The Middle East's Information Revolution

"It may be some time before the Internet becomes firmly entrenched in much of the Middle East. The obstacles to adoption, especially with the current technology, appear significant. But the information revolution has already arrived in the Middle East, and it poses significant challenges for the status quo."

JON B. ALTERMAN

The visionaries of the information age see a future in which mankind and machines are fused. Computers, telephones, and pagers will morph into a single appliance, while everything from refrigerators to washing machines will be connected to the Internet. We will become ever more enveloped in information, and we will be able to devote progressively more of our energies to purposive activities instead of the minutiae that crowd our present lives.

In painting such a picture, futurologists tend not to give much thought to whom the word "we" represents. They assume that "we" is shorthand for the world, or perhaps more narrowly the developed world, or even more narrowly still, the very rich in the developed world. They pointedly do not concentrate on the technologies available to the vast portion of the world's population, or those technologies most likely to be adopted.

In the Middle East, it would be a mistake to predict that the bulk of the region's people will be "wired"—connected to the Internet and other interactive communications, constantly sending and receiving signals through the electronic ether—anytime soon. But it would also be a mistake to assert that the Middle East is beyond the reach of the information revolution enveloping the developed world. Fax machines, videocassette recorders, and photocopiers are found throughout the region, and are even reaching into the villages. Indeed, the Middle East is undergoing its own information technology revolution—it is simply different than that occurring in the West.

"NET" GAINS?

The United States has been a pioneer both in developing the Internet and in adopting it for popular use. In the 1990s the "net" went from being a mode of communication for a small number of hobbyists, scientists, and educators to being something akin to a national craze. A large number of advertisements now sport website addresses for commercial sponsors, although the entire concept of the world wide web is little more than a half decade old.

A robust Middle Eastern presence can already be felt on the Internet. Middle East–oriented news-groups have existed for more than a decade, encouraging discussions on subjects as broad as Middle Eastern politics and as narrow as Algerian rai music. Middle Eastern chat rooms can also be found. Newspapers from throughout the region have begun maintaining a presence on the web, often posting the contents of their newspapers free of charge. *Ha'aretz,* an Israeli newspaper that publishes in Hebrew, posts an English-language version of its newspaper on its website daily. Even radio and television stations have taken to the web, and in the last few years an increasing number have begun webcasting their programming.

> Satellite television and the Internet in the Middle East allow expatriates living in the West to play an intimate role in their homelands' cultures.

Governments and organizations also host websites, and many sites run by expatriates link to many sites involving their home countries. The Muslim Students Association, an American collegiate organization, maintains an impressive news website that has links to sites throughout the Muslim world (msanews.mynet.net/Launchpad/index.html). Explicitly religious organizations have taken to the web as well. One recently launched site, Islam Online (www.islam-online.net), offers net-surfers the ability to solicit a custom-tailored religious decree, or *fatwa,* in Arabic or English. Political opposition groups have also taken to the web; Lebanon's Hezbollah maintains an active web page (www.hizbollah.org), as does the Saudi opposition group, the Movement for Islamic Reform in Arabia (www.miraserve.com).

Most of the Internet activity involving the Middle East is carried out by Middle Easterners residing overseas rather than in the region itself. In fact, the Internet has been embraced much more tentatively in the Middle East than in the United States and Western Europe. One barrier has been expense. Computers alone cost about $1,000, and on-line access in most Middle Eastern countries is approximately $30 a month, and in some cases much higher. While these costs may seem relatively affordable to many Americans, they remain out of reach to most Middle Easterners. Saudi Arabia, once one of the rich-

est countries in the region, has seen its annual per capita income decline from a high of about $24,000 in 1982 to a relatively paltry $6,500 today. In the most populous Arab country, Egypt, per capita income is even lower, at about $1,290 per year. Israel, with a per capita income of $15,940, bucks this trend, and accordingly has a higher level of Internet penetration.

Money is not the only barrier to the Internet in the Middle East. Using the Internet remains baffling for many, especially those who are not proficient in English. Technology is improving to represent foreign languages on the web (especially languages that are difficult to represent, such as Arabic, Hebrew, and Farsi), and a few Arabic search engines exist. But upward of 80 percent of the world wide web is in English, and in a medium whose utility is a function of its size and comprehensiveness, lack of a facility with English is a major drawback.

Language aside, personal computers in general and the Internet in particular remain difficult for novices to use. Typing is a slow process for many, and efforts to simplify interfaces collide with rapidly expanding operating systems that automate increasingly more tasks. Computers still crash, browsers cause internal conflicts, viruses proliferate, and hard drives decay over time. While these problems may be manageable in an environment where help is a phone call away, it can turn a computer in a developing country into a paperweight. In many developing countries, clusters of unused computers sit under dust covers, protected from users who might introduce some insoluble problem to the systems.

E-mail, which appears to be the primary use of the Internet in the United States, is typing-intensive and also offers somewhat less robust support for non-Western languages than the web. In some chat rooms, participants transliterate non-Western languages into the Latin alphabet, using commonly agreed on numbers for sound that do not exist in English. Such an approach underscores both the lack of support for less common languages, as well as the need to be at least moderately Western-language literate to participate.

THE INTERNET'S FRIENDS AND FOES

Governments in the Middle East have taken strikingly different approaches to the Internet. Some, like Egypt and Jordan, have been quiet boosters, building global Internet connections while promoting the establishment of local Internet service providers. The Egyptian government has promised not to monitor Internet activity, and the Jordanian government has encouraged universities to provide Internet services to students. In what may be a sign of tolerance (or a sign that Internet use remains the province of a small group of elites), Egyptian and Jordanian authorities have not intervened when newspaper articles banned by local censors have been made available on the web.

Other governments, such as Saudi Arabia, have been slow to adapt. For most Saudis, domestic Internet connections did not arrive until January 1999, almost two years after the decision to allow access and four years after the issue was first considered. Until last January, many Saudis dialed into neighboring Bahrain for their Internet connections. The Internet available in Saudi Arabia is still subject to many restrictions, filters, and "firewalls" to prevent access to what the government holds is undesirable information. According to at least one account, any effort by a Saudi to reach a banned site results in an instantaneous message alerting the user that his or her effort to reach the site has been noted and logged. The Saudi Internet infrastructure is also swamped with users, prompting recent complaints that it is hard to get on-line.

The Syrian government has evinced interest in the Internet, and President Hafez al-Asad's son (and some assume, successor) Bashar al-Asad heads the Syrian Computing Society. Still, Internet access remains limited to a small group of perhaps several hundred, with an unknown number dialing up through Lebanon. Libya and Iraq prohibit access outright. Iran allows access, especially for e-mail, but the extent of monitoring remains unclear.

The remaining governments tend to regard the Internet somewhat warily. Bahrain and Tunisia openly monitor Internet traffic, and the United Arab Emirates and Yemen use proxy services that can prevent access to undesirable sites.

User figures are difficult to establish and tend to change rapidly. Questions such as how many users operate from a single account remain as baffling as exactly who is accessing the Internet in the Middle East. In general, data is much better regarding Israeli Internet use, which also includes in its figures many users in areas administered by the Palestinian National Authority. Estimates put Israeli Internet use at more than 600,000 users, which may be as much as double the number in the entire Arab world. Countries like the United Arab Emirates (UAE) have relatively high levels of Internet use, although estimates placing it as high as 9 percent of the population are significantly exaggerated (at least in part because of the large number of expatriates in the UAE, who are more likely than the local population to have Internet connections, and less likely to share those connections widely). Other countries are more like Oman, with an estimated 1.6 percent of the population using the Internet, or Egypt, with an estimated 3 percent (although expatriates may be inflating that number as well). Iranian Internet use is also difficult to estimate, but it is certainly low. The lack of many high-speed international connections means that use of the world wide web is frustratingly slow, and most people are restricted to e-mail use.

In recent years the Western philanthropic community has worked to expand Internet connectivity to nongovernmental organizations in the Middle East. Human rights organizations, think tanks, and charitable organizations increasingly have web pages and communicate through e-mail with their Western donors. The long-term effects of these efforts are unclear. Such efforts certainly facilitate contacts among regional organizations, and create access to resources that may be hard to come by in many developing countries. They can also be monitored with relative ease by government authorities, should they choose to do so. The major question is how effectively the organizations will use the Internet both to gain influence in their own countries and draw strength from the international community. A subsidiary question is whether nongovernmental organizations' Internet use will spur wider Internet use among a broader segment of the Middle Eastern societies. At this point, these answers appear murky.

POISED NOT TO GROW?

How quickly will the Internet spread in the Middle East? Will the region's Internet adoption be characterized by the exponential growth that has marked its use in the United States and Western Europe, or will it follow a flatter trajectory?

It is not easy to answer these questions when looking regionwide, because of large disparities in income, education, literacy, and language ability. From a broader perspective, however, it appears that for some (mainly wealthy, Western-educated elites) adoption of the Internet is a rather easy process, while for others (most graduates of the region's public education systems) the process is more difficult. Although numbers are extremely difficult to obtain, it appears that the elites do not comprise more than about 5 percent of the population of most Middle Eastern countries, with few indications that the number is likely to expand soon. This small percentage means that Internet growth will plateau in most countries in the next five years, with the main question being whether at 1 percent, 5 percent, or 10 percent of the population.

Assessing the impact of the information technology revolution solely in terms of Internet use would be a huge mistake, however. A number of technological innovations have had a far-reaching effect on life in the Middle East, and are poised to have an even greater impact in the years to come.

THE NEWS ... AND HAYFA TOO

The explosion of satellite television in the Middle East is often overlooked. Whereas television broadcasting once was the sole province of government within its borders, the shrinking size of satellite dishes, their plummeting cost (now about $200 for a fixed dish), and the rapid expansion of programming choices have created regional audiences where none existed even five years ago. The change is most marked in the Arab world, where 22 nations are united by language but divided by political borders. Satellite television stations, programming in Arabic, reach an audience that may be as large as between 20 and 30 percent of the region's population.

A Saudi-owned channel called the Middle East Broadcasting Center (MBC) pioneered regional programming. Owned by Shaikh Walid al-Ibrahim, whose sister is married to King Fahd, the station has used its London base to broadcast a mix of news and entertainment since 1991. MBC has been pioneering in some respects: it was the first Arab television station to open a Jerusalem bureau, for example, and it has broadcast documentaries on wars with Israel and Iraq that included interviews with former adversaries. But MBC is thought to have gone stale in recent years, perhaps hobbled by Saudi sensitivities not to push the envelope too much on issues such as regional political reform or relations between the sexes.

Into the gap has leaped upstart al-Jazeera, which broadcasts from Qatar. Al-Jazeera was formed, ironically, when the Saudi owners of another Arab station, Orbit, shut down a joint news operation with the British Broadcasting Corporation's Arabic service because the British-based reporters had violated Saudi sensibilities. The Qataris took much of the BBC operation and exported it to their capital of Doha, where they pointedly permit their on-air talent to say what other regional news operations are unwilling to allow. Lively debates, provocative hosts,

and call-in programs on hot topics are daily fare on al-Jazeera; the titles of its two most popular shows, "The Opposite Direction" and "More Than One Opinion," tell much of the story.

All satellite programming is not heavily news based, however. The Lebanese Broadcasting Corporation (LBC) has a more entertainment-oriented approach, mixing Arabic game shows, light interviews, and reruns of American programs. Hosts on LBC often appear flirtatious, but nothing approaches the notoriety of LBC's most watched program, "Hayfa Is the Only One for You." The show is an exercise program in which a leotard-clad Hayfa exercises on location throughout Lebanon. The afternoon show enjoys extraordinarily high viewership in conservative Arab societies among both men and women.

In addition to the Arab offerings on satellite television, some viewers use their dishes to pick up the transmissions of other regional broadcasters. Israeli and Turkish television is especially prized, the former because of its superior selection of American programming, and the latter for its more liberal portrayal of women. In some countries, movable dishes are

pointed toward northern Europe, where satellites show soft-core pornography in addition to their other programming.

A missing link in much of the regional satellite programming is profitability. Television, some have observed, is a medium created to support advertising, but the advertising market in much of the Arab world remains weak. Arab satellite viewers see few advertisements, in part because it is unclear exactly whom those viewers are. While American and European firms can quickly rattle off the age, sex, and income characteristics of consumers of products and media programming in their home markets, the task is far more difficult in the Arab world.

The problem of gathering demographics has several components. One is that the Arab world contains 22 countries, and coordinating data collection over such a large area is quite difficult. Another obstacle is cultural resistance to answering personal questions. A third problem, and perhaps the biggest, is that Arabs simply do not consume very much because of their relative poverty. While pockets of true wealth do exist in the Persian Gulf, the per capita income for the entire region was only $2,050 in 1998. At such levels of income, discretionary spending is low, as is the propensity to spend money on branded products. Some inroads have been made, especially in terms of laundry detergent and tobacco, but for the most part Arab audiences' consumption does not sustain the type of advertising revenue that can support satellite broadcasting long into the future.

It costs in the neighborhood of $40 million a year to operate a satellite station, and most are not close to covering their expenses. Among all the Arabic satellite stations, LBC is perhaps the closest to making money; the others have losses that range from controllable to hemorrhaging. Governments or wealthy individuals with ties to governments pick up the remaining tab, but how long they will be able to cover losses and at what levels is an open question.

FAX, COPY, REWIND

While satellite television and the Internet, because of their costs, remain beyond the reach of many Arabs, other technological innovations of the last two decades have had a startling effect on the information that residents of the Arab world can receive. Among the most important developments are the photocopier, the fax machine, and the videocassette player.

The photocopier has become so mundane in Western societies that people no longer think of it as a high-tech device. But no single invention has so democratized the wide dissemination of a message at such a low cost. Photocopied leaflets are common throughout the Arab region, as are single-page flyers advocating political and religious positions. Photocopies are inexpensive (often less than three cents per impression), and they do not belie the printer's identity. Equally important, any individual can create a message to be photocopied without involving typesetters or other specialized professionals. While leaflets and broadsheets are not new, what is new is the availability of the technology to individuals even in small villages.

Photocopiers can also intersect with the Internet to widely disseminate web pages or messages previously available only to a few individuals. Under such a scenario, those trying to mobilize a population need only reach a small number with Internet access (who may be far from those trying to do the mobilization), and that small number can then reproduce and distribute the message. The same is true with encrypted messages; only a few people need to understand how to operate the encryption mechanism for it to emerge as a powerful tool to organize people across a vast distance free of surveillance.

Fax machines can be combined with photocopiers as well. Faxes may not enjoy the same security of communication as do encrypted Internet messages, but they remain a popular method to mobilize and spread ideas, used by religious groups and opposition figures alike across borders and within borders. The decline in international telephone tariffs, which will take place in the next few years as a consequence of international trade agreements, may lead to more international faxes being sent. The best-known fax campaigners in recent years have been two Saudi opposition groups: the Committee for the Defense of Legitimate Rights, and the Movement for Islamic Reform in Arabia, both of which operate out of London. There are reports that Islamists in Egypt, anti-Syrian forces in Lebanon, and separatist forces in Sudan are also running fax-based campaigns from Western countries.

Videocassette players were a rarity in the Middle East 10 years ago, but they have become widely disseminated since then. The advantage of videocassettes is that they present compelling images, are relatively inexpensive to copy, and can be viewed many times.

Video rental facilities have spread throughout the Middle East, often offering a combination of popular Hollywood films, action-oriented B-movies never shown on American screens, Indian and Egyptian films, Kung Fu action pictures, and, in some cases, discreetly hidden pornography. The number of video rental stores that carry explicitly religious or political programming is unclear.

Even programming that may appear innocuous in the West may carry powerful messages to Middle Eastern audiences. Films convey attitudes toward gender, class, wealth, religion, and a host of other social issues and, while invisible to Western audiences, they may be the most striking aspect of a film to audiences in the developing world.

Videotapes can carry explicitly religious or political messages, and those messages can take several forms. In 1994 the Egyptian government produced a film entitled *The Terrorist*, which starred the hugely popular comedian in the Arab world, Adel Imam. In a manner that appeared crude and ham-handed to many Western viewers, the film portrayed Islamically-inspired terrorists as venal, corrupt, and misguided, and suggested that much of their anger is only a result of misunderstandings. Among Egyptians, there is a broad perception that this film and others like it helped turn the tide against Islamist political violence in Egypt.

Videotapes can also be used to inspire action against a government for either religious or political purposes. While the content of such films is often harder for outsiders to ascertain, some are certainly used for fundraising, political mobilization, indoctrination, and similar activities. Hamas suicide bombers often have made videotapes before carrying out an attack, explaining their motivations and their expectations of the world to come. Such films are certainly meant to inspire and recruit additional support.

EVOLUTIONARY OR REVOLUTIONARY?

None of this is wholly new. Regional newspapers have always been available in many countries, albeit at some cost and after several days. Offshore newspapers are not new either—*Abu Nazara Zarqa,* an Egyptian satirical magazine, was published in France in the nineteenth century. Books and pamphlets have circulated throughout the region since the advent of printing presses in the nineteenth century. Regional radio broadcasting also has a long history, dating to Gamal Abdel Nasser's "Voice of the Arabs" in the 1950s and 1960s. Combined with the sudden rise of the transistor radio, Cairo's messages mobilizing the masses in the Arab world had a striking effect and may have contributed to coups in Iraq and Yemen.

Yet changes in the last decade have been revolutionary rather than evolutionary. In only a short time, satellite television has broken out of its narrow elite audience to reach broad segments of the region's population. It now enjoys an audience that far exceeds that of regional radio broadcasts. Inexpensive photocopying, combined with sharply increased rates of literacy, exponentially expands the opportunities for disseminating messages and viewpoints. Videotapes send explicit and implicit messages widely, reaching a far greater audience for a greater variety of programming than films ever could in the past. Although the Internet remains mostly limited to the very rich, Western philanthropic efforts to spread Internet use to civil society organizations puts it in the hands of some who may not be members of the elite.

All this creates a basic shift in the regional information environment. Previously, the emphasis was on accumulating information. Government media outlets dispensed information, and for all but an elite, that was most of what was available. Television was government controlled, and that control was often very tight. While alternative outlets for information always existed (such as through local religious figures), communication between those outlets was often slow and unreliable.

The technological developments of the last two decades, combined with increased literacy, have completely changed this situation. The current information-rich media environment is demand driven rather than supply driven. Viewers switch the channel if they are bored with their government's fare, and they find a panoply of choices. Although most regional television stations have links to some government, the wide variety of choices ensures that stations must present interesting and credible programming to maintain viewership. On the print level, too, far much more is available to read than ever before, and far more people read it.

It may be some time before the Internet becomes firmly entrenched in much of the Middle East. The obstacles to its adoption, especially with the current technology, appear significant. But the information revolution has already arrived in the Middle East, and it poses significant challenges for the status quo. How well individuals, organizations, and governments will cope with the new challenges and take advantage of the new opportunities will be the main engine for change in the Middle East in the next decade.

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My fatwa on the fanatics

Ziauddin Sardar

The magnitude of the terrorist attack on America has forced Muslims to take a critical look at themselves. Why have we repeatedly turned a blind eye to the evil within our societies? Why have we allowed the sacred terms of Islam, such as fatwa and jihad, to be hijacked by obscurantist, fanatic extremists?

Muslims are quick to note the double standards of America—its support for despotic regimes, its partiality towards Israel, and the covert operations that have undermined democratic movements in the Muslim world. But we seldom question our own double standards. For example, Muslims are proud that Islam is the fastest growing religion in the West. Evangelical Muslims, from Saudi Arabia to Pakistan, happily spread their constricted interpretations of Islam. But Christian missionaries in Muslim countries are another matter. They have to be banned or imprisoned. Those who burn effigies of President Bush will be first in the queue for an American visa.

The psychotic young men, members of such extremist organisations as Al-Muhajiroun and 'Supporters of Sharia', shouting fascist obscenities outside the Pakistan Embassy, are enjoying the fruits of Western freedom of expression. Their declared aim is to establish 'Is-