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## WORLD & I ARCHIVE

### Embracing Cyberspace: The Evolution of Japan's Internet Culture

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***In Japan and much of Asia, information tends to be carefully controlled by those in authority; there has never been a democratic tradition of information transparency or the public's "right to know." Western journalists frequently refer to cultural barriers that have slowed the Internet's adoption in Japan. In a nation where hierarchy, order, and seniority are powerful forces, and where information is more likely to be brokered than shared, the freewheeling architecture of the Internet is deeply unsettling.***

"In five years," Japanese Prime Minister Yoshiro Mori boldly declared in 2000, "we will make this country the most advanced IT nation." That vow is not likely to be fulfilled, but with an IT Strategy Headquarters spearheading the national "e-Japan" plan, the Japanese are indeed on an information technology roll. Domestic shipments of personal computers surged 25 percent in 2000, and for delivery on New Year's Day 2001, Japan's post offices sold some 662 million do-it-yourself greeting cards designed for use with home PCs and ink-jet color printers, 2.4 times more cards than were sold the previous year. Japanese prime ministers have limited shelf lives, of course, and Mori is long gone. Yet the trend remains healthy; the cyber-newsletter put out by current Prime Minister Junichiro Koizumi was being emailed to more than 2 million subscribers within weeks of his taking office last year.

In the key area of wireless Internet technology, most significantly, Japan has

broken from the pack and is reemerging as a world-beater. For today's Japanese, though, revolution runs deeper. Commentators foreign and domestic have asserted that Japan stands at a momentous juncture in its modern national history. Following the Meiji Restoration and post--World War II reconstruction, the emerging "Third Way" or "Third Opening" will be inextricably tied to the Internet and information technology.

Plainly, times have changed. In the mid-1990s, news articles about lackluster Japanese and Asian commitment to IT carried critical titles such as "Japan's Internet Tangle" and "Asia Wobbles Onto the Web." An entirely different image was being projected by the end of the decade, fueled by headlines like "Asia Catches .Com Fever," "Japan Goes Web Crazy," and "Watch Japan Leapfrog Into the Internet Age." In a twelve-part feature dubbed "Japan's Internet Tsunami," London's normally restrained Financial Times effused: "The Internet is sweeping across Japan like a massive tidal wave, or tsunami, reshaping corporate structures, challenging cultural norms and pushing up valuations of Internet stocks."

Due partly to the subsequent tech-led global economic slowdown, but mostly to a decade-long banking crisis and endemic macroeconomic problems, Japan Inc. remains on life support. The nation was teetering on the brink of a deflationary spiral and yet another recession as of Spring 2002, with the Nikkei Stock Average worth less than one-third of its 1989 value. Such familiar bad news notwithstanding, Japan's IT revolution has unleashed powerful genies of change that will not be forced back into any bottle.

Internet culture, definable as a society's shared set of norms and practices as they relate to the Internet, develops as an extension of social, political, and economic values. Because values are not universal, nothing resembling a monolithic or global Internet culture has yet emerged. Rather, nations such as Japan and the United States are utilizing the Internet in ways that reflect their unique national characters. One anthropologist offers that traditional American personality attributes include individualism, equality, rights and privileges, self-assertion, and change; traditional Japanese personality attributes include collectivity, hierarchy, duty, deference, and endurance. ENDNOTE: 1 Though oversimplified, such constructs may suggest why Americans and Japanese have taken to the Net so differently.

As the technology was invented in the United States, it embodies--and to some degree, transmits--American values and displays an unmistakable American personality. Like American society, the Internet is boisterous and driven by individual choice, whereas group consensus is the guiding principle of the more reserved Japanese. Power and authority in the United States, as with the Internet, tend to be decentralized and horizontally dispersed; both tend to be centralized and vertically concentrated in Japan. Summarizes Rosen, in reference to the legal cultures of the two nations, "The American attitude is: that which is not specifically prohibited is allowed. The Japanese approach is: that which is not specifically allowed is prohibited." ENDNOTE: 2

This article considers how core cultural values and attitudes have influenced

development of the Internet in Japan and the United States. The approach involves overviews of Japanese and American history and contemporary society, followed by descriptions of Japanese and American Internet cultures. Japan's Internet culture is examined in three chronological stages: its initial slow takeoff, the ongoing "full speed ahead" phase, and its dynamic future course. Although the Internet continues to reshape American society to a remarkable degree, these changes represent extensions or magnifications of existing American values and institutions. For Japan, however, the 1990s were a decade of profound social, political, and economic change. The Internet did not cause the sweeping changes described below, but it has become intertwined with them in a positive feedback loop. The myriad forces now transforming the fabric of Japanese society are proving receptive to the fuller adoption of Internet technology, which is propelling the broader process of cultural transition.

## AMERICAN HISTORY AND SOCIETY

Using history to interpret differences between Americans and Japanese is not uncommon, and sketches of U.S. history typically begin with the arrival of the Mayflower in 1620. Fleeing religious persecution by the British monarchy, the Pilgrims formed the Massachusetts Bay Colony in order to freely practice their own brand of Christianity. In 1776, the urge of the thirteen American colonies for autonomy and self-determination produced both the Revolutionary War and a highly decentralized confederation of self-governing states that enshrined freedom of choice as a fundamental value. Along with the Declaration of Independence, the U.S. Constitution and its unprecedented Bill of Rights display the full flowering of basic liberal concepts some two centuries in the making.

The distant origins of today's Information Revolution can be traced back to the Renaissance in sixteenth-century Europe. Rationalism and secular humanism initiated the decline of the theocentric Age of Faith and the rise of the anthropocentric Age of Reason, leading to the relentless ascendancy throughout the Western world of science and technology. They also gave rise to the related ideologies of liberal democracy and market capitalism--that is, to modernity. Liberalism itself represents an attempt to apply to human society natural laws such as those governing the physical world. Whereas kings and queens previously were believed to possess "divine rights" or heavenly mandates to rule, liberalism holds that political sovereignty resides within a nation's individual citizens and is best exercised by means of electoral democracy. (In the United States this franchise was at first extended only to landowning white males.) Liberalism is further distinguished by its twin tenets of limited government by voluntary social contract and expansive individual liberties, prominent among them the "natural right" to private ownership of property.

"The government governs best that governs least," according to an American political adage. In the economic sphere during the 1800s, the industrializing United States adopted a laissez-faire system of private enterprise that rejects market protectionism and intervention by the state, except in cases when the "invisible hand of government" is needed to ensure fair competition by breaking up monopolies. Geography has also influenced American history and helped shaped the national character. The aggressive and frequently violent settling of

the western frontier reflected the spirit of self-reliance and rugged individualism embodied by the cowboy, usually with tragic results for the Native Americans already living there. The frontier provided an outlet for antiauthoritarian impulses; discontented individuals and persecuted groups could move farther west in order to express themselves freely or just be left alone. America became a mobile, restless, and often unruly society of European immigrants in pursuit of their collective "manifest destiny." The issue of slavery was merely the proximate cause of the nation's bloody Civil War of 1861--65; the deeper division concerned whether the locus of power was to be dispersed among state capitals or concentrated in Washington, D.C. The Union won the war, but the central government's activity remained limited until the Great Depression of the 1930s necessitated massive federal spending for social welfare programs. World War II solidified this transfer of power and authority to Washington, a phenomenon made permanent and even more pronounced during the Cold War with the establishment of the "national security state."

Today, American society retains many features displayed during its formative stages. The relationship between the rulers and the ruled can still be described as essentially a democratic, "bottom-up" one, meaning that power originates within the citizenry and is expressed in an upward manner. There exists a streak of populism and informality that scorns most class-based distinctions. Grassroots activism and a vigorous spirit of volunteerism are alive and well.

America remains arguably the most ethnically diverse and culturally pluralistic place on earth, the "land of opportunity" and second chances symbolized by the Statue of Liberty. The United States will never be a utopia, however. On the downside, cultural critics claim, rights are exercised with an absence of responsibility and liberty has degenerated into license. Constitutional free-speech guarantees, for example, protect robust political expression as well as the most outrageous hate speech and hardcore pornography. The right to bear arms has produced a nation awash in guns, and high rates of violent crime have been tolerated since the nation's inception as being an unavoidable product of human nature. America imprisons and executes far more of its citizens than does any other industrialized democracy. The income gap between rich and poor, historically always large, has widened, and the number of homeless people has climbed. Particularly anathema to classical liberalism is state-sanctioned redistribution of wealth or government-enforced equality of economic condition, such as practiced by socialist systems. Instead, by limiting government interference in the private sector, it is believed that wealth naturally accrues to society's most enterprising, rational, and therefore deserving members. (Today, confusingly, these classical liberal concepts have come to be identified with right-wing "conservatives," while left-wing "liberals" espouse more socialist ideas.) Americans still lack national health care.

Since the Reagan era, the nation's social, political, and economic mood has grown increasingly conservative. The welfare state has been rolled back and the economy thoroughly deregulated, while the downsized federal bureaucracy is being run more like a private-sector business. A highly individualistic strain of political thought known as libertarianism has tapped into society's primal fear of a totalitarian "Big Brother" and opposition to intrusive government activity (including,

for libertarians, income taxes and the census). Such sentiments resonate deeply with Americans concerned about potential government control of the Internet, says Rosen. "Libertarianism is grounded in a basic distrust of government, a mindset shared by many heavy users of the Net and solitary arms collectors living alone in the woods. The government is out to take my guns, my tax money, my modem--these are essentially the same arguments."

## AMERICAN INTERNET CULTURE

The Internet truly came of age in September 1998, when millions of people across the globe logged onto the World Wide Web to directly view, in its graphic entirety, the so-called Starr Report, accusing U.S. President Bill Clinton of impeachable misconduct. Congress cemented the impact of the Internet by releasing the lengthy text of the prosecutor's report online, while nongovernment sites offered recordings of related private telephone conversations, even though the president had not yet been convicted of any crime. "For the first time ever," one commentator observed, "people were able to bypass the conventional news media and digest information about a major news story directly from the source. No third-party editing, no extraneous opinions and no bias, except that of the original report."

The episode showcased the Net's unmatched capability for disseminating information Americans believed the public had a right to know. Yet the sheer overload of unmediated information raised philosophical questions about the right to privacy and the new technology's role in the political process: "And while many of us certainly know more 'facts,' are we really better informed? Likewise, the rush to post on the Internet can lead to serious inaccuracies," the commentator noted, foretelling the Internet's contribution to the 2000 U.S. presidential election fiasco of too much underchecked data. "Imagine the herd mentality at the speed of light." ENDNOTE: 3 The U.S. government has done an outstanding job of promoting Internet development by staying out of the way, by keeping regulation of fledgling New Economy industries to a bare minimum and deferring to private-sector leadership. The real groundwork for the IT-led record economic growth of the 1990s was laid during the 1980s, when the government forcibly dismantled the massive Bell AT&T telephone company on antitrust grounds. Thanks to a radical deregulation measure known as the Telecommunications Act of 1996, telecom companies can offer any products or services in any market sector and at any price, thereby ensuring that fierce competition and low prices will prevail. Washington wielded its not-so-invisible hand again in the late 1990s, ruling that Microsoft's market dominance was unfair and ordering the company split up. (The American regulatory philosophy is thus the near-opposite of Japan's. Infrequent intervention by the U.S. government assists smaller newcomers by preventing monopolist practices; the constant involvement of Japanese bureaucrats favors giant corporations and discourages new market entrants.) The nation's deregulated financial sector pumped billions of dollars in venture capital investment into technology firms of all descriptions, stimulating entrepreneurial innovation on an unprecedented scale.

The government also set a pro-IT example within its normal sphere of activity. Use of the "Information Superhighway" became the centerpiece of Vice President

Al Gore's National Performance Review, an administrative reform drive initiated in 1993. By 1997, Congress was informed that some 42 federal organizations were operating as many as 4,300 home pages, and about 1.7 million federal employees (nearly half the total) had email addresses. More than 360,000 Americans filed their federal income tax returns by email that year, while the State Department's home pages were drawing up to 70,000 hits a day.

Meanwhile, at the local level as of 1997, the Association of Bay Area Governments in northern California had linked 69 cities, 8 counties, 25 special districts, and more than 90 school districts (said to be among the world's best electronically equipped) in an online system designed to increase government efficiency. Bay Area business, government, and community collaboration produced the "Smart Valley" project, promoting the new concept of telecommuting as a solution to traffic congestion and other problems. For most of the 1990s, free Internet access was available in public libraries throughout the United States. For home dial-up users, cutthroat competition between Internet service providers (ISPs) led to fees for unlimited usage of around twenty dollars per month, with local phone calls to ISPs being subject to low flat rates.

In an enormous boost for e-commerce, the congressional Internet Tax Freedom Act continues to ensure that online purchases are exempt from sales tax. (This situation may be destined for reform after 2003, however, as it drains municipal tax coffers and discriminates against conventional retail stores, where shoppers frequently go to physically inspect merchandise before ordering online from home.) E-commerce represents an extension of the American consumer's comfort zone, as it meshes well with the efficiency-driven shopping paradigm of low overhead and the cheapest possible prices, as well as with the established practices of shopping by mail order catalog and paying by credit card. Entertainment-related purchases, such as books and music from Amazon.com, were among the first to take off in the area of B2C (business to consumer) sales.

Eliminating middlemen through a process of "disintermediation," the Net also superseded financial broker services for stock trading and travel agent services for making airplane and hotel reservations, as Americans' do-it-yourself mentality easily blended into book-it-yourself, online. U.S. companies of all sizes quickly realized that besides streamlining retail distribution and increasing revenue, information technology could improve worker productivity and cut costs, especially for business to business (B2B) transactions. IT-derived increases in productivity became a main engine of U.S. economic expansion. (Somewhat ironically, in the mid-1990s American workers pulled ahead of their Japanese counterparts, long the industrialized world leaders, in the number of hours toiled per year.)

The overall sequence of diffusion of American Internet usage was from the military (the technology's distant 1960s Cold War origin) to universities (which began linking up to academic databases in the '70s) to businesses and individuals (who were logging on in earnest by the early '90s). Popular ISPs such as America Online enabled the general public to connect with each other in virtual chat rooms, and individuals freely spoke their minds via personal home pages, which at first seemed slightly skewed toward UFO abduction accounts and various conspiracy theories. Demographically, "early adapters" were mostly males in the

18--34 age range, but usage soon spread to American females and senior citizens, groups that by global standards were already broadly empowered. SeniorNet, started in San Francisco in 1986 and dedicated to teaching computer skills to senior citizens, today has 39,000 members in 220 learning centers across the United States. The early success of this nonprofit organization was possible because American seniors enjoyed an existing tradition of vigorous post-retirement activity and volunteerism. When Senior Net Kurume commenced operations fully ten years later, by contrast, the small local group was considered progressive for Japan. ENDNOTE: 4

A glance at Internet history (recounted by time lines linked to the Internet Society's Web site, [www.isoc.org/internet/history](http://www.isoc.org/internet/history)) confirms that, early on, most users were American and most tech breakthroughs (as well as e-commerce) involved U.S. companies. This was not coincidental. The United States benefited from a "cultural head start" on the IT revolution because the necessary social, political, and economic conditions were already solidly in place. Nor did these conditions occur randomly; they were outgrowths of American values and attitudes. The United States will likely remain the world's premier Net nation for as long as American-style values continue to underpin the technology. "Unlike the hierarchical structure of Confucianism, which continues to influence Asia, decentralization is basic to the American ideal of the Internet," asserted Rosen, referring to a liberal theme infusing U.S. Internet culture. "To date, the American attitude toward the Internet has been to break down hierarchical barriers, to separate oneself from the control of institutions. ... This ideology is as foreign to Japan and other Confucian-based nations as sashimi might be to the Nebraska Association of Cattle Ranchers."

## JAPANESE HISTORY AND SOCIETY

Throughout the uncommonly peaceful Edo period (1603--1867), Japan was ruled by the Tokugawa military government, which tightly controlled virtually all domestic activity. Foreigners, except for the handful of Dutch confined to Nagasaki's Dejima trading post, were expelled and the nation was officially closed in 1630, a policy facilitated by Japan's island geography. Power became concentrated in the new capital of Edo (present-day Tokyo) and was exercised in a "top-down," vertical manner; obedience to authority was absolute. Confucianism, imported from China centuries earlier, came to be expressed through a feudal system composed of four hierarchical classes, between which there was very little mobility: samurai, farmer, artisan, merchant. Political sovereignty belonged to the emperor, believed to be of divine descent, but successive Tokugawa shoguns ruled in feudal fashion by imperial mandate. Individuals possessed no rights or liberties in the Western sense. The collective system of wet rice agriculture, introduced from the Asian continent via Korea more than a millennium before, made group harmony and cooperation indispensable. A reaction to the arrival in 1853 of U.S. Navy Commodore Perry's "black ships" and the threat of forcible colonization, the Meiji Restoration marked the beginning of Japan's amazing modern history. The nation abandoned two centuries of isolation and industrialized at a frantic pace by adopting European and American technology, becoming a major military power in a few decades.

Japan today is a key and respected member of the global community. It is a liberal democracy with a full set of individual rights guaranteed by its postwar constitution. Nevertheless, it has been called a "spectator democracy," as the basic relationship between the individual and the state remains quite unlike that in the United States and Europe. The flow of information between the government and citizenry, for example, is much more restricted than in the West. As of late 1997, it took only three hours for minutes of U.S. congressional proceedings to be posted on the World Wide Web, but in Japan it required three weeks for parliament (or Diet) reports to be made public--and then only in printed form. Private individuals were not allowed even to make photocopies of political fund-raising reports. Grassroots demands for fuller disclosure of public information about environmental pollution, retirement payments to former bureaucrats, police scandals, and other matters prone to government secrecy and cover-ups led to the enactment in 2001 of an information disclosure law. (The U.S. Freedom of Information Act, a landmark development in the history of democracy, has been used to pry loose American government secrets since it was passed by Congress in 1966.)

Organized into compliant Tokyo-based "press clubs," the Japanese media tend to report government and corporate press releases nearly verbatim. In the area of interpersonal communication, because "the nail that sticks up gets hammered down," the Japanese are well known for appearing subdued. This can be seen in the contextual, indirect, and hierarchical character of the Japanese language, which requires the listener to infer various nuances of meaning; in the more direct, Western model of discourse, it is the speaker's job to make the meaning clear and unambiguous. The opaque nature of information within Japanese society, along with cultural traditions discouraging vigorous individual expression, helped create a climate not immediately receptive to the Internet.

Japan also remains the world's second-largest individual economy, despite three recessions during the "lost decade" of the 1990s. But unlike the U.S. and Britain, Japan "never embraced a free-market economy. Despite defeat in World War II, it retained its old economic system: massive industrial development directed by government ministry." ENDNOTE: 5 Japan's centrally managed economy posted tremendous export-led growth during the Cold War period, enriching the country as a whole but frequently benefiting producers at the expense of consumers.

The model also bred rampant political corruption and a government dominated by a powerful but nonelected national bureaucracy. From resident registration requirements to onerous vehicle safety inspections, the state's role looms large in most areas of Japanese life. On the positive side, Japan's current record-high unemployment rate is still low by Western standards. The nation is famous for its excellent public safety and low violent-crime rates. There are fewer homeless people than in other industrialized nations, and the income gap between rich and poor is much smaller than in the United States. Most Japanese seem generally content with their big government and its activist policies, which have resulted in an approximate equality of condition for the vast majority. As Heilbrunn notes, "The consensus society that exists in Japan would be overturned by adopting the U.S. [economic] model. In Japan, the economy functions as a



buffer against the kinds of social forces the U.S. takes for granted." But just as clearly, Japan's group-first model has discouraged the type of individual initiative and entrepreneurial risk-taking that have energized IT elsewhere.

The pace and scope of changes now resculpting Japanese society must be strongly emphasized. Corporate bankruptcies and emergency restructuring have ended the postwar employment-for-life system, raising serious questions about how the country will provide future social services for its rapidly aging population. Marriage for life is falling by the wayside too, prompting regular bouts of national soul-searching about the collapse of traditional morality. There is deep concern about horrific juvenile crimes, skyrocketing drug use, and plummeting educational standards. Forced into a series of coalition governments, the "old boys" of the Liberal Democratic Party no longer rule Japan unilaterally, as a proprietary fiefdom. The silver lining of this rather destabilized situation is that long-held assumptions are being challenged and a plethora of "public-centered" reforms are being implemented, holding out the promise of a less regulatory and Tokugawan, more open and efficient Japan.

Government agencies, for example, are phasing out the use of personal name seals, a particularly low-tech practice, in an effort to reduce the country's notorious red tape. A general relaxation of information controls is under way as well. In 1998, the Justice Ministry for the first time announced the executions of three condemned prisoners on the same day the sentences were carried out, and the Transport Ministry started making available on the Internet aircraft accident reports that were previously off-limits to the public. Born of economic necessity, an easing of various market-entry restrictions has given Japanese consumers more choice, and therefore clout, than ever. Japanese society can still be described as pyramidal, but the distance between the apex and base is decreasing.

## JAPAN'S INTERNET CULTURE

"The information technology (IT) revolution has finally hit, according to television program lead-ins and headlines flaunted by nearly every newspaper and magazine in the country," remarked an American observer of Japan's Internet scene in 2000. "Perhaps we are wondering: Why wasn't this the case ten years ago?" ENDNOTE: 6 One reason is Japanese society was not yet ripe for revolution; the cultural infrastructure for widespread Internet usage was not yet in place. The result was half a decade of IT stagnation and a staid cyberculture that has only recently begun to evolve along more free-spirited Western lines. The Japanese government rightly deserves blame for interference and weak leadership, as it did not approve the nation's first commercial ISP until 1993, insisting until then that the Internet should be reserved for academic use only.

A deeper cause of the Japanese Internet's slow takeoff phase was the "penetration of bureaucratic thinking and predispositions into both the public and private sectors. Those in both sectors tend to shy away from taking risks and avoid sticking their necks out because of a strong sense of conformity." ENDNOTE: 7 (A joke poses the question, How many Japanese bureaucrats does it take to change a lightbulb? Answer: Change?)

Most crippling to the infant Internet was the failure to ensure real competition in the crucial telecommunications field, where the privatized NTT phone company still resembles the government monopoly it long was. From the 1970s until just last year, NTT's metered-rate local telephone service cost ten yen per three-minute increment, meaning that one hour per day of Web surfing cost about fifty dollars per month in non-ISP phone charges alone. Under intense public and political pressure (high NTT rates were the major Japan-U.S. trade issue in 2000), NTT has trimmed its metered rate by 12 percent and introduced various schemes for reducing Internet connection costs. Still, the company continues to be fingered as the main reason why Japan was fourteenth in the world in terms of Internet penetration in mid-2001. (The United States was second; Sweden was first.) NTT is also dramatically downsizing its workforce--a sure sign that the long-standing "social contract" between government, big business, and labor has become null and void.

In Japan and much of Asia, moreover, information (the very I of IT) tends to be carefully controlled by those in authority, and there has never been a democratic tradition of information transparency or the public's "right to know." Western journalists frequently refer to "cultural barriers that have slowed (the Internet's) adoption in Japan. In a nation where hierarchy, order, and seniority are powerful forces, and where information is more likely to be brokered than shared, the freewheeling architecture of the Internet is deeply unsettling." ENDNOTE: 8

While labeling Japanese people less expressive than Americans may be neither fair nor accurate, Japanese modes of expression can be less conducive to dissemination via the Internet. Compared to their brashly demonstrative American counterparts, Japanese groups are also more likely to be passive receivers than active producers of information. "The reluctance of major Asian organizations to put important information on their Web sites ... has resulted in a largely one-flow of information, from America to Asia." ENDNOTE: 9 Japanese corporations and government agencies prefer to manage information through the filter of public relations campaigns and an obedient mass media. "Something as direct as the Internet and e-mail has [the government and large companies] a little concerned about how best to project their image in this new medium, and so they are being slow to develop Web pages the public is demanding." ENDNOTE: 10 The shortage of Japanese-language Net content was even blamed for a 1997 slump in personal computer sales, with one newspaper headline declaring, "Unfulfilled Internet expectations drive consumers out of home PC market."

Japanese business culture, driven by a group-consensus management style, was similarly lukewarm to IT at first. Epitomized by the ritual exchange of business cards and frequent meetings, face-to-face personal contact is indispensable. "Japanese rarely even make decisions over the telephone; making them over e-mail will be a revolution indeed," according to Harai. Working on computers may deprive the Japanese of their familiar decision-making process, as well as a sense of trust and solidarity." ENDNOTE: 11 (Foreigners living in Japan notice many Japanese decline to leave messages on "faceless" telephone answering machines. Then again, Japanese rarely screen their phone calls) Due to "keyboard phobia," Japanese businessmen in senior management positions

were reluctant to use computers at all, although in their defense the standard English keyboard is singularly unsuitable for inputting the Japanese language's 2000-plus kanji characters. PC penetration of offices remained low, as the workplace structure was quite different from the American model of "one person, one computer."

Partly the result of its symbiotic relationship with the governing bureaucracy, Japan's conservative business culture typically overanalyzes new ideas that might upset the existing harmony of interests, thwarting bold risk-taking by Bill Gates--type individuals. So it is unsurprising that e-commerce was not an overnight sensation in Japan. Producers hesitated to challenge the elaborate web of distribution networks, while consumers (few of whom owned credit cards or had ever ordered merchandise by phone) remained willing to pay extra for meticulous product packaging and sales floors overstuffed with bowing clerks. The Internet, by contrast, values function over form, substance over style.

Japan's national weakness in English played a role in early resistance to the Internet, and opposition to the online spread of English and U.S. mass culture arose. French President Jacques Chirac called English domination of the Internet a "major risk for humanity: linguistic uniformity and thus, cultural uniformity." An anti-American, anti-Internet backlash developed in some circles. "Instead of seeing a small world of multiculturalism, many foreigners view the emergence of the Net as another tool of American cultural imperialism." ENDNOTE: 12

Expressing similar fears that "the whole world would become a cultural colony of the United States" due to English online, Toru Nishigaki of Tokyo University called for a kanji-based "Asian cultural zone" composed of Japan, China, South Korea, and Taiwan. An unpublished 1996 master's thesis by a Japanese student at American University in Washington, D.C., was ominously entitled, "A Dangerous Road: Information Superhighway as Cultural Imperialism?"

In other cases, however, Japanese critics of the Internet were the same entrenched bureaucratic forces opposing the unmanageable change of globalization in general. (Because globalization, both a cause and an effect of Internet diffusion, has come to be most strongly associated with market capitalism and liberal democracy, it is being pursued most eagerly in its "native" Europe and the United States, and meeting greater resistance in Asia, where the ideologies are most "foreign.") "Even without any government interference, Japanese are just less likely than Americans to become enthusiastic about isolating themselves from face-to-face contact in the name of 'progress,'" offered Rosen, referring to a soft cultural barrier that bogged down Net growth. For the first half of the 1990s, it was not easy to get online in Japan, and there was not much to do there anyway.

## FULL SPEED AHEAD

The tradition-bound world of Buddhist funerals supplied a sign of Japan's new Internet mind-set when a temple in Nagoya recently began offering online grave visits. Relatives unable to visit the temple in person can view computer images of urns containing ashes of the deceased, along with photographs and memorial inscriptions. "For the first time since the Meiji Period, when thousands of new

businesses were spawned in a rush to modernize, the country is marshalling its resources to catch up to the West and build a new Japan," declared one observer. "At this early stage, Japan is experiencing entrepreneurial drive it hasn't seen for 125 years." ENDNOTE: 13 Different aspects of the Japanese character have surged to the forefront, namely a natural inquisitiveness and willingness to try new things. The appearance of a Japanese version of the Microsoft Windows 95 operating system, along with Japanese Web browsers and search engines, and the entry into the workforce of the "Nintendo kids" tech-savvy generation helped spark the ongoing Internet boom.

Bit Valley, otherwise known as Tokyo's Shibuya district, emerged as the center of a newly innovative, hard-charging Japanese IT industry. "The risk-averse label often applied by outsiders to Japanese business no longer fits the multitudes of Japanese students and others who gladly pass up the safety of long careers with traditional corporations to make it big on the Internet." ENDNOTE: 14 A host of stodgy, long-accepted practices are being superseded by more flexible arrangements. University applications are being submitted online and graduating students are contacting prospective employers directly by email, threatening to render obsolete the "recruitment season" system preferred by corporations and colleges. Online employment agencies are doing brisk business in the previously nonexistent field of midcareer job hunting, though many Japanese remain bashful about posting their resumes online. Hikari Tsushin is still the exception, but the high-profile tech company may offer a glimpse of the Japanese workplace environment to come: younger employees, greater gender balance, more foreigners, performance-based compensation (including stock options), streamlined management structure, and altogether less formal. ENDNOTE: 15 (Business suits became nearly extinct in California's Silicon Valley, which would soon lose its high-tech leadership position if the overseas brain drain into the United States of mostly Asian computer engineers were to cease.) The "bamboo ceiling" that blocks female Japanese from career advancement in old-line companies is less applicable to Internet-related fields.

No longer dragging its feet, the central government is now actively setting the tone. The e-Japan package will thin out the thicket of laws hindering e-commerce, expand PC use in public schools, permit electronic payment of income taxes, and invite thirty thousand foreign tech experts to work in Japan (a nation that historically has not encouraged immigration). The Home Affairs Ministry is studying an electronic voting system using computerized polling stations, while the Construction Ministry has introduced a Net-based bidding system for public works projects, a particularly graft-ridden arena that could benefit from increased efficiency and transparency. Businesses and individuals were allowed to have more than one Internet domain name beginning last year, a practice that was never restricted in the United States.

Financially, stock market reforms have drastically altered the technology investment environment. The Tokyo Stock Exchange opened the "Mothers" market to facilitate initial public offerings for New Economy start-up companies in 1999; Nasdaq Japan commenced trading the following year. Neither market has prospered, but much-needed mechanisms for providing capital liquidity are now in place, as it previously took thirty-four years on average for a Japanese company

to offer public shares. Further deregulation of telecommunications and related sectors should eventually produce genuine competition for the first time, and foreign direct investment in Japan is at an all-time high. ("Many in the foreign community believe the current climate for doing business in Japan is the best it has ever been," Helweg confirmed in 2000.) The central government's numerous economic-stimulus packages have heavily stressed upgrading the nation's IT infrastructure, while local governments are working hard to promote Net use in the name of regional revitalization.

As for personal consumption, "Years of falling wages and rising unemployment have turned the Japanese into bargain hunters, even if they hate to admit it." ENDNOTE: 16 Paying close attention to the bottom line of retail price, this new breed of Japanese shopper is flocking to discount sushi shops, no-frills hair salons, do-it-yourself home centers, and "one hundred-yen stores" where every item costs roughly half-price. They are suddenly buying used furniture and secondhand comic books (avidly read by millions of adults). In fact, thanks to sales promotion extended due to popular demand, during weekdays McDonald's hamburgers are now cheaper in Japan than in the United States. Costco and Uniqlo are two low-overhead, super-discount stores doing brisk business in this new retail environment, which is much more hospitable to e-commerce. "Japan is what you might call a middleman economy, and if there is anything the Internet is great at, it's killing off middlemen. Whether it's banking, retailing, or health care, the Internet will lower transaction costs, reduce the number of workers, and streamline communications." ENDNOTE: 17

Amazon.com opened a Japanese site for books and music in 2000; online sales of outdoor sporting goods and computer software have also been promising. Yet e-merchants still employ offline promotions in print magazines and have reported the need to "Japanize" Web sites with cartoon mascots and fast-loading pages to compensate for high Internet connection fees. According to Shibata, online business-to-business activity took wings when major corporations "finally realized that whether or not they jump on the e-commerce bandwagon is a matter of life or death. ... Whole business sectors and industries followed suit." Electronics manufacturer NEC today uses the Internet for 90 percent of all procurement activities. Tokyo Electric Power Co. uses the Internet for all its procurement and construction contracting activities with some five thousand companies. It is pushing for establishment of an "e-market" where companies in various business sectors can buy and sell materials, parts, and equipment online.

The tide of transition presently engulfing all of Japanese society is essentially one of individual empowerment. Among the various facilitators of this change, "Most exciting is the Internet, which gives individuals the opportunity to slash through a rigid and hierarchical society that favors incumbents and vested interests." ENDNOTE: 18 The Internet is a vital vehicle for this nascent individualism, the main causes of which are economic (the implosion of the largely anticonsumer "Japan Inc." model) as well as political (a burgeoning citizens' desire for more complete benefits of democracy). "Entrepreneurs are not the only ones empowered," the article continues. "Disgruntled consumers are fighting back against giant corporations via the Web, activists are posting the record of politicians online and organizing voter forums, and NGOs of all stripes are

networking across the country and around the globe." Indeed, the implications for the Japanese body politic may be the most far-reaching.

"Political grousing does not come naturally to the Japanese," noted Newsweek. "But with the advent of the Internet, the country's PC generation is beginning to speak its mind." ENDNOTE: 19 Younger people, especially, are taking advantage of the Net's low "entry barriers" by venting steam about politics in live chat rooms and email discussion groups. One interactive site now broadcasts live sessions of the national parliament and even allows users to rate Diet members' statements on a scale from "boo" to "bravo." Web-wise and wildly popular, Prime Minister Koizumi is appealing to more serious constituents via his "Koizumi Cabinet E-mail Magazine," which has forged new channels of communication that might be shifting power away from political parties and toward citizens, turning them into participants as opposed to spectators. "Made in a medium with unlimited potential for rapid, low-cost interactivity, where feedback is as easy as a click of the mouse, this pledge [by Koizumi] to listen to the Japanese online public may foretell greater access to politicians and more transparency in their policies." ENDNOTE: 20 The economic stagnation and political turbulence of the past decade, along with the steady evolution of Japanese attitudes, helped lay the groundwork for full-scale adoption of the Internet.

#### JAPAN'S WIRELESS FRONTIER

Although rapidly advancing along broad American lines, Internet usage in Japan remains distinct. "It is clear that Japan has not accepted outright the U.S. Internet model developed over past years. Instead, it is tailoring the digital economy to fit its needs." ENDNOTE: 21 One thing the average Japanese Netizen apparently does not need is English; in 1999, 95 percent of links on Japanese WWW servers pointed to other Japanese sites. Outside communications may not be necessary either, as something resembling a vast national intranet or domestic LAN may be taking shape. Even PCs are not mandatory, for the mobile telephone is fast becoming the preferred platform for going online. In Japan and elsewhere, the meteoric rise of the wireless Net phone will affect both the physical architecture of the Web and the nature of cyber-activities.

The number of subscribers to i-mode, NTT DoCoMo's relatively low-cost mobile Internet service, topped thirty million--fully one-quarter of Japan's population. From one end of the archipelago to the other, "Kids are e-mailing one another pictures of Hello Kitty, the cloyingly ubiquitous national feline. Teenagers are building networks of i-friends that they e-mail but never see. Office workers are trolling online, looking for love." ENDNOTE: 22 The mostly younger, fashion-conscious users customize their easy-to-operate Internet phones with distinctive ring-tone melodies, colorful screen wallpapers, and trendy straps with multiple charms. Fully "pocket portable," the i-mode phone remains constantly connected to the Internet (or "Evernet"), eliminating the need for a separate dial-up ISP. Data transmission, on the downside, is much slower than with a PC modem connection, so emails must be kept short and surfing is limited to simplified, specially formatted Web pages that can be viewed on the tiny cell phone screen. DoCoMo (a maverick NTT subsidiary whose name stands for "Do

Communications over the Mobile network" but also means "anywhere" in Japanese) is doggedly overcoming these early limitations, while forging alliances with U.S. and European telecom companies in hopes of exporting i-mode worldwide. Potential markets could be huge; a wireless Asian Net phone would greatly appeal to countries such as China and India, where installing fiber-optic cable is logistically problematic. The i-mode "mobile data service" could even turn out to be the leapfrog, world-beater technology that Japan has been desperately seeking.

In the meantime, Western detractors of the Internet phone have been easy to find, and their criticism frequently displays a normative bias concerning how the Internet ought to look and function. According to a longtime American observer of Japan's IT scene, large blocks of Japanese cyberspace in late 1998 consisted of "fare such as making jigsaw puzzles with ActiveX, sending virtual pets by e-mail, and other applications that could only be characterized as, well, childish. This 'Internet as toy' or 'Internet as plaything' mindset is still deeply rooted in Japan." ENDNOTE: 23 The Net phone has come a long way since then, but in 2000 the same i-mode critic could still point out that there are numerous subscribers "who are counted as Internet users, but who do little more than send simple e-mail messages and play with entertainment-oriented services within DoCoMo's network of pushbutton information providers. ... Most of these people are simply playing with their telephones," often unaware they are using the Internet at all. ENDNOTE: 24 In fact, DoCoMo (by far the largest of Japan's three wireless Web companies) carefully avoided using the word Internet in early marketing efforts, and i-mode employs a "walled garden" approach to Internet content that has previously struck out with Westerners.

Yet the runaway success of what may be termed "Internet lite" is obviously not inappropriate from the perspective of Japanese themselves. The cultural disconnect stems partly from the fact that most Japanese are now getting their first taste of cyberspace via a cell phone handset. For Westerners who have enjoyed fast, cheap Web access for years, the Net phone requires a downgrading of expectations and resembles a whiz-bang solution in search of a problem. "To Web-surfing Americans, i-mode may seem like a step backward," explains Sakamaki. "Their PCs can do and see a whole lot more than the i-mode-loving Japanese can find on their little phones. But i-mode isn't designed to compete with the desk-bound Web." Instead, Net phones and Net PCs are different animals, serving different needs for different audiences. Underwhelmed commentators have tried to supply reasons why i-mode has caught fire in Japan but would never work in the West: "Japanese consumers take readily to gadgets, and because they travel frequently on trains, they have lots of idle time; i-mode is more of a time-filler than a tool." ENDNOTE: 25

That's changing and at wireless broadband speed. Last fall, DoCoMo rolled out its "third-generation" (3G) Internet-enabled cell phone, boasting far faster data transmission and improved functionality. Since DoCoMo's existing garden of "second-generation" i-mode Web sites continues to flourish, the company is now poised to revolutionize the Internet by delivering real-time, location-specific content on the fly. The Net phone is no longer just CNN news headlines in Japanese, baseball scores, local weather, and bullet train schedules. It is also

mobile banking and stock trading, as well as interactive road atlases that will suggest alternative routes during traffic jams and perhaps even locate and pay for a parking space downtown. "L-commerce" (the location-dependent subset of e-commerce) will enable users to browse restaurant menus and department store sales while strolling the sidewalk outside, or read a consumer product review while shopping inside. (Americans are generally more sensitive than Japanese to this location-monitoring technology's potential for unsolicited "drive-by marketing," and they are more concerned about potential threats to personal privacy and perhaps even liberty.) Speed-sensitive data can be especially handy. The Internet phone can notify users when tickets to a sold-out concert suddenly become available, or when a rental apartment matching the subscriber's specifications is listed.

A key feature of Japanese e-commerce is a streamlined billing system in which itemized charges, for various Web services or actual merchandise, automatically appear on the subscriber's monthly DoCoMo phone bill, neatly sidestepping the security phobia many Japanese consumers have about sending credit card numbers out into cyberspace. (Phones can even be used to buy colas from "smart" street-corner vending machines, in a related application of the "electronic wallet" concept.) Products ordered through i-mode can be delivered directly to one's home, or to a neighborhood convenience store for later pickup. In yet another Japanese Net twist, merchandise can also be ordered online at convenience stores using wired shopping kiosks and paid for at the familiar cash register. (Sony, Sega, and Nintendo, meanwhile, have each developed non-PC ways of interacting with the Internet using home video game consoles and quasi-TV devices.)

DoCoMo has become Japan's most valuable company, eclipsing Toyota and Sony, and its handheld Web represents the cutting edge of the country's Internet culture. Although 3G service is not yet available nationwide, the PC-like capabilities of the "visual phones" include two-way video conferencing and streaming multimedia. How about viewing a movie trailer while standing beside the theater ticket booth, or downloading and storing music for later listening with cordless earphones? Some Net phones have built-in digital cameras. All models can still be used for lower-tech activities like making telephone calls, and because the phones also tell time, legions of Japanese no longer wear wristwatches.

As Sakamaki explains, "To some extent, i-mode's success in Japan has as much to do with the peculiarities of Japanese culture as it does with the technology. In a place where eye contact and direct speech are avoided, a heads-down, thumb signaling device is a perfect communications instrument." This suggests that some of the more practical Net phone uses will eventually catch on with Americans; others, such as text messaging by means of a small, nubby keypad, will not. Japanese and American modes of oral conversation have been compared to the games of Ping-Pong and tennis, respectively. Ping-Ponglike "info bursts," or short requests for information and prompt replies, do describe the general i-mode data flow. Western reporters have attempted to explain the "adoption of this technology by tens of millions of Japanese. Japanese society--in both business culture and personal relationships--demands frequent communication, not just to convey essential information, but often just to reaffirm



that communication channels are open." ENDNOTE: 26

The explanation rings true, as does the typically pragmatic American counterpoint that "there is relatively less demand in the West for non-essential, trivial, 'touching base' communications." ENDNOTE: 27 These minor clashes of Internet culture are inevitable. "The culture of the Net may be set in America, but like American baseball and other cultural exports, it will surely be changed by its interaction with Japanese society and people," predicted Rosen in 1997, back when i-mode was still confined to the DoCoMo drawing board. "As Japan adapts to the Internet, it will adapt the Internet to itself. This will be yet another story of the reception of outside culture and technology, modified to fit local preferences." Turnabout being fair play, the same astute prediction will next apply to America's reciprocal embrace of the wireless Web, a field in which Japan is far in front.

## CONCLUSION

Sheer lucky timing aided the early, rapid development of American Internet culture. The end of the Cold War around 1990 and the subsequent rise of global interdependence made large swaths of the world suddenly eager for U.S.-style mass culture and political pluralism, which the Internet represents and helps spread. Record stock market growth fueled intense IT investment. For Japan, conversely, the Internet could not have appeared at a worse time. Major trading partners, no longer distracted by the Soviet Union, began forcing Japan to open its tightly protected domestic markets to foreign competition. The collapse of the nation's asset-inflated "bubble economy" triggered the severe stock market devaluation and monumental bad-debt banking crisis (which predated and has outlived the Asian financial crisis), meaning Japan could not afford to invest heavily in early IT.

Yet the nation's streak of bad luck also produced the gift of desperation, making leaders and citizens alike more willing to confront a wide range of problems that had been brewing for years. The bursting of the economic bubble in 1989, according to Pulitzer Prize--winning historian John Dower, marked "the moment when it became evident to all that while Japan had attained its single-minded goal of 'catching up' to the West economically and technologically, the vision and flexibility necessary for charting a new course were lacking. The system that had created the superpower was breaking down." ENDNOTE: 28 Just when Japan's state-directed capitalism quit working, underscoring the need for greater transparency and productivity and merit-based performance, IT presented itself. This convergence of timing involves a historic shift from agriculture and manufacturing to an information-based economy, which is requiring unprecedented social and political adjustments. Calling on the Japanese people "to reclaim their sense of sovereignty," the head of a Tokyo think tank urged "the cultivation of creative and dynamic young people who are indispensable to an innovative society. This new age requires a new elite." ENDNOTE: 29

Luck, nonetheless, may be defined as the intersection of preparation and opportunity. Cultural values played integral roles, handing the United States an unmistakable home-field advantage in adopting the Internet. Americans already possessed e-friendly attitudes and behavior and were very comfortable with the

Net's underlying assumptions of decentralization and deregulation. Thus free to focus on the technology and its mass marketing, the United States could capitalize on early IT circumstances as they unfolded. Indeed, the Internet--as it exists today, at least--could not have been invented anywhere else. A bedrock American belief is that individual empowerment is always desirable. According to Bill Gates, chief executive officer of Microsoft Corporation (and the richest man in the world): "The Net is, fundamentally, a technology that enables people to make their own choices--and connect with whom they want." Japanese society, on the other hand, has been bound by a web of public and private relationships that constrain choice, and "individuals tend to depend on groups (government, corporations, organizations, families) rather than themselves for the quality of their experiences." ENDNOTE: 30 As examined above, this occurs by means of centralization, regulation, management of information, and cultural predisposition for quiet conformity. Japan was underprepared for the Internet opportunity when it first appeared; several years were required for more e-friendly attitudes and behavior to take hold. (Numerous other nations with more traditional, non-Western values continue to grapple with philosophical questions concerning the social, political, and economic impacts of Internet development. These are questions that the United States, for better or worse, largely chooses to ignore.)

While in America the Internet is contributing to "more of the same" in terms of social change, in Japan there is a greater potential for transforming society along newer lines. Something more far-reaching than the adoption of new technology is afoot. "Japan's collectivism is what has been the core of Japanese culture. The high standard of education and low unemployment, crime and divorce rates all come from the Japanese sense of social responsibility," according to Harai. This collectivism is sometimes referred to as Japan's "membership society" model, in which members pay steep dues but receive considerable benefits in return. All four areas Harai cites have deteriorated at an alarming pace, however, as the characteristic Japanese response of treading water has not sufficed during the sink-or-swim situation. "In the past, this system was touted as a model for other countries to follow. But in the 1990s, it became evident that the system was maintained at the expense of consumers and could not adapt to the tides of change," notes Lee, in reference to the model's economic aspect. ENDNOTE: 31 The critique is highly applicable to the entire membership society approach, which produced among Japanese an "excessive dependence" out of sync with new global and domestic circumstances. Something closer to Western-style individualism, sometimes termed "personal responsibility," is rising from the ashes. "The Internet may not be directly responsible for the shift to personal responsibility in Japan, or for reducing the 'excessive dependence' [journalist and author Nobuhiko] Ochiai talks about. Concomitance doesn't equal causality. But it's fascinating to watch growth in Internet usage paralleling these trends." ENDNOTE: 32

Belatedly aware of the need for radical change throughout Japanese society, the prime minister's office appointed a blue-ribbon panel of top intellectuals and leaders to make recommendations, which were released in 2000. "The Japanese should become more independent, the commission said. More tolerant of people who veer from the norm. Less preoccupied with rules, peer pressure, and school tests. There should be more immigrants. And more lawyers. To some, it sounds

like Japan should be more like America." ENDNOTE: 33 It was also suggested that English be adopted as the country's official second language and that the voting age be lowered from twenty to eighteen. "We are really advocating a fundamental reorientation of society," the commission's director later explained. Although the Internet was not the focus of the panel's report, the technology by its very nature is quietly enacting such recommendations. Stated the president of the Internet Society in 1997: "The Internet has the same basic fundamental principles upon which the United States was built. So the Internet is, in fact, extending the United States' thinking and principles without intending to." ENDNOTE: 34

Japan's accelerating Internet revolution is just one symptom of a sweeping movement, but it is a singularly important symptom. A synergistic process of mutual reinforcement is at work: As Japanese society evolves, it is becoming ever more hospitable to the Internet, which is encouraging further social evolution. Japan's long-awaited Third Opening is under way, says Shibata, yet far from complete. "The nation will never witness (an IT) revolution while the public continues to show an inclination toward maintaining the status quo and shifting the responsibility to others, while seeking government regulations and protection and depending on the authorities for everything. That is because a revolution is a historical event that overturns everything, from society to people's lives and perceptions."

This is the new operating system being installed in today's Japan. Americans may tend to excessively pride themselves on possessing a "freewheeling, entrepreneurial style that mirrors the decentralized nature of the Internet itself. But there's a cultural aspect of Japan that we sometimes overlook: Though the country can appear static and convention-bound for long periods of time, it has time and again demonstrated an ability to make sudden, breathtaking leaps forward." ENDNOTE: 35 For Japan's Internet culture, this leap is currently in progress. Japan is now in midair.

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