

GENDER-RELATED BARRIERS TO E-COMMERCE ENTREPRENEURSHIP: THE CASE OF THE UAE

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Abstract: One of the most significant factors hindering growth of E-Commerce in the UAE is low participation of Emirati women in E-Commerce entrepreneurship. This article explores six specific barriers to E-Commerce entrepreneurship among the Emirati women: underrepresentation in the workforce, lack of technical know-how, incompatibility with the communication style, concerns over privacy, lack of perceived benefits, and lack of funding opportunities. While Emirati women and men report a high likelihood of starting a business online, the severity of the barriers to E-Commerce entrepreneurship appear to be stronger for Emirati women (with the exception of the communication style barrier). In order to sustain the unprecedented growth in E-Commerce in the UAE, these barriers need to be addressed via a set of initiatives aiming at removing gender imbalance in the workforce, providing women with training in technical fields, changing human resource management practices in organizations, and adjusting lending practices in financial institutions.

Key words: E-Commerce, barriers, gender, UAE, entrepreneurship

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Introduction

In recent years, the United Arab Emirates (UAE) has emerged as one of the world's leading hubs of Electronic Commerce (E-Commerce). Despite the rapid growth in E-Commerce in the UAE, participation of Emirati women in E-Commerce remains low. This gender imbalance can largely be explained by the traditional role in society that women have played in the region. Because of these cultural norms, Emirati women face significant barriers to E-Commerce entrepreneurship, depriving their own businesses and the society in general from the socioeconomic development benefits that E-Commerce can potentially offer.

Introduction

E-Commerce is a term that has been traditionally used to refer to the process of selling and purchasing goods and services over a variety of electronic systems (Berry, 2009). These electronic systems are typically based on the Internet and other digital networks. The recent advancements in ICT have broadened the definition of E-Commerce to include other types of activities, such as the development, marketing, selling, buying, delivery, and servicing of goods and services over the Internet or any other computer network (Boone and Kurtz, 2011).

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In addition to improving organizational operational efficiency and effectiveness, E-Commerce, if used in conjunction with a sound business strategy, can be applied to gain a competitive edge over industry rivals (MacGregor and Vrazalic, 2008). Because of these benefits, E-Commerce is increasingly used by companies around the globe.

E-Commerce in the UAE

E-Commerce has a relatively long history in the UAE. In 2000, Sheikh Maktoum bin Rashid al-Maktoum, the late ruler of Dubai, issued a decree that established a free trade zone for E-Commerce and technology in the emirate (Shakir et al., 2010). The free zone was to be governed by the Free Zone Authority – a government entity under the umbrella of the government of Dubai. A total of 100 companies had registered in the free zone and commenced operations when the decree was issued (Shakir et al., 2010). Eventually, the decree has led to the emergence of Dubai Internet City (DIC) – the Middle East and North Africa's largest technology business park (DIC, 2012). Today DIC “offers an environment that attracts all the elements of the ICT value chain and helps IT and Telecoms businesses develop, innovate and grow while enjoying free zone benefits of 100% business ownership and a tax free income as well as rich networking opportunities, industry building programs and government services” (DIC, 2012).

In 2007, number of technology companies operating in the free zone had increased to over 1,000 (Shakir et al., 2010), featuring the presence of such well-known companies as Microsoft, Google, Yahoo, HP, Dell, Intel, Booking.com and Cisco (DIC, 2012). In 2006, in response to the rapid growth of the UAE's ICT sector, the UAE's Ministry of Commerce enacted the Electronic Commerce and Transaction Act and formed the Telecommunications Authority Board (TRA) (Shakir et al., 2010). The Act was passed to improve the legal framework behind electronic transactions and communications and set a platform for e-business. In addition to regulating the usage of Information Technology, the act was meant to ensure universal access to ICTs by individuals and businesses. TRA was created for the overall management of the ICT sector and enforcement of the Act. This initiative by the federal government contributed to a widespread and, at the same time, free and fair use of ICTs among the UAE businesses and the general population (Nelson, 2006).

In 2007, the Dubai International Financial Centre (a federal financial free zone administered by the government of Dubai), created a legal framework for personal data handling and privacy assurance. The DIFC issued the Data Protection Law and appointed a Data Protection Commissioner to oversee administration of the law within its jurisdiction (DIFC, 2007). The main purpose behind this initiative was to establish and enforce “legal safeguards against the misuse of personal data” (DIFC, 2007). According to His Excellency Dr. Omar Bin Sulaiman, Governor of the DIFC, the act aligned practices and regulations with international best practices in relation to personal data protection.

Due to these government initiatives as well as the unprecedented social, economic, and the technological progress of the country in the last decades, the UAE has emerged as one of the world's most prominent hubs of E-Commerce (Emirates NBD, 2011). E-Commerce sales in the UAE had reached USD 2 billion in 2010. This amounts to approximately 55-60% of total E-Commerce revenues in the Gulf Cooperation Council (GCC). A study by Dubai-based Madar Research Group established that Dubai was on-par with major European cities in terms of the availability of various online services, for both businesses and individuals (Madar Research Group, 2002).

Gender-Related Barriers to E-Commerce Entrepreneurship

Although the UAE has emerged as powerful global hub for E-Commerce, adoption of E-Commerce in the country can be enhanced even further by ensuring higher participation of Emirati women in Internet-enabled business activities. Currently, participation of Emirati women in E-Commerce remains low due to the numerous barriers that Emirati women face when trying to adopt internet in their business or place of employment. These barriers are discussed in detail below.

Barrier 1: Underrepresentation in the Workforce (Employment)

One significant barrier to broader adoption of E-Commerce among Emirati women is general underrepresentation of women in the workforce. A recent study by Naseda in collaboration with YouGov Siraj conducted for the second annual Women in Leadership Forum Middle East revealed that Emirati women comprise 28% of the national labor force (Haan, 2002). While the percentage has tripled since 2003 (Nelson, 2006), Emirati women are still underrepresented in the UAE workforce. This can be explained by a number of social and economic factors. One of the most significant factors is family pressure. There is a view held by both men and women in the UAE that a woman's main duty in life is to take care of her family. Because of that, working women in the UAE are often looked at with disapproval. There is that view that a working woman is a poor reflection on her husband, as this may show that the husband is not capable of providing for his family. There is also a lack of work-life balance emphasis in the workplace. At work, women are offered little flexibility when it comes to working hours, which makes it difficult for married and family-committed women to work (Mcmeans, 2010). Because of that, many women lose their employment after getting married. Because of all these cultural factors, Emirati women are less likely to use E-Commerce due to the general lack of employment opportunities where E-Commerce can be used.

Barrier 2: Lack of Technical Know-How (Education)

Traditionally, Emirati women have been deprived of the many educational opportunities available to men. Again, this can be largely attributed to the traditional role that women had played in the region. This trend has been reversed in recent years and now an increasing number of Emirati women enroll in

universities. Today, 77% of Emirati women enter universities to study. Moreover, Emirati women are increasingly enrolling in degree programs that have been traditionally male-dominated, such as programs related to science and technology. For example, in 2003 the UAE had more female than male students pursuing a degree in Information Technology (Nelson, 2006). Despite this fact, the number of women who have the technical know-how required for using E-Commerce is still low (MacGregor and Vrazalic, 2008). The cause for the apparently low levels of technical know-how among Emirati women (despite access to high quality education) can be that employers do not give enough opportunities to women in technical areas to showcase and develop their skills. Because of that, many Emirati women think implementation of E-Commerce is very complicated and, therefore, should be left to men.

Barrier 3: Incompatibility with Communication Style (Communication)

Studies on management styles of women in general have revealed that women refer to use informal means of communication in the workplace (MacGregor and Vrazalic, 2008). This generalization may be applicable to Emirati women as well. Emirati women view electronic communication (something that always accompanies E-Commerce) as being highly formal. Because of that, they prefer to use informal means of communication for interacting with their co-workers and clients, such as informal face-to-face communication.

Barrier 4: Concerns over Privacy (Privacy)

The use of online networking tools is also hindered by the privacy concerns among Emirati women. They have the perception that adopting social business networks will increase the risk of leaking personal and private information to the public. This is something that can result in serious consequences in a traditional society of the UAE. Based on the gender roles established in the society, women are supposed to offer support to their men and not avoid being visible in the public domain. Therefore, women find it safer to use personal face-to-face communication instead of using online social networks (Sandberg, 2009).

Barrier 5: Lack of Perceived Benefits (Compatibility)

Some studies have reported that Emirati do not view E-Commerce to be compatible with the nature of their business (Quayle, 2002). Thus, these women have the perception that incorporating E-Commerce in the normal operations of their work will not result in any substantial benefits. For example, most of the women surveyed by Quayle (2002) were involved in trading and manufacturing operations. These included textile, fashion and design, hairdressing, consultancy and small to medium scale retail services. In these lines of business, women felt more comfortable using traditional methods to reach their clients and were concerned with traditional business issues (such as pricing) rather than implementing ICT in their operations.

Barrier 6: Lack of Funding Opportunities (Funding)

Incorporating E-Commerce into a business requires capital. Yet Emirati women face substantial difficulties in raising the capital for their businesses. Despite the fact that nowadays it is much easier for women to access bank loans, there is still some degree of gender discrimination in these financial institutions (Nelson, 2006). Because of that, most Emirati women usually use their personal savings or source funds from friends and family to finance their business (Hadjimonolis, 2009). Due to this financial constraint, these women have not been willing to incur additional costs that are required to incorporate E-Commerce into their businesses. Most of these women substitute the use of E-Commerce with the superb interpersonal and marketing skills that they have (Hadjimonolis, 2009).

Data and Methodology

Due to the lack of prior theorizing on the role on gender-specific barriers to E-Commerce entrepreneurship in the UAE context, this study adopts an exploratory approach. A survey was developed to capture demographic data, intentions to start an online business, as well as the extent to which survey respondents are impacted by the six barriers to E-Commerce entrepreneurship discussed in this paper. The demographic variables captured by the survey included gender, age, nationality, education level, field of studies, employment status, employment sector, employment industry, and income. Two questions were used to assess the importance and frequency of use of the Internet in each of the respondent's current place of employment. A series of questions were used to capture entrepreneurship experiences and intentions of each of the respondents. Respondents were asked whether they currently own a business, whether the business that they own is conducted online and how important the Internet is in their business. Entrepreneurial intentions related specifically to E-Commerce were captured by asking whether respondents intend to conduct their potential future business online, the likelihood of starting an online business, and the overall importance of the Internet in their future business. The extent to which survey respondents were impacted by each of the barriers to E-Commerce entrepreneurship was measured using 5-item (or 5-question) instruments developed for each of the barriers based on the theoretical discussion contained in this paper. To improve the validity of survey responses, some questions used to measure the barriers were reverse-coded. An online version of the survey was developed using surveymonkey.com service. The survey was piloted using a small sample of faculty and staff at Abu Dhabi University (ADU) – a private university located in Abu Dhabi, UAE. The feedback obtained from the survey pilot participants was used to fix technical glitches associated with the online implementation of the survey, correct spelling errors, and improve wording of survey items. After the pilot, the survey was circulated among undergraduate and graduate students at ADU as well as participants of the 2015 Undergraduate Student Research Competition hosted by ADU. The competition included hundreds of students and faculty members representing

various universities across the UAE (including students and faculty from ADU). During the event, student teams had to present their research and prototypes aiming to address important socioeconomic problems in the region. Since many of the research projects presented by the event participants involved technology-driven solutions, it was decided that this sample can be quite fruitful in terms of exploring entrepreneurship intentions in the UAE. Initially, the survey was sent out to the participants in May 2015. A number of email reminders were sent out following the initial release of the survey. The survey was open for responses until the end of August 2015. A total of 207 people responded to the survey. Since the survey intentionally allowed the respondents to discontinue the survey at any point, some of the responses contained missing values. After removing all the responses containing missing values, the sample was left with 163 completed responses. Consistent with the overall demographics of the UAE, Only 51 responses (39%) were from Emiratis. Out of these 51 responses, 37 were from Emirati females while 14 were from Emirati males. These 51 responses from Emiratis were used in the analysis.

All responses were recoded into a format suitable for quantitative analysis using Microsoft Excel 2013 pivot tables. Each of the barriers was measured using an instrument comprised of 5 questions (or items) tapping into various aspects of this barrier. Each item was measured using a 5-point Likert scale. The scale of reverse-coded questions was converted back so that all items use the same scale. All items were coded in such a way, where a high response value (e.g. 5) indicates that the barrier is very strong (i.e. a serious obstacle to E-Commerce entrepreneurship), while a low response value (e.g. 1) indicates that the barrier is weak (i.e. not a serious obstacle to E-Commerce entrepreneurship). For each of the 6 barriers captured by the survey, an average value was computed by averaging out the responses to the 5 items measuring a particular barrier for each of the respondents. Thus, the numerical value for each barrier can be on a continuous scale from 1 (very weak) to 5 (very strong). The intentions to start an online business were captured by asking respondent to estimate how likely they are to start an online business in the future. The responses were measured by using a 5-point Likert scale with values ranging from 1 (highly unlikely) to 5 (very likely). These items representing the 6 barriers as well the likelihood to start an online business were then further explored for Emirati females and Emirati males.

Discussion of Results

Overall, it can be argued that the empirical results are fairly consistent with the theoretical discussion contained in this paper. Both Emirati females and Emirati males report a high likelihood of starting an online business in the future, with Emirati males reporting a noticeably higher likelihood (see Figure 1). These results are consistent with studies conducted in other cultural contexts, particularly United States of America (Wilson et al., 2007).

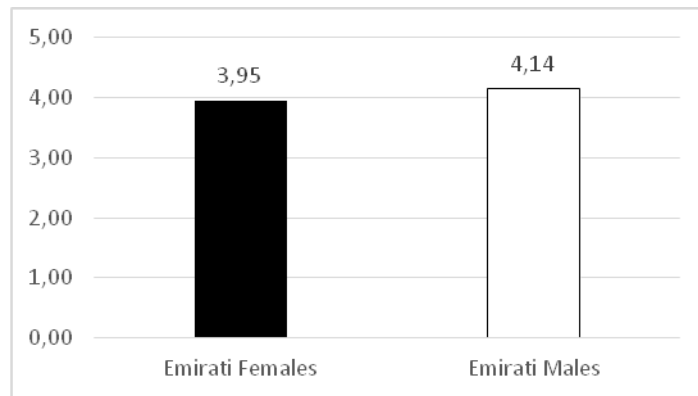


Figure 1. Likelihood of starting an online business for Emirati females and Emirati males

Interestingly, contrary to the general stereotypical expectations towards the Middle East, the difference in entrepreneurial intentions between Emirati females and males is not as drastic as American males and females reported in the study by Wilson et al., (2007). The fact that Emirati males report somewhat stronger intentions to start an online business may be a result of them facing less severe barriers to E-Commerce entrepreneurship in comparison to Emirati females. As Figure 2 below indicates, 5 out of 6 barriers to E-Commerce entrepreneurship are noticeably more severe for Emirati females than for Emirati males.

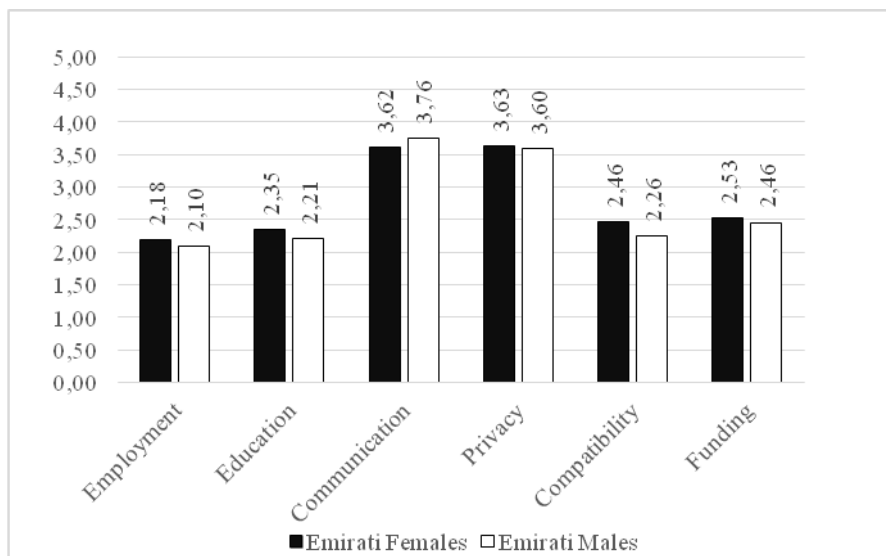


Figure 2. Strength of barriers to E-Commerce entrepreneurship for various demographic groups

Emirati females appear to face a somewhat higher employment barrier. This is consistent with the findings of studies conducted in Japan, South Korea, and the United States, where it was found that family commitments (e.g. in relation to kids or aging parents) decrease the likelihood of women being employed while have no impact on employment rate of men (Tsuya et al., 2000). The education barrier is somewhat higher for Emirati females as well. This is consistent with the findings of the study conducted in the United States, where it was found that women typically feel that they have less knowledge in relation how to start a business than men yet respond to education much better than men in terms of dramatically increasing their intentions to start a business (Wilson et al., 2007). It is interesting that the Communication barrier is less of an obstacle for Emirati females in comparison to males. This finding stands in contrast with studies conducted in Australia, where women were found to prefer traditional modes of communication (Venkatesan and Fink, 2002). While it was argued earlier that due to the fact that Emirati females prefer a personal and informal approach to communication (something that is hardly afforded by the Internet), an alternative theoretical explanation is possible. Due to slightly higher privacy concerns (see Figure 2), Emirati females may actually feel more comfortable communicating over the Internet than Emirati males. Online communication can afford additional perceived anonymity to Emirati females. Another interesting observation is that the barriers that seem to be strongest for both males and females (Communication and Privacy) are not related to the economic or technological infrastructure but rather to the cultural norms of the region. The fact that this study has found stronger concerns over privacy risks is consistent with findings of a study conducted in Israel, where women were found to perceive various uses of the Internet risky to a greater extent than males (Liebermann and Stashevsky, 2002). The study's finding that Emirati women see E-Commerce less compatible with their existing business than males is comparable to the findings of the study by Quayle (2002) conducted in the United Kingdom. Finally, just like women entrepreneurs in Latin America (Garrido and Roman, 2006) and Morocco (Poster and Salime, 2002), Emirati women face a slightly higher barrier when it comes to obtaining funding for their business ventures.

Implications

In order to encourage Emirati women to participate in E-Commerce, a number of initiatives can be implemented by the government and the private sector. First, the gender imbalance in the workforce needs to be addressed by giving women training and opportunities in the fields from which they have been marginalized from. These initiatives should be accompanied by a change in human resource management practices, allowing women to enter and stay in the workforce while preserving their traditional role of a homemaker. Second, it is apparent that both the private and public sector should provide for more training opportunities in the technical as well as managerial issues surrounding adoption and use of E-Commerce. This will allow women to gain the necessary technical skills to use E-

Commerce for operations, communication inside and outside their organizations, as well as protect to protect their privacy. Third, the current lending practices of the financial institutions should be reconsidered to give women opportunities for acquiring the necessary financial resources for including ICT in their businesses. These initiatives should stimulate Emirati women's involvement with the UAE's rapidly developing E-Commerce sector, ICTs in general, and the society as a whole.

Limitations and Directions for Future Research

Due to the exploratory nature of this study and several limitations related to the data set (e.g. convenience sampling and relatively small sample sizes) and methodology (e.g. an ad-hoc scales were created for capturing the study-related constructs), the study's results should be interpreted with caution. Further research should carry out formal tests of the hypothesis implied by this study. For example, further research should empirically test whether the barriers discussed in this study are negatively correlated with the intention to start an online business. Perhaps, additional barriers can be identified in the literature to give the barriers more explanatory power. Moreover, formal tests should be carried out to see whether the differences in the strengths of barriers among Emirati men and women are statistically significant.

Conclusion

The results of this exploratory study indicate that Emirati women are less likely to participate in E-Commerce entrepreneurship due the stronger barriers that they face when trying to start an online business. While the results of this study are fairly consistent with similar studies conducted in other cultural contexts, some findings that are specific to the UAE. For example, contrary to the popular belief, Emirati women do not exhibit substantially lower intentions to start an online business. Moreover, their communication style seems to be compatible with online communication. Still, most of these barriers constitute a threat to the country's vision to become a digitized, knowledge-based economy. Therefore, this gender-specific gap needs to be addressed by a number of government policies and initiatives proposed in this paper.

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BARIERY PRZEDSIĘBIORCZOŚCI KOBIEŃ W E-COMMERCE: PRZYKŁAD ZJEDNOCZONYCH EMIRATÓW ARABSKICH

Streszczenie: Jednym z najważniejszych czynników hamujących rozwój e-commerce w Zjednoczonych Emiratach Arabskich jest niski udział kobiet w działaniach biznesowych w obszarze e-commerce. Niniejszy artykuł analizuje sześć barier przedsiębiorczości e-commerce wśród kobiet w ZEA: niewystarczającą reprezentację w sile roboczej, brak technicznego know-how, niezgodność ze stylem komunikacji, obawy dotyczące prywatności, brak postrzeganych korzyści oraz brak możliwości finansowania. Zarówno kobiety i mężczyźni w ZEA cechują się dużą chęcią do rozpoczęcia biznesu w obszarze związanym z Internetem, natomiast widoczne są znacznie większe bariery przedsiębiorczości e-commerce w przypadku kobiet (z wyjątkiem bariery stylu komunikacji). W celu podtrzymania bezprecedensowego wzrostu w e-commerce w ZEA, należy podjąć walkę z barierami poprzez szereg inicjatyw mających na celu usunięcie dysproporcji płci na rynku pracy, zapewnienie kobietom szkoleń w obszarach technicznych, zmiany praktyk zarządzania zasobami ludzkimi w organizacjach oraz praktyk udzielania kredytów w instytucjach finansowych.

Słowa kluczowe: E-commerce, bariery, przedsiębiorczość kobiet, ZEA

與電子商務創業者有關的性別相關障礙：阿聯酋的案例

摘要：阿聯酋電子商務增長阻礙最大的因素之一是阿聯酋婦女參與電子商務創業的比例較低。本文探討了在阿聯酋婦女中存在的電子商務企業家精神的六個具體障礙：勞動力中的代表性不足，缺乏技術知識，與溝通風格不兼容，對隱私的關注，缺乏認識到的利益以及缺乏資金機會。雖然Emirati婦女和男子報告在線開展業務的可能性很高，但是對於Emirati婦女來說，電子商務創業障礙的嚴重性似乎更強（除了溝通風格障礙之外）。為了保持阿聯酋電子商務的前所未有的增長，這些障礙需要通過一系列舉措來解決，旨在消除勞動力中的性別不平衡，為婦女提供技術領域的培訓，改變組織中的人力資源管理做法，以及調整金融機構的貸款做法。

關鍵詞：電子商務，障礙，性別，阿聯酋，創業精神