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E-Commerce Acceptance and Implementation Among Consumers in the UAE: An Opportunity to Build Human Capital for Future Jobs in Technology and Marketing

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With the steady rise in information technology and social media, e-commerce, over the past ten years, has shaped the way multinational corporations (MNCs) manage and conduct international business. Having contributed to the growth of many organizations, online retailing has been adopted and implemented by sellers and buyers all over the world as a thriving trend. It can be observed that until 2015–2016, researchers and industry experts strongly presumed that there would be no scope for cross-border e-commerce and online retailing in Dubai. However, since 2017, there has been a gradual but steady rise in cross-border business-to-consumer (B2C) online shopping among the consumers in Dubai. This chapter seeks to investigate the factors that have led to the gradual acceptance and implementation of B2C cross-border e-commerce in the region. It also examines e-commerce adoption as a

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technological innovation by using the adoption model of theory and finally discusses the impacts of e-commerce on human capital and employment opportunities in the UAE.

As of early 2016, industry experts and researchers stated that there would be no room for e-commerce growth in the UAE. In an article published by the *Gulf News* in May 2016, industry expert R. Nair stated that 'brick and mortar is here to stay, and that ecommerce will still be complimentary to the shopping experience in the UAE'. He further stated that 'ecommerce is likely to be a platform where people would seek to learn more about a product as opposed to buying it'. In the same year, Dubai carved a name for itself by being named as the fourth most attractive retail market in the world by a multi-national real estate firm, Jones Lang Salle (2016). However, despite the presence and growth of mega shopping malls in this region and industry expert predictions, there has been a gradual but steady rise in cross-border online shopping among the residents of Dubai. According to an article published by the *Arabian Gazette* in late 2016, the UAE is set to soon become one of the top three countries in the Middle East & North Africa (MENA) region to have the highest average proportion of cross-border purchases being made on a mobile device (smartphone or tablet). There has been a drastic increase in the e-commerce market size over a span of five years (from 2015–2019) in the Gulf Cooperation Council (GCC) region. It is observed that while there is a boost in the e-commerce market size in all the countries, a more prominent rise can be noticed in Saudi Arabia and the United Arab Emirates, signifying that both of these countries exhibit a strong potential to not just conduct international business on a digital platform but to thrive on it as well. Focusing on the UAE, this further indicates that there will soon be a drastic shift in the shopping trends in the region, which would subsequently change the dynamics of how international business will be conducted in the country. It is, thus, quite vital and relevant to probe into this research further and examine the factors that have contributed to the steady growth of e-commerce in the UAE.

This chapter examines the e-commerce environment in Dubai from an international business perspective. The purpose of this study is manifold. This study will first aim to assess and explore the reasons behind the rise of cross-border online shopping among the residents of Dubai from an international business perspective. Based on the findings, an adoption

model of theory will be applied to view the adoption of e-commerce by the residents of the UAE as a technological innovation. Therefore, the study seeks to gain an overall understanding of the changing dynamics of the international business environment in Dubai, due to the upsurge in e-commerce and its effect on employment. According to Terzi (2011), with an upsurge in e-commerce, information and communication technologies sector will witness generation of new jobs. Meanwhile demand and productivity will influence indirect creation of jobs. The observations of this study will be beneficial to those MNCs that are looking to establish their presence in the UAE, especially e-business.

Literature Review

Since late 1990s, there has been a rapid change in the international business environment due to the arrival of IT and globalization, which have subsequently paved the way for e-commerce growth and online retailing. The Global Cross-Border Report 2016 indicates the Middle East as one of the regions with the highest incidence of cross-border online shoppers. Thus, it comes as no surprise that significant research has been conducted pertaining to e-commerce acceptance and adoption in the Middle East. These researches have touched base on key impediments to the growth of e-commerce, cultural impact on the popularity of online shopping and the effects of social media and mobile usage on e-commerce. The growth of e-commerce adoption in Saudi Arabia, Kuwait, Jordan, Bahrain and Egypt was also explored by industry academics. These academic studies include but are not limited to:

- E-commerce and globalization: An exploratory study of Egypt (Elbetagi, 2007);
- E-commerce in Saudi Arabia: Adoption and perspectives (Sait, Al-Tawil & Hussain, 2004);
- Key internet characteristics and e-commerce issues in Arab countries (Aladwani, 2003); and
- Factors affecting social e-commerce adoption in an Arab country: Findings from a qualitative study (Rouibah & Al-Qirim, 2017).

Focusing on the UAE, various literature has been published pertaining to e-commerce; however, it can be noted that the emphasis has always been on the factors that affect the adoption of e-commerce among local firms in the region. Little has been researched from an international business perspective or from the consumer's, that is, the buyer's, viewpoint. It can also be observed that barely any model of framework was used in relation to this study, apart from the technology acceptance model (TAM). For the purpose of literature review, some articles are highlighted and their aims and scope are outlined below:

- A case study: Adoption of IT in e-business of the UAE (Akhter, 2007)—The aim of this study was to analyze the factors that affected the adoption of e-commerce in the region; however, the primary focus of this research was to perceive and observe how privacy and security factors affected the adoption of e-commerce in the region.
- Impediments of e-business: A Dubai experience (Al-Alawi, Kuzic, & Chadhar, 2005)—The research reported in this article explores the challenges of e-business faced by the Dubai companies in contemporary times.
- The effect of exogenous factors on the technology acceptance model for online shopping in the UAE (Mouakket, 2009)—This study tests the applicability of the technology acceptance model within an e-commerce setting. It aims at examining the relationship between perceived ease of use, perceived usefulness and three exogenous factors (computer self-efficacy, security issues and features of a website).
- E-commerce: Adoption, acceptance, and prototyping in Abu Dhabi (Radaideh & Selim, 2004)—This article specifies the critical factors that affect the adoption of e-commerce in the United Arab Emirates, particularly in the emirate of Abu Dhabi. These critical factors are studied from firms' and consumers' perspectives.
- A model of consumer e-service adoption within Dubai (Courtney, 2010)—This study revolves around creating a model to assess the level of adoption of e-services, particularly in banking. The focus is primarily on e-services and the factors that influence the acceptance of e-service in the region.

- A study of the factors that influence the acceptance of e-commerce in developing countries: A comparative survey between Iran and United Arab Emirates (Dehkordi, Shahnazari, & Noroozi, 2011)—In this article, the dimensions of culture, gender and previous experience are assessed in relation to information technology. This study also makes it imperative to understand the role of these dimensions in e-commerce, while comparing the findings of the UAE with those of Iran.

Research Aim

This study aims to fill the gap by, firstly, assessing the topic from a consumer's standpoint, evaluating the factors that have compelled individuals in the region to adopt online shopping despite the rise in mega shopping malls in the UAE. Secondly, keeping in mind the international business angle, it will focus on cross-border online shopping, taking consumer demographics and buying behavior into consideration. Lastly, the study will explore e-commerce's impact on job opportunities and the requirement of future human capital for e-commerce businesses. The adoption of e-commerce in a region can be effectively assessed using the adoption model of theory. No existing study has used this model of theory to assess e-commerce adoption in the UAE. This theory will therefore be used to gain an understanding on the inclination toward online shopping in Dubai.

Methodology

In order to gain vital findings pertaining to the study, the methodical strategy that will be used, by and large, will be descriptive as much of the data is qualitative in nature. However, some of the data found for the purpose of this study was found to be quantitative as well. In this case, the methodical strategy will be more associational, as a more correlational approach will be used to assess the quantitative data.

To understand the factors that have contributed toward the steady growth of e-commerce usage in the UAE a descriptive research is

conducted. This includes using qualitative data and carrying out a content analysis to make significant inferences. As mentioned above, the data found here will also be quantitative in nature and thus the research might also be associational. A combination of quantitative and qualitative data will be used to generate conclusions.

This study will address the conceptual and theoretical aspects of e-commerce acceptance by using a model of framework approach, namely, the adoption model of theory framework. This model will help to facilitate a better understanding on the gradual adoption of e-commerce in the region using five perceived characteristics, namely, relative advantage, compatibility, complexity, trialability and observability. For the purpose of this topic, security/confidentiality will also be included as a characteristic.

Data Collection

Data collected for this research is secondary in nature and mostly qualitative, although quantitative data is also present in the research study. Most of the data has been collected through news articles from reputed sources and from interviews, pictorial representations, charts and surveys generated and compiled by multi-national research firms.

E-commerce and its advent in the Middle East, particularly the UAE, has been monitored and reported by newspapers and multi-national research firms closely over the past few years. It is particularly interesting to note that much of these articles published during 2014–2016 vouched for a stagnant e-commerce future for the region; however, as of 2017, there has been a drastic shift in what most of these news articles post. These articles by and large revolve around the gradual spike in e-commerce performance in the UAE. For the purpose of this study, most, if not all, of this data will be analyzed so that significant findings can be inferred.

Data Analysis and Results

This research study aims to address two main factors revolving around e-commerce performance in the UAE by using a theoretical model of framework, namely, the adoption model of theory, to critically analyze the adoption of e-commerce in the region as a technological innovation:

- Factors that have contributed toward the steady growth in e-commerce usage in the region
- Impact of e-commerce on employability of current and future human capital in the UAE

Factors That Have Contributed Toward Steady Growth in E-commerce Usage in the UAE

Extensive findings reveal that the United Arab Emirates undertook and implemented dynamic initiatives from late 2016 onward, which led to a vast array of factors, which in turn subsequently contributed to the steady rise in cross-border online retailing among the residents of the UAE. Before delving on these factors, it is vital to first highlight these initiatives and developments. In November 2016, the chairman of Emaar Properties, Mohamed Alabbar, got the ball rolling with the opening of a new e-commerce platform, Noon (*The National Business*, 2017). This \$1 billion e-commerce venture offers around 20 million items for sale in the UAE. It is interesting to note that this e-commerce platform operates in and is also open to the residents of Saudi Arabia. In March 2017, the e-commerce giant Amazon took over [Souq.com](#), which happened to be this region's largest e-commerce venture (*The National Business*, 2017). This venture may well be the ultimate peak point for online shopping in the country as the integration of Amazon's technology and global resources with the local expertise would help Souq to offer and attend to its local customers with exceptional products and services. With the advent of e-commerce platforms such as Noon and Amazon, the e-commerce scene in the UAE is expected to change dramatically. According to the consultants of the multi-national consultancy firm AT

Kearney, e-commerce in the UAE is set to grow at a compound annual growth rate of 25% per year up to 2020.

Additionally, the arrival of new entrants such as [Namshi.com](#), [awok.com](#) and further add to the vast array of e-commerce platforms in the region, consequently leading to a competitive digital environment. This competition in turn has led many of these platforms to add more variety to their product range while lowering the prices. It thus comes as no surprise that as of 2017, 76% of the respondents of a survey conducted by Go-Gulf in 2017 cited 'better prices' as one of the topmost factors for opting for cross-border online retailing. It can also be noted that 'access to items not available in the region' was reported to be the second factor for e-commerce adoption (65%), followed by the opportunity 'to discover new products' (59%), availability of a wide variety of products (52%) and 'affordable shipping costs' (50%) (Go-Gulf, 2017). In a nutshell, it can be inferred that all of these factors arose primarily as a result of diverse and new e-commerce platforms entering into the region, paving the way for aggressive competition.

In an article published by the *Gulf Business* in June 2017, the CEO of [Awok.com](#), Ulugbek, states that 'one of the key factor that helps nurture online shopping culture is customer trust'. Until recently, consumers in the region have been reluctant to buy and pay online. This lack of trust has been a reason for the slower growth of e-commerce here. This article further emphasizes the innovative measures that online sites have implemented recently in order to encourage consumers to purchase products online. Some examples of this include the cash-on-delivery feature, which reassures consumers that they can make payments safely. Sites like PayPal have also become popular and renowned in this region, enabling residents of the UAE to swipe their card securely. According to the *Arabian Gazette*, 'the UAE consumer base prefers PayPal as their preferred payment method due to security (55%) and brand worthiness (42%)' (Arabian Gazette, 2016). Providing customers with secure and safe transaction options has no doubt been a critical reason for the residents of the UAE opting for online shopping.

Along with the security factor, many of these sites now offer flexible options such as refund with 100% money-back guarantee, magnified and detailed pictures of the product online and a 24/7 customer service

hotline, leaving no stone unturned in compelling residents of the UAE to opt for online retailing. According to the global cross-border report, the main drivers for UAE online shoppers to buy cross-border online are secure payment gateways (47%), free shipping (44%) and proof of product authenticity (43%) (Arabian Gazette, 2016).

With globalization and technology reaching its peak, the UAE's e-commerce revolution is set to only boost further with time. This in turn will significantly change the way international businesses will soon be conducted in the region, with brick and mortar being replaced by digital retail spaces. MNCs looking to establish themselves in the region will thus choose to skip FDI and opt for a more feasible digital approach.

Adoption Model of Theory: A Framework for Critically Analyzing the Adoption of E-commerce in the UAE as a Technological Innovation

The adoption model of theory, also known as the innovation diffusion theory, is a theoretical framework introduced by Roger and Shoemaker (1971). This model, with its five perceived innovation characteristics, serves to provide an apt explanation of the rate of innovation adoption, the innovation in this case being e-commerce adoption. The five perceived characteristics are relative advantage, compatibility, complexity, trialability and observability. For the purpose of this study, security is added as a perceived characteristic as well.

Relative Advantage: Relative advantage, in this case, can be deemed as the 'extent to which an innovation is perceived to be better than the original idea. For an organization, it is viewed as an advantage for the organization over previous ways of performing the same task' (Agarwal & Prasad, 1997). It can be further noted that relative advantage has been found to be an ideal indicator and is positively related to an innovation's rate of adoption (Premkumar, Ramamurthy, & Nilakanta, 1994; Rogers, 1983, 1995; Tan & Teo, 2000; Tornatzky & Klein, 1982).

For a multi-national corporation looking to expand internationally and in the UAE, e-commerce brings with it significant benefits, the first and foremost being reduction of risk, primarily in terms of financial and

investment risks. Financially, it enables an organization to enter into a new market without investing heavily in land/rent and capital requirements, trade license requirements, labor, warehouse and so on. The second advantage that e-commerce provides an MNC is the ease with which it can enter into the local market. It is imperative that an organization have a local sponsor should they choose to establish themselves in the UAE via FDI. Most MNCs in this case choose to have a local franchisee who takes up the responsibility of managing the MNC in the region. These formalities can be time consuming and expensive in itself, which in turn may deter the MNCs from entering into the region. It can be observed that the e-commerce setup and license registration in the UAE is currently permitted under a variety of trade or service activities.

Although entities are required to be registered, no strict licensing requirements exist and thus determining market positioning has been at the option of the owner in consultation with the authority with whom they register (Khaleej Times, 2017). This implies that digital establishment of a firm is considerably easier than brick and mortar setup in the UAE. Other advantages include collecting and diffusing information on an international scale, strengthening customer relationships via direct customer service chats with clients, reaching new markets, improving business knowledge and awareness through social media, attracting investments and optimizing business processes.

Compatibility

This characteristic can be defined as ‘the degree to which an innovation is perceived as consistent with the existing values, past experiences, and needs of potential adopters’ (Limthongsai & Speece, 2003). According to Tornatzky and Klein (1982), an innovation is more likely to be accepted when it synchronizes with the individual’s job responsibility, value system, lifestyle and deeply held cultural values. It is also important that innovation be compatible with previous ideas. Keeping this in mind, MNCs need to determine the needs of their customers and then carry forward with the innovations to effectively cater to those needs.

The UAE is home to millions of individuals that are technologically savvy and carry out much of their day-to-day activities online. It can be noted that people in the UAE lead a very busy lifestyle, which in turn makes convenience a top priority for them. E-commerce, hence, fulfills this criterion by enabling individuals to order and purchase products at the comfort of their home. A research conducted by Google reveals that the UAE, with its high rate of mobile penetration, is home to online shoppers that are increasingly opting to make purchases on their mobile devices. Consequently, there has been a sharp upsurge in the purchase of smart phones to the extent of 29% between 2015 and 2016, valued at close to AED 10 billion. This region further leads the global smartphone penetration at 73.8% and the country's internet usage statistics show that 91.9% of the population has internet access (Gulf Business, 2017).

Another factor to look into is social media usage. It can be noteworthy to observe that social networking and online retailing go hand in hand, as much of the advertising and awareness of these e-commerce sites are done on these social networks. According to a survey conducted by Northwestern University in Qatar in 2013, users residing in Qatar, Lebanon, Egypt, Jordan, Tunisia, Saudi Arabia and the UAE consider Facebook (41% of online users), Instagram (23%) and Twitter (12%) as their primary social media influence when it comes to making buying decisions. Furthermore, the same survey revealed that the Middle East has 72% of online buyers that firmly believed that social media platforms serve as a great source of information and feedback regarding product recommendations and reviews.

Suffice it to say that a robust internet, tech-savvy lifestyle, thriving social networking culture and high mobile penetration across the region have fostered compatibility in the adoption of e-commerce among residents in the UAE. However, online retailers in particular will have to focus on ensuring that their e-commerce sites are mobile friendly to offer efficient and convenient shopping experiences for the smartphone-obsessed residents of the UAE.

Complexity

Complexity as a perceived characteristic is defined as the ‘extent to which an innovation is perceived as relatively complex to comprehend and use’ (Wang et al., 2010). In this regard, ideas, systems and products that are easier to understand are more likely to be adopted by the mass than complicated innovations, which in turn may compel adopters to develop new knowledge, skills and understanding.

Engaging in cross-border online retailing does not require the residents of the UAE to develop any new skills or knowledge apart from a basic understanding and know-how of computers, smartphones, and tablets. As mentioned above while discussing compatibility, almost every resident of the UAE is an avid smartphone and internet user, from a teenager to an adult to an elderly individual; thus, making purchases and networking online have become something of a secondary nature to the residents of the UAE, making e-commerce adoption a non-complicated innovation for users to accept.

Trialability

This characteristic can be defined as the ‘the extent to which an innovation may be experimented with on a limited basis’ (Rogers, 1995, p. 243). Innovations that can be implemented with a trial period are generally adopted more easily, as adopters have the chance to grow more comfortable with the adoption, than those that are not experienceable. Trialability serves as a vital feature for innovation as it provides adopters the chance to curb the uncertainty they feel toward an unfamiliar technology or product (Weiss & Dale, 1998).

E-commerce as an adoption did not arrive into the region suddenly; rather, it was always present and gradually started gaining the interest of the individuals as they experimented with online shopping at their own pace. During the course of 2015–2016, it could be observed that cross-border online retailing was an innovation that was being explored by customers in this region. While some users grew accustomed to online shopping (early adopters), some still expressed reluctance due to security

concerns. This further enabled the MNCs and the government of the UAE to identify existing loopholes that made the users hesitant to opt for this shopping trend.

As new customer-friendly, secure-friendly features and e-commerce websites entered into the UAE market by late 2016, the trialability phase of this innovation transitioned to a more accepting phase. Hence, cross-border online retailing as an innovation began to grow in the UAE gradually as customers became more comfortable with the chance to explore and engage in this innovation.

Observability

Observability in simple terms refers to the 'extent to which the results of an innovation are visible to others' (Rogers, 2003). It is interesting to note that observability is difficult to create in a market that is already dominated by an established technology. Before attempting to challenge the dominant technology in its native market and application, it is hence vital to first establish observability in a niche market or a new application of the technology (Weiss & Dale, 1998).

Observation of e-commerce websites and its growth and performance are way easier than ever before. Surveys and statistical trends compiled by multi-national research firms, newspapers and the government pertaining to e-commerce growth in the region are readily available for assessment and evaluation. These pictorial representations and analysis can be viewed throughout this report. Additionally, e-commerce websites themselves serve as a shopping window, as these websites are open 24 hours a day and 7 days a week to millions of potential customers and suppliers. Feedback and reviews are also simultaneously posted on these websites, along with product details. There is also a 24/7 customer service chat hotline for clients to get general information and get a response to their queries. This, in a nutshell, not just facilitates observability but also helps the organization to create relationships with both buyers and sellers.

Security/Confidentiality

An extra perceived characteristic that is added in relation to e-commerce adoption as innovation is security. It can be observed from various findings that security is one of the topmost factors that influence an individual's decision to make a purchase online. In the findings section, this study had stated that one of the main factors for individuals to engage in online retailing was secure payment gateways (47%). It is noteworthy to observe that this same factor served as a major hindrance in 2015–2016 to online retailing, as credit card fraud and cyber-oriented money swindling have been a cause for concern in the UAE. Around one in ten residents in the UAE has been a victim of online credit card fraud, with about 37% of them not able to recover their money back.

Keeping this in mind, the Department of Economic Development, under the consumer protection department, in 2017, implemented the 'Consumer Protection Initiative', which seeks to offer stringent security to the public in their access and use of e-commerce platforms. This initiative further permits authorized sites to display consumer protection logo, which adds to the comfort, authenticity and security factor for the customers in the UAE. It also offers promotional and logo tools to the appropriately licensed websites and platforms as an incentive for effectively undertaking efforts to abide by the consumer protection laws, while reporting to the authority as required.

Lastly, this initiative allows 'ease of recourse in the event that complaint is lodged against a registered site providing enhanced consumer protection of the same degree to which consumers have come to expect from traditional "bricks and mortar" stores' (Khaleej Times, 2017). In the same year, the government of Dubai further introduced the launch of 'Dubai CommerCity', which is the first e-commerce-specific free zone in the MENA region. This zone revolves around providing a centralized option via offering an ease of compliance and uniformity throughout the e-commerce industry, that is, organizations that operate out of and within the UAE.

These strict initiatives, followed by e-commerce websites' flexible options (cash on delivery, PayPal secure payment), have instilled a sense

of trust in the residents of the UAE to freely indulge in online retailing in the comfort of their home. It can be safely said that e-commerce adoption, over the recent years, is an innovation that has been gradually accepted by the residents of the UAE as it fulfills all the criteria of the adoption model of theory framework.

Impact of E-commerce on Employability of the Current and Future Human Capital in the UAE

The fast growing and competitive e-commerce in the UAE has placed the country in the leading position in the region. According to the UAE e-commerce report 2018 by Dubai Economy Department (DED), it was estimated that in the MENA region, e-commerce sales will reach \$28.5 billion, whereas it reached \$34.69 billion by the end of 2019, 40% of which was generated by the UAE (Go-Gulf, 2019). It is forecasted that UAE e-commerce will experience a steady 23% growth per annum until 2022. This indicates that with the upsurge of the e-commerce in the UAE, there is a pressing need for the development, acquisition and retention of high-skilled talent. The current and futuristic digitalization and automation of the businesses will create more jobs for tech-savvy labor while non-tech or low-tech labor might suffer, thus creating an imbalance in the employment sector. During October 2019, all the leading job-hunting platforms, like [indeed.com](https://www.indeed.com), [naukrigulf.com](https://www.naukrigulf.com), [laimon.com](https://www.laimon.com) and [Bayt.com](https://www.bayt.com), announced 100–1000 e-commerce jobs. These roles mainly included *E-commerce* Web Developer, *E-commerce* Studio Manager, *E-commerce* Marketing Executive and Manager, Head of *E-commerce* and Digital.

Balsmeier and Woerter (2019) conducted a study in Switzerland, one of the global technology leaders, by using firm-level microdata. The results of the study showed that investments in digital technologies have positive association with the overall net effect on employment. Meanwhile, it has been noted that this association is positive for employment of high-skilled workers whereas negatively related to low-skilled individuals. Similarly, Arntz, Gregory, Zierahn, Lehmer and Matthes (2018) studied the overall impact of digitalization on employment in the German economy and found small yet positive correlation. On the contrary, Frey and

Osborne (2017) argued that computerization or digitalization in the current era would have a negative impact on the job market due to automation. However, they also agreed that the low-skilled population will be more affected than the high-skilled one. Biagi and Falk (2017) conducted a decade-long study in ten European countries and empirically proved that e-commerce and employment growth have no significant relationship.

In the past, many researchers have studied the impact of innovation on employment and concluded that innovations will have a positive effect on the jobs at the firm level (Blanchflower & Burgess, 1998; Smolny, 1998; Van Reenen, 1997). Terzi (2011) also agrees with job expansion and generation of new jobs in the high-tech sector, which will demand high-skilled workers. Evangelista, Guerrieri and Meliciani (2014) also found a positive influence of technologies in the job market. According to Yub, Chankwon, Sooyoung, Hyun and Saebyul (2018) since e-commerce expands the market, it has a positive influence on the employment at both industry and firm levels. However, they also argued about labor-capital substitution. According to a USITC (2013) report, e-commerce resulted in employment growth by 1–2%.

Although the required talent for e-commerce is dominated by technology, logistics and warehouse management, it also requires skilled labor for digital marketing, customer care, merchandising and sourcing (Girotra & Kaushik, 2018). Software developers, AI specialists and data analytics will be in high demand for e-commerce-related jobs. Additionally, customer care representatives, marketing specialists and warehouse managers remain highly demanded. Hence, it is concluded that with this global e-commerce boom, a new set of human capital will be in demand to fulfill the requirements of the shift in the businesses.

Recommendations

From this study, the following can be inferred in relation to cross-border online retailing in the UAE:

- The gradual rise in the e-commerce usage among the residents of the United Arab Emirates was a result of dynamic initiatives that were undertaken by multi-national corporations and the government of Dubai from late 2016 onward. This in turn led to a vast array of factors that subsequently contributed to the steady rise in cross-border online retailing among the residents of the UAE.
- The primary factors that motivated the residents of the UAE to opt for online shopping were better prices and stringent cyber security initiatives.
- Using the adoption model of theory framework, it can be observed that e-commerce adoption as an innovation is easily adaptable in the UAE as it fulfills all the five criteria (including security as an extra characteristic) outlined under the framework.
- Education, training and continuing professional development are necessary to fill the gap between skills and job requirements. Such human capital development programs must not be limited to technological skills alone but should also include soft skills.
- With these advancements in the e-commerce growth, in the UAE, there will soon be a shift in the way multi-national corporations will conduct their international businesses. FDI may be outdated, as digital markets take over their regional markets, paving the way for exporting/importing of goods.

Conclusion

From a customer's standpoint, individuals need to ensure that their rights and resources are protected on online platforms. They also need to be more aware of the digital platforms and conduct adequate online research before engaging in cross-border online shopping.

From an organization's standpoint, MNCs with a physical presence need to tap into digital markets as well. It is important for firms today to have a noticeable existence on social networks, while expanding internationally via a dynamic digital website. While the costs associated with e-commerce are low, competition on electronic platforms makes it nearly impossible for firms to stand out among the millions of digital companies. Moreover, firms

with only a digital presence would benefit from having a physical presence as well to better establish their brand name and identity while gaining opportunities to generate competitive advantage. In summary, MNCs looking to conduct international businesses need to innovatively tap into both the digital and retail markets to best utilize their market potential.

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