

# **What Women Want from IT: Views from West Asia**

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# What Women Want from IT: Views from Western Asia

By Deborah L. Wheeler

## Introduction

It has become commonplace in the 21<sup>st</sup> century to link women's empowerment and information technology, and many of these voices come from women leaders in Western Asia. For example, Queen Rania of Jordan, addressing the Second Arab Women's Summit in 2002 observes that "it is important for Arab women to make use of the latest technologies, particularly the Internet, to reshape their lives".<sup>1</sup> Similarly, Najat Rochidi, director of the ICTDAR (Information and Communications Technologies for Development in the Arab Region) program at the United Nations Development Program states that the Internet can be leveraged to expand women's leadership skills, provided that "the culture of machismo in Muslim countries is also changed so that women are valued as clever and accomplished people in their own right outside the tutelage of a father or husband and not only as mothers and caretakers."<sup>2</sup> The United Nations Development Program reinforced these views when in 2002, its Arab Human Development Report observed that failing to provide women with easy and equitable access to IT slows the development and progress of society as a whole. This same report ranked expanding women's access to information technology as the third most pressing concern women in Western Asia face, preceded only by domestic violence and poverty.<sup>3</sup>

## Gender and IT Access

While great expectations are placed upon information technology as a tool for transforming women's lives, relatively little is known about why, how and when such transformations take shape. This is especially true for the lives of women in Western Asia where statistics suggest that Internet penetration rates among women are lower than any other place on the globe.

**Table 1: Women's Internet Usage by Country/Region, 2002**

Region/Country	% of all users
Arab States	6
China	37
European Union	25
Japan	18
Latin America	38
Russia	19
South Africa	17
United States	50

**Source:** Women's Learning Partnership, Technology Facts and Figures ([www.learningpartnership.org/facts](http://www.learningpartnership.org/facts).)

1 "Queen launches Arab Women's Summit," Jordan Times, 5 November, 2002.

2 [www.womenswire.org](http://www.womenswire.org)

3 United Nations Development Program, Arab Human Development Report 2002 (New York: Oxford University Press, 2002), p. 10.

The problem of understanding women's relationship with information technology in Western Asia is compounded by an absence of current and reliable statistical data with which to grasp women's role in building regional information societies. The 6% or less access rate for female Internet users in the Middle East is a number that has been floating around the region (uncontested by new data) since a 1998 DIT-Net survey conducted for *PC Magazine Middle East* generated it. Issues that complicate the measurement of women's access to the Internet (and other forms of IT) have to do with ownership. If the male head of household is listed as account owner by the Internet Service Provider that does not tell us whether or not any women in the household use the same account. Similarly, women who have access to IT only via a community center or Internet café are also difficult to count without more carefully targeted surveys designed to get at the gendered nature of IT access and use. When more gender sensitive assessments are performed, women may figure more equally in terms of the percentage of local individuals involved with building the information society. Several international organisations including the International Telecommunications Union, the World Bank, the United Nations and the World Summit on Information Society Gender Caucus have acknowledged the need for more gender sensitive surveys of the information society.<sup>4</sup> These organisations have called upon the international community and local organisations to begin collecting data on the role that gender plays in information technology diffusion and use. Given the fact that empirical data has not kept pace with inquiry, key issues affecting our understanding of women's access to and use of IT in Western Asia remain an emergent framework. At this stage, qualitative data can serve to illuminate the richness of many West Asian women's IT lives as demonstrated below.

## Qualifying Women's IT Access

Qualitative data gathered by the author throughout Western Asia (1997-2005) with the generous support of the United States Fulbright Program, the Oxford Internet Institute, the United Nations Development Program, the Zein al-Sharaf Institute for Development (Jordan), and the Digital Opportunity Trust (Canada) suggests that women play a much greater role in the regional information society than is presently understood.<sup>5</sup> When one juxtaposes our only extant statistical data (as indicated in the chart above, a mere 6% of users) with narratives of female Internet users throughout Western Asia, for example, it is clear that we have much to learn about West Asian women's IT practices. Emerging data, such as a recent survey of 125 female Internet café users between the ages of 17 and 48 conducted in Jordan and Egypt in 2004, illustrates that many women in the region spend on average 12 hours a week in an Internet cafe.<sup>6</sup> Typically, women in such cafes are accessing information they would not have access to otherwise (such as that relating to sensitive issues linked with relationships and health); and chatting online, which some of those interviewed argue allows

4 Nancy Hafkin, "Some Thoughts on Gender and Telecommunications/ICT Statistics and Indicators," paper prepared for the ITU World Telecommunications/ICT Indicators Meeting Geneva, Switzerland. 15-17 January, 2003. ([www.itu.int/ITU-D/pdf/5196-007-en.pdf](http://www.itu.int/ITU-D/pdf/5196-007-en.pdf)) Date accessed, April 17th, 2006.

5 See for example, Deborah L. Wheeler, "New Technologies, Old Culture: A Look at Women, Gender and the Internet in Kuwait," in *Culture, Technology and Communication: Towards an Intercultural Global Village*, ed. Charles Ess and Fay Sudweeks (Albany: State University of New York Press, 2001), pp. 187-212; Wheeler, "Blessings and Curses: Women and the Internet in the Arab World," in *Women and the Media in the Middle East: Power through Self-Expression*, ed. Naomi Sakr (London: I. B. Tauris, 2004), pp. 138-161; Wheeler, "Gender Matters in the Internet Age: Voices from the Middle East," in *Technology in a Multicultural and Global Society* ed. May Thorseth and Charles Ess (Trondheim: Norwegian University of Science and Technology Program for Applied Ethics Publication Series No. 6, 2005), pp. 27-42.

6 Deborah L. Wheeler, "Women, IT and Empowerment in the Arab World: Lessons from Internet Cafes and Beyond," Paper presented at the Gender and ICTs Workshop, Sam Nunn School of International Affairs, Georgia Tech, Atlanta, Georgia 28th March, 2006. The interviews upon which this research is based were conducted in Arabic by two Jordanian female research assistants in 2004 and 2005. Part of the research was supported by the Digital Opportunity Trust of Canada.

them an ability to form and articulate a wider personal and political consciousness. The most common explanation for women's use of Internet cafes is for chatting, and the maintenance of email networks among family and friends. Such surveys, and the narratives below, suggest that women in Western Asia want access to IT, are getting access to IT, and that once they have access, such technologies provide paths of empowerment. It is also clear that access in itself, not to mention the paths to empowerment women take once they have access, is shaped by the local contexts of women's lives. This is especially clear in the results of the NetCorps Jordan IT and sustainable livelihoods training program analysed later in this paper.

## Regional Realities Challenge and Shape Women's IT Practices

There are a number of key development indicators which intervene in compounding women's access to IT, and shaping the context and impact of use. For example, nearly 50% of women in the region over the age of 15 can't read and write. In terms of formal access to political power, only 3.5% of all seats in parliament in Western Asia are occupied by women. Most of these seats, including those held by women in Morocco, Egypt, and Jordan, are only filled because the government has reserved key parliamentary seats for women. It is generally understood that without the quota system, women would not gain enough votes to be elected, if running directly against men. Illustrating the challenges women face in Western Asia in terms of grasping their full potential as leaders, a Jordanian observer notes, "our community would not accept the idea of a woman to be a leader. It is difficult to convince men that this would be a good idea. Our community does not trust women's abilities."<sup>7</sup>

In terms of access to the economy, men in Western Asia have 3.5 times the purchasing power of women; and women constitute on average only 28% of the labour force. Many female activists in Western Asia argue that until women gain financial independence, their lives will continue to be dominated by dependence on men - brothers, husbands, fathers, sons, and beyond. These deeply entrenched relationships of patriarchy often severely limit and constrict West Asian women's independent identity formation. Financial independence is a step towards the subversion of such limits on women's lives. As one observer notes, "If a woman can achieve financial independence she can achieve her full potential. If she stays financially dependent on a father, brother or husband, she will not be independent and it would be difficult for her to achieve her full potential".<sup>8</sup>

Women also face significant legal challenges, especially in terms of rules regarding freedom of movement (many countries still require a male family member's permission to obtain a passport, or to travel abroad, and divorce laws also do not favour women in many West Asian countries).

Unequal access to information technology is therefore just one of the many forms of challenges which women in the region face. Shaping all of these gendered inequalities are three main factors:

1. Social/Cultural Norms:
  - a. These norms define women's work generally in terms of care giving within the home—for husbands, for children, for elderly relatives, for the sick.

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<sup>7</sup> Interview with Netcorp Jordan intern, 10 January, 2005.

<sup>8</sup> Interview with Netcorp Jordan intern, 15 December, 2004.

- b. Definitions of women's work as primarily linked with care for hearth and home discourage women from working outside of the home.
  - c. Financial dependence is maintained by discouraging women from working outside of the home.
  - d. Financial dependence deters women's independent identity formation and action.
  - e. Obtaining access to IT is shaped by these cultural norms, with access in the home being rare in Western Asia, and access at public centers often out of reach of women in conservative areas, who in the words of one Jordanian observer, "after the age of 13 are discouraged from exiting the home, even for shopping."<sup>9</sup>
  - f. At play in all of these gender based social and cultural norms is the issue of women's honor which is one of the mainstays of patriarchy, and constraints those small and large ways in which women, often at great risk to themselves, strive to challenge these norms.
2. The State:
- a. Given strong social and cultural currents against redefining women's roles to include positions of leadership and work outside of the home, the state is constrained in its efforts to evoke change.
  - b. Pushing too hard to change women's social, political and economic roles could encourage protest and unrest within West Asian societies.
  - c. Even if the state builds community IT access points for rural and outlying regions, it cannot force these conservative communities to change their attitudes about giving women access to technology, information and public space.
3. Feminism/IT Revolution as Imperialism:
- a. The idea of "women's liberation" is often critiqued in Western Asia by those resistant to change as an Imperialist plot to weaken the social fabric of local communities.
  - b. Mahnaz Afkhami and Erika Friedl argue that "the most obvious strategy for those who feel threatened" by the call for women's empowerment in Western Asia, "is to link women's rights to cultural imperialism."<sup>10</sup>
  - c. The fact that many of the technologies which define the information age are imagined, invented, produced and distributed by Western countries have left some critics talking about new forms of "electronic colonialism."<sup>11</sup>
  - d. Linking feminism and the IT revolution with imperialism discredits both in the eyes of those resistant to change within Western Asia.

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<sup>9</sup> Interview with Netcorp Jordan participant, 15 December, 2004.

<sup>10</sup> Mahnaz Afkhami and Erika Friedl, "Introduction," in *Muslim Women and the Politics of Participation: Implementing the Beijing Platform*, ed. Mahnaz Afkhami and Erika Friedl (Syracuse: Syracuse University Press, 1997), p. xii.

<sup>11</sup> When I met with a group of Moroccan journalists and intellectuals during a lecture tour in Rabat and Fez in 1997 several of the participants said that they intended to resist the Information Age because it was a form of electronic colonialism. For a more on this view see, Abu Karim Mboka, *Virtual Imperialism and Colonialism: An Analysis of Globalization*. MA Thesis, Arizona State University, 2003.

## Signs that IT Leads to Empowerment

In spite of the challenges to women's identity articulation and empowerment outlined above, some have argued, including several of those women interviewed below, that information technology is enabling at least some women in Western Asia to increase their power and influence in both public and private spheres. Some of the paths to empowerment outlined by women in Western Asia include the ways in which IT, especially the Internet and mobile phones, give women a global voice. Many women in the region when interviewed claim that IT empowers them by giving them access to information regarding women's rights world wide, and access to advice and information on taboo subjects like marital satisfaction, divorce support, lesbianism, and women's health issues. Some women have observed that the Internet and other forms of IT give them access to professional networks which might otherwise be inaccessible to them. Some celebrate the way in which Internet technologies especially downplay the role of gender in online social interactions, thus liberating them from key gendered social constraints that are present in face to face conversations. Some viewed the Internet as an important tool in saving family expenditure by reducing the cost of keeping in touch with friends and family members, especially those living and working abroad. Some women interviewed claimed that IT training had given them a marketable skill - familiarity with computers - which makes them more competitive in the job market or more indispensable in the jobs they currently hold. All of these factors and more, outlined below, indicate the importance of both analysing and promoting the role of IT in Western Asian women's lives. Together, these narratives reinforce Dale Spender's observation that computers are not toys, they are paths to power.<sup>12</sup>

The following pages provide a brief overview of the role that gender plays in shaping information societies in Western Asia. While the discussion focuses most on the role of ICTs for personal, social and political identity formation, the institutional context of such changes, as well as connected issues of ownership and control over technology and its use for collective action for women's empowerment is also touched upon. While the intention is to give a snap shot of women's informational lives in Western Asia as a whole, given the poverty of empirical data on this subject, specific case studies are used to supplement the general overview with real stories. It is through the narratives of women in the region that we can glimpse the motivations, challenges and opportunities (both realised and missed) of women's relationships with information technology. The ultimate goal of this analysis is to provide recommendations for making IT policy and practice more compatible with what Western Asian women want, using women's voices from across the region and the social spectrum as a guide. The victories outlined below may seem miniscule when considered objectively in terms of the strength of the patriarchies that regulate women's lives in Western Asia. While having access to IT will not automatically place women in new positions of power, it is often a fundamental first step towards enabling an environment where women can learn to "debate, mobilise and lobby" in favor of their multiple interests.<sup>13</sup> We must also remember that in Western Asia, women's interests are contextually shaped, and potentially as various as women's lived experiences; meaning that what may seem like a small change in one woman's life, could actually produce a significant alteration in power relations, when judged from within the context of a particular woman's life and circumstances. For example, in a conservative village woman's household, permission from the patriarch to attend a computer class could produce a significant alteration of normal family behavior, whereas for a liberal family from Amman, it might require a woman using her computer training to start her own business to see an equally significant alteration in power relations. Neither transformation should be discounted as more or less important as the other. Both should be

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<sup>12</sup> Dale Spender, *Nattering on the Net* (Toronto, 1995), p. xvi.

<sup>13</sup> Afkami and Friedl, p. xi.

taken as contextually shaped expressions of the diversity of women's lived experience in Jordan. Thus, we should not discount any form of empowerment narrated by women themselves and instead, should understand the many contextually determined ways in which power relationships interplay in shaping women's identity and existence.<sup>14</sup>

## The Macro-Picture of the Information Society in Western Asia

States throughout Western Asia are under great pressures, both from the world community, the global economy and their own populations (especially from the new middle classes) to move towards development of information societies. E-education initiatives, e-government initiatives, community access information technology projects, targeted training in IT and sustainable livelihoods, and various capacity building projects for the regional information society are common expressions of the top down move to build connectivity throughout Western Asia. The proliferation of Internet cafes and the rapid rise in user-ship throughout Western Asia represents the bottom up approach of building the information society. There is a direct correlation between state attitudes towards information technology, and levels and sophistication of IT use within society. For example, in some West Asian countries, leadership structures attempted to discourage IT use within society, for fear of potential destabilization and security risk if citizens were fully empowered to have easy access to IT. Tactics for diminishing a society's IT capacity include making Internet access illegal (as was the case for a number of years in Syria and Saudi Arabia).

Once Internet use is legalized, states in Western Asia use a host of strategies for keeping use concentrated in privileged pockets of society by keeping costs for Internet access and computers high, heavily filtering Internet content, stalling the spread of high speed Internet access, thus making it frustrating and time consuming to surf over regular land lines. More draconian measure for slowing Internet spread include arrest and harassment of Internet users who overstep the bounds of appropriate use. This definition of "appropriate" use varies from state to state, but in the past, users have been arrested and punished in Syria, Bahrain, Tunisia, Egypt and Jordan for oppositional or immoral purposes. In the words of an Algerian exile, whose family is living in Tunisia, "I cannot get my relatives to use the Internet to communicate with me here in the States. They say the government has conditioned the people to think that using an Internet café means that one is either surfing porn or trying to oppose the government, so people want to keep their reputations clean and stay away from public access sites."<sup>15</sup> Another tactic for slowing the growth of Internet use in Western Asia is maintaining a complicated and lengthy process for obtaining business licenses to open Internet cafes and other IT related businesses. Many Internet café owners in Jordan when interviewed claimed that it took as many as 3 years to get their business licenses to open their cafes. Every state in Western Asia has used one or more of these strategies to keep IT penetration "regionally appropriate" (e.g. concentrated in the hands of those who need it, business men and women and the cosmopolitan elite; and out of the hands of those who shouldn't have it, like the poor and disenfranchised, Islamists or any other groups/individuals who might use such empowerment to press for change).

The rapid growth in regional Internet connectivity, especially in the past 2 years, throughout Western Asia suggests that in spite of state reticence and security concerns pressures from the population and from the global community are producing institutional change in information environments. For example, until 2000, the Internet was growing and spreading

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<sup>14</sup> In some cases, IT acts to enhance traditional roles, such as in the case where a woman desires IT training in order to be a better mother, more educated in regulating a child's IT use.

<sup>15</sup> Interview with Hassan (a pseudonym) Washington, D.C. March, 2006.



more slowly in Western Asia than in any other world region (perhaps because of the predominance of security concerns resulting in state tactics as described above). As of 2006, the Internet is growing and spreading more rapidly in Western Asia than in any other world region, thus suggesting that states in Western Asia are no longer adopting a “wait and see” approach to the Internet and instead are giving into social and global pressures to embrace the information age. The following chart illustrates the phenomenal pace of recent IT diffusion in the region.

**Table 2: IT Diffusion in West Asia**

West Asia and North Africa	Size of Population (2005)	Number of Internet Users (2000)	Number of Internet Users (March, 2005)	Percentage of change 2000-2005
Algeria	32,557,738	50,000	500,000	900.0%
Bahrain	707,357	40,000	195,700	389.3%
Egypt	69,954,717	450,000	3,000,000	566.7%
Iran	68,458,680	250,000	4,800,000	1,820.0%
Iraq	26,095,283	12,500	25,000	100.0%
Israel	6,986,639	1,270,000	3,040,000	139.0%
Jordan	5,788,340	127,300	457,000	259.0%
Kuwait	2,530,012	150,000	567,000	278.0%
Lebanon	4,461,995	300,000	500,000	66.07%
Libya	5,980,693	10,000	160,000	1,166.7%
Morocco	31,003,311	100,000	1,000,000	900.0%
Oman	2,398,545	90,000	180,000	100.0%
Palestine (W. Bank)	3,997,861	35,000	145,000	314.3%
Qatar	768,464	30,000	140,800	369.3%
Saudi Arabia	21,771,609	200,000	1,500,000	650.0%
Syria	18,586,743	30,000	610,000	1,933.3%
Tunisia	10,116,314	100,000	630,000	530.0%
Turkey	73,598,181	2,000,000	6,000,000	200.0%
United Arab Emirates	3,750,054	735,000	1,110,200	51.0%
Yemen	19,600,009	15,000	100,000	566.7%
Total for Western Asia	459,112,545	5,994,800	24,660,700	411.4%

Source: [www.internetworldstats.com](http://www.internetworldstats.com) Date Accessed: March, 2005

In most cases in Western Asia, the nature of local and national information societies are as much a reflection of state attitudes towards information diffusion throughout society, as they are a reflection of society's demand and capability for information resources. For example, in Jordan, where Internet access has grown in the last 5 years by more than 250%, King Abdullah II has played a defining role in promoting access to IT via the Knowledge Station project. With the support of the King Abdullah Fund, and the United Nations Development Program, 100 community knowledge stations have been established throughout the kingdom. These community access points to IT have been especially important for the urban and rural poor, and are found in places like Ma'an and Tafeilah, as well as Eastern Amman. These places were identified by Jordan's regional Human Development Report for 2004 as ones with great pockets of poverty and a lack of opportunities with which to create sustainable

livelihoods. In these IT centers, Jordanians can obtain International Computer Driving License (ICDL) certification which it is hoped will enhance their employability. Apart from accessing Internet at these centres citizens can also take up government subsidized computer training courses, and in some cases, courses in IT and sustainable livelihoods (as evidenced by the Netcorps Jordan program profiled below). A high percentage of local women participate in such IT training programs, with female participation often as high as 67%.

While access to the Internet has more than quadrupled over the past 5 years in most countries in Western Asia, when user communities are considered as a percentage of the population, penetration figures are still low as measured by conventional techniques. In many countries throughout Western Asia, Internet access is still a luxury, with less than 5% of the population participating in this fundamental aspect of an information society (e.g. Syria, Saudi Arabia, Iraq, Egypt, and Algeria) when one counts users in terms of ISP data. Increasingly, measures of Internet diffusion in Western Asia are being used as an indication of information society development and penetration. This is because it is one of the easiest and most basic measurements of information society readiness. Analysts are now attempting to expand such a focus by developing statistical databases on mobile phone access, PC penetration, and as well, e-governance indicators. USAID has also begun funding projects which attempt to delineate the nature and power of the IT economy in the region, starting with a study of Lebanon. One of the most ambitious and comprehensive assessments of the information society in Western Asia was performed by the Economic and Social Commission for Western Asia as a form of preparation for the UN sponsored World Summit on Information Society. The study was designed to provide "the necessary prerequisite for establishing national and regional plans for building the information society."<sup>16</sup> This document provides qualitative ratings of ICT policies and strategies, legal and regulatory environments for ICTs, ICT infrastructure, ICT capacity building, ICT sector of the economy, ICT applications in government, education, business and health care. However, gender and IT is not among the factors considered.

It should not be surprising that gender specific indicators of the regional information society are scant at best, given the fact that IT indicators for West Asian society as a whole are still emerging. We know that as late as 2002, estimates were that only 6% of all women in the region had regular Internet access (reliable statistics segregated by gender are difficult to obtain). While connectivity for women must surely have grown along with the phenomenal spread of the technology indicated above, more careful attention to statistics about women's IT access is desperately needed. Without having such figures available, disaggregated along gender lines, it is difficult to know what percentage of women participate in the emerging information society.

Another important complication for measuring women's IT access in Western Asia, and most likely for society as a whole, is the fact that a large percentage of those connected, as much as 80% by some estimates, has regular access to computers, the Internet and other forms of information technology only via a community access point or an Internet café. The standard methods for measuring Internet users as an indication of information society is to count the number of Internet accounts via Internet service provider data. Because in most countries in Western Asia there is only one main pipeline for Internet connectivity which is mostly controlled by the state counting the number of accounts via an ISP is a relatively reliable and easy process. On the other hand, measuring access via an Internet café or community center is difficult to gauge. In most cases, regular ISP data is just multiplied by an arbitrary

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<sup>16</sup> Economic and Social Commission for Western Asia, "Regional Profile of the Information Society in Western Asia." (E/ESCWA/ICTD/2003/11 8 October, 2003), p. iii.

factor generally between 4 and 6 to reach at a figure for the number of people accessing Internet through these centers. In Internet cafes, for example, it is not uncommon for a small café with 10-15 computers to have as many as 300 clients a week. Recent interviews with Internet café staff in Jordan and Egypt suggest that there are an equal number of men and women who form the clientele.<sup>17</sup> The hours of use, however, are highly gendered, with women forming the majority of users before 8 pm, and males forming the majority of users in the late evenings.

Understanding the importance of communal access points for women's IT empowerment, this analysis of information society in Western Asia pays particular attention to data gathered in 2004-5 which documents women's access to, attitudes toward and use of community Internet access points in Jordan.<sup>18</sup> Along with the other case studies offered below (Kuwait, Saudi Arabia, and Bahrain), this analysis provides an intimate look into the informational lives of women in Western Asia. Use of the Internet by women in Western Asia is also a key focus of this analysis as this is one of the IT tools which provides the greatest opportunity for empowerment.

## Contextualising the Information Society in Western Asia: Voices of Empowerment

### Kuwait

In terms of ICT policy and strategy readiness, Kuwait was ranked as level 2 of 4 (4 being highest) by the ESCWA (United Nations Economic and Social Commission for Western Asia) information society regional survey.<sup>19</sup> This means that Kuwait's ICT policies and strategies "indicate articulated vision and existence of a national strategy and display a somewhat operational implementation plan and initiative." ICT infrastructure is also at level 2 of 4 which means that Kuwait is connected to the global Internet backbone, Internet access is on the rise, and PC dissemination is also on the rise. Between 2000 and 2005, Internet use in Kuwait increased 278% jumping from 150,000 users in 2000 to 567,000 users in 2005. Kuwait University was the first university in the Arab world to provide full Internet access to its students for free. A survey of Internet access by Kuwaiti student in 1997 revealed that female students constituted more than 50% of Internet users.<sup>20</sup> The Internet is an important part of youth sub-culture in Kuwait, especially for young women as profiled below. In Kuwait, men and women do not mix freely in public, but in cyberspace, easy communication across gender lines with little social risk makes the Internet an important space for women to interact with the opposite sex. The ability to cyberdate is one of the main appeals of the Internet to young Kuwaiti women. In fact, the desire to join chat rooms is one of the main forces drawing young women on-line. It is not uncommon, however, to find a majority of professional women in Kuwait over the age of 30 have no familiarity with computers. Many

17 Deborah L. Wheeler, "Women, IT and Empowerment in the Arab World: Lessons from Internet Cafes and Beyond," Paper presented at the Gender and ICTs Workshop, Sam Nunn School of International Affairs, Georgia Tech, Atlanta, Georgia 28th March, 2006, and Wheeler, "Gender Matters in the Internet Age: Voices from the Middle East," in *Technology in a Multicultural and Global Society* ed. May Thorseth and Charles Ess, (Trondheim: Norwegian University of Science and Technology Programme for Applied Ethics, 2005), pp. 27-42.

18 Deborah L. Wheeler, "Gender Sensitivity and the Drive for IT: Lessons from the NetCorps Jordan Project," *Ethics in Information Technology*, Forthcoming.

19 <http://www.escwa.org.lb/information/publications/edit/upload/ictd-05-1.pdf>

20 Survey conducted by Seif Abbas, at the time Professor of Political Science at Kuwait University and used with permission. For more on women's Internet use in Kuwait see Deborah L. Wheeler, *The Internet in the Middle East: Global Expectations/Local Imaginations in Kuwait* (Albany: State University of New York Press, 2005), pp. 105-132.

do not know how to type, and have administrative staff who type and use the computer for them. Given the fact that many professional women are not required by their jobs to use computers, they remain a minority among women users of Internet. Perhaps over time, as more young female Internet users enter the work place, this situation will change.

Examining the Internet practices of Kuwaiti women can give us important insights about IT and paths to empowerment in Western Asia. The following interviews were conducted by the author during 2001 and 2002.

Buthayna is a Kuwaiti college student completing a BA degree. She is 20 years old.

**Date of interview: 29<sup>th</sup> October, 2001**

Interviewer: Why do you think the Internet is so popular among young Kuwaiti women?

Buthayna: *Well, I have been told that you have lived for a while in Kuwait, so I would gather you are familiar with the way in which the Kuwaiti society is built. There is a somewhat double standard, and there are many gray areas in terms of the two sexes mingling with each other. Therefore I think the most common place for both sexes to mix with each other is through the Internet. Girls especially cannot form relationships with boys, even as friends in many families in Kuwait, so the Internet is a 'safe' place I guess for them to do so. And the fact that the two sides don't know each other they feel safer to voice their concerns, ideas... without having their reputations ruined or without it affecting their social life.*

Buthayna is drawn to the Internet because it provides a neutral ground on which females can interact with males without fear of social consequences. A woman's reputation is something to be carefully guarded in these societies and interacting too freely and openly with the opposite sex is a sure way to blemish one's social standing as a 'respectable woman'. Men are not subject to the same rules. If they talk with other women, it is the woman who is at risk, not the man. Thus, the Internet, according to Buthayna, is a place for Kuwaiti women in which to overcome this "double standard."

Interviewer: Do you think the Internet has any special significance for Kuwaiti women?

Buthayna: *The Internet indeed is different for a woman than it is for a man, in many ways. As I have said earlier, due to the society that we live in, women are still bound by so many (more) rules than men are, even if people in Kuwait are not willing to admit it. Therefore, the Internet makes it easier for a woman to experience much of what she might not be able to experience in real life, even though this may just be virtual. In terms of (doing) research, it is also different, for there are many subjects in our society that are considered taboo, whether sexual or not, so the Internet makes it easier to delve into many worlds sometimes answering questions that cannot be asked, or just opening new horizons.*

Buthayna celebrates the Internet's ability to provide women access to information which may be considered socially or politically sensitive. Women in the region appear eager to enhance their access to information, uncensored by the government or strict social norms which are apparently in place to protect their 'honour and reputations'.

Sabiha is a 19 year old Kuwaiti college student, finishing a BA degree. Her testimony is similar in character to Buthayna's. She also stresses that the major impetus behind Internet use among young Kuwaiti women is the desire to communicate with members of the opposite sex. Illustrating the conservative nature of Kuwaiti society, Sabiha finds that there is a difference between chatting on line (which is relatively harmless) versus having a relationship with someone on line, which she observes "is impossible" as well as inadvisable, for reasons explored below.

#### **Date of interview: 30th November 2001**

Interviewer: Why do you think the Internet is so popular among young Kuwaiti women?

*Sabiha: The main reason Internet is so popular with the Kuwaiti youth is because it's the most effective way for boys and girls to communicate with each other. Mostly they use the Internet to chat with people from the opposite sex because, to them, it is easier to communicate with a name and not a face. Very rarely, if ever, do they use the Internet to do any research.*

Interviewer: Do you think Internet use has a positive or negative affect on women in Kuwait?

*Sabiha: In some ways there is a positive affect on women because they are more able to communicate with guys and it's a way for them to know that guys are not so bad. The bad thing is that some girls try to have relationships with someone online and that isn't possible. Many guys think this is possible and wind up having something like 3 or 4 if not more girlfriends online. Then there are the girls who try and do the same thing. Of course this causes the problem that girls wind up not wanting to trust guys and visa versa. So this is a major problem.*

Cyberdating, although it is common, is viewed as "a major problem" by Sabiha. Because there are not face to face responsibilities and accountabilities between the parties, and no firm commitment to a single partner relationship, on-line relationships are said to be breaking down the trust between the sexes. Chatting, on the other hand, is viewed by Sabiha as a positive way for girls to understand that guys "aren't so bad." This perspective is interesting as it implies a degree of female solidarity as well as a gendered separation common in Islamic societies. Women's attitudes towards men in the Islamic world are often conveyed in terms one might see applied to foreigners. Men are clearly an "out-group" with strange thoughts, desires and appearance. Only within marriage will these mysteries and sense of foreignness be breeched. Cyberspace is also a ground for such breeching, and it is possible that providing some data with which to access the mysteries of the opposite sex, will transform young people's attitudes towards dating and marriage. At present, parents are considered the best judges of suitability in marriage. Moreover, love, it is said, will grow out of a "good" union. Until engagement, knowledge of one's future spouse is superficial, and love is something that is understood to grow as the couple takes steps towards marriage. With the Internet, young people are increasingly empowered to explore knowledge of the opposite sex, often times choosing a spouse outside of a parent's influence, and often knowing more about their future spouse via chatting than was ever before possible within the confines of society's norms and values which places great emphasis on keeping men and women separated outside of marriage and family relationships.

When asked if she considered the Internet as holding any special significance for women, Sabiha responded:

*"One thing that I see changing is that women try to do research on women's suffrage which is a major issue in Kuwait at the moment. So women try and find a way to convince the government to let women vote, and the Internet is helping them do this."*

Sabiha is one of the few women interviewed who saw an overt political importance associated with Internet use. One of the mysteries of the spread and impact of the Internet in Western Asia is why so few citizens choose to use the tool for political purposes. Can and will the Internet serve to promote civil society, women's activism and empowerment, a retreat of the state in public life, or is the culture of authoritarianism too firmly established at present to allow for such risk taking. As discussed above, the risks can include arrest if the state finds one's "activism" a threat to security. This issue deserves further study, especially in light of women's networks and processes of democratization in the region. The section on collective action later in this paper examines some new trends in women's IT supported activism in Western Asia, of which an especially powerful instance is the use of IT in women's struggle for full political rights in Kuwait. Sabiha was prescient when she predicted that women in Kuwait would use the IT in the future to obtain their full political rights. She was interviewed in 2001, while the IT enabled political struggles for women's full voting rights in Kuwait occurred in 2005 under the leadership of Rola Dashti.

## **Saudi Arabia**

Unlike Kuwait, Saudi Arabia is ranked in tier 1 of 4 in terms of policy and leadership readiness for the information society. This lowest ranking possible means that Saudi Arabia, unlike many of the other countries in Western Asia has no clearly articulated policy vision or national strategy for building the information society in the Kingdom, nor are there any clear plans to do so in the near future. This lowest tier ranking puts the Kingdom on par with relatively ICT impoverished Yemen and Syria in terms of policy and planning. The factor (since the infrastructure factor seems to have significant connection with government vision and policy factor) slowing the progress of the information society in Saudi Arabia is the fact that ICT infrastructure was relatively slow to emerge and spread, with public Internet services not becoming available until 1999. This low penetration is also a result of state policies which made the Internet illegal to use in the Kingdom until the late 1990's. In order to maintain the security of the network and to discourage misuse, all connections to the Internet are routed through a state server located at King Abdul Aziz City for Science and Technology. This connection is managed by the Internet Services Unit (ISU) at the City for Science and Technology. ISU does not service end users. Instead, connectivity is provided to universities and licensed commercial ISP's, who in turn provide service for faculty, staff, government and commercial users respectively. The Ministry of Information web site provides a list of licensed Internet service providers in the kingdom of which there are 28 at present. They have provided service for more than 112,000 users in 1999, 490,000 users by 2001, and 1,500,000 by March 2005. In spite of a lack of state leadership preparing the Kingdom for the information society, the phenomenal rapidity with which Internet use is spreading (650% growth from 2000-2005) suggests that Internet use is an increasingly important aspect of everyday life in the Kingdom.

Data provided by the Ministry of Information surveys reveal that Internet access grows by at least 20% annually in the kingdom. 83% of Internet users are between the ages of 20 and

35. More than 78% of all Internet use in Saudi Arabia is by males. The average Internet user uses the Internet for approximately 3.5 hours a day. Some users, an estimated 6%, go online from one of the 200 or more Internet cafes in the Kingdom; while as many as 78% of Saudi Internet users have access to the Internet at home (this is a high percentage, carrying on from the above point, does government actively neglect community access possibilities. Community access in the Gulf is mostly for expatriate workers. In spite of this, access costs are relatively high (sometimes as much as 5-10 times the cost of Internet café access in Jordan or Egypt). As of May, 2001, Saudi authorities at the ISU were censoring on average 200,000 web sites, most of which were pornographic or contained materials critical of Saudi or Gulf regimes. 45% of all Internet use in the Kingdom takes place from Riyadh, the capital. In terms of use, 93% of Internet users surf the web, and 72% use email, 32% engage in Internet chatting. 56% of Internet users in Saudi Arabia have bachelor degrees. Only 22% of Internet users in the Kingdom are female.

The following narrative is provided by a 20 year old college student, Fedaa, who is from a prominent Saudi family.

**Date of interview: December, 2002**

Interviewer: How and when did you become an Internet user?

*Fedaa: I learned to use the Internet in the early 1990s (1993-94). I got a computer a few years prior by winning a bet with my father--I was able to grow my hair half way down my back. A representative from the company who did technical support from my father's workplace came to my house after strenuous nagging on my part and explained how to connect (via Bahrain, there was not yet Internet access in Saudi Arabia, so the phone bill was ridiculous!) and use e-mail.*

Here we see that a very feminine act, contributed to bringing this young woman online, she grew her hair! Long hair is an important manifestation of female beauty, concealing this beauty is one reason for veiling. Most importantly, connectivity was provided by parental consent, and access to technical support from the parent's business. Moreover, this family could afford expensive long distance phone calls to Bahrain, which used to be required when the Internet was officially banned in Saudi Arabia. These aspects of the narrative separate this young woman's experience from the masses of women in the region who are poor, uneducated, and lacking access to centers of business and political power.

When asked about her use, Fedaa observes:

*"When I first began using it I frequented chat rooms and met as many people as I could online. I then discovered that I could also use it for getting information for papers I needed to write in school. I now use it for much of my research papers, to keep connected with my friends and family, and the various consumer products available online."*

Her use patterns are typical for wired youth in the region, and parallel the narratives provided in the Kuwaiti case. The greatest attraction of the Internet for young women in the Gulf is chatting. Second is shopping, third is to obtain information, especially data that might be censored otherwise.

When asked about the impact of Internet in Saudi Arabia, Fedaa notes:

*"Because of the nature of the Saudi society, I feel that people have abused the openness of chat rooms. I think that it has done wonders for some, where they have even met their husbands online, and for others, like a friend of mine I was talking to earlier today, it has ruined their lives. This girl got in a fight with a colleague of hers, and apparently the colleague spread the girl's phone number in chat rooms. She claims she had gotten phone calls and obscene messages from all around the world, which led to her to get in trouble with her family, and she eventually changed all of her phone numbers. I also think that many women are also discovering the amount of useful information that is available online, and many women are using it for medical information, as well as shopping."*

Feda's narrative once again highlights a common theme-- that the Internet can both have a positive and a negative impact on women's lives and society in general in Western Asia. The technology promotes the unprecedented flow of uncensored information (even if the Internet is censored in Saudi, Feda' notes in other conversations, that it is really impossible to filter everything, and there are companies which offer software to break through firewalls, commonly available in the Kingdom)<sup>21</sup>. The Internet promotes young people's freedom of movement, and interaction across gender lines. In this case, Feda' explains that the Internet can also be used to harm a young woman's 'reputation' creating a considerable negative impact on her life. Moreover, Feda' explains that she thinks some people in Saudi Arabia abuse the freedoms provided by chat rooms and the Internet. Her explanation is, the nature of the "Saudi society", meaning that given the restrictiveness of the culture, when people are awarded freedoms, like those available via the Internet, some are unable to control themselves or to conduct themselves properly. Like in case of a starving child given access to a lavish buffet, hunger can interrupt table etiquette, Internet freedoms can bring out unaccustomed behaviors, including what would be considered 'misuse' of the Internet given Saudi social codes. Joshua Teitelbaum has analysed uses of the Internet in Saudi Arabia and summarizes the ambivalence of local attitudes towards the technology via a quote by the Minister of the Interior, Prince Nayef bin Abdal-Aziz. Prince Nayef addresses a gathering of Imams from local mosques and observes, "the Internet, while containing much negative material could be used as a tool to inform the world about Islam in Saudi Arabia."<sup>22</sup>

When asked about Internet use among women in Saudi Arabia, Feda' notes:

*"I think that less than half (of the female population in Saudi Arabia) use the Internet. Those who do are mainly the elite, but they are beginning to introduce the Internet to students in private schools (which could widen access)."*

We know from figures provided by the Ministry of Information that female Internet users constitute just over 20% of all Internet users in Saudi Arabia. In terms of what percentage of women have access, we have no figures, but Feda' highlights a common pattern in Western Asia, that users tend to be part of the elite, and tend to have gone to private schools (this is changing in Jordan as analysed below with more rural and urban poor women gaining IT access and training in community Knowledge Stations).

When asked about the potential long term effects of the Internet on Saudi society and its relationship with the global community, Feda' optimistically observes:

<sup>21</sup> For more on censorship of the web in the Arab World see: Eric Goldstein, (1999) The Internet in the Middle East and North Africa: Free Expression and Censorship. [www.hrw.org/advocacy/internet/mena](http://www.hrw.org/advocacy/internet/mena).

<sup>22</sup> Joshua Teitelbaum, "Dueling for Da'wa: State vs Society on the Saudi Internet," Middle East Journal 56/2 (Spring, 2002), p. 7).



*"I believe that having a portal to the world is extremely necessary in the world we live in today. I do believe that being able to access information from all around the world does help build tolerance and understanding. I also believe that it can be harmful, not only because of the instance I mentioned earlier, but because it is still very difficult to control the information that is available online, and any charismatic psychos are able to mislead the weak into flying airplanes into buildings. I hope that by seeing that an open society online functions on a normal level, which hopefully it can prove to do, Saudis will begin to consider transforming their closed and very limited social activities. I think that interaction between the sexes especially in the workplace is inevitable in the future, and I think that the Internet may be the only means to proving that decent and respectable interaction is possible. Hopefully the good will overcome the evil that is spread online, and people can see that the glass really is half full."*

Feda' refers above to the Al-Qaeda movement, which has Saudi roots, and has made liberal minded Saudis eager to illustrate to the world that extremist views are not the norm in the Kingdom. Feda' also celebrates the Internet's ability to provide incentive for Saudi society to be less insulated from the world. She hopes that exchanges of communication via wired technologies can help to promote global understanding.

## Bahrain

Information society in Bahrain shares many features with that in Kuwait and Saudi Arabia. Bahrain, like Kuwait, is in the second tier of information society readiness in terms of policy and leadership preparation. In terms of ICT infrastructure, Bahrain, Saudi Arabia and Kuwait are all second tier countries, meaning that ICT infrastructure is experiencing a rapid expansion, but still the countries ICT sectors are regulated and state controlled to the degree that they are lagging behind Western Countries in terms of access and diffusion. The Internet was made publicly available in Bahrain beginning in 1995. For example, from 2000-2005, Internet access grew by 389% but there are still just under 200,000 users. Bahrain still has a single ISP, Bahrain Telecommunications Company, Batelco - the state's majority owned telecommunications firm<sup>23</sup>. Internet access was provided initially to serve the business community. At the same time, access is closely monitored by the state, for which the explanation given is the need to ensure that connectivity does not undermine state security. The government does block access to some sites. For example, the Bahrani Freedom Movement web site ([www.vob.org](http://www.vob.org)) was blocked by Batelco because it was considered by the government to incite sectarianism. In 1997, Sayyid Alawi Sayyid Sharaf, a Batelco engineer was arrested and detained for 2 years without charge for allegedly using the Internet to transmit information to political opposition groups.<sup>24</sup> In spite of some evidence of censorship and monitoring, the Internet is still a powerful force in business, education and entertainment in Bahrain. Bahrain University, like Kuwait University, offers all of its students free email accounts and access to the World Wide Web. An Information Technology Center provides access and training at Bahrain University for students, faculty and staff. Incorporation of computers and Internet use into instructional objectives is encouraged. Even in government high schools there is a commerce track which requires training in Internet use and content development as well as other forms of IT literacy for business. Since the government continues to monopolize the ISP market in Bahrain, the cost of access is unlikely to drop until competition is allowed. Among those who are active Internet users, the most popular portals are [www.inet.com.bh](http://www.inet.com.bh), [www.accessgcc.com](http://www.accessgcc.com), [www.zawya.com](http://www.zawya.com), and

<sup>23</sup> [www.batelco.com.bh](http://www.batelco.com.bh)

<sup>24</sup> The Internet in the Middle East and North Africa, Human Rights Watch, 2001, p. 2

www.tradearabia.com.<sup>25</sup> While we do not have figures with which to understand women's contributions to the information society in Bahrain, the following narratives suggest that women do participate in the information society, and their numbers are increasing.

Haya is a government employee in her Mid 20's.

**Date of interview: 15th April, 2002.**

When asked about the characteristics of Internet use in Bahrain, Haya replies:

*"Internet use in Bahrain is especially widespread. Most business women here are Internet Savvy, as are many housewives and self-employed women. Internet in the workplace is an integral part of work (email, research) so for business purposes, it is widely used. Chatting is also hugely popular—from first-hand observation, the age range of 11-30 years I would say likes to chat on the net."*

From Haya's observations, we can conclude that Internet usage in Bahrain closely parallels the Kuwaiti and Saudi cases in terms of young people's use of the Internet for chatting. Moreover, her observation that Internet use is common in workplace resonates with the idea that getting on-line is also often associated with work related demands. What is distinct about Haya's observation, is her comment that Internet use in Bahrain is widespread. Figures cited in the introduction to this article indicate that of all the cases considered in this analysis, Bahrain has one of the highest Internet penetration rates per capita, with nearly 30% of the population having access.

When asked about the possible impact of the Internet in Bahrain, Haya notes:

*"Socially, it is also interesting that there seems to be an undocumented rise in the number of marriages that start off as Internet romances. I think this is especially true in the Gulf and probably mainly for twenty somethings, who don't have the opportunity to date all that much. Email is also used quite a bit as a chat up method—it isn't uncommon to get random emails from strangers telling you that they have seen you somewhere and would like to get to know you (again, over email!!). Instant messaging is also hugely popular."*

These observations resonate with those made in Kuwait and Saudi Arabia, that the Internet is a common forum for cyberdating, especially for the young. Most of the observers seem to find this "interesting" or "curious" or "liberating" rather than to be concerned about the undermining of more patriarchally and matriarchally controlled forms of courtship, common in the region.

When asked about women's access to the Internet in particular, Haya states:

*"I think that what started off as a rich woman's technology is now becoming increasingly mainstreamed. I know that in Bahrain, a lot of schools are improving their connectivity—some at a faster rate than others—but we are getting there."*

Bahrain's approach, according to Haya's observations, is to improve connectivity and IT training by providing for it at government schools. As a relatively wealthy country, with a relatively small population, and relatively high literacy rates, Bahrain can realise positive

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<sup>25</sup> Email correspondence with a Batelco employee, 30 March, 2002.

results over a short period of time, with the right kind of enabling environment provided by the state.

In terms of the impact of the Internet in her own life, Haya comments:

*“For me personally, the Internet has just sped things up. Whether its work related or for pleasure, my ability to stay in touch with people, send and receive information, obtain information over the web, keep in touch with goings-on at my alma mater, etc. the speed and ease of access to all of these have made the desire to maintain connections with people easier to realise.”*

Again we see that for women who do have access to the Internet, their use fits a global pattern, in that Internet is making life faster paced, more connected globally, and more information driven.

Fatima is a professional woman in her mid 20's, and a friend of Haya's.

#### **Date of interview: 10th April, 2002**

In this interview, Fatima decided to contextualize her narrative of the Internet's use and impact in Bahrain in her own personal experiences. She explains:

*“Speaking only for myself, I use the Internet everyday at all times and for all purposes. I rarely chat. I book plane tickets and hotels, buy groceries, use it for work related research, obtain directions, book movie tickets, buy theater tickets, read news...[My] uses are many and varied. I have an ADSL line so I can use it 24/7.”*

Fatima's use patterns fit those of other mid-career professionals, in Western Asia and abroad, for that matter. She uses the technology “everyday and for all purposes” which is testimony to the advanced development of Internet culture in Bahrain. We see through her narrative that ecommerce is not only possible, but practical in Bahrain, where one can buy groceries, movie and theater tickets, airline tickets on line. In spite of her own use patterns, Fatima notes below that ecommerce still has much room for growth in Bahrain, as most companies don't use their home pages to transact business, but rather as a form of advertising. Fatima's narrative also suggests that some of the speed and ease of her use of Internet stems from her regular access to an ADSL line which gives her reliable and quick home access. Wide access to ADSL also distinguishes the Bahraini case. In most West Asian nations, including Oman, Jordan, Yemen, Iraq, Saudi Arabia, Syria, Jordan and Lebanon, high speed Internet connections are scarce, and this has been a significant factor in slowing the emergence of an information society. E-governance, e-commerce, and e-education all require high speed bandwidth to be widely available to run smoothly and efficiently.

In terms of the broader use and impact of the Internet in Bahrain, Fatima observes:

*“My thoughts on Internet usage are that it is probably currently a phenomenon of the wealthy rather than the poor for the following reasons:*

- *The high transaction costs associated with acquiring a computer/getting and paying for an Internet phone line—Most Gulf countries do not have freely accessible and cheap/free broadband telephone networks and computer penetration, and literacy tends to be higher among the more educated.*

- *The wealthier tend to have more ease with English (which is vital for Internet use); even those who can read Arabic may not know how to type Arabic quickly which would make computer usage more difficult.*
- *Gulf countries tend to censor traditional media so to the extent that the usage is to obtain news, users would tend to be people who are politicized and/or are interested in obtaining several different points of view; I don't know how that cuts in terms of usage.*
- *There are currently not many local Internet commerce opportunities (ie, businesses treat their web pages as an advertisement, not as a medium to transact business), so I assume from that that the utility of the Internet is likewise somewhat curtailed."*

Fatima's observations regarding barriers to more widespread Internet use in the Gulf and beyond parallel those offered by others in the region. That information society transitions are inhibited by the cost of connectivity, education and literacy factors and, lack of public interest or demand except among isolated pockets of society - the rich, the young and rich, the politically active, the urban professional. In its present state, even in Bahrain, connectivity is inhibited by all of the factors which account for the digital divide world wide. If we take Fatima and Haya's narratives together, they present a clear snap shot—indicating that for the elite, Internet use is widespread. For other social classes, its use is limited.

## Jordan

The Jordanian case offers the most promising example of how a country with relatively few natural resources can build a successful information society, not just in the capital, but throughout the country. With the support of King Abdullah II, the information technology community and policy makers in Jordan developed the REACH initiative, the implementation of which has distinguished Jordan as among the most information society ready countries in the region. Jordan ranks on par with the United Arab Emirates in terms of leadership, policies and vision, and in terms of legal and regulatory readiness for the information society. Jordan is a second tier country, ranking on par with Kuwait and Saudi Arabia in terms of ICT infrastructure. For example, connectivity to the Internet has grown over the last 5 years at a rate of more than 250%. Several organisations are responsible for promoting the diffusion and use of IT in Jordan including the National Information Center which helps to support use of IT in public sector organisations and projects; the Ministry of Information and Communication Technology, which spearheads such high profile projects as the Jordan Education Initiative, the E-Village project, and the Jordan E-Government initiative. The promotion of IT in the private sector is supported by the Information Technology Association of Jordan. UNIFEM regional headquarters in Jordan is also playing a significant role in assessing women's access to and use of IT in Western Asia by making, in the words of one local observer, "ICT policies and forums more gender sensitive."<sup>26</sup> King Abdullah II has also helped to spread IT use and access in Jordan through the Knowledge Stations project which has established 100 information technology access and training centers throughout the kingdom in poor and rural communities. The ubiquity of Internet cafes also promotes community access. Jordan is in the *Guinness Book of World Records* for having the highest concentration of Internet cafes in the world. In Irbid, on University Ave. across from Yarmouk University, more than 150 Internet cafes exist within an expanse of a few city blocks. The same phenomenon can be observed on University Ave in Amman, across the street from University of Jordan, where more than 75 Internet cafes exist within a few city

<sup>26</sup> Doha Abdel-Khaleq, "When Jordan UNIFEM Speaks Up," in Packet: Quarterly Update on Jordan's ICT Sector. Vol. 7, Spring (Amman: INT@J, 2004), p. 5.

blocks. Women form a majority of Internet users in cafes and community access points in Jordan.<sup>27</sup>

In order to more fully grasp women's role in the emerging information society, this section profiles the narratives from Jordanian women who participated in the NetCorps Jordan project. NetCorps Jordan is a project launched in 2002 via a partnership with the Digital Opportunity Trust of Canada (DOT) and the Zein al-Sharaf Institute for International Development. The project attempts to use information technology for development at the community and national level by training interns in IT and sustainable livelihoods and placing such interns in their local community Knowledge Stations throughout the country. The interns are trained to raise awareness of ICT in their local communities by offering training courses in ICT and sustainable livelihoods. The NetCorps Jordan program was funded by the Digital Opportunity Trust of Canada, the Jordanian Ministry of Information and Communications Technology (MOICT) and the Achieving Market-Friendly Initiatives and Results Program (AMIR) which is funded by United States Agency for International Development (USAID). All of these organisations saw great potential in the NetCorps model for helping Jordanians to spread Information Technology (IT) literacy, sustainable livelihoods, and the knowledge economy. Narratives of the participants suggest that the Netcorp Jordan project was in particular a path to ICT enabled empowerment for Jordanian women.

When explaining why she enrolled in the Netcorp Jordan program, Maha, a woman aged 40, observes:

*"The reason I registered for this course was to learn computer skills, which was a challenge for me. I was always asking my son, who is a tenth grader questions about computers and their uses, and I used to have some information but it was not enough. I had to work more on that. My son used to answer me by telling me he does not have time, he was busy, and he used to trivialize my questions which actually motivated me to register for this course to know more about computers and to learn on my own without his help. My goal was to better supervise his usage of the computer, as a mother. Moreover, the nature of my work requires me to have computer skills for report writing and indexing. This also constituted a motivation to learn something my work expected from me so I would not need to keep asking people, especially people that are not always free or there to guide or help me. Ultimately, I wanted to develop myself, to not feel ignorant over something which all people around the world know how to use, computers and Internet."*

Often IT for development projects focus upon empowerment via enabling women's access to public centres of power - the knowledge economy, parliament, policy making communities etc. Maha's narrative suggests that IT can also be a path to empowerment even for more traditional women who view IT training as a path towards more effective parenting. In Maha's case, her IT training in the Knowledge Stations via the Netcorp Jordan project also empowered her by making her more effective at work.

Again highlighting the role that IT can play in advancing the interests of Jordanian women, 23 year old Netcorp intern Noor observes the following when assessing her most important achievements as a NetCorps volunteer,

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27 Deborah L. Wheeler, "Women, IT and Empowerment in the Arab World: Lessons from Internet Cafes and Beyond," Paper presented at the Gender and ICT's Workshop, Sam Nunn School of International Affairs, Georgia Tech, Atlanta, Georgia 28th March, 2006, and Wheeler, "Gender Matters in the Internet Age: Voices from the Middle East," in Technology in a Multicultural and Global Society ed. May Thorseth and Charles Ess, (Trondheim: Norwegian University of Science and Technology Programme for Applied Ethics, 2005), pp. 27-42; and Deborah L. Wheeler, "Gender Sensitivity and the Drive for IT: Lessons from the NetCorps Jordan Project, Ethics in Information Technology, Forthcoming.

*“One of my clients was a 39 year old woman with a 7th grade education. She knew nothing of computers before taking my NetCorps training session. Her husband has an electric and tool shop, while she is a dressmaker. After she took the power point course, she did a slide show of pictures promoting her husband's business and displayed it on a screen in his shop. Now when a client enters the shop, he sees the screen and the pictures as well as the actual products. I really liked what she did and I felt that being able to influence change in her life was an achievement for me. Also, since she is a tailor, she started searching on the Internet for different dress styles that are the latest fashion, in order to benefit when she is making clothes for people.”*

Noor's narrative is important because it highlights the fact that even women with limited education can benefit from IT training. Noor's student used her IT skills to improve the quality of her designs as a tailor. Likewise, Noor's student shared her IT skills with her husband by using IT for marketing in his electric and tool shop.

The link between IT and empowerment featured prominently in interviews with Netcorp participants. The following list highlights some of the most important IT enabled paths towards empowerment for women participants who formed the majority of Netcorp interns and clients:

1. Rimah, 25 from Jarash, states that her NetCorps training “widened her vision and made her more strategic in her thinking, made her decide she did not want to be a housewife, led to more volunteer experiences and ultimately to employment.” She now works at a handicapped rehabilitation center in Jarash
2. Inas, 21 from Amman, gained new employment opportunities which enabled her to find a profession where she could fulfil her dreams of using IT to help people achieve their full potential. Via NetCorps, Inas gained complete financial independence, and gained deep respect from her father when she was invited to deliver a speech in front of King Abdullah II (Young Entrepreneur of the Year Award).
3. Niveen, 24, states that “NetCorps allowed us to recognise things in ourselves that we might not have known. Things which we might actually make good use of like I did not know that I have the ability to prepare and train people. I never thought in my whole life that I would become a teacher. I didn't know that I had the energy to deal with children. I also made new friends, and this is a major step, because I do not get along with people easily. I also became more social and active in family visits.”
4. Hanadi, 24 observes that “NetCorps taught me how to be more organised, how to be a leader, and more creative. I became pickier about my future career. I aim to improve myself more. I know after the NetCorps experience that I love to work.”
5. Al'a, 24 from Amman notes, “I consider NetCorps Jordan as an introduction phase for professional life. What I have learned and practiced in NetCorps, is what I am doing now on the job. I now work with Fredrisch Norman foundation in a community development program working with local communities at the household level. NetCorps prepared me for this career.”
6. Maha, 40 from Sweleh (profiled above) said NetCorps helped her earn more respect from her children, and encouraged a family learning tradition (her husband signed up for a distance learning course following her NetCorps experience). She also gained

- skills that helped her at work, including more professional presentation skills. Her knowledge of power point, for example, led to her invitation to address an international conference on her organisation's behalf.
7. Sayada, 52, from Amman gained more independent mastery of technology, expanding and strengthening family and friend networks with enhanced IT use.
  8. Ibtisam, 30, from Ajloun, was inspired by her NetCorps training to volunteer for the Al Arz Cultural Center where she helps with the organisation's word processing needs. She hopes that her training and volunteering will lead to employment in the near future.
  9. Safa, 30 from Zarqa, notes, that "her life has completely changed after the training." She was able to supplement her income by finding a job doing freelance typing and editing for students, and the general public. She placed ads for her services at bookshops near the University of Jordan. Word of mouth is spreading news of her services, and she is earning good money now. One of her client's father works at a Middle East Research Center and he asked her to type and translate documents from Hebrew to Arabic further augmenting her income.
  10. Basma, 45, from Amman, explains that she used her computer skills gained during the SL and IT NetCorps training to enhance her teaching at Sunday School and during her Tuesday women's meeting at the church. She notes, "I also got a part time job because of my computer skills. I was volunteering for 4 years at this place, the Daily Arabic Women Office, but now I am actually paid for my work. I used to send them hand written articles, but now I type my own articles and add photos and send it to them by email. Now they just have to post it on the website magazine. Because I save them time and the quality of my articles is better they offered me a part time job. I was also selected as one of four in the Middle East and North Africa to participate in a distance learning seminar called Folk Bildung, a Swedish educational institute. I will get a certificate at the end of the course. They accepted me in part because of my newly acquired IT skills. Without NetCorps, none of this would have happened. I also save lots of money on books, newspapers, and educational materials because now I use the Internet for reading and research.

## Ownership: Can Women Shape the IT Revolution in Western Asia?

In each country in Western Asia, signs of women's ownership of the IT revolution can be grasped. For example, in Jordan, Doha Abdel-Khaleq is a Managing Partner at ESKADENIA Software Solutions; in Egypt, Magda Ismael was head of the Ministry of Information and Communication Technology's E.Commerce initiative; in Kuwait, women are prominent members of the IT community as trainers and business owners.; in Bahrain, women are visible in the management structure of BATELCO. In spite of this visibility, the majority of women in Western Asia are far from such positions of power and ownership in the IT arena. A recent study by Dr. Zeinab Karake Shalhoub, Associate Dean of the American University of Sharja, points out that in the United Arab Emirates where literacy rates are high, Internet access rates are high, and a female-only IT University exists to train women for the information economy (Zayed University), women still constitute less than 12% of those trained for technology related fields. Dr. Shalhoub (a woman) gives several explanations,

which are representative of the general problems women face throughout IT sectors in Western Asia:

1. A 'glass ceiling' and old boys' network keeps women from advancing in the IT professions. A lack of advancement for women means a lack of incentive for other women to join the IT professions.
2. The intense work and time demands of the IT field are incompatible with the social and family demands placed on women throughout Western Asia. If women have to choose career or family, they tend to place family higher and thus do not enter the IT profession.
3. Self doubt and timidity among women in Western Asia makes them risk averse and thus discourages them from taking the risks to enter the IT field.<sup>28</sup>

These observations are more representative of the lives of elite women in Western Asia who may be struggling to break into all-male domains. Among other classes, women's access to and use of IT and training opportunities are limited by many other contextual and cultural constraints on their participation in public life and educational opportunities. Participants in the Netcorp Jordan project identified the following constraints on IT empowerment for rural and/or poor women in Jordan:

1. Maha observes that traditions which concern a woman's honour, her safety, and not 'courting trouble' by working late hours are a barrier to women's full participation in the work force (in the IT industry and beyond).
2. Majeda claims that community scrutiny is a barrier to women's advancement. She states, "...society is small and closed, so everyone knows everyone else's business. People gossip and this can harm a woman's reputation. Complications happen when women do actions against cultural norms."
3. In terms of IT education and empowerment, Fayza explains, "I would love to continue my education, even though I am older now...but my dreams need to be within the limits acceptable for the community. People talk, and this could affect our reputation."
4. Stereotypes and local cultural identities also play a role in women's empowerment or lack thereof. Along these lines, Hakmeh observes, "Women's roles are usually associated with the kitchen!"
5. Again, stressing the role that stereotypes and cultural constraints play on women's empowerment in Western Asia, Liana observes, "Society perceives that women should not work but rather stay at home and take care of the house management, children and husband."
6. Safa adds to Liana's observations when she states, "The women in my neighbourhood face challenges, and their biggest challenge is their husbands; husbands treat them as slaves, their wives have to spend their life cooking, washing clothes and taking care of children."
7. Rimah has a different opinion. She states that women's advancement is limited by women themselves. She states, "The problem is within women themselves, because

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<sup>28</sup> Dr. Zeinab Karake Shalhoub, "Women and ICT: Challenges facing UAE Women," unpublished manuscript.



when a woman wants something she can achieve it. A woman is able to accomplish whatever she puts her mind to. Will and determination are the key."

Traditions, lack of will or determination, a non-supportive family or husband, too many domestic responsibilities, communal pressures, lack of education, or all of these factors together combine to limit women's ownership of the IT revolution in Western Asia. Add to these factors the issues of women's illiteracy and poverty and it is easy to understand why women face potential marginalization from emerging information societies.

## Collective Action and Institutional Transformation: Using IT to Reshape Women's Lives

In spite of the challenges women face in becoming IT literate, in advancing in the IT professions, and in reshaping their lives with IT, important signs of women's empowerment via IT do exist in Western Asia. For example, the Netcorp Jordan program as profiled above illustrates clear links between women's IT training and empowerment.

Moving beyond this case study, we can see throughout Western Asian examples of women using IT to create paths towards empowerment. One of the most telling examples of this process occurred in the spring of 2005 when women in Kuwait used cell phone technology and the Internet to mobilise protesters and public opinion in favor of granting women full political rights in Kuwait. Ultimately their IT enabled campaign helped to persuade Kuwaiti Parliament to extend full political rights to women. One of the activists Rola Dashti hopes to run for office in the next election. During the campaign, Dashti was often the target of critical text messages. In one such message, circulated by the Islamist camp, her ancestor's Persian and Lebanese heritage were used as a form of insult; to call into question her identity as a Kuwaiti.<sup>29</sup> Throughout Western Asia, especially in the oil rich Gulf, but also in the recent protests against Syrian occupation of Lebanon, women (and men) are using text messaging "to mobilise followers, to dodge authorities and swarm quickly to protest sites."<sup>30</sup> Electronic channels of participation expand the realm of women's activism. For example, in Kuwait, the suffragists like Dashti note that "Kuwaiti women organising protests for voting rights said that they had been more effective during their 2005 campaign than during their last serious effort five years ago because text messaging had allowed them to call younger protesters out of schools and into the streets."<sup>31</sup> Similarly, in March 2005, the Lebanese used text messaging to encouraged friends to attend demonstrations. One example of such a message read "This is the last card they are playing, and we are moving faster to freedom—no one should stay home Monday—please forward."<sup>32</sup> Using IT to organise and coordinate demonstrators resulted in hundreds of thousands protesters storming the streets of Beirut. With such mass demonstrations and the flow of such images across borders and global communities, processes of empowerment are encouraged as "messages of protest and hope are transmitted from one country to another."<sup>33</sup>

29 Steve Coll, "In the Gulf, Dissidence Goes Digital," *Washington Post*, 28 March, 20, 2005, p. 1. (On-Line version; date accessed, May 20th, 2005).

30 Coll, p. 1.

31 Coll, p. 2.

32 Andrea Mitchell, "Technology Fuels Democracy in the Middle East: Text Messages, Satellite TV Spread Ferment." *MSNBC.com* 9 March, 2005, p. 1. (<http://msnbc.msn.com/id/7141338?print/1/displaymode/1098>) Date accessed: March 10th, 2005.

33 Mitchell, p. 1.

## Conclusion

This study of women and IT in Western Asia suggests that IT offers women in the region access to what they may not have in the real world: opportunities for self-expression; abilities to interact with people from different cultural, political and social backgrounds; opportunities to network, to improve their job prospects, or to find support for issues that trouble them. IT enables West Asian women to recreate social space as they want it, with enhanced freedoms of expression, expanded choices for social interaction, opportunities for experiencing people and places that are beyond their reach in the real world. For those on-line, experiencing new freedoms has spill over effects in their day to day lives, whether it's just making them more confident and better able to express themselves or less isolated when they refuse to submit to strict social sanctions on their character. If we take these micro victories to the macro level, we can argue that IT policy definition and implementation can be more gender aware and effective in Western Asia if it takes into account the various patterns of women's empowerment illustrated above—from IT enabled village women who use their new skills to better teach their children to be computer literate (Jordan), to more elite women who leverage IT in their quest for full political enfranchisement (Kuwait).

### **Socio-Cultural Context of IT Empowerment: The Role of the State**

As illustrated above, although the state's IT policy is an absolutely crucial piece in solving the regional information society puzzle, it is a necessary, but not sufficient variable in enhancing women's access to the technological infrastructure once it is established. At this stage, contextual variables like social and cultural norms regarding women's status, more than the state, help to shape women's IT experiences. If a husband or male relative does not want a wife or daughter or sister to have access to information technology (hardware and/or training) then it is local patriarchies rather than the state that ultimately keeps women from participating in the information age. If the price for becoming an active participant in the IT world is a woman's honor, then the cost may be too high for most to risk. In the NetCorp Jordan study, 100% of the women interviewed stated that their ability to participate in the program was facilitated by a supportive spouse and/or son. That with male family support, women could overcome communal gossip which took aim at their reputations, attempting to correct a breach of local communal norms and values. The state can build community access points, it cannot guarantee that society will allow women access, especially in towns and villages far from the capital city. There are some who will orient their behaviour in line with the policies of progressive governments, and it is these individuals who will be swayed by public information campaigns about the importance of computer literacy for all citizens, including women. In the Netcorp Jordan study, some participants cited King Abdullah's wish that all Jordanians should be computer literate as a reason for joining the program. So, the state can have an effect on spreading the information society, even if it remains difficult to change local cultural perceptions of women's ideal role within such transformations. Some strategies which the state can pursue to enhance the place of women in the information society include:

1. Reducing the cost of PC's by removing tariffs on imports and better yet, developing local computer production/assembly capabilities which also lowers costs. Some governments, like Egypt, have also introduced low interest loans for Egyptian families to purchase a PC through their PC for Every Home program.
2. Expanding IT training programs to go into homes at the village level so that women will not have to face what may be considered as a public stigma of attending classes in the community (often with male trainers).

3. Expand the number of female IT trainers so that women do not have to learn computing and other IT skills from men (which can attract social sanction).

### **Context Shapes Method and Outcome of IT Empowerment: From Micro Processes to Macro Results**

It is clear from this study and the other work done by the author on IT and gender in Western Asia that context plays a significant role in shaping women's IT experiences. For example, women who grow up in regional capital cities, who are moderately to well educated, who are employed in professional fields, have IT existences which are part of a global pattern—IT is a fundamental part of their everyday life, from e-commerce to e.governance to email and telecommuting...for these women it is almost as if life without IT is a life that cannot function normally. We especially see such patterns in the IT narratives provided by West Asian women in Bahrain, Kuwait and Saudi Arabia. Unfortunately, these cosmopolitan cyber-elites constitute a small minority of West Asian women. The majority of women live life in a different set of circumstances. Many have less than a high school education, are functionally illiterate (more common in Egypt and other parts of North Africa than in Jordan and the Gulf, with the exception of Yemen and interior Oman), were married young, have on average 3 children or more, don't work outside of the home, and are discouraged by their neighbours, their husbands and sons, from advancing their education including learning IT skills. These women make up the bulk of female West Asian society. It is these women who need the most attention when states expand the boundaries of the information society.

Some policy strategies for softening the effect of contextual variables on non-elite women's IT lives include the following:

1. Enhancing public information campaigns which stress the value of IT for strengthening family ties (via email), better preparing younger generations for the knowledge economy, and the importance of computer literacy for accessing e-government and e-education programs. These public information campaigns should be mediated by leaders with authority within local communities.
2. Creating networks of women teaching women IT. These networks will be most effective if trainers are drawn from within local communities. A household-women-to-household-women network will be most effective in conservative communities.
3. Linking IT training with employment opportunities and other sustainable livelihood strategies will help provide incentive for training and incorporating IT into households at the village level.
4. Developing a series of micro finance loans so that women can put ideas for IT enabled sustainable livelihood projects into action without risking already limited household funds. Such funds could be used to purchase a computer, to buy monthly Internet connectivity, to expand or create an at home business. Many women involved in the NetCorp Jordan project stated that they gained valuable information from the Internet with which to enhance or create a business, including ideas for hair styling, access to the latest fashion trends (especially important for seamstresses), and access to networks through which to market handicrafts and home made foods/baked goods.
5. Targeted education strategies for gender-sensitisation of men so that changes in women's lives and roles can be better accepted and discussed

within local communities, and thus more likely to take root. Such training sessions should be endorsed by local leaders respected within the community.

### **Ownership—Overcoming a Barrier to Women’s IT Enabled Advancement**

It is clear that women will not own the information revolution until they become more active participants within it. The methods for expanding women's participation include increasing the number of women who work outside of the home; reducing the price of IT so that more families can purchase PC's and other high tech tools, thus giving women who do not work wider access. Also important to widening women's role in the information society is providing gender sensitive forms of IT training. Also key to women's advancement in the IT economy is enabling more women to break through the "glass ceiling" in these emerging markets.

Some policy steps to increase women's ownership of the IT revolution in Western Asia, in addition to those already outlined above include:

1. The implementation of female targeted IT industry internships through which women can access positions of leadership within this emerging field.
2. The creation of female targeted IT management training seminars linked with entry into leadership roles within the information economy.
3. A government/private sector supported venture capital fund to support women owned IT businesses, or businesses with an employee base of 50% female staff, including equal representation in corporate and upper level management positions.

### **Collective Action and Institutional Transformation: The High Profile Signs of Women’s IT Enabled empowerment**

For the majority of West Asian women, the personal costs of being an activist for gender related change are too high to take such risks. Once again, those women who do leverage IT in their struggle for equitable social change as discussed above are part of an elite minority. Although the results of such activism make headlines, the roots of such activism do not spread far and wide within West Asian societies. They are instead the legacy of a handful of well educated, well placed, elite women armed with IT. IT enhances their public voice and extends their global reach in their quest for change. The narratives above suggest that the anonymity of cyberspace is broadening the scope of women who are experimenting on line in terms of expressing their opinions, debating political and social issues, and taking risks that would too dangerous to pursue in real life. One of the legacy effects of the information age is that a growing contingent of women may be enabled by IT in overcoming the risks to their reputations that activism can bring. Cyberactivism plays a role in change and, according to the narratives above, it is not considered by West Asian women as being as 'risky' as directly acting in the public sphere.

It is the bravery and boldness of IT enabled cyber chatters, as much as it is the growing chain of IT literate village women, who hold the real keys to hope in this region. Each woman who takes information technology into her own hands, fashioning it to fit her contextual circumstances, and makes a step towards personal and communal growth; it is she who illustrates the clear links between IT and empowerment. Women, leveraging IT to break through the norms which constrain them, provide the keys to the IT revolution budding and blooming in Western Asia.