causal interactions, because these set the stage for new opportunities as well as threats. For example, explosive population growth (demographic) leads to more resource depletion and pollution (natural environment), which leads consumers to call for more laws (political-legal). The restrictions stimulate new technological solutions and products (technology), which if they are affordable (economic forces) may actually change attitudes and behavior (social-cultural).

DEMOG APHIC EN I ONMEN

The first macroenvironmental force that marketers monitor is population because people make up markets. Marketers are keenly interested in the size and growth rate of population in different cities, regions, and nations; age distribution and ethnic mix; educational levels; household patterns; and regional characteristics and movements.

Worldwide Population Growth

The world population is showing "explosive" growth. It totaled 5.4 billion in 1991 and is growing at 1.7 percent per year. At this rate, the world's population will reach 6.2 billion by the year 2000.8

The world population explosion has been a source of major concern, for two reasons. The first is the fact that certain resources needed to support this much human life (fuel, foods, and minerals) are limited and may run out at some point. First published in 1972, The Limits to Growth presented an impressive array of evidence that unchecked population growth and consumption would eventually result in insufficient food supply, depletion of key minerals, overcrowding, pollution, and an overall deterioration in the quality of life.⁹ One of the study's strong recommendations is the worldwide social marketing of family planning.¹⁰

The second cause for concern is that population growth is highest in countries and communities that can least afford it. The less developed regions of the world currently account for 76 percent of the world population and are growing at 2 percent per year, whereas the population in the more developed countries is growing at only 0.6 percent per year. In the developing countries, the death rate has been falling as a result of modern medicine, but the birthrate has remained fairly stable. Feeding, clothing, and educating their children while also providing a rising standard of living is nearly impossible in these countries.

The explosive world population growth has major implications for business. A growing population does not mean growing markets unless these markets have sufficient purchasing power. Nonetheless, companies that carefully analyze their markets can find major opportunities. For example, to curb its skyrocketing population, the Chinese government has passed regulations limiting families to one child per family. Toy marketers, in particular, are paying attention to one consequence of these regulations: These children are spoiled and fussed over as never before. Known in China as "little emperors," Chinese children are being showered with everything from candy to computers as a result of what's known as the "six pocket syndrome." As many as six adults—parents, grandparents, great-grandparents, and aunts and uncles—may be indulging the whims of each child. This trend has encouraged such companies as Japan's Bandai Company (famous for its Mighty Morphin' Power Rangers), Denmark's Lego Group, and Mattel to enter the Chinese market. ¹¹

Population Age Mix

National populations vary in their age mix. At one extreme is Mexico, a country with a very young population and rapid population growth. At the other extreme is Japan, a country with one of the world's oldest populations. Milk, diapers, school supplies, and toys would be important products in Mexico. Japan's population would consume many more adult products.

A population can be subdivided into six age groups: preschool, school-age children, teens, young adults age 25 to 40, middle-aged adults age 40 to 65, and older adults age 65 and up. For marketers, the most populous age groups shape the marketing environment. In the United States, the "baby boomers," the 78 million people born between 1946 and 1964, are one of the most powerful forces shaping the marketplace. Baby boomers are fixated on their youth, not their age, and ads geared to them tend to capitalize on nostalgia for their past, such as those for the newly redesigned Volkswagen Beetle or the Mercedes-Benz ad featuring the rock music of Janis Joplin. Boomers grew up with TV advertising, so they are an easier market to reach than the 45 million born between 1965 and 1976, dubbed Generation X (and also the shadow generation, twentysomethings, and baby busters). Gen-Xers are typically cynical about hard-sell marketing pitches that promise more than they can deliver. Ads created to woo this market often puzzle older people, because they often don't seem to "sell" at all:¹²

- M B C Instead of the usual macho men, scantily clad women, beauty shots of beer and mountain vistas, Miller's new beer ads targeted to 21- to 27-year-olds feature the on-screen legend "It's time to embrace your inner idiot" and images of a frenetic, sloppy hot-dog eating contest.¹³
- Diesel jeans ads revolve around a celebration of the bizarre, and they playfully poke fun at mainstream situations. Called "Reasons for Living," the ads reverse our code of ethics with images like one of humans serving a roasted girl to pigs sitting at a dining table laden with exotic foods. 14

Finally, both baby boomers and Gen-Xers will be passing the torch to the latest demographic group, the baby boomlet, born between 1977 and 1994. Now numbering 72 million, this group is almost equal in size to baby boomers. One distinguishing characteristic of this age group is their utter fluency and comfort with computer and Internet technology. Douglas Tapscott has christened them Net-Gens for this reason. He says: "To them, digital technology is no more intimidating than a VCR or a toaster." See the Marketing Memo "Tapping into the Internet Generation." 15

But do marketers have to create separate ads for each generation? J. Walker Smith, co-author of *Rocking the Ages: The Yankelovich Report on Generational Marketing*, says that marketers do have to be careful about turning off one generation each time they craft a message that appeals effectively to another. "I think the idea is to try to be broadly inclusive and at the same time offer each generation something specifically designed for it. Tommy Hilfiger has big brand logos on his clothes for teenagers and little pocket polo logos on his shirts for baby boomers. It's a brand that has a more inclusive than exclusive strategy." ¹⁶

MARKETING memo

Tapping into the Internet Generation

Net-Gens already influence adult purchases more than any preceding generation. The Alliance for Converging Technologies estimates that American preteens and teens spend \$130 billion of their own dollars annually and influence upward of \$500 billion of their parents' spending. How do you market to this group? Don Tapscott, author of *Growing Up Digital: The Rise of the Net Generation* (www.growingupdigital.com), advises marketers to keep five things in mind:

- **1.** Options are a must—choice is one of their most deeply held values.
- Customize to meet their needs. These are the kids who build their own levels in video games and write their own Web pages, and they want things their way.
- **3.** Let them have the option of changing their minds. They're growing up in a world where fixing mistakes takes a stroke of the mouse, and they believe that changing their minds should be equally painless.
- **4.** Let them try before they buy. They're users and doers. They reject expert opinions in favor of forming their own.
- **5.** Never forget that they will choose function over form. "Unlike baby boomers, who witnessed the technological revolution,"Tapscott says,"N-Geners have no awe of new technology. They have grown up with computers and treat them like any other household appliance. This is an audience that cares about what the technology will do, not the technology itself."

Source: Excerpted from Lisa Krakowka, "In the Net," American Demographics, August 1998, p. 56.



Ethnic Markets

Countries also vary in ethnic and racial makeup. At one extreme is Japan, where almost everyone is Japanese; at the other is the United States, where people from come virtually all nations. The United States was originally called a "melting pot," but there are increasing signs that the melting didn't occur. Now people call the United States a "salad bowl" society with ethnic groups maintaining their ethnic differences, neighborhoods, and cultures. The U.S. population (267 million in 1997) is 73 percent white. African Americans constitute another 13 percent, and Latinos another 10 percent. The Latino population has been growing fast, with the largest subgroups of Mexican (5.4 percent), Puerto Rican (1.1 percent), and Cuban (0.4 percent) descent. Asian Americans constitute 3.4 percent of the U.S. population, with the Chinese constituting the largest group, followed by the Filipinos, Japanese, Asian Indians, and Koreans, in that order. Latino and Asian American consumers are concentrated in the far western and southern parts of the country, although some dispersal is taking place. Moreover, there are nearly 25 million people living in the United States—more than 9 percent of the population—who were born in another country.

Each group has certain specific wants and buying habits. Several food, clothing, and furniture companies have directed their products and promotions to one or more of these groups. ¹⁷ For instance, Sears is taking note of the preferences of different ethnic groups:



If a Sears, Roebuck and Company store has a shopping base that is at least 20 percent Latino, it is designated as a Hispanic store for the purpose of Sears's Hispanic marketing program. More than 130 stores in southern California, Texas, Florida, and New York have earned this label. "We make a special effort to staff those stores with bilingual sales personnel, to use bilingual signage, and to support community programs," says a Sears spokesperson. Choosing merchandise for the Latino marketplace is primarily a color and size issue. "What we find in Hispanic communities is that people tend to be smaller than the general market, and that there is a greater demand for special-occasion clothing and a preference for bright colors. In hardlines, there isn't much difference from the mainstream market."

Yet marketers must be careful not to overgeneralize about ethnic groups. Within each ethnic group are consumers who are as different from each other as they are from Americans of European background. "There is really no such thing as an Asian market," says Greg Macabenta, whose ethnic advertising agency specializes in the Filipino market. Macabenta emphasizes that the five major Asian American groups have their own very specific market characteristics, speak different languages, consume different cuisines, practice different religions, and represent very distinct national cultures. 18

Educational Groups

The population in any society falls into five educational groups: illiterates, high school dropouts, high school degrees, college degrees, and professional degrees. In Japan, 99 percent of the population is literate, whereas in the United States 10 percent to 15 percent of the population may be functionally illiterate. However, the United States has one of the world's highest percentages of college-educated citizenry, around 36 percent. The high number of educated people in the United States spells a high demand for quality books, magazines, and travel.

Household Patterns

The "traditional household" consists of a husband, wife, and children (and sometimes grandparents). Yet, in the United States today, one out of eight households are "diverse" or "nontraditional," and include single live-alones, adult live-togethers of one or both sexes, single-parent families, childless married couples, and empty nesters. More people are divorcing or separating, choosing not to marry, marrying later, or marrying without the intention to have children. Each group has a distinctive set of needs and buying habits. For example, people in the SSWD group (single, separated, widowed, divorced) need smaller apartments; inexpensive and smaller appliances, furniture, and furnishings; and food packaged in smaller sizes. Marketers must increasingly consider the special needs of nontraditional households, because they are now growing more rapidly than traditional households.

The gay market, in particular, is a lucrative one. A 1997 Simmons Market Research study of readers of the National Gay Newspaper Guild's 12 publications found that, compared to the average American, respondents are 11.7 times more likely to be in professional jobs, almost twice as likely to own a vacation home, eight times more likely to own a computer notebook, and twice as likely to own individual stocks. ¹⁹ Insurance companies and financial services companies are now waking up to the needs and potential of not only the gay market but also the nontraditional household market as a whole:

- Press Financial Advisors, Inc., launched print ads that depict same-sex couples planning their financial futures. The ads ran in *Out* and *The Advocate*, the two highest-circulation national gay publications. The company's director of segment marketing, Margaret Vergeyle, said: "We're targeting gay audiences with targeted ads and promotions that are relevant to them and say that we understand their specific needs. Often, gay couples are very concerned about issues like Social Security benefits and estate planning, since same-sex marriages often are not recognized under the law."²⁰
- J H M L I C The John Hancock Mutual Insurance Company has been focusing on single parents and working women with two series of ads on cable television channels. The company is focusing on a very specific segment of women whose financial needs happen to be even more critical because of their situation. The slogan for the ads: "Insurance for the unexpected. Investments for the opportunities."²¹

Geographical Shifts in Population

This is a period of great migratory movements between and within countries. Since the collapse of Soviet eastern Europe, nationalities are reasserting themselves and forming independent countries. The new countries are making certain ethnic groups ghr mi Koun ruhter unwelcome (such as Russians in Latvia or Muslims in Serbia), and many of these groups are migrating to safer areas. As foreign groups enter other countries for political sanctuary, some local groups start protesting. In the United States, there has been opposition to the influx of immigrants from Mexico, the Caribbean, and certain Asian nations. Yet many immigrants have done very well. Forward-looking companies and entrepreneurs are taking advantage of the growth in immigrant populations and marketing their wares specifically to these new members of the population.



1-800-777-CL B, I . When they came to the United States from Taiwan in the late 1970s, brother and sister Marty and Helen Shih earned a living by selling flowers on a street corner. They now own an 800-employee telemarketing business, 1-800-777-CLUB, Inc., based in El Monte, California. That number logs about 1,200 phone calls a day from Asian immigrants seeking information in six languages: Japanese, Korean, Mandarin and Cantonese Chinese, Tagalog, and English. The callers seek advice on dealing with immigration officials, perhaps, or help in understanding an electric bill. The Shihs use those calls to add to a database of names, phone numbers, and demographic information that is then used for highly targeted telemarketing. The Shihs' great advantage is that their telemarketers talk in their native language to people who are far from assimilated. A recent Vietnamese immigrant is thrilled to pick up the phone and hear someone speaking Vietnamese. Last year, the Shihs' telemarketers sold more than \$146 million worth of goods and services for companies including Sprint Corporation and DHL Worldwide Express. Their database now has around 1.5 million individual names covering a high percentage of Asian American households and 300,000 businesses.²²

Population movement also occurs as people migrate from rural to urban areas, and then to suburban areas. The U.S. population has now undergone another shift, which demographers call "the rural rebound." Nonmetropolitan counties that lost population to cities for most of this century are now attracting large numbers of urban refugees. Between 1990 and 1995, the rural population has grown 3.1 percent as people from the city have moved to small towns.²³



Wanda Urbanska and her husband, Frank Levering, moved from the media grind of Los Angeles to a simpler life in Mount Airy, North Carolina (population 7,200). Urbanska's former job as a reporter for the Los Angeles Herald Examiner and Levering's former job as a screenwriter for B movies had taken up so much of their time and energy that they couldn't really enjoy the material gains they were making. When Levering's father had a heart attack, the couple packed up and moved to Mt. Airy to help him with his fruit orchard. They still help him run the orchard while doing freelance writing on the side, such as two books about seeking a better life: Simple Living and Moving to a Small Town.24

Businesses with potential to cash in on the rural rebound might be those that cater to the growing SOHO (small office-home office) segment. For instance, makers of RTA (ready to assemble) furniture might find a strong consumer base among all the cashedout former city residents setting up offices in small towns or telecommuting from there to larger companies.

Location makes a difference in goods and service preferences. The movement to the Sunbelt states has lessened the demand for warm clothing and home heating equipment and increased the demand for air conditioning. Those who live in large cities such as New York, Chicago, and San Francisco account for most of the sales of expensive furs, perfumes, luggage, and works of art. These cities also support the opera, ballet, and other forms of culture. Americans living in the suburbs lead more casual lives, do more outdoor living, and have greater neighbor interaction, higher incomes, and younger families. Suburbanites buy vans, home workshop equipment, outdoor furniture, lawn and gardening tools, and outdoor cooking equipment. There are also

regional differences: People in Seattle buy more toothbrushes per capita than people in any other U.S. city; people in Salt Lake City eat more candy bars; people from New Orleans use more ketchup; and people in Miami drink more prune juice.

Shift from a Mass Market to Micromarkets

The effect of all these changes is fragmentation of the mass market into numerous micromarkets differentiated by age, sex, ethnic background, education, geography, lifestyle, and other characteristics. Each group has strong preferences and is reached through increasingly targeted communication and distribution channels. Companies are abandoning the "shotgun approach" that aimed at a mythical "average" consumer and are increasingly designing their products and marketing programs for specific micromarkets.

Demographic trends are highly reliable for the short and intermediate run. There is little excuse for a company's being suddenly surprised by demographic developments. The Singer Company should have known for years that its sewing machine business would be hurt by smaller families and more working wives, yet it was slow in responding. In contrast, think of the rewards marketers reap when they focus on a demographic development. Some marketers are actively courting the home office segment of the lucrative SOHO market. Nearly 40 million Americans are working out of their homes with the help of electronic conveniences like cell phones, fax machines, and handheld organizers. One company that is shifting gears to appeal to this micromarket is Kinko's Copy Centers:

Founded in the 1970s as a campus photocopying business, Kinko's is now reinventing itself as the well-appointed office outside the home. Where once there were copy machines, the 902 Kinko's stores in this country and abroad now feature a uniform mixture of fax machines, ultrafast color printers, and networks of computers equipped with popular software programs and high-speed Internet connections. People can come to a Kinko's store to do all their office jobs: They can copy, send and receive faxes, use various programs on the computer, go on the Internet, order stationery and other printed supplies, and even teleconference. And as more and more people join the work-at-home trend, Kinko's is offering an escape from the isolation of the home office. Kinko's, which charges \$12 an hour for computer use, is hoping to increase its share of industry revenue by getting people to spend more time—and hence, more money—at its stores. Besides adding state-of-the-art equipment, the company is talking to Starbucks about opening up coffee shops adjacent to some Kinko's. The lettering on the Kinko's door sums up the \$1 billion company's new business model: "Your branch office/Open 24 hours."25

ECONOMIC EN I ONMEN

Markets require purchasing power as well as people. The available purchasing power in an economy depends on current income, prices, savings, debt, and credit availability. Marketers must pay close attention to major trends in income and consumerspending patterns.

Income Distribution

Nations vary greatly in level and distribution of income and industrial structure. There are four types of industrial structures:

- 1. Subsistence economies: In a subsistence economy, the vast majority of people engage in simple agriculture, consume most of their output, and barter the rest for simple goods and services. These economies offer few opportunities for marketers.
- 2. Raw-material-exporting economies: These economies are rich in one or more natural resources but poor in other respects. Much of their revenue comes from exporting these resources. Examples are Zaire (copper) and Saudi Arabia (oil). These countries are good markets for extractive equipment, tools and



- supplies, materials-handling equipment, and trucks. Depending on the number of foreign residents and wealthy native rulers and landholders, they are also a market for Western-style commodities and luxury goods.
- 3. Industrializing economies: In an industrializing economy, manufacturing begins to account for 10 percent to 20 percent of gross domestic product. Examples include India, Egypt, and the Philippines. As manufacturing increases, the country relies more on imports of raw materials, steel, and heavy machinery and less on imports of finished textiles, paper products, and processed foods. Industrialization creates a new rich class and a small but growing middle class, both demanding new types of goods.
- **4.** Industrial economies: Industrial economies are major exporters of manufactured goods and investment funds. They buy manufactured goods from one another and also export them to other types of economies in exchange for raw materials and semifinished goods. The large and varied manufacturing activities of these nations and their sizable middle class make them rich markets for all sorts of goods.

Marketers often distinguish countries with five different income-distribution patterns: (1) very low incomes; (2) mostly low incomes; (3) very low, very high incomes; (4) low, medium, high incomes; and (5) mostly medium incomes. Consider the market for Lamborghinis, an automobile costing more than \$150,000. The market would be very small in countries with type 1 or 2 income patterns. One of the largest single markets for Lamborghinis turns out to be Portugal (income pattern 3)—one of the poorer countries in Western Europe, but one with enough wealthy families to afford expensive cars.

Since 1980, the wealthiest fifth of the U.S. population has seen its income grow by 21 percent, while wages for the bottom 60 percent have stagnated or even dipped. According to Census Bureau statisticians, the 1990s have seen a greater polarization of income in the United States than at any point since the end of World War II. This is leading to a two-tier U.S. market, with affluent people buying expensive goods and working-class people spending more carefully, shopping at discount stores and factory outlet malls, and selecting less expensive store brands. Conventional retailers who offer medium-price goods are the most vulnerable to these changes. Companies that respond to the trend by tailoring their products and pitches to these two very different Americas stand to gain a lot:26



At Gap's Banana Republic stores, jeans sell for \$58. Its Old Navy stores sell a version for \$22. Both chains are thriving.

- The Walt Disney Company, which owns the D rights to A. A. Milne's Winnie-the-Pooh and his make-believe friends, is marketing two distinct Poohs. The original line-drawn figures appear on fine china, pewter spoons, and expensive kids' stationery found in upscale specialty and department stores like Nordstrom and Bloomingdales. A plump, cartoonlike Pooh, clad in a red T-shirt and a goofy smile, adorns plastic key chains, polyester bedsheets, and animated videos. This downscaled Pooh sells at Wal-Mart and other discount stores.
- The National Basketball Association sells front-row seats in New York's Madison Square Garden for \$1,000 apiece. Yet, worried they might lose fans who can't afford the typical \$200 for a family night out at a sports event, NBA marketers have launched an array of much more affordable merchandise and entertainment properties such as traveling basketball exhibitions.

Savings, Debt, and Credit Availability

Consumer expenditures are affected by consumer savings, debt, and credit availability. The Japanese, for example, save about 13.1 percent of their income, whereas U.S. consumers save about 4.7 percent. The result has been that Japanese banks were able to loan money to Japanese companies at a much lower interest rate than U.S. banks could offer to U.S. companies. Access to lower interest rates helped Japanese companies expand faster. U.S. consumers also have a high debt-to-income ratio, which slows down further expenditures on housing and large-ticket items. Credit is very available in the United States but at fairly high interest rates, especially to lower-income borrowers. Marketers must pay careful attention to major changes in incomes, cost of living, interest rates, savings, and borrowing patterns because they can have a high impact on business, especially for companies whose products have high income and price sensitivity.

ALEN I ONMEN

The deterioration of the natural environment is a major global concern. In many world cities, air and water pollution have reached dangerous levels. There is great concern about certain chemicals creating a hole in the ozone layer and producing a "greenhouse effect" that will lead to dangerous warming of the earth. In Western Europe, "green" parties have vigorously pressed for public action to reduce industrial pollution. In the United States, several thought leaders have documented ecological deterioration, whereas watchdog groups such as the Sierra Club and Friends of the Earth carried these concerns into political and social action.

New legislation passed as a result has hit certain industries very hard. Steel companies and public utilities have had to invest billions of dollars in pollution-control equipment and more environmentally friendly fuels. The auto industry has had to introduce expensive emission controls in cars. The soap industry has had to increase its products' biodegradability.

Marketers need to be aware of the threats and opportunities associated with four trends in the natural environment: the shortage of raw materials, the increased cost of energy, increased pollution levels, and the changing role of governments.

Shortage of Raw Materials

The earth's raw materials consist of the infinite, the finite renewable, and the finite nonrenewable. Infinite resources, such as air and water, pose no immediate problem, although some groups see a long-run danger. Environmental groups have lobbied for a ban on certain propellants used in aerosol cans because of the potential damage they can cause to the ozone layer. Water shortages and pollution are already major problems in some parts of the world.

Finite renewable resources, such as forests and food, must be used wisely. Forestry companies are required to reforest timberlands in order to protect the soil and to ensure sufficient wood to meet future demand. Because the amount of arable land is fixed and urban areas are constantly encroaching on farmland, food supply can also be a major problem. Finite nonrenewable resources—oil, coal, platinum, zinc, silver will pose a serious problem as the point of depletion approaches. Firms making products that require these increasingly scarce minerals face substantial cost increases. They may not find it easy to pass these cost increases on to customers. Firms engaged in research and development have an excellent opportunity to develop substitute mate-

Increased Energy Costs

One finite nonrenewable resource, oil, has created serious problems for the world economy. Oil prices shot up from \$2.23 a barrel in 1970 to \$34.00 a barrel in 1982, creating a frantic search for alternative energy forms. Coal became popular again, and companies searched for practical means to harness solar, nuclear, wind, and other forms of energy. In the solar energy field alone, hundreds of firms introduced firstgeneration products to harness solar energy for heating homes and other uses. Other firms searched for ways to make a practical electric automobile, with a potential prize of billions for the winner.

The development of alternative sources of energy and more efficient ways to use energy and the weakening of the oil cartel led to a subsequent decline in oil prices. Lower prices had an adverse effect on the oil-exploration industry but considerably improved the income of oil-using industries and consumers. In the meantime, the search continues for alternative sources of energy.

Increased Pollution Levels

Some industrial activity will inevitably damage the natural environment. Consider the dangerous mercury levels in the ocean, the quantity of DDT and other chemical pollutants in the soil and food supply, and the littering of the environment with bottles, plastics, and other packaging materials.

Research has shown that about 42 percent of U.S. consumers are willing to pay higher prices for "green" products. This willingness creates a large market for pollution-control solutions, such as scrubbers, recycling centers, and landfill systems. It leads to a search for alternative ways to produce and package goods. Smart companies are initiating environment-friendly moves to show their concern. 3M runs a Pollution Prevention Pays program that has led to a substantial reduction in pollution and costs. Dow built a new ethylene plant in Alberta that uses 40 percent less energy and releases 97 percent less wastewater. AT&T uses a special software package to choose the least harmful materials, cut hazardous waste, reduce energy use, and improve product recycling in its operations. McDonald's and Burger King eliminated their polystyrene cartons and now use smaller, recyclable paper wrappings and paper napkins.²⁷

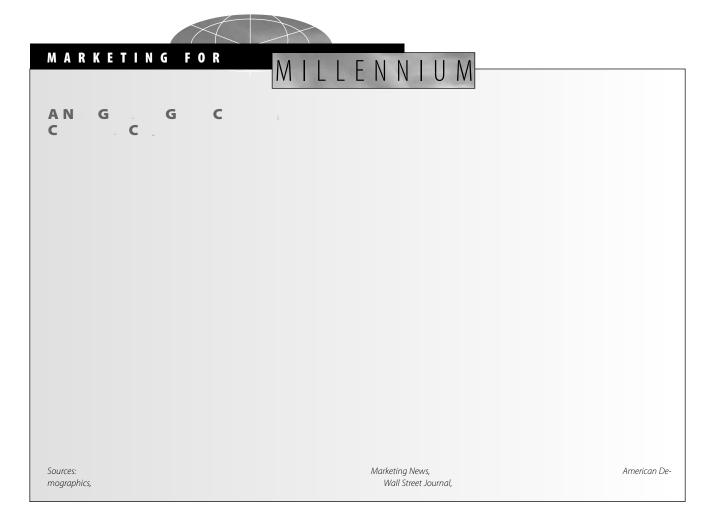
New concern over the toxic nature of dry cleaning solvents has opened up opportunities for a new breed of "green cleaners," although these new businesses face an uphill battle. See the Marketing for the Millennium "A New Guard of Green Cleaners Vies for Concerned Customers."

Changing Role of Governments

Governments vary in their concern and efforts to promote a clean environment. For example, the German government is vigorous in its pursuit of environmental quality, partly because of the strong green movement in Germany and partly because of the ecological devastation in the former East Germany. Many poor nations are doing little about pollution, largely because they lack the funds or the political will. It is in the richer nations' interest to help the poorer nations control their pollution, but even the richer nations today lack the necessary funds. The major hopes are that companies around the world will accept more social responsibility and that less expensive devices will be invented to control and reduce pollution.

ECHNOLOGICAL EN I ONMEN

One of the most dramatic forces shaping people's lives is technology. Technology has released such wonders as penicillin, open-heart surgery, and the birth-control pill. It



has released such horrors as the hydrogen bomb, nerve gas, and the submachine gun. It has also released such mixed blessings as the automobile and video games.

Every new technology is a force for "creative destruction." Transistors hurt the vacuum-tube industry, xerography hurt the carbon-paper business, autos hurt the railroads, and television hurt the newspapers. Instead of moving into the new technologies, many old industries fought or ignored them, and their businesses declined.

The economy's growth rate is affected by how many major new technologies are discovered. Unfortunately, technological discoveries do not arise evenly through time—the railroad industry created a lot of investment, and then investment petered out until the auto industry emerged. Later, radio created a lot of investment, which then petered out until television appeared. In the time between major innovations, the economy can stagnate.

In the meantime, minor innovations fill the gap: freeze-dried coffee, combination shampoo and conditioner, antiperspirant/deodorants, and the like. Minor innovations involve less risk, but critics argue that today too much research effort is going into producing minor improvements rather than major breakthroughs.

New technology creates major long-run consequences that are not always fore-seeable. The contraceptive pill, for example, led to smaller families, more working wives, and larger discretionary incomes—resulting in higher expenditures on vacation travel, durable goods, and luxury items.

The marketer should monitor the following trends in technology: the pace of change, the opportunities for innovation, varying R&D budgets, and increased regulation.

Accelerating Pace of Technological Change

Many of today's common products were not available 40 years ago. John F. Kennedy did not know personal computers, digital wristwatches, video recorders, or fax machines. More ideas are being worked on; the time lag between new ideas and their successful implementation is decreasing rapidly; and the time between introduction and peak production is shortening considerably. Ninety percent of all the scientists who ever lived are alive today, and technology feeds upon itself.

The advent of personal computers and fax machines has made it possible for people to telecommute—that is, work at home instead of traveling to offices that may be 30 or more minutes away. Some hope that this trend will reduce auto pollution, bring the family closer together, and create more home-centered entertainment and activity. It will also have substantial impact on shopping behavior and marketing performance.

Unlimited Opportunities for Innovation

Scientists today are working on a startling range of new technologies that will revolutionize products and production processes. Some of the most exciting work is being done in biotechnology, solid-state electronics, robotics, and materials sciences.²⁸ Researchers are working on AIDS cures, happiness pills, painkillers, totally safe contraceptives, and nonfattening foods. They are designing robots for firefighting, underwater exploration, and home nursing. In addition, scientists also work on fantasy products, such as small flying cars, three-dimensional television, and space colonies. The challenge in each case is not only technical but also commercial—to develop affordable versions of these products.

Companies are already harnessing the power of virtual reality (VR), the combination of technologies that allows users to experience three-dimensional, computergenerated environments through sound, sight, and touch. Virtual reality has already been applied to gathering consumer reactions to new automobile designs, kitchen layouts, exterior home designs, and other potential offerings.

Varying R&D Budgets

The United States leads the world in annual R&D expenditures (\$74 billion), but nearly 60 percent of these funds are still earmarked for defense. There is a need to transfer more of this money into research on material science, biotechnology, and micromechanics. Japan has increased its R&D expenditures much faster than has the United States and is spending it mostly on nondefense-related research in physics, biophysics, and computer science.²⁹

A growing portion of U.S. R&D expenditures is going into the development side of R&D, raising concerns about whether the United States can maintain its lead in basic science. Many companies are content to put their money into copying competitors' products and making minor feature and style improvements. Even basicresearch companies such as DuPont, Bell Laboratories, and Pfizer are proceeding cautiously. Much of the research is defensive rather than offensive. And, increasingly, research directed toward major breakthroughs is being conducted by consortiums of companies rather than by single companies.

Increased Regulation of Technological Change

As products become more complex, the public needs to be assured of their safety. Consequently, government agencies' powers to investigate and ban potentially unsafe products have been expanded. In the United States, the Federal Food and Drug Administration must approve all drugs before they can be sold. Safety and health regulations have also increased in the areas of food, automobiles, clothing, electrical appliances, and construction. Marketers must be aware of these regulations when proposing, developing, and launching new products.

POLI ICAL-LEGAL EN I ONMEN

Marketing decisions are strongly affected by developments in the political and legal environment. This environment is composed of laws, government agencies, and pressure groups that influence and limit various organizations and individuals. Sometimes these laws also create new opportunities for business. For example, mandatory recycling laws have given the recycling industry a major boost and spurred the creation of dozens of new companies making new products from recycled materials:

In 1993, Wellman introduced Ecospun Post Consumer Recycled (PCR) fiber, made from recycled soda bottles, and sold 800,000 pounds in that first year alone. Today, Wellman boasts 15 million pounds in sales and is partnering with domestic fabric mills like Milliken & Company, Malden Mills, and Dybersburg. At the outdoor Retailer Winter Market in 1998, Wellman introduced its new EcoSpun Squared fiber, which has moisturemanagement properties and was designed specifically for a performanceapparel market anxious to jump aboard the recycling bandwagon.

Legislation Regulating Business

Business legislation has three main purposes: to protect companies from unfair competition, to protect consumers from unfair business practices, and to protect the interests of society from unbridled business behavior. A major purpose of business legislation and enforcement is to charge businesses with the social costs created by their products or production processes. Legislation affecting business has steadily increased over the years. The European Commission has been active in establishing a new framework of laws covering competitive behavior, product standards, product liability, and commercial transactions for the 15 member nations of the European Union. Ex-Soviet nations are rapidly passing laws to promote and regulate an open market economy. The United States has many laws on its books covering such issues as competition, product safety and liability, fair trade and credit practices, and packaging and labeling.³⁰ Several countries have gone further than the United States in passing strong consumer-protection legislation. Norway bans several forms of sales promotion—trading stamps, contests, premiums—as inappropriate or "unfair" instruments for promoting products. Thailand requires food processors selling national brands to market low-price brands also so that low-income consumers can find economy brands. In India, food companies need special approval to launch brands that duplicate what already exists on the market, such as another cola drink or brand of rice. A central concern about business legislation is: At what point do the costs of regulation exceed the benefits? The laws are not always administered fairly; regulators and enforcers may be lax or overzealous. Although each new law may have a legitimate rationale, it may have the unintended effect of sapping initiative and retarding economic growth.

Marketers must have a good working knowledge of the major laws protecting competition, consumers, and society. Companies generally establish legal review procedures and promulgate ethical standards to guide their marketing managers. As more and more business takes place in cyberspace, marketers must establish new parameters for doing business ethically. Although America Online has been hugely successful and is the country's most popular on-line service provider, it has lost millions of dollars due to consumer complaints regarding unethical marketing tactics:



, I . In 1998, America Online, Inc., agreed to pay a \$2.6 million penalty and revamp some of its business practices to settle deceptivemarketing complaints brought by 44 state attorneys general. In this instance, AOL failed to clearly notify consumers that the "50 free hours" in its on-line service's much-touted trial memberships must be used within a one-month period and that users would incur subscription fees after the first month. This was AOL's third settlement with state regulators in less than two years. Previous settlements dealt with the company's data network congestion in early 1997 (due to a move to flat rate pricing that gave the company more subscriptions than it had equipment to handle) and efforts in late 1996 to switch customers to a higher-priced subscription plan. The three agreements not only cost the company \$34 million in total but also created a barrage of negative publicity that AOL had to work hard to counter.³¹

Growth of Special-Interest Groups

The number and power of special-interest groups have increased over the past three decades. Political-action committees (PACs) lobby government officials and pressure business executives to pay more attention to consumer rights, women's rights, senior citizen rights, minority rights, and gay rights. Many companies have established public-affairs departments to deal with these groups and issues. An important force affecting business is the *consumerist movement*—an organized movement of citizens and government to strengthen the rights and powers of buyers in relation to sellers. Consumerists have advocated and won the right to know the true interest cost of a loan, the true cost per standard unit of competing brands (unit pricing), the basic ingredients in a product, the nutritional quality of food, the freshness of products, and the true benefits of a product. In response to consumerism, several companies have established consumer-affairs departments to help formulate policies and respond to consumer complaints. Whirlpool Corporation is just one of the companies that have installed toll-free phone numbers for consumers. Whirlpool even expanded the coverage of its product warranties and rewrote them in basic English.

Clearly, new laws and growing numbers of pressure groups have put more restraints on marketers. Marketers have to clear their plans with the company's legal, publicrelations, public-affairs, and consumer-affairs departments. Insurance companies directly or indirectly affect the design of smoke detectors; scientific groups affect the design of spray products by condemning aerosols. In essence, many private marketing transactions have moved into the public domain.

OCIAL-C, L, AL EN I ONMEN

Society shapes our beliefs, values, and norms. People absorb, almost unconsciously, a worldview that defines their relationship to themselves, to others, to organizations, to society, to nature, and to the universe.

■ Views of themselves: People vary in the relative emphasis they place on selfgratification. In the United States during the 1960s and 1970s, "pleasure seekers" sought fun, change, and escape. Others sought "self-realization." People bought products, brands, and services as a means of self-expression. They bought dream cars and dream vacations and spent more time in health activities (jogging, tennis), in introspection, and in arts and crafts. Today, in contrast, people are adopting more conservative behaviors and ambitions. They have witnessed harder times and cannot rely on continuous employment and rising real income. They are more cautious in their spending pattern and more value-driven in their purchases.

- Views of others: Some observers have pointed to a countermovement from a "me society" to a "we society." People are concerned about the homeless, crime and victims, and other social problems. They would like to live in a more humane society. At the same time, people are seeking out their "own kind" and avoiding strangers. People hunger for serious and long-lasting relationships with a few others. These trends portend a growing market for social-support products and services that promote direct relations between human beings, such as health clubs, cruises, and religious activity. They also suggest a growing market for "social surrogates," things that allow people who are alone to feel that they are not, such as television, home video games, and chat rooms on the Internet.
- Views of organizations: People vary in their attitudes toward corporations, government agencies, trade unions, and other organizations. Most people are willing to work for these organizations, although they may be critical of particular ones. But there has been an overall decline in organizational loyalty. The massive wave of company downsizings has bred cynicism and distrust. Many people today see work not as a source of satisfaction but as a required chore to earn money to enjoy their nonwork hours.

This outlook has several marketing implications. Companies need to find new ways to win back consumer and employee confidence. They need to make sure that they are good corporate citizens and that their consumer messages are honest. More companies are turning to social audits and public relations to improve their image with their publics.

- Views of society: People vary in their attitudes toward their society. Some defend it (preservers), some run it (makers), some take what they can from it (takers), some want to change it (changers), some are looking for something deeper (seekers), and some want to leave it (escapers).³² Often consumption patterns reflect social attitude. Makers tend to be high achievers who eat, dress, and live well. Changers usually live more frugally, driving smaller cars and wearing simpler clothes. Escapers and seekers are a major market for movies, music, surfing, and camping.
- Views of nature: People vary in their attitude toward nature. Some feel subjugated by it, others feel harmony with it, and still others seek mastery over it. A longterm trend has been humankind's growing mastery of nature through technology. More recently, however, people have awakened to nature's fragility and finite resources. They recognize that nature can be destroyed by human activities.

Love of nature is leading to more camping, hiking, boating, and fishing. Business has responded with hiking boots, tenting equipment, and other gear. Tour operators are packaging more tours to wilderness areas. Marketing communicators are using more scenic backgrounds in advertising. Food producers have found growing markets for "natural" products, such as natural cereal, natural ice cream, and health foods. Two natural-food grocery stores, Whole Foods Markets and Fresh Fields, merged in 1997 with sales of \$1.1 billion.

Views of the universe: People vary in their beliefs about the origin of the universe and their place in it. Most Americans are monotheistic, although religious conviction and practice have been waning through the years. Church attendance has fallen steadily, with the exception of certain evangelical movements that reach out to bring people back into organized religion. Some of the religious impulse has been redirected into an interest in Eastern religions, mysticism, the occult, and the human potential movement.

As people lose their religious orientation, they seek self-fulfillment and immediate gratification. At the same time, every trend seems to breed a countertrend, as indicated by a worldwide rise in religious fundamentalism. Here are some other cultural characteristics of interest to marketers: the persistence of core cultural values, the existence of subcultures, and shifts of values through time.

High Persistence of Core Cultural Values

The people living in a particular society hold many core beliefs and values that tend to persist. Most Americans still believe in work, in getting married, in giving to charity, and in being honest. Core beliefs and values are passed on from parents to children and are reinforced by major social institutions—schools, churches, business, and government. Secondary beliefs and values are more open to change. Believing in the institution of marriage is a core belief; believing that people ought to get married early is a secondary belief. Thus family-planning marketers could make some headway arguing that people should get married later rather than that they should not get married at all. Marketers have some chance of changing secondary values but little chance of changing core values. For instance, the nonprofit organization Mothers Against Drunk Drivers (MADD) does not try to stop the sale of alcohol, but it does promote the idea of appointing a designated driver who will not drink that evening. The group also lobbies to raise the legal drinking age.

Existence of Subcultures

Each society contains subcultures, groups with shared values emerging from their special life experiences or circumstances. Star Trek fans, Black Muslims, and Hell's Angels all represent subcultures whose members share common beliefs, preferences, and behaviors. To the extent that subcultural groups exhibit different wants and consumption behavior, marketers can choose particular subcultures as target markets.

Marketers sometimes reap unexpected rewards in targeting subcultures. For instance, marketers have always loved teenagers because they're society's trendsetters in fashion, music, entertainment, ideas, and attitudes. Marketers also know that if they attract someone as a teen, there's a good chance they'll keep the person as a customer in the years ahead. Frito-Lay, which draws 15 percent of its sales from teens, says it has seen a rise in chip-snacking by grown-ups. "We think it's because we brought them in as teenagers," says a Frito-Lay marketing director. 33

Shifts of Secondary Cultural Values Through Time

Although core values are fairly persistent, cultural swings do take place. The advent in the 1960s of hippies, the Beatles, Elvis Presley, and other cultural phenomena had a major impact on young people's hairstyles, clothing, sexual norms, and life goals. Today's young people are influenced by new heroes and fads: Pearl Jam's Eddie Vedder, Michael Jordan, and rollerblading.

Marketers have a keen interest in spotting cultural shifts that might bring new marketing opportunities or threats. Several firms offer social-cultural forecasts. The Yankelovich Monitor interviews 2,500 people each year and tracks 35 social trends, such as "antibigness," "mysticism," "living for today," "away from possessions," and "sensuousness." It describes the percentage of the population who share the attitude as well as the percentage who do not. For example, the percentage of people who value physical fitness and well-being has risen steadily over the years, especially in the under-30 group, the young women and upscale group, and people living in the West. Marketers of health foods and exercise equipment cater to this trend with appropriate products and communications. In 1995, Taco Bell unveiled a new lower-fat "Border Lights" menu. The Center for Science in the Public Interest, a consumer advocacy group in Washington, praised the new menu as being "more than a marketing gimmick."34

SUMMARY

- 1. Successful companies realize that the marketing environment presents a neverending series of opportunities and threats. The major responsibility for identifying significant changes in the macroenvironment falls to a company's marketers. More than any other group in the company, marketing managers must be the trend trackers and opportunity seekers.
- **2.** Many opportunities are found by identifying *trends* (directions or sequences of events that have some momentum and durability) and megatrends (major social, economic, political, and technological changes that have long-lasting influence).