

**SAME BUT DIFFERENT:
UNDERSTANDING WOMEN'S EXPERIENCE OF ICT IN THE UAE**

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ABSTRACT

Information Communications Technologies (ICTs) have become a potent global force in transforming social, economic, and political life. Given the centrality and importance of ICTs, men and women need to have equal opportunities to access, use, and master them. In particular, it could be asked whether women in Islamic societies within the GCC region have equal access to these new technologies. What are some of the promising new social, economic and political opportunities for Islamic women in the ICT sector, or does ICT access and use by those women replicate patterns of segregation seen elsewhere in their societies? What are the barriers that women, especially those in the Islamic world, have to overcome to actively participate in the promise of these technologies? We use grounded theory as our preliminary research methodology to analyse interviews with women who work in the ICT sector in the UAE. We discuss five major themes from the research: Westernization, IT as Modernity, Education, Government Initiatives, and Gender Perspective, and introduce a preliminary framework of the area. We conclude by discussing some inherent contradictions of women's ICT use in a society that wishes to modernize, rather than Westernize, and how this is played out in our study.

Keywords Social inclusion, Women and ICTs, Middle East, grounded theory, Theory-building

1 INTRODUCTION

Information Communications Technologies (ICTs) have become a potent force in transforming social, economic, and political life globally. As Avgerou & Walsham (2000) assert, ICTs have the potential to aid economic growth and the improvement of social conditions in the world. However, the transference of this vital knowledge to women in Islamic countries within the GCC (Gulf Co-operation Council region is hindered on two fronts; embedded gender structures within society, as well as inadequate ICT initiatives such as infrastructure, training and support from government. Although GCC countries have made many strides in recent years with regard to ICTs, the effect of Islamic culture on women's participation in ICT has not been studied.

In particular, it could be asked whether women in these Islamic societies have equal access to these new technologies. What are some of the promising new social, economic and political opportunities for women in the ICT sector? Or does it replicate patterns of segregation seen elsewhere in society? What are the barriers that women, especially those

within in this region have to overcome to actively participate in the promise of these technologies? These are some of the questions that the case study in this paper endeavours to explore. Although developing countries, especially those in the GCC region are eager to adopt new technologies such as ICTs, their utilisation of ICTs has been far below that which has been achieved by developing countries (Hill et al, 1998). This disparity can to some extent be explained by the lack of infrastructure and the difficulties encountered in implementing adequate ICT training. However this, does not explain why ICT adoption is still at the early stages in some parts of the region. Many GCC countries have the technology (tools) but are not using them to their full potential. They are still laggard in electronic service, e-government, and e-commerce in comparison with the developed world. Some GCC countries are making more progress and Dubai is a good example (Pons, 2004; Mahmood, 2007). Others like Saudi Arabia are still at the stage where they are trying to encourage people to go online and register to e-government services. To some degree, an important element of this under-utilisation has been the cultural differences inherent within the technologies. This paper explores the cultural, social and political norms that exist within a particular Islamic society – the UAE - that construct barriers to the use of ICTs as a tool for the empowerment of women within these societies.

Feminist scholarship has pointed out women's unequal relation with technology, where the contextual force of existing gender relations continues to exert a strong influence on the relationship between women and technology in ICT-related work. Even though a gendered approach to the implementation of ICTs can create opportunities for women, they can also reproduce gender inequalities seen in the broader fabric of Islamic society. ICT policies must therefore take into account the gendered roles, norms and practices that affect both labour markets and households because these, in turn, affect both the outcome and sustainability of ICT-based development (Arun & Arun, 2002).

Currently there are two gaps in the research in this area worth investigating. The first is there is very little academic research on ICT use in the UAE (Tubaishat, Bhatti, & El-Qawasmeh, 2006, Taha, 2007). Most literature seems to approach the Middle East region as a whole with few a details on particular countries (Alterman, 2000, Fandy, 2000, Dutta & Coury, 2003). The second gap is that literature provides a very superficial discussion about the engagement of women with ICTs in this region (Wheeler, 2004; Skali, 2006). This paper presents a preliminary theoretical framework based on some initial data from the United Arab Emirates. The paper aims to address the following research questions:

How do Islamic cultural beliefs and values affect the perception of Information Communications Technology (ICT), as experienced by female Emirati ICT workers in the UAE? What role does the UAE government play in the perception of ICTs, as experienced by female Emirati ICT workers in the UAE?

The paper is structured as follows. The next section explores the existing literature on women's experiences of ICT in the Muslim world, culminating in a 'sensitising device' (Klein and Myers 1999) for the study. This sensitising device provides the basis for exploring the UAE as a specific example of women's experiences in the ICT sector. The paper concludes with the presentation of a preliminary theoretical framework for understanding the influences that affect the uptake and ICT use by Emirati women in the UAE which might then be used as a basis for further study

2 LITERATURE REVIEW

2.1 Women and ICT

While there is recognition of the potential of ICT as a tool that could give a major boost to the economic, political and social empowerment of women (Hafkin and Huye, 2006), a "gender divide" has also been identified. This gender divide is reflected in the lower numbers

of women accessing and using ICT compared with men. Unless this gender divide is specifically addressed, there is a risk that ICT may exacerbate existing inequalities between women and men and create new forms of inequality (Sandys, 2005). It can also be argued that ICT's are designed and created within male-dominated environments and as a result, they do not necessarily correspond to the specific needs of women. ICTs are also regulated by decision-makers, the majority of which are men. This phenomenon embracing the disparities in access and use of ICTs by women and men has also been named the "gender digital divide" (Huyer and Mitter, 2003).

This gender digital divide is often characterized by more than just low levels of access to technologies; it is also where women's capacity to exploit the potential of the new ICT as tools for empowerment is constrained in many different ways. Some constraints are linked to factors that affect both women and men, including technical infrastructure, connection costs, computer literacy and language skills. These overall constraints are, however, exacerbated in many cases by gender-based determinants, which particularly disadvantage women (Sandys, 2005). Consequently, the potential created by ICTs will only be realized if the gender dimensions of the Information Society - in terms of users' needs, conditions of access, policies, applications and regulatory frameworks - are properly understood and adequately addressed by all stakeholders (Primo, 2003).

The transformational capacity of ICT for the empowerment for women has been well established in the literature (see Wheeler, 2004). ICT development scholars have concluded that ICTs are not gender-neutral (Hafkin, 2002; Huyer and Sikoska, 2003). Like any other technology, they are socially constructed and impact men and women differently (Hafkin, 2002). This situation is worsened in societies (Islamic) where women are more socially, religiously and politically constrained in relation to women in other societies (Western) (Wheeler, 2004). There has been some research done that addresses these implications for women (and men) in the Middle East of new forms of media such as the television and radio (Abu-Lughod 1998; Cooke 2001; Mazrui and Mazrui 2001; Eickelman and Anderson 2003; Sakr 2004; Miller 2007). However, none of this research focuses on the opportunities for and barriers to empowerment that ICTs can offer for Muslim women.

2.1.2 Empowerment

Women's empowerment is focused on increasing their ability to take control over decisions that shape their lives, including access to resources, participation in decision-making and control over distribution of benefits (Sandys, 2005). For women who can access and use them, ICTs offer income generation, education, health, access to information and awareness on (public and private) rights, and improve their wellbeing. Furthermore as the DAW Meeting in November 2002 concluded, "*when there is an enabling environment, ICT can provide diverse avenues for women's social, political and economic empowerment.*" (Huyer and Mitter, 2003). Consequently, empowerment tends to be viewed as a process that leads women to perceive themselves as capable of undertaking decisions and making choices about their lives, which in turn requires sufficient levels of self-confidence and assertiveness. Empowerment therefore, necessarily embodies challenging patriarchy at all levels of expression: social structures and relationships, moral, cultural values and norms, institutions and power structures (Huyer and Sikoska, 2003).

2.2 Islamic Society

2.2.1 ICTs as Modernity

Modernization, the introduction into society of the artefacts of contemporary life such as communications, technology, or household equipment, has permeated into virtually all societies including Muslim societies. But modernity, a way of thought and of living in the

contemporary world and of accepting change, as part of political and cultural processes by integrating new ideas into society, may not always be present (Munir, 2003). In most Muslim countries the rapid changes through a process of technological, economic, political, social, and cultural innovation, however, have not been followed by the development of their people. In contrast to modernization, development denotes the relative welfare of a nation's population. Modernization and development have become paradoxical. Modernization has occurred rapidly, while appropriate development has not. As a result of its relative success in the West, modernization has become identified with Westernization and secularization (Munir, 2003).

2.2.2 Access

Much initial concern over the Internet in the region has focused, from those in authority positions on "culturally inappropriate" content (Anderson, 1999). In the UAE and other Arab countries, access to the Internet is tightly controlled and censored by the government in an effort to control the exposure of certain thoughts and ideas. Whilst pornography and gambling remain the official reasons for banning certain websites, other Internet sites that are seen to be violating family values, criticizing Islam or Islamic governments and any websites about Israel are also banned (Arab Governments and the Internet, 2006).

2.2.3 Religious Perspectives on Women

As religion is a major factor in shaping Arab culture, some authors view this male-dominated culture as leaning on religious rhetoric as an excuse for women disempowerment (Minai, 1981). However others like Hassan (2003) and Kort (2005) assert that Islam has nothing to do with the disempowerment of women. They assert that the teachings of both the Koran and Prophet Mohammed emphasized the importance of both males and females acquiring knowledge and that "the quest of knowledge and science is obligatory for every Muslim man and women." Thus, Hassan (2003) concludes that Arab authoritative governments are simply using religion as a tool to further women disempowerment (El Gody, 2003). Whatever the motivation, a woman's position in most Islamic societies is segregated and restricted to some degree.

2.2.4 Decision Making

Gender equality will remain a distant, unattainable dream unless a substantial number of women believe that they must push for recognition of their rights and governance (Wheeler, 2004). As Rowland (1995) asserts, this needs to start with the recognition of the internalized oppression by the patriarchal nature of Islamic society and continue with a collective effort by women to improve their situation. Furthermore, in many Muslim societies treat women as "separate and unequal." Aspects of that perspective are rooted in a view of the Shar'ia that dictates that women inherit half of what men inherit and that, in certain circumstances, holds the testimony of women in court to be worth less than that of men. In addition, there are few women in the political arena in Islamic societies and thus their influence is severely hampered (World Bank, 2005).

2.3 ICT Initiatives

2.3.1 ICT Training

Women need basic literacy and numeric skills in order to read and compose simple messages, navigate the Internet, and execute commands in most software applications. Women make up nearly two-thirds of the world's illiterate, and one out of every two women in developing countries is illiterate, for these reasons women are more likely than men to lack basic literacy and computer skills, which would enable them to take advantage of the opportunities afforded

by ICTs. To this end, Jorge (2002) recognizes that ICT training is of the utmost importance if women are to use the technology of choice. Gaining the required skills not only allows women to feel comfortable as ICT users but it further empowers women to use ICT in many other ways, such as, for example, by increasing their employment choices and their contribution to community development. There is a huge push in the UAE for the attainment of higher education for women and this is reflected in the fact that there are more women than men enrolled in tertiary institutions, especially in IT related areas (UAE Yearbook, 2004). Moreover, projects are underway in the region to help connect Arab women through the use of ICTs and the Internet, and include advocacy campaigns for mainstreaming gender into regional and national ICT policies and programs (UNDP, 2002).

2.3.2 Government Support

It is essential to engage the ITU and other UN agencies and programs involved in ICT work, in more active training of policy makers and ICT advocates on gender analysis. ITU frequently conducts training seminars and workshops for regulators and policy makers of member states. These training activities should incorporate gender considerations and gender analysis in their plans (Jorge, 2002).

2.3.3 ICT Investment

Nour (2002) conducted a study on the diffusion of Internet in the Arab world which showed that even though this part of the world encompassed 280 million people it still continued to have the lowest uptake of ICTs when compared to USA, Japan and Europe (Regions of comparable populations). However, the UAE has the highest penetration rate in the entire region with 24 percent of the population having access to the Internet (Nour, 2002). This may be for two main reasons; firstly, that UAE is one of the richer Gulf countries (Nour, 2002). Secondly, there is a strong strategic focus by the UAE government to invest in a knowledge society, one that is fully IT-literate (Al Ahed et al, 2007).

2.4 The Relationships between the Different Elements of the Framework

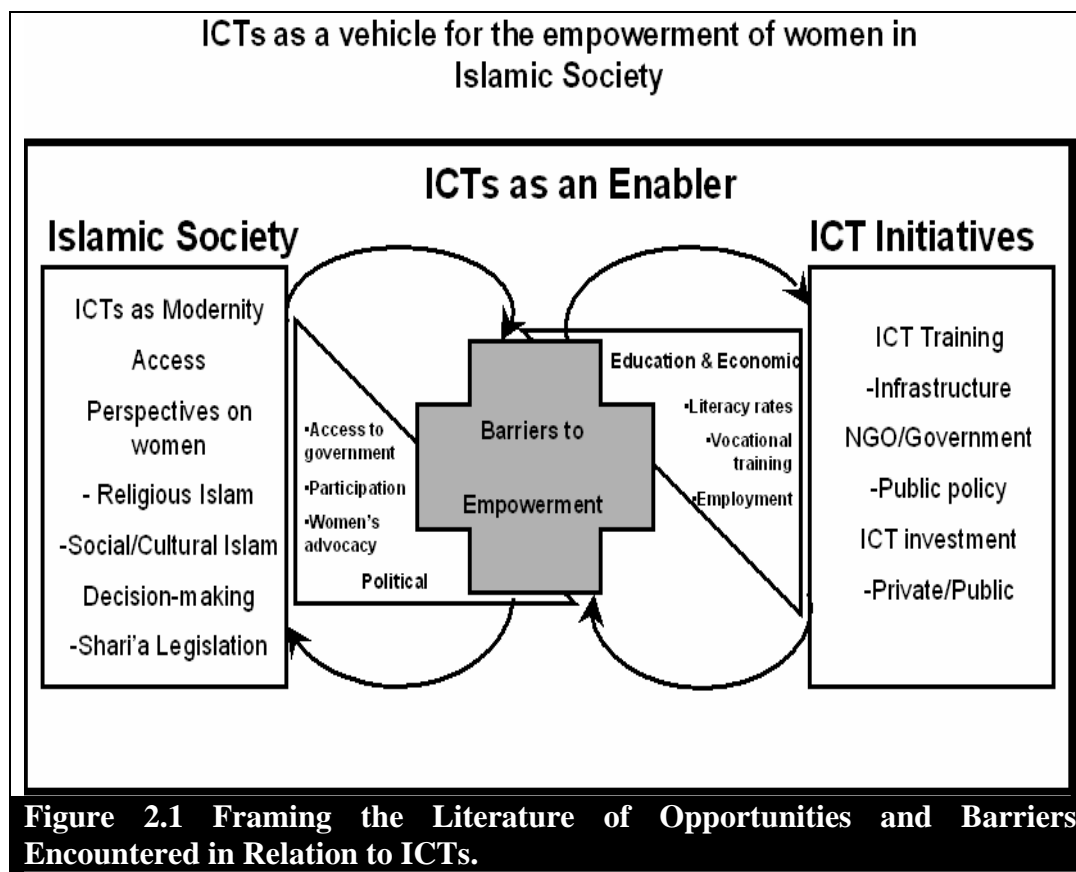
Political Empowerment in terms of e-government and access to government services, has the ability to facilitate and promote the participation of women in public-decision making, access to government and the services it provides as well as advocating women's issues. This in turn would enable engendered education and economic policies, which would augment education and economic empowerment of women. Conversely, greater education and economic empowerment in the form of increasing literacy rates, vocational training in all arenas and better employment conditions, would enable women to lobby greater political participation. However, where these two components are usually complementary to each other, this model takes the view that, in Islamic societies women are hindered by two factors.

The first being the socially constructed perspectives and cultural norms that posit inequality between genders and impede women's access and rights in all arenas of life. The treatment of men and women in Islamic societies varies; however, in stricter societies such as the Gulf States in the Middle East, men and women are segregated in all facets of life. Added to this is the mistrust of ICTs as a tool of modernity and as such, one that will corrupt their traditions, beliefs and values of which women play a central role. These two factors added together provide a restricted role for women in the political sector as well, where their actions are stringently monitored through the national legal religious framework of the Shar'ia Law. In the UAE, physical segregation of women applies strongly in some regions, less so in more 'Western' areas such as Dubai. This study interviewed women from Abu Dhabi where women's education is segregated but women and men do work alongside each other.

The second, is that the ICT initiatives, such as government policies and ICT training that are required to sustain and support gender neutral access to education, economic and political empowerment, are themselves gender biased (Hafkin, 2002: Huyer & Sikoska, 2003). Both the UNDP and the ITU note that it is of the utmost importance to create an enabling environment for the use of ICT as an instrument for the advancement and empowerment of women (Arab Human Development Report, 2002: Wheeler, 2004). Jorge (2002) suggests that this environment should include amongst other things, national policies on gender equality as well as sectoral policies that include gender equality objectives. These policies should address the differential impact of ICT on women and men, and consequently respond to the different needs and realities of women. They should also focus on creating universal opportunities for accessing ICT through education, training and information. Lastly, these policies should recognize the diversity of women and the roles that they can play as producers and consumers of ICT. However, gender equity policies can become mere rhetoric, where the inclusion of such policies is simply there to placate the international community and are rarely converted into reality. While this may be true for some Islamic countries, there are still examples such as the UAE, where this latter aspect is becoming a reality for its female citizens. There is a huge push in the UAE for the attainment of higher education for women and this is reflected in the fact that there are more women than men enrolled in tertiary institutions, especially in IT related areas (UAE Yearbook, 2004).

New computer technologies offer a whole new field for women to participate in the workforce, and play their part in developing the new, technologically based Arab economies on which future development depends. The Arab Human Development Report (2002) calls for reversing the feminization of unemployment by removing gender bias in labour markets – including gender-based occupational segregation and wage differentials – and addressing gender gaps in the quality and relevance of education and skills-training programs (UNDP, 2002). Projects are underway in the region to help connect Arab women through the use of ICTs and the Internet, and include advocacy campaigns for mainstreaming gender into regional and national ICT policies and programs (UNDP, 2002). Moreover, a significant feature of technologies like the Internet is its anonymity where people may surf on the Internet without their identity being known to others. As Summer Hathout, co-founder of the Muslim Women's League asserted, "*I think for the first time for a lot of Muslim women they can be equal partners in a discussion on anything, that is, I think, primarily the beauty of it—that nobody knows who you are*" (Kort, 2005). In this way, as well as opening up participation, the Internet obscures the line between public and private spaces.

The 'sensitising device' (Klein and Myers 1999) presented in this section provides a diagrammatic and synthesized view of the various issues discussed in the existing literature. Figure 2.1 serves as a tool through which we can assess the barriers that arise in the context of Islamic societies that impede the use of ICT to aide the empowerment of women. The purpose of this section was to discuss the various components of the framework and provide an explanation of the relationships that exist between the components.



The sensitising device suggests that in spite of these new freedoms and new possibilities afforded by ICTs, the technology is not necessarily free of influence from existing systems of economic, political, and social inequality that exist within Islamic societies (Mazrui and Mazrui, 2001). Such Islamic societies have assumed that there were two different doors of knowledge, one for each gender (Mazrui and Mazrui, 2001). In some ways the introduction of ICTs has the ability to enforce this doctrine of “separate and unequal”. Under the new technology the computerized *hijab* is at hand: women can more easily stay at home while continuing to participate in a computerized workplace. And yet, on the other hand, by gradually abolishing the distinction between home and the workplace, Internet technology may also give women the opportunity to integrate themselves into the economic and political global community (Mazrui and Mazrui, 2001).

3 METHODOLOGY

Two in depth interviews were carried out in an educational institution of the UAE. Each interview lasted for 1.5 to 2 hours. The idea was to use these interviews for a preliminary theoretical framework for a larger study, but we feel these results stand on their own as a theory building effort. The participants were both employees of a University which has an emphasis on technology mediated education in the UAE. Walsham (1995) asserts that interviews should be the primary data source as these provide the best insights into the participant’s interpretations, views and values of what is going on around them. As the ‘official’ documentation of events in the Middle East is often quite different to the realities being faced by women in the society, this rich data source was relied heavily on by the authors. While the sensitising device presented in the previous section was used as a starting point for exploring the research problem as well as the foundation for the formulation of the interview questions. The research used a theory building approach (Eisenhardt 1989). The

interviews were analysed using grounded theory method (Glaser and Strauss 1967, Glaser 1992). Open coding, selective coding, and theoretical coding (where the relationships between constructs are considered) were carried out on the interviews. Relationships between constructs were also elaborated on using theoretical memos (Glaser 1992), and an example is provided in the appendix.

Grounded theory was considered appropriate for this study for two main reasons; grounded theory is inductive by nature so is extremely suitable for interpretive research, especially when little research or literature exists in the area under study, or the existing literature does not explain the phenomena satisfactorily (Eisenhardt 1989). Literature on the Middle East and specifically about the UAE is sparse, especially in reference to the 'real' experiences of Arab women and ICTs. Secondly, the emphasis on theory development inherent within grounded theory made it very suitable for the research. Grounded theory's original aim was to inductively generate formal theory via the route of substantive theory (Urquhart, 2001). The aim of the study was to develop a preliminary theoretical framework, based around the experiences of Arab women within a particular context, rather than attempting to understand it within an existing theory or framework. As such, the sensitising device was used purely to anchor the phenomenon of interest in the literature and help with the formation of interview questions, rather than represent our final thinking on the subject.

4 FINDINGS

Five themes emerged from the data during the analysis phase of this research. The framework in the figure below provides a high level overview of how the themes relate to one another. Each of the boxes represents a theme. The theme's properties, that is, their selective and open codes are listed inside each box, and arrows are used to identify the relationships between categories. Each of these themes and their associated properties is discussed further in this section.

4.1 Westernization

In our country they do not want to get Westernized, they want to maintain their heritage and culture (Fatima).

This theme reflects the way the participants viewed ICTs as an idea that has originated in the West and one that needs to be implemented with care in their own societies in regards to sensitivity towards their culture. We have named this theme Westernization as it reflects a concern that exists at least with Fatima and Sarah, of becoming westernized as opposed to modernized.

When analyzing the interview data the authors discovered a close conceptual relationship between cultural issues that arise when implementing ICTs and the censorship that is put in place. The level of censorship acts as a mechanism for safeguarding the national culture and religion of the UAE from the influences of Westernization that are perceived to accompany the ICTs (an example of how the coding was conducted is included in Appendix 1).

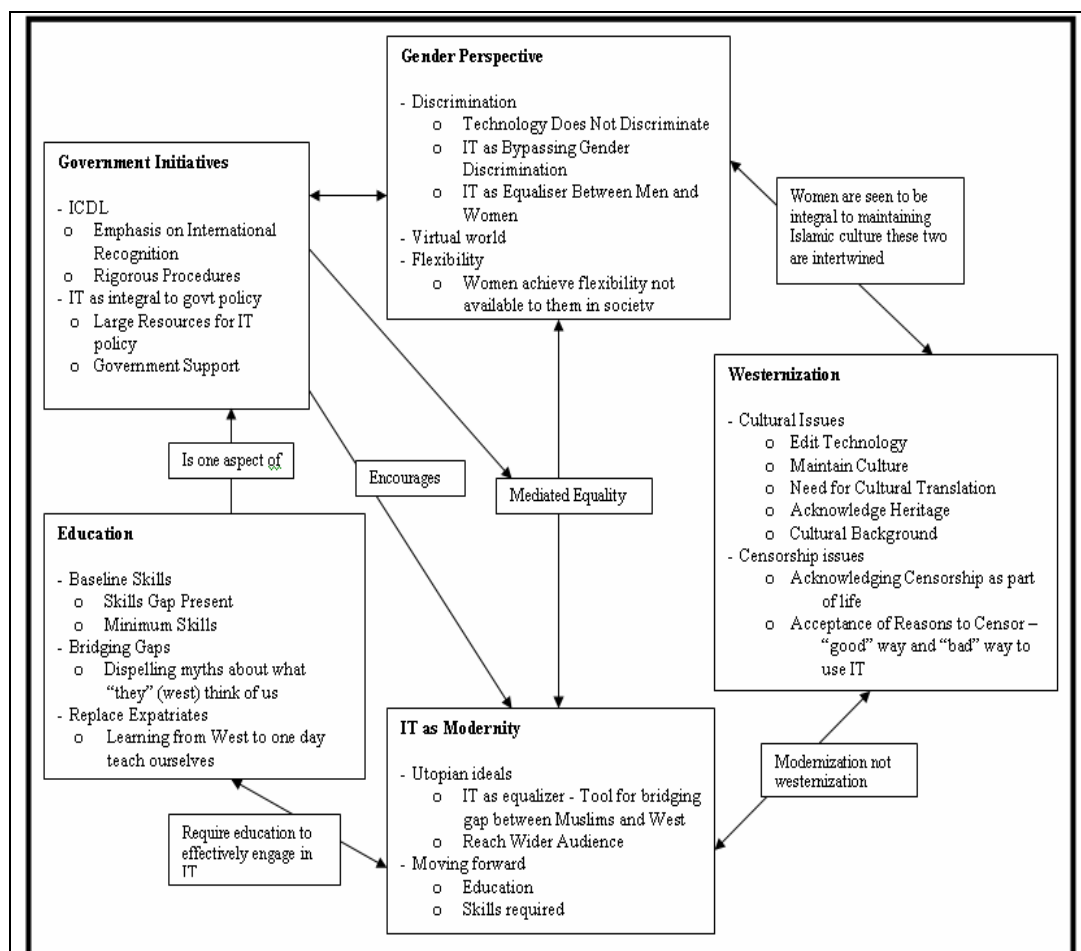


Figure 4.1 Emergent Theory from the Analysis of Findings

4.2 Gender Perspective

Are there any specific benefits for women...? I would say, yeah. This might sound a bit strange but you know, we have families who are still very restrictive and they can not, they do not accept the idea of women going out a lot, and etc (Fatima).

In a society where people are segregated based on gender in almost all spheres of life, it is important to consider the gender perspective of ICTs. This theme represents recognition of how ICTs could provide an alternative virtual world where discrimination can be overcome and ICTs can become an equalizer between men and women via the flexibility that it provides for women.

4.3 Government Initiative

What they're trying to do is establish a strong base of nationals and non-nationals that are IT literate and have good language skills (Fatima). So basically there is a strong future look or strategic look of enhancing the education and qualifications and the backgrounds of people (Sarah).

From the participants' views on the opportunities that ICTs can provide, this theme naturally emerged as it reveals the level of government commitment to raising the IT profile of the UAE. This can be seen through the initiatives that they provide like the ICDL as well as their financial support.

The obvious government support is demonstrated through the presence of large resources, namely financial support in the form of funding for the running of the ICDL programme (a local IT up skilling programme implemented by the government for all government employees) as well as providing bonuses for employees who complete the course.

4.4 Education

They want to feel that their nation is putting an effort in to developing themselves career-wise. So the first target was the language and IT literacy skills. So they have been intensively involved in such courses, to establish a strong base (Fatima).

Well, they thought they are not highly educated or we don't have the skill to use our brain, and you know. But no, we are good on this, and sometimes we are better than expatriate people who come from outside the country to fix our machines or to find solution for a machine (Sarah).

There was a strong link between modernizing the country and the education required to bring up the level of IT literacy within the working population of UAE. Both participants felt that their University was an important part of propelling the country forward by means of education that focused specifically on improving its student's baseline skills in IT literacy. Moreover, Sarah saw education and more specifically her own University which only caters to local UAE female citizens, as a stepping stone for increasing the skill level of national UAE students and enabling them to one day replace the expatriates with their own people

4.5 IT as Modernity

I feel strongly that it's (ICTs) one of the things that puts a country forward and should be encouraged at all levels (Fatima).

This theme was derived mainly out of the interview with Fatima as she talked more about what ICTs meant for her country on a larger scale than just how it impacted her personally and professionally. She emphasized what ICTs could mean in terms of Modernity, in that how they could propel her country forward. Her vision could almost be seen as a utopian ideal of what ICTs could do, where it could become an equalizer between the UAE and the West.

In Fatima's eyes then, education in IT is a very important part of moving forward and transforming into a modern country. Moreover there are minimum skills required as she outlines below that are also part and parcel of moving forward and modernizing.

5 TOWARDS A PRELIMINARY THEORETICAL FRAMEWORK OF ICT AND WOMEN IN THE UAE

The previous section discussed the foundation of the research study that was carried out in the UAE. This section presents the preliminary theoretical framework that resulted from the analysis of the interviews carried out with women who work in the private sector of the UAE. In this section we discuss the relationships between the themes and their properties, as it is these relationships between the themes or concepts that build theory (Dey, 2002).

5.1 Relationship between IT as Modernity and Westernization

The relationship between these two emergent themes is perhaps the most important finding of the entire research process. Both interviewees emphasized numerous times during the

interview that they believed the way of the future for the UAE was modernization through the use of ICTs. However, they also emphasized that this *Modernization* needed to take place without *Westernization*. *Modernization* was viewed as the coming of age of the UAE where according to Fatima's *Utopian ideals*, the UAE would now be able to compete on a more even playing field with the West. On the other hand, *Westernization* was seen as being in conflict with the Islamic culture of the UAE and something that needed to be averted at all costs. On a deeper level we can see that there is in fact also a sub-relationship between the selective code *Moving Forward* from the theme *IT as Modernity* and the theme *Westernization*. Fatima and Sarah viewed ICTs as a tool to propel the UAE forward but noted that *Cultural Issues* such as their *Heritage* and *Cultural Background* needed to be accommodated so as to not impose *Westernization* on them. They both accepted that *Censorship* by the government was a valid means of achieving this.

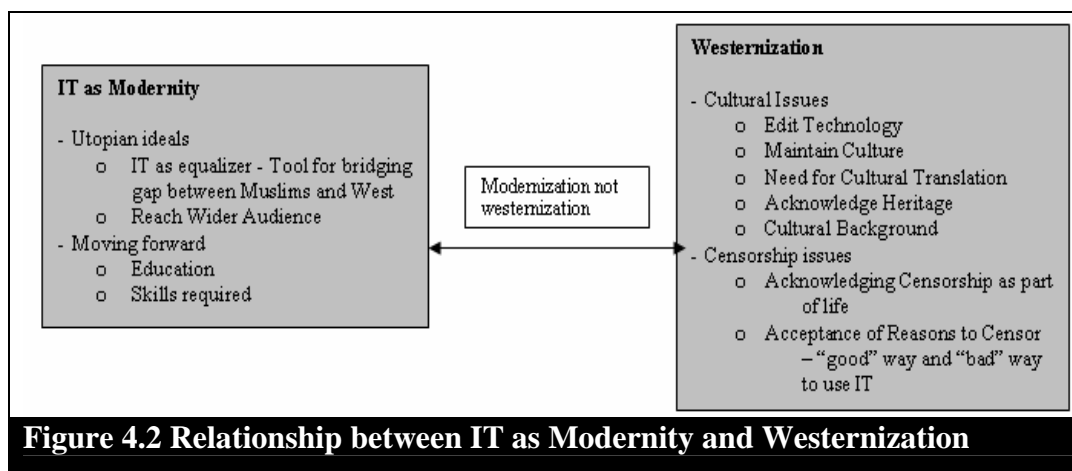


Figure 4.2 Relationship between IT as Modernity and Westernization

5.2 Relationship between Westernization and Gender Perspective

As women are perceived to be an integral part of observing Islam (Kaya, 2000), the relationship between these two themes is unmistakable. A major part of ensuring that the UAE does not transform into a Western society as opposed to a Modern society is ensuring that their culture is maintained and as women play a big part of that culture, the relationship between Westernization and Gender becomes precarious. This dichotomy was subtly referred to by the interviewees, on the one hand there was an emphasis on the recognition of *Cultural Issues* that surround the implementation of new ICTs and on the other hand there was identification of the *opportunities* that ICTs could provide for women. The latter emerged in so far as ICTs *not being discriminative* towards women and providing them *flexibility* that is perhaps not available to them elsewhere in society. Moreover, an interesting contradiction emerged from Fatima's interview where she referred to a *Virtual World* as providing women *opportunities* and *flexibility* as discussed above, however she did not then talk about the *Censorship Issues* that still prevail. That is, there is a *Virtual World*, but the government controls its contents and regulates the constitution of it, which tampers with the freedom afforded by this *Virtual World*.

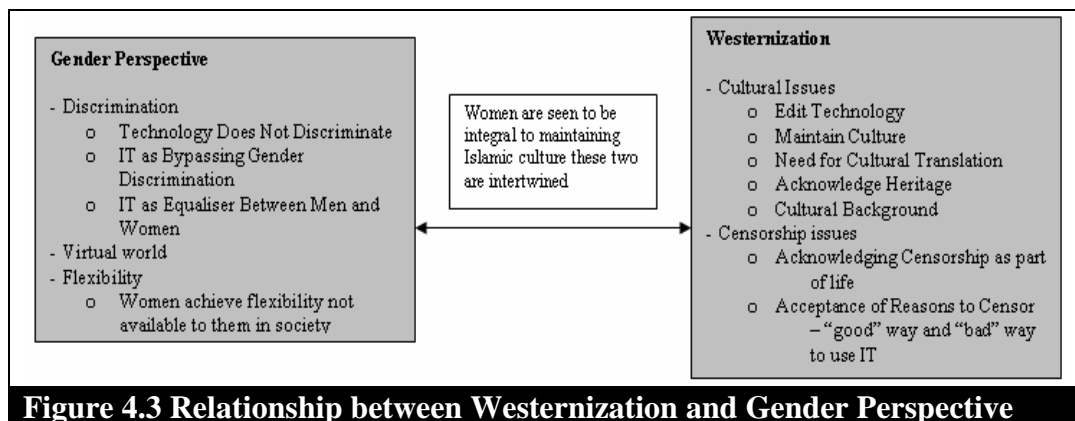


Figure 4.3 Relationship between Westernization and Gender Perspective

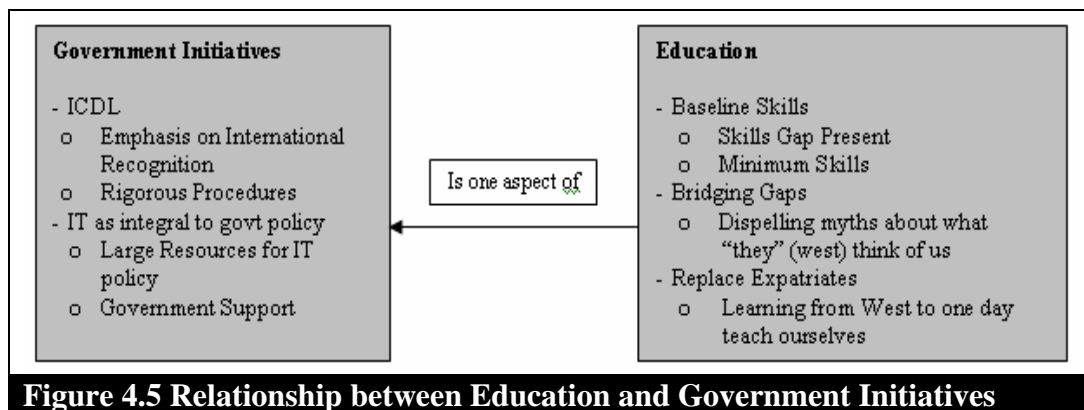
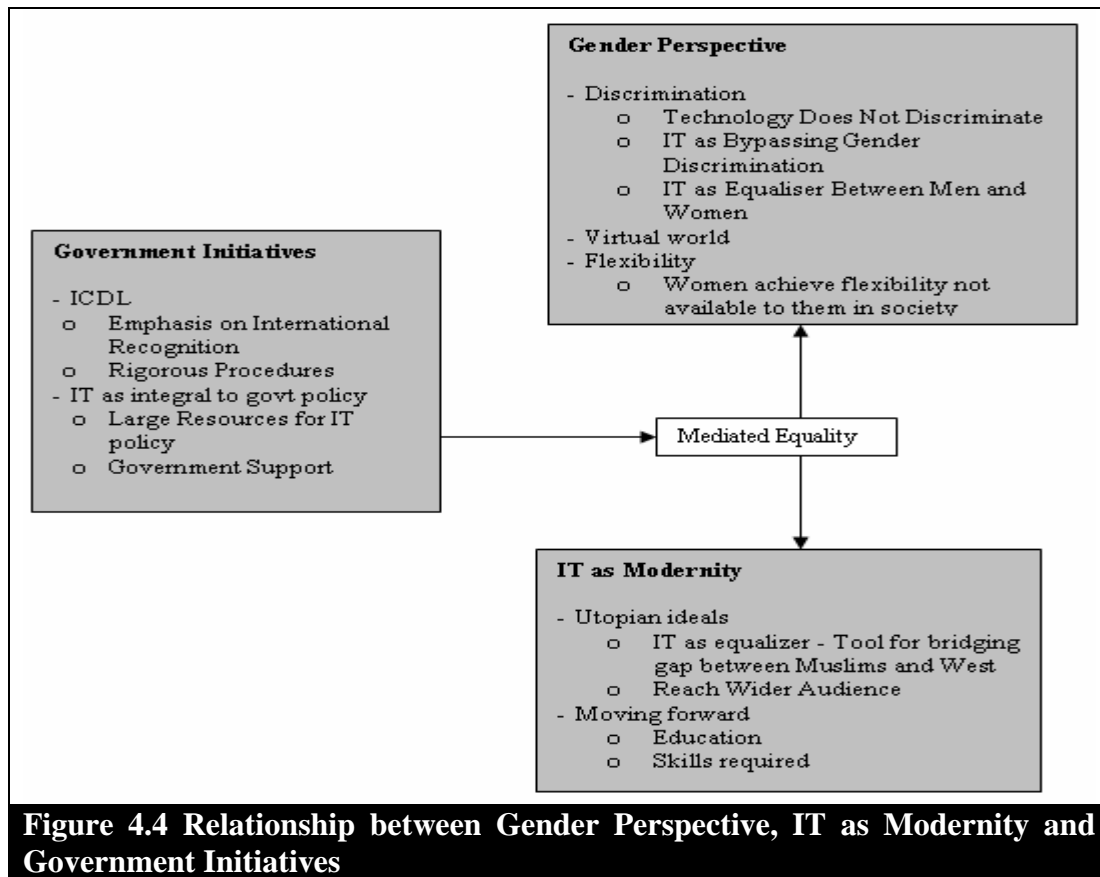
5.3 Relationship between Gender Perspective, IT as Modernity and Government Initiatives

University X is a good example of the level of support provided by the government that encourages the higher education of women in IT in the UAE (Arab Human Development Report, 2002). This type of support symbolizes the *commitment* by the government to *propel* the UAE *forward towards Modernity* via IT for its *female* population. However, as seen in the diagram the relationship between these three themes is that of *Mediated Equality*. This *Mediated Equality* can be seen where the *opportunities* and *flexibility* provided by having a University that has a huge emphasis on IT and only teaches *women* is tampered by the *control* that is present in this provision. That is, there is a *paternalistic* focus by the government on how much freedom they are willing to grant. Although the *higher level of education* of women is encouraged by the Universities such as these, this is not reflected in the levels of employment in the workplace as alluded to by Sarah. In addition, access to ICTs within the University and the movements of the students are closely supervised. The latter can be linked back to Sarah's role in the University. Sarah's entire job revolves around ensuring that the students are where they are meant to be at any given time of the University day by keeping track of whether they have electronically signed in to their prescribed classes.

5.4 Relationship between Education and Government Initiatives

Education is *one aspect* of the Government Initiative to propel the country forward in terms of *Modernity* through IT. The ICDL certification is one distinct example of a *Government Initiative* whose aim it is to improve the country's *baseline skills* and enable the citizens of the UAE to *bridge gaps* between the Western and Muslim perspectives of the UAE and of Islam. The investment of *large IT resources* and the *integration of IT in government policy* is also seen by one of the interviewee's as an opportunity to *replace the expatriate* population with educated local citizens.

In the next section we will integrate and ground these findings within the body of existing literature, and provide a discussion of the findings.



6 DISCUSSION

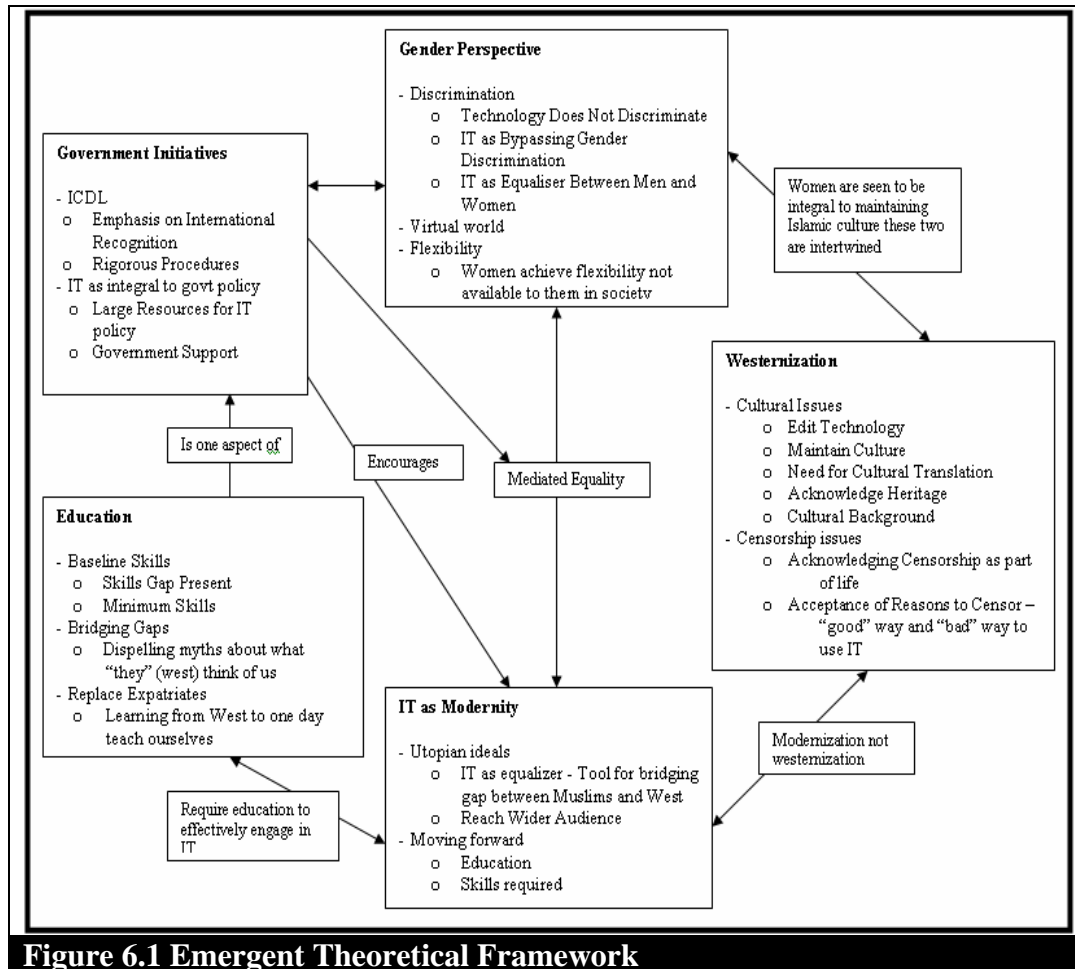
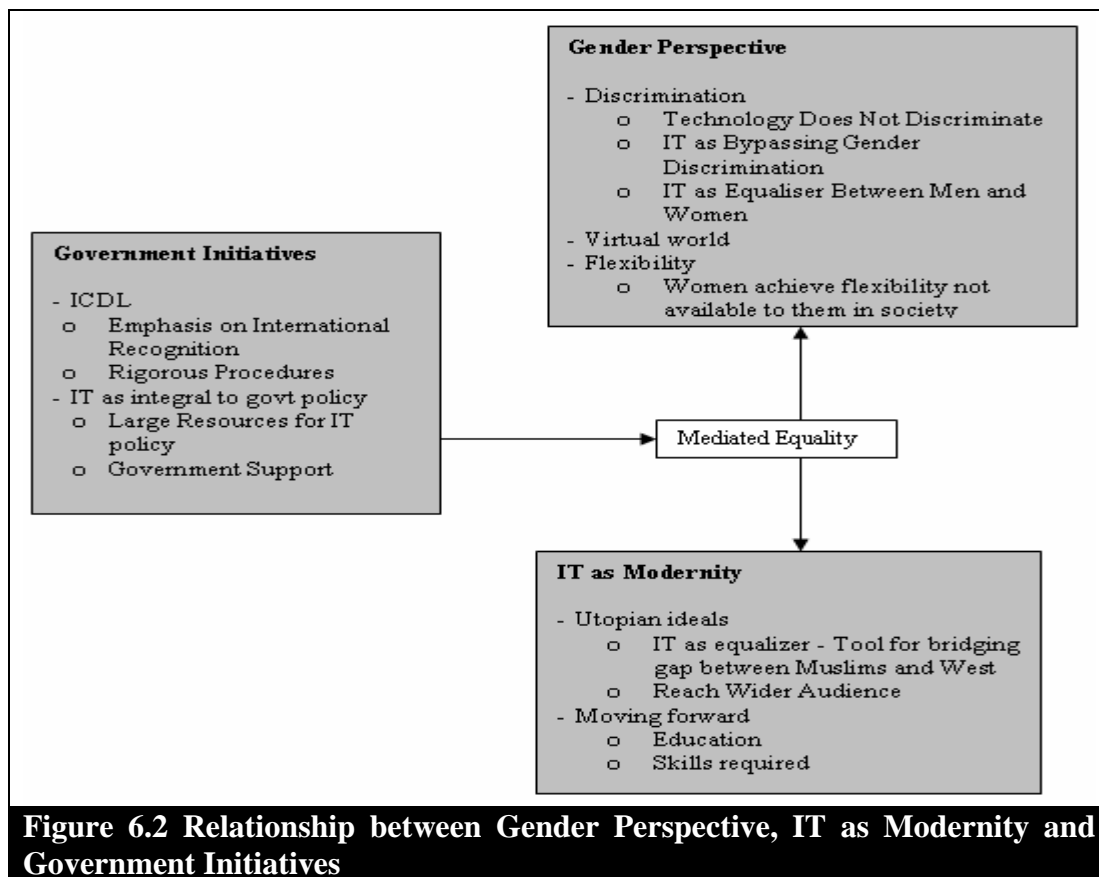


Figure 6.1 Emergent Theoretical Framework

The emergent theoretical framework depicted in Figure 6.1 illustrates the underlying interaction of different aspects of society that impact on the use of ICTs by women in the UAE proposed by the author. This model aims to provide a deeper and richer understanding of ICT use by women. In particular the findings relate to women within the UAE as most of the literature focuses on the Gulf or the Middle East as a whole and fails to identify the idiosyncrasies of each country within this region. In this section we aim to provide a brief discussion of how the findings related to each question.

The main finding of this research was the complex relationship between the emergent themes of IT as Modernity, Gender Perspective, Government Initiatives and Westernization as shown in Figure 6.2 below, which answered the research question – *How do Islamic cultural beliefs and values affect the perception of Information Communications Technology (ICT), as experienced by women ICT workers in the UAE?*



The underlying relationship between these themes highlighted the intricacies of how Muslim society functions. On one hand there is immense pressure within and without the UAE to transform itself into a modern and IT-literate knowledge economy. This has usually been translated into policies towards women and education that have slowly shifted the focus away from tribal and limited education for women to education policies that are specifically focused on increasing the IT literacy for all its citizens and especially women. The main categories from all three themes allude to this goal of modernization. From the theme of IT as Modernity we can see purpose to move forward and utilise IT as a tool to bridge the gap between Muslims and the West. The main categories in Government Initiatives outline how this will be achieved, that is, through IT being integrated in its public policies and the introduction of internationally recognised IT literacy programs such as the ICDL. In the theme Gender Perspective, the main categories allude to the impact that these policies are having on women, that is, they are gaining more flexibility and as one of the interviewees pointed out, the Virtual World created by the new IT economy is providing a tool for women to become more equal to men. On the other hand however, we can see that the reach of Islamic cultural beliefs and values still negatively affect the transference of ICTs to women. We can conclude this mainly from the theme of Westernization. In this theme the main categories construed that a push for maintaining and safeguarding their Islamic cultural heritage and background has meant that there is aggressive censorship policies in place. These censorship policies are a reflection of the patriarchal values that are still in place in an otherwise Modern society.

The second research question – *What role does the UAE government play in the perception of ICTs, as experienced by women ICT workers in the UAE ?* This research question can principally be answered by examining the emergent relation between the themes

Government Initiatives, Gender Perspective and Education from the analysis of the interviews.

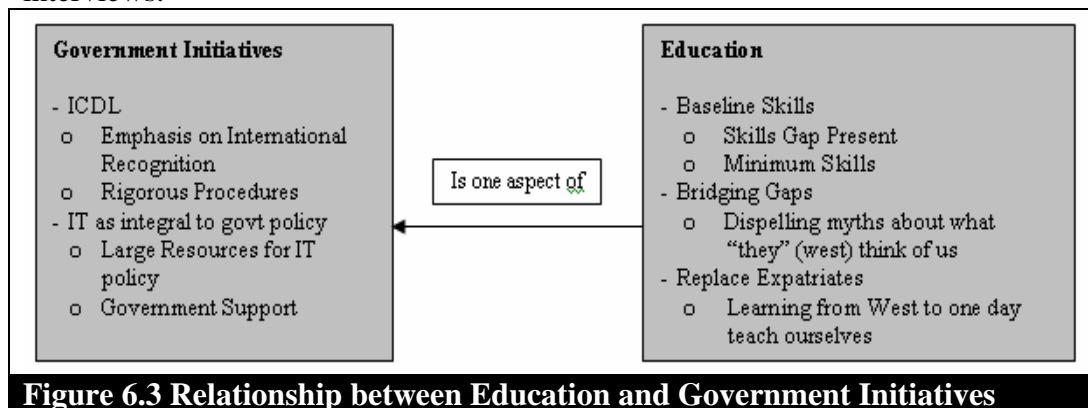


Figure 6.3 Relationship between Education and Government Initiatives

The literature suggests that educating women has increasingly become a priority for the UAE government. Part of this priority is the newly introduced ICDL certification, although this does not specifically target women, it definitely becomes part of reaching the goal of attaining an IT literate knowledge economy which includes women. The other important government initiative has been the level of support provided for targeting women and IT in education. This can be seen through the presence of female only universities throughout the Emirates including University X, which are pre-dominantly IT focused. However, according to one interviewee, the presence of women-focused IT education does not necessarily translate into IT-focused jobs for women in the workplace, especially in the IT- management sector. This finding reflects the literature to some degree. Joseph and Lunt (2006) suggest that in general, about 60 percent of graduates of Gulf universities today are female, although only a small percentage of these graduates ever enter the workforce.

The main discovery from the literature was recognition that women play an important role in the maintenance of traditional Islamic Society. This was echoed by one of the interviewee's who stated that, "*we have families who are still very restrictive and they cannot, they do not accept the idea of women going out a lot*". This interviewee then went on to talk about the opportunities and flexibility that ICTs has provided women in this type of modern but still highly restrictive and gender segregated society. However, what she failed to discern was that the goal of modernization without Westernization results in the immense level of control that the government exerts over its citizens especially in relation to women. The types of control discussed in the analysis mainly centred on the censorship and editing of ICTs. Moreover, an interesting discovery resulting from the emergent relationship between IT as Modernity and Westernization was how willing the interviewees were to have the government regulate their access to ICTs. They both showed a complete willingness to have the government censor and edit their access to ICTs as in the words of one of the interviewees, "*Because I think if something has more disadvantages than advantages they [the government] actually assess it well before implementing it in the country*". From this we can conclude that the level of government control over access to ICTs is not necessarily as top-down driven as the literature would have us believe. The two interviewees in this analysis, showed unconditional support for this type of paternalistic control even if they did not see the impact that it had on their access to ICTs as women.

The area of research, women in ICTs in UAE society is a highly complex one that requires understanding both of broader concepts within Muslim societies as well as a discussion of the idiosyncrasies of each Muslim country. An understanding of the latter is the gap that this research has tried to fill. It was found that the literature mainly focuses on ICT uptake and women empowerment in Muslim societies in general, whereas the findings from

the research was able to provide a more in-depth analysis of how ICTs are used by women in the UAE and the specific obstacles and opportunities that they face. It is hoped that the emergent theory will help serve as a valuable resource for researchers, academic and executives alike that are considering how they may help empower the positions of women in the ICT private and public sector, such that they can be politically, socially and economically empowered.

7 CONCLUSION

The contributions of the research are presented in relation to Walsham's (1995) four analytical generalisation which suggests that contributions of research should include rich insight, development of concepts, generate theory and the drawing of specific implications. We achieved rich insight despite our limited interview base, which is why we believe this emergent preliminary framework stands on its own. The two women interviewed felt that censorship was not only appropriate but also necessary to safeguard the society's traditions and values. The Virtual World created by ICTs was seen to provide an important forum for women to circumnavigate restrictions placed upon them in the gender segregated society and provided them with opportunities otherwise not available to them. This is an extraordinary finding – that women could find freedom in a virtual world that was not afforded to them in the real world. The five themes were the main concepts that were developed from this research. That is, Westernization, Gender Perspective, IT as Modernity, Government Initiatives and Education. These themes were further developed in terms of the categories and sub-categories within them and the relationships between them that emerged as a result of the analysis of the interviews. The emergent relationships between the themes served as the generation of substantive theory from this research. Of these the most interesting relationships were between IT as Modernity and Westernization, Westernization and Gender Perspective, IT as Modernity, Gender Perspective and Government Initiatives and the relationship between Government Initiatives and Education. It was difficult to draw specific implications on such a small empirical base, however the main implication from this research was the relationship between Modernization and Westernization. The women interviewed in this research and the literature reviewed suggests that there is an emphasis on gaining the former without the latter. That is, there is a strong push for Modernization to occur in the UAE without Westernization. This should be an important consideration when implementing a new ICT into the UAE.

This research's primary contribution is the development of a substantive theory for understanding the influences and barriers to the use of ICTs by women. The research clearly identifies potential issues and concerns that can influence the use of ICTs and the realisation of the opportunities that they can present to women in Muslim society. We hope that this framework serves as a small but informative step for academics and practitioners alike when they are assessing the implications involved when attempting the implementation and transference of ICTs to women in Muslim societies. We see this as an important advance in a little researched area.

A secondary contribution is that we have illustrated how a theory building effort might proceed, albeit with a small but rich data source. It is especially important, we feel, to consider relationships between concepts, as it is in the consideration of these relationships that a theory is built. There have been many calls for more theory building in IS (e.g. Weber 2003), and this paper offers an exemplar of how some preliminary theory building work on a research area, using grounded theory might be carried out.

We are aware that some researchers may feel that an interview base of two people is of limited contribution to the debate about Islamic women and ICT. However, many papers publish purely theoretical frameworks with no grounding in empirical data. We think that the

theory building process illustrated in this paper is a methodological contribution in itself that can assist people to build sensitising devices for IT4D research. We very much hope that fellow researchers will adopt, refine and challenge this framework according to their needs.

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Appendix 1 Example Theoretical Memo

Theoretical Memos – coding the interviews

Memo A Link between Westernization and Engaging with IT

Technology is often viewed as a proxy for modernization. UAE nationals are well aware that IT is required to move the country ahead

So in my opinion, ICTs, you know it's a part of society which can not be neglected, if you want to move forward then you have to put an effort in to developing ICT programmes.

However they are also acutely aware of the discrepancy between modernization and westernization. The former being a way to equalise with the West and the latter being a threat to their culture and heritage.

But the challenge for us in the UAE is to actually customize it to our culture and to our needs. So you can not actually get a system which is working in the States or Australia or New Zealand, or whatever, and just put one here without assessing the reaction of people we have.

We have to edit many things which suit our culture, our traditional, our Islam, otherwise it would not work.

Memo B

We blocked many websites because we can't look at, for example, pictures or read information which is not related to our Islam or not related to our yeah Islam...they block many websites, for example porn

Interesting insight into the government regulation of blocking certain websites. The reasons given for blocking these are specifically related back to culture and Islam, where the government asserts that only those things that do not relate to these two are blocked, for example pornography is often cited in defence of internet censorship. Nonetheless a study shows that many more seemingly neutral things like myspace.com is also blocked. Furthermore, the UAE internet server Etisalat, blocks any website that contains the word *Israel* or challenges the ideology of Islam in any way. In spite of this, in the eyes of the UAE nationals, at least the two that I interviewed, the government is seen as the rightful regulator of information that should and shouldn't be viewed by its citizens.