



TECHNOLOGY AND SOCIAL CHANGE IN THE MIDDLE EAST

Advances in technology have brought about a remarkable revolution in the speed and scope of information flows — raising the expectations of many experts and policymakers that such flows will accelerate social and economic change in the developing world. The rates of return on information have been mixed, however. The effects of information technologies and flows have been neither uniform nor guaranteed. At a recent Global Strategy Institute Forum, Jon Alterman, director of the CSIS Middle East Program, warned that such trends could even have a severely disruptive effect in the Arab world. While the expansion of information technologies and knowledge flows can improve education, raise incomes, increase equality, and promote better governance, they can also exacerbate differences within societies, raise expectations without raising incomes, and facilitate mobilization of the unconnected masses.

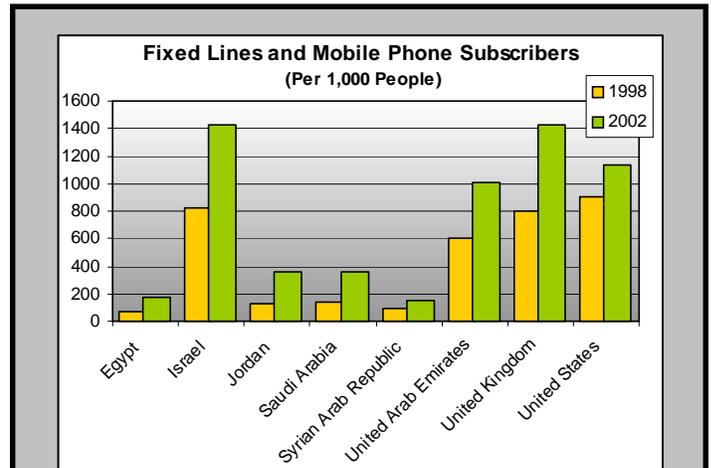
Deeper, Faster, Cheaper...

There is no question that the information revolution has touched the Arab world. Although still modest in absolute numbers, the growth rate for connectivity has been substantial. In Jordan alone, the number of telephone lines quadrupled in four years, rising from 125 lines per 1000 people in 1998 to 355 lines per 1000 people in 2002.¹ Internet users in Jordan increased by a factor of seven between 1997 and 2002, though users represented only 4.2 percent of the population in 2002.² Perhaps more impressive and more visible are the 200+ plus satellite television stations available in Arabic both within the region and beyond its boundaries. As Alterman stated, "Arab satellite TV started in 1991 and has gone from 0 to 60 [mph] in a decade."

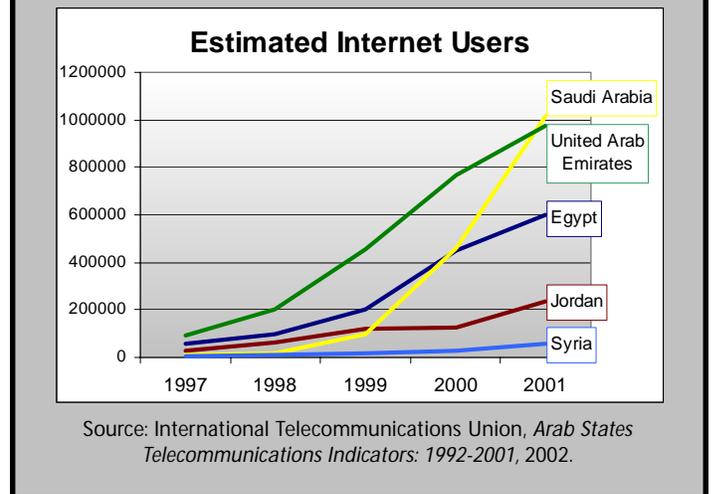


Jon Alterman, Director, CSIS Middle East Program

The question is how deeply this increased information flow has penetrated Arab society and what the effects will be. Here Alterman acknowledges that



Source: World Bank, World Development Indicators Database, (2004).



Source: International Telecommunications Union, Arab States Telecommunications Indicators: 1992-2001, 2002.

globalization has reached the Middle East, but warns that the greater volume, wider distribution, and cheaper costs of transmitting information and knowledge mostly benefit the upper echelons of society. He draws a line between the *globalization of information*, in which knowledge flows quickly and independently, and the *globalization of style*, in which fashion, brands and entertainment products are widely consumed. The former kind of globalization creates knowledge economies that reward individual or society who can translate waves of data into improved goods and services. The latter is driven more by cultural preferences

¹ World Bank, Human Development Indicators Database, 2004.

² International Telecommunications Union, Arab States Telecommunications Indicators: 1992-2001, 2002.



and facilitates the spread of common desires for particular lifestyles and consumer products. Alterman warns the accelerating globalization of style and the decelerating globalization of information could lead the Middle East into a period of political and social turmoil.

Globalization of Promise or Peril?

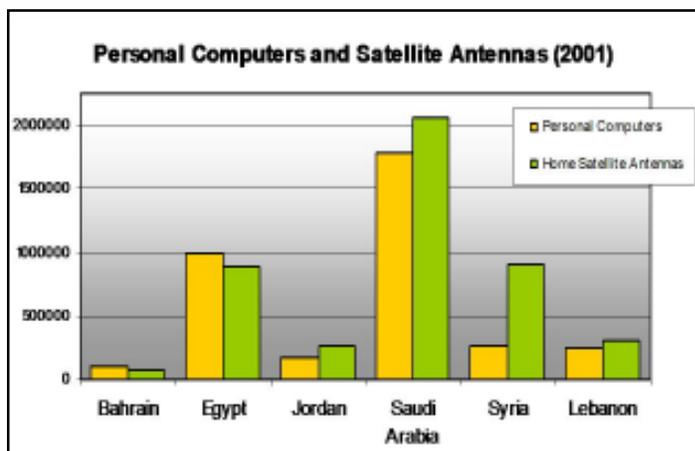
The globalization of information can lead to economic, social, and political development, but also requires serious investment in information technologies, infrastructure, and education – in other words, a lot of time and a lot of money. In contrast, the stylistic preferences expanding through the globalization of style reach a wider audience through cheaper and cheaper technologies and services, but do little to provide new skills or improve the lives of the people they touch. This dichotomy is brought about by the relative costs of technology, language barriers, necessary skills, and requisite levels of education associated with each type of globalization.

In a region in which education stresses rote memorization over analysis, English language capabilities are deficient, and only a small proportion of the population have access to information technologies, the prospects for capitalizing on the globalization of information are not bright. Personal computers with an average cost of about \$1,000 become a luxury item when compared with per capita incomes ranging from \$8,530 in Saudi Arabia to \$1,490 in Egypt to \$490 in Yemen.³ On average just 1.6% of the population has Internet access and only 18 out of every 1000 people have access to a computer – a little over a quarter of the world average. As the *Arab Human Development Report* comments, “These indicators scarcely reflect a sufficient level of preparedness for applying information technology for knowledge diffusion.”⁴ This limited base consists of the top tier of society who has the time and resources to gain access to and capitalize on information technologies and flows. Alterman warns that the expansion of the globalization of information is about to plateau as this upper level becomes saturated with information technologies and the skills to use them.

In contrast to the knowledge flowing from the globalization of information, the globalization of style facilitates the movement of fashions, brands, and products for consumption. Because these products are far less expensive and less language-intensive, they can be spread more

widely and more quickly than the information available via the Internet and other information technologies.

One obvious indicator for this phenomenon in the Arab world is the explosion of satellite television networks and satellite dishes in homes. Because satellite television networks do not charge a service fee, the cost of access is equal to the cost of the satellite dish, prices for which have dropped significantly. By 2000, it was estimated that satellite television stations, programming in Arabic, reached an audience as large as 20%-30% of the region's population and as high as 50% in some of the wealthy Gulf states, such as Saudi Arabia, Kuwait, Bahrain, and the United Arab Emirates.⁵ Programming has expanded to include news broadcasts, talk shows, game shows, reruns of American and European programs – even a popular Arab version of



Source: International Telecommunications Union, *Arab States Telecommunications Indicators: 1992-2001, 2002*.

“Dr. Phil.” The market has essentially become demand-driven – based mainly on common religious beliefs and ethnic identity.

With such competition, it appears that governments have lost their monopolies over public consumption of information and entertainment. Those who keep their finger on the pulse of the population will ultimately be the winners, and governments are spending large amounts of money to stay ahead of the curve. Although there has been a shift away from the top-down approach from the

³ World Bank, World Development Indicators, 2003 <<www. http:// devdata.worldbank.org/data-query/>>

⁴ UNDP, *Arab Human Development Report*, Executive Summary, 2004, pp. 3, <<http://www.undp.org/rbas/ahdr/english2003.html>>

⁵ Jon Alterman, “The Middle East’s Information Revolution,” *Current History*, January 2000; Marwin Kraidy, “Arab Satellite Television Between Regionalization and Globalization,” *Global Media Journal*, Fall 2002.



likes of Nasser in the 1960s, satellite stations still maintain ties, either directly or through close personal relationships, to the governments of Middle Eastern states. In fact, none of the Arabic satellite stations actually turn a profit; some, in fact, are running severe deficits that are absorbed by various governments or wealthy patrons.

Status quo or status woe?

The question remains as to whether these increased flows of information and style will ultimately lead to more liberalized economies and governments in the Arab world. Alterman's short answer is "no." The types of information that benefit society and drive development are not accessible to a sufficiently large proportion of the population. Simultaneously, more and more people are gaining access to consumer and entertainment products that make reference to or are linked with better lifestyles without actually providing the tools for creating that better lifestyle. The widening gap between expectations and reality allows room for alternative messages from religious demagogues or expatriates to reach increasingly disgruntled populations. Managing technological change, thus, has become a major political issue. If they want to deflect disruptive consequences in the future, Arab governments must ensure the benefits of technological change are widely distributed and adjust to the new domestic political environment.

For articles and speeches written by Jon Alterman, visit the CSIS Middle East Program website at

<http://www.csis.org/mideast/articlespubsprs.cfm>

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Jeremy Rifkin
November 9, 2004

Jeremy Rifkin, president of the Foundation on Economic Trends, is the author of seventeen books on the impact of scientific and technological changes on the economy, the workforce, society, and the environment. His most recent book, entitled *The European Dream: How Europe's Vision of the Future is Quietly Eclipsing the American Dream*, was published in August.

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