future will see anytime, anywhere procurement coupled with anytime, anywhere

consumption; more and more products and services will be purchased and consumed anytime, anywhere. Consumers will receive advertising and other forms of information "on demand."

The crucial importance of increased time and place utility is nowhere more evident than in the banking industry. Banks face a massive dislocation in the near future, as their vast and expensive time- and location-bound distribution networks (branches) become rapidly obsolete. Ironically, some banks are still building branches, while others are moving proactively to reconfigure their branch networks. For example, Wells Fargo announced in the fall of 1995 that it planned to move 72 percent of its existing branch network into in-store (supermarket) locations. Since in-store branches require only 20 to 25 percent of the cost of conventional branches, this represents a substantial cost saving, as well as a way to expand market coverage in terms of time as well as geography. The more major shift, of course, is the move toward home or remote banking. This trend, still in its early infancy, will take time and place utilities to much higher levels.

With regard to supermarket retailing, the impact of increased emphasis on time and place utilities will be even greater. Already, supermarkets can offer electronic ordering and home-delivery services for relatively low start-up costs. A recent survey indicates that more than 25 percent of supermarket chains offer home delivery, potentially reaching more than 40 percent of the population. A significant barrier to broader adoption of home shopping is the delivery charge, which runs from $7 to $10 an order. Survey research by Management Horizons shows significant consumer resistance to any delivery charge (*Supermarket News* 1996).

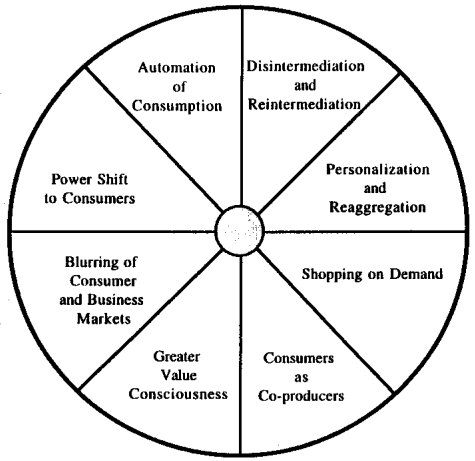
What is needed is a business model that is optimized for home shopping, rather than one in which the service is added on as an ancillary to traditional retailing. An analysis by Management Horizons indicates substantial savings can be made in operating a delivery depot compared to operating a supermarket. On a typical $100 order, home delivery will cost a typical supermarket operator an extra $10 to process, pick, check out, and deliver from the supermarket. A delivery depot can process and deliver the same order for about $10 to $12 less in total cost than the supermarket can.

To summarize, the future success of marketers will depend on their ability to deliver total customer convenience. This includes hassle-free search (advertising-on-demand), hassle-free acquisition (home delivery), hassle-free consumption (e.g., products with built-in expert systems to enable maximal value extraction), and hassle-free disposal.

EMERGING TRENDS IN CONSUMER BEHAVIOR

We foresee eight major trends in consumer behavior. These trends are listed in Figure 2.2; each is briefly discussed.

Figure 2.2. Emerging Trends in Consumer Behavior



Disintermediation and Reintermediation

Current marketing practice depends heavily on the presence of multiple intermediaries between the producer and consumer. These intermediaries primarily add time and place utilities to the functional utility "engineered" into the offering by the producer. They provide broader and more convenient access to products for a wider range of customers.

In addition to serving as essential conduits for getting products to the market, intermediaries have also served as informational conduits. Producers typically have little or no direct contact with end-user customers and must rely almost entirely on intermediaries for information pertaining to those customers. Likewise, intermediaries often play a role in directing and filtering information from producers that is intended for end users.

Building an adequate distribution channel is usually the biggest hurdle that a new entrant must face in establishing a foothold in a market; this is usually the slowest and most expensive part of the marketing mix to implement. Distribution channels add huge cost elements. For example, they may include multiple warehouses at the factory, wholesaler, retailer, and even consumer level.

As has already been well documented, the electronic world changes all that. Companies small and large are able to achieve a high level of accessibility almost immediately. Establishing a two-way information flow directly with end users is readily possible. The automation of numerous administrative tasks enables the company to serve huge numbers of customers efficiently and effectively. Innovations such as demand-driven marketing can dramatically lower systemwide inventory levels.

As a result, more and more companies are finding it possible to deal directly with more and more of their customers. In the process, they are putting enormous pressures on their intermediary (e.g., wholesaling and retailing) partners. This trend toward disintermediation is still in its early phases, and massive dislocations will occur as a result of it.

The trend will also cause major growth in the support services needed by companies that deal directly with larger numbers of customers. For example, growth in small package shipping will likely far exceed that in bulk shipments or the building of warehouse space.

Another consequence of this trend may well be what we call reintermediation. By this we mean that new categories of intermediaries will emerge to capture the value-creating opportunities that will undoubtedly be spawned by the confluence of new ways of interacting between consumers and producers. As with traditional intermediaries, these too will thrive on the basis of economic transfer principles; intermediaries that deliver greater value at lower cost will prosper.

Examples of new types of intermediaries may include rating services, automated ordering services, services based on consolidating numerous small orders from numerous consumers into more economically viable quantities, and so forth. Market specialists could emerge who would orchestrate the offerings of numerous suppliers around the specialized needs of a single customer.

Personalization: From Aggregation to Disaggregation and Reaggregation

The emergence of a relatively homogeneous mass market earlier in this century led to the development of various mass marketing approaches that continue to define and dominate the marketing function today. For some time now, we have recognized that the mass market is splintering (even atomizing) into ever smaller segments. Talk has even arisen in recent years of a so-called segment of one, and Stan Davis came up with the powerful oxymoron of "mass customization" as the way in which we will have to increasingly operate in the future.

Although we certainly agree with the broad premise of this argument, we believe some important caveats apply. First, customers are not always looking for customized products; they may be perfectly content in many cases with a

well-designed standardized product. However, mass customization applies to more than the product; it should encompass all the appropriate elements of the marketing mix. Thus, the price, advertising message, and/or the distribution mode may be customized, even if the product is not.

Second, new forms of aggregation of demand will undoubtedly occur. In the past, these were driven entirely by producers. In the future, it will become increasingly facile for the aggregation to be driven by customers. For example, customers who individually purchase small quantities of a product will find it very easy to pool their purchases to enjoy better terms.

Shopping on Demand

As discussed earlier, consumer behavior in the future will increasingly feature shopping on demand and consumers will cease to be held hostage to the time and place constraints historically imposed on them by businesses. Shopping on demand will include anytime, anywhere procurement as well as anytime, anywhere consumption.

Consumers as Co-producers

In many facets of consumption, consumers will take on increasingly active roles. For example, they will become directly involved in designing and customizing the products they purchase. They will take over some of the support and service functions that are normally performed by companies; this trend is akin to the one toward self-service in retailing. For example, FedEx now allows its customers to track their own packages via the Internet, bypassing the customer service department altogether.

From Insourcing to Outsourcing. Somewhat paradoxically, we believe that as consumers take more control over certain commercial relationships, they will also relinquish a measure of control in other areas. This is not as contradictory as it might first appear; after all, consumers have a limited amount of time and effort that they are willing to expend, necessitating trade-offs. As a result of escalating time pressures and growing economic resources, consumers will begin to outsource household functions much more over time. The argument here is very similar to the one that drives outsourcing in the business context; specialist vendors will be used to deliver far better price-performance value than consumers can create in-house. In other words, the make-versus-buy question will increasingly be resolved in favor of buy. Many services (such as lawn care, house cleaning, and child care) are already outsourced to a significant degree. Many new areas will be added in the future. For example, household product needs may be outsourced to such firms as Proctor and Gamble, and in-home dining may be outsourced to restaurants that will deliver prepared food daily to the consumer's home.

Greater Value Consciousness

Although they have benefited in many ways as well, consumers have paid the price for marketing's extraordinary lack of productivity in the past. High advertising budgets, the proliferation of brands, runaway sales promotions, uneconomic levels of inventory build-up—all of these activities added costs way out of proportion to the value they created (which was, in many cases, negative).

As marketing reforms, customer expectations for value received will soar. Consumers will demand and receive more value in exchange for the four primary resources at their disposal: money, time, effort, and space.

Money. Consumers will expect to pay less for most products. They will willingly pay more, provided that the additional value offered exceeds the incremental price. Because of their recent experience with major product categories such as computers and consumer electronics, consumers have come to expect as a given the proposition that products get better and cheaper over time. We believe (and many economists concur) that an era of negative inflation will characterize many more product categories.

Time. For many consumers, especially those in two-income households, time is a more valuable currency than money. Many consumers will gladly make a trade-off, paying a higher price if they can save time in the process. Marketers must be extremely wary of placing heavy time demands on consumers.

Effort. As life gets ever more complex in so many dimensions, consumers are looking for convenience and simplicity wherever they can find it.

Space. Given a choice, consumers would rather not be forced to warehouse large quantities of products in their basements in order to benefit from lower prices. Heavy users should get the advantages of scale economy; however, they should not have to swallow huge lumps of inventory in order to do so.

Value buying will become paramount, as consumers become more value-conscious than ever. They will be better educated about offerings. Given the efficiency with which information will be shared between customers and between customers and companies, it will be almost impossible for companies to survive without delivering peak value. In contrast with the past, consumers will respond far more to innovation-based differentiation than to image-based differentiation.

Barriers to consumption will increasingly disappear as a result of the adoption of value-based marketing, more creative pricing approaches (leasing, metering), the separation of form from function, and the removal of artificial

constraints. Given the right value equation, the limits to consumption will be revealed as being far less than were believed possible. It is now commonplace for households to have numerous radios, telephones, calculators, and even computers. Many consumers own three or more watches.

Greater competitive pressures on pricing, coupled with an enhanced ability to easily locate the best price, will be a fact of life in the new world. The impact of this will be threefold. First, successful manufacturers will increasingly seek to control their prices at retail to minimize what they view as destructive intrabrand price competition. Second, the primary drivers of profitability will be mostly on the cost side; companies with highly efficient production and marketing systems will prosper. Third, strong customer relationships will give companies an opportunity to broaden those relationships through the provision of an ever-expanding array of products and services. In essence, we believe that many successful producers of a product will become retailers of a multitude of other products for the same customer.

Blurring Between Consumer and Business Markets

The lines between the home and the workplace are rapidly blurring. More and more people work at least part-time in their homes, and a growing number of people undertake some of their personal tasks at the office. As this trend continues, many consumer decisions will become more like business decisions. Many technology applications traditionally seen as home based will be important to businesses as well. For example, video shopping has great potential in a business environment; an automobile mechanic will be able to see a picture before ordering a part. To see how to make repairs the worker has not done in a long time, he or she will be able to view a video clip.

This movement of home-based services to business and vice versa can already be observed. Typical home-bound applications such as television and VCRs are now "trickling up" into business applications. Telephone answering machines trickled up to businesses as voice mail. Business applications such as e-mail, the Internet, EDI, and accounting software are trickling down into the home market. Dual-purpose applications include video shopping, distance learning, travel planning, news on demand, legal/financial advice, information services/on-line databases, and so forth. Some applications will remain geared to the business or consumer market, although even here analogous applications may be developed.

Power Shift from Marketers to Consumers

Inevitably, increased competition and greater access to more powerful information tools will put greater power in the hands of savvy consumers. As a result, it is possible that buyers will increasingly be viewed as marketers and sellers as prospects in the marketplace. In any event, consumers will no longer be targets of marketing activity; they will be knowledgeable and demanding drivers of it.

Marketers will have to show far greater respect for consumers, who have increasingly become immune to marketing hype. Instead, they will demand content-rich information and demonstrable product innovations. Transactions will occur in the context of a complex relationship revolving around lifestyle issues. Customer managers will be charged explicitly with identifying, retaining, and growing profitable customer relationships.

Market activity will be driven almost entirely by buyer demand; marketing management will essentially become demand management: the task of influencing the level, timing, and composition of demand in a way that will help the organization achieve its objectives. Customer knowledge will truly become the cornerpiece of effective marketing, and that knowledge will become a highly valued corporate resource. By linking directly into production systems, consumers will effectively become producers; they will engage in self-service, self-design, and self-ordering and provisioning.

Consumers will be highly information-technology literate; they will therefore not be impressed by the mere use of such technology. They will be highly efficient at information searching and processing. Consumers can already conduct product research on-line, log onto bulletin boards and interact with other consumers, and provide and receive helpful hints about the product, its use, and acquisition. In this environment, "information invitations" may become common; companies will have to seek permission to present their case to consumers by inducing interest, unlike the message clutter that is rampant today.

As communication between marketers and customers becomes increasingly interactive, relationship marketing will become the rule rather than the exception. Buyers and sellers will interact in real time. Just-in-time marketing will replace the traditional just-in-case marketing. Time and place constraints on purchasing (and even consumption of many products and services) will become obsolete. The nearly instant gratification of customer needs will be common; thus, lead times of all kinds (e.g., for product development or between order placement and shipment) will have to shrink dramatically.

The Automation of Consumption

Consumers' time poverty and an abundance of information technology will lead to a greatly increased level of automated transactions with marketers. Akin to automatic replenishment as practiced in the business-to-business marketing arena today, such arrangements will become increasingly commonplace in the future. They may happen directly between consumers and manufacturers for larger purchases, and through intermediaries for smaller purchases. As discussed

elsewhere, suppliers of large items or major services will have the opportunity to become the supplier of choice for an ever-widening array of goods and services (the concept of customer equity).

Other related concepts from the business marketing arena that will rapidly find analogs in the consumer marketing arena include vendor-managed inventory, supply chain management, electronic data interchange, customized pricing, and various forms of risk sharing (such as the revenue-sharing formulas offered by manufacturers of some infrastructure equipment such as telecommunications gear).

One important development will be that savvy consumers will increasingly demand that corporations share the benefits of cost cutting with them. Just as Wal-Mart demands that P&G lower its costs and then share the benefits with it, so too will customers with a high lifetime value demand and receive similar consideration. Smart companies will do this without being forced; they will proactively invest resources in those relationships with the greatest long-term value. Currently, investment in customers usually stops after they have become customers; spending on customer retention activity is much less than on acquisition. Further, loyal customers tend to subsidize those who are less loyal, as well as the acquisition of new ones. Overall, the economics of customer acquisition and retention will require and will receive much more understanding and attention than they do currently.

The Concept of a Personal Marketplace. The Personal Marketplace (PM) is a hypothetical mechanism to make effective use of the vast amounts of consumer and transaction data generated today. It is a repository where participating companies prepare and market custom-tailored offerings directly to a consumer. These are categorized by product and/or service, as specified by the consumer. By selecting a particular category, the consumer alerts companies that he or she is a potential customer, and offers begin to flow in. The customer voluntarily provides as much customizing information as needed. Participating companies agree not to sell the data they collect outside the PM, and not to use it to market in any other channel.

THE IMPACT OF CHANGING CONSUMER BEHAVIOR ON MARKETING

As we (Sheth and Sisodia 1995a,b) previously pointed out, the marketing function is in the midst of a serious and escalating productivity crisis. For several decades the marketing function has consumed an ever-growing share of corporate expenditures while failing to deliver increased customer loyalty or greater profitability. The marketing tools and tactics that worked well in decades past are increasingly relics of an era that is rapidly fading.

Our discussion of changing consumer behavior suggests that the root cause of marketing's problems is behavioral. In other words, marketing today largely operates under the modalities of industrial-age commerce, while consumer behavior has changed and will continue to change rapidly and dramatically. Industrial-age marketing, coupled with information-age consumer behavior, creates a misalignment that renders much of what marketing does ineffectual and sometimes damaging.

It is not surprising, then, that marketing today is incredibly inefficient. For example, in 1996, $159 billion was spent on advertising in the United States alone, plus a nearly equal amount on sales promotions. This amounts to $1,250 per person per year, or $5,000 per year per four-member household. The advertising dollars buy an average of 1,600 exposures per day per person; only two percent of those result in positive recall.

Even direct marketing is highly inefficient; there are 254,000,000 Americans, but four billion names for rent. Direct marketing is regarded as successful when it is 98 percent wrong. It is viable only because trees continue to be cheap, and postal rates are still relatively low.

In addition to being inefficient, marketing is too often ineffective as well. Customer dissatisfaction runs high in many industries, and brand loyalty continues to erode. Most customers have become conditioned to being opportunistic and short-term oriented.

A full-blown productivity crisis now exists in marketing. Consequently, we can expect to see major budget cuts in marketing in coming years, as companies search for greater operating efficiency.

Interactive broadband communication systems have the potential to make the marketing function far more productive, mainly because they directly target the areas of communications and selling, which is where the bulk of marketing resources are expended. Both outbound communications (e.g., advertising, sales promotion, and personal selling) and inbound communications (e.g., ordering and customer service) will be impacted.

With such systems, companies will be able to integrate advertising, sales promotion, personal selling, and physical distribution to a far greater extent than is now possible. They will be able to achieve maximal market coverage with a relatively small amount of inventory, dramatically reducing costs in the process. Marketing efforts will be tailored for and targeted directly at the most responsive segments of the market. Companies will close the loop by making it almost effortless for customers to interact with them and with each other.

Firefly: Harnessing the Power of Word-of-mouth Marketing

An interesting example of how marketing can leverage emerging networking technology is a new service called Firefly. Firefly is one of the first commercial services to attempt to harness the power of peer recommendations or

word-of-mouth marketing (Judge 1996). It (http://firefly.com) works by building detailed psychographic profiles of members, based on their answers to scores of questions. On the basis of this information, Firefly then identifies the individual's "psychographic neighbors" (other individuals who appear to have similar predispositions) and recommends products and services on the basis of what others have reported liking. The information is also used to pinpoint advertising messages to individuals. Although currently limited to music and movies, Firefly is planning to add mutual funds, restaurants, and books.

Going beyond facilitating transactions, Firefly also enables user-to-user communications, with communities based on shared interests. Corporate users of the service so far include Merrill Lynch, MCI, Dun & Bradstreet, Reuters, Yahoo, and ZD Net.

Importantly, Firefly has aggressively sought to maintain user privacy; it does not require users to provide real names and addresses unless they choose to. The company has gone so far as to hire Coopers & Lybrand to conduct audits twice a year to ensure that it is adequately safeguarding user privacy. Firefly's privacy policies have earned it plaudits from the Electronic Frontier Foundation, an entity that advocates privacy for Internet users.

How Marketing Must Respond

Paradoxically, marketing must simultaneously get smaller and bigger in the future. At the most successful marketing companies, there will be fewer full-time marketers than there are today. At the same time, the role of marketing will grow. Marketing will exert functional control over operations, customer service, and pricing to a far greater extent than it currently does. Many more employees will be considered part-time marketers. Marketing will evolve into the truly integrating business function it was always intended to be.

The ongoing information and communications revolution presents a once-in-a-lifetime opportunity for marketing to radically define its base operating models and configure them for maximum efficiency and effectiveness. Because this future is approaching at a much faster rate than previously envisioned, marketers must begin now to understand its dimensions and invest in developing the core capabilities that will be needed to succeed in the future. Marketing will have to do the following.

Become More Technology Savvy. Marketing will have to develop a deep understanding of the drivers and trajectories of computing and communications technology. It will have to develop just-in-time capabilities in areas such as pricing and provisioning. Companies will have to learn to leverage visually interactive communications and refine on-line transaction processing systems. They will have to invest in sophisticated logistical capabilities aimed at serving individual consumers. They will have to become adept users and developers of expert systems and other forms of artificial intelligence technologies, such as voice recognition systems and intelligent agents. All of this will require a massive investment in the information technology platforms that are used in marketing.

Learn How to Retain Customer Loyalty. Consumer behavior in the future, coupled with slow market growth rates, will make customer retention an even more important driver of profitability. Marketing's primary focus on customer acquisition will thus have to change to one based on relationship management.

Learn How to Become the Quarterback. Marketing's ability to quarterback cross-functional teams organized around customer needs will be key in the future. This will require two levels of integration. First, the marketing function will have to integrate its own activities, which are performed today in semiautonomous "silos." Second, the marketing function will have to be linked and integrated with other business functions.

Practice Interactive, One-to-one Marketing. The ability to undertake direct, interactive marketing will be a critical element in future marketing success. This goes far beyond database marketing as currently practiced. The most important element will be to develop virtual empathy with consumers on a one-to-one basis. One-to-one interactions may take several forms: person-to-person (marketer interacts with customer), person-to-system (marketer interacts with customer's "agent"), system-to-person (marketer's "agent" interacts with customer), and system-to-system (marketer's agent interacts with customer's agent). All of these forms of interaction will be necessary in the future.

Agent Technology and Household Management Computers

Increasingly, company-consumer interaction will in fact be computer-computer interaction, as computers at either end take on the personalities of sellers and buyers. Although this may seem far-fetched today, consider the extent to which this is already widespread in the following commercial applications:

- Smart robots are used by travel agents to ferret out the best fares by using a variety of creative approaches.
- Numerous expert systems are being used by companies in areas ranging from the approval of credit applications to the fine tuning of blast furnaces to the prediction of photocopier failures.
- Automated trading systems (program trading) have been used by brokerage firms on Wall Street for many years.

With the blurring of boundaries between the workplace and the home (already there is talk of "home at work" along with "work at home"), we believe

it is only a matter of time and appropriate marketing before such innovations are deployed in the mass market, where they will have a much greater impact.

Consider the possibility of a household management computer (HMC). An HMC could operate during off hours at night searching the globe for goods and services needed for the household. Although the search is based on specifications used in the past, these could be modified according to what the HMC may learn in the market. The HMC could operate in one of three ways. For commodities such as oil and heating, the HMC can make purchase decisions, place orders, schedule delivery, and authorize payment without further intervention by the consumer. For somewhat more complex decisions such as which styles of dress shirt to buy, the HMC may collect and store information. The consumer can review that information at a later time and make decisions. The information is verbally presented to the user, and verbal responses are also received by the computer. For more complex decisions requiring large amounts of information and significant financial outlays, the HMC gathers information, requests the delivery of electronic samples and other product information, and presents a recommendation on the basis of agreed-upon criteria.[1]

One possible innovation in the future might be "feel sites." These are locations where consumers can go to try on clothes, taste food, or sit on furniture before returning to the Internet to finalize a purchase decision.[2]

MARKETING'S STRANDED ASSETS

A "stranded asset" is a sunk cost that may no longer provide economic value. For example, in the electric utility industry, many nuclear plants have become stranded assets; they were built at enormous cost but are no longer competitive with more efficient ways of generating electricity. Companies have little choice but to write off such assets and invest in newer ones (or to simply stop producing internally and rely on purchases from the market).

We believe that marketing has built up numerous potentially stranded assets. More and more, these relics of a fast-fading era will have to be replaced. If they are not replaced, they will represent a severe drag on the competitiveness of the firms that continue to own them. Examples of stranded assets include the following:

- Retailing space—banks and supermarkets will be increasingly replaced by home-based retailing; in the last decade, the average time spent at malls by consumers has declined dramatically, from 7 hours a month to only 2 1/2 hours.
- Warehousing space—manufacturers, wholesalers, retailers, consumers; replaced by virtual warehouses.
- Office space—there will be more space-independent working.
- Inflexible manufacturing plants—for example, GM has some plants that are capable of making only one particular type of pick-up truck.
- Outbound telemarketing setups—these have proven to be extraordinarily efficient at alienating large numbers of customers.

Certain capabilities will be in short supply and will thus be at a premium. Examples include small-order-size delivery systems (agile logistics), picking systems, and order-fulfillment experts.

CONCLUSION

Wehling (1996, p. 170), senior vice president of advertising at Proctor and Gamble, recently noted that

> Over the long term, marketers who remain unprepared for the sea-change we're about to experience won't survive. Marketers who understand the implications and get ahead of the curve will not only survive, they'll thrive. They'll emerge more competitive than ever and they'll build relationships with consumers that are deeper and more enduring than any we can create today.

A marketing revolution is only just beginning. We are now climbing onto a technological treadmill; companies that are not already on board may not be able to make up for lost ground. New entrants will base their business model on the starkly different economics of the information age. Consequently, these new entrants will create numerous stranded assets among traditional marketers.

The world is changing in major ways that few of us have begun to fathom. In particular, the world in which marketing exists is getting reshaped with great speed. The microprocessor forever changed the world of computing and nearly destroyed IBM. IBM was forced to change dramatically simply to survive. Analogous to IBM, marketing will die if it does not change.

There will undoubtedly be winners and losers in this process, as well as leaders and laggards. Those marketers who move proactively now to redefine the function and rewrite its value equations will position themselves for a bright future. If it is managed right, marketing may lose the battle but win the war. If it is not managed right, operations or customer services may drive the corporation—to the ultimate detriment of customers as well as shareholders.

NOTES

1. Dwayne McCollum, MBA student, George Mason University.
2. Carol Diggs, MBA student, George Mason University.