Prospects and Problems for E-commerce in Pakistan

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Author’s contribution

The sole author designed, analysed, interpreted and prepared the manuscript.

ABSTRACT

E-commerce facilitates firm and individual to conduct business over an electronic network and it is decreasing the geographical hurdles of trade. E-commerce played key role in the development of many countries by changing old methods of doing business with more sophisticated and accessible methods. The current study examines the significance of E-commerce industry for Pakistan and the prospects of growth and opportunities in the sector. Furthermore, the study also takes into account the challenges faced by e-commerce sector. The study used the descriptive analysis for the purpose and analysis is presented based on the secondary data. E-commerce industry in Pakistan observed significant growth in the last few years. The government has also taken measures through e-commerce policy and Digital Pakistan Policy which provided new opportunities for the growth of the sector. However, e-commerce is facing challenges including payment gateways, lack of Information and Communications Technology (ICT) infrastructure, multiple taxes on ICT products and lack of e-payment regulations. Despite the challenges, the sector can possesses growth prospects as it can help in revenue generation, jobs provision and promoting digital trade. It is required that government should accelerate the digital payment gateways. A digital chamber of commerce, better human capital and intellectual property protection are other measures which can be helpful in promoting e-commerce in Pakistan.

Keywords: E-commerce; digital trade; COVID-19.

1. INTRODUCTION

Electronic commerce is a kind of business model, which facilitates an individual or a firm to conduct business over an electronic network which usually is the internet [1]. E-commerce eradicates the geographical obstacles of trade as sellers from any region can deliver goods and services to customers domestically and internationally. E-commerce has boosted the global economy and played a key role in economic development of many countries [2] through changing old methods of doing business with more sophisticated and accessible methods.
[3]. However, e-commerce adopting is a challenge for many developing countries due to the barriers including cognitive aspects, economic and sociopolitical factors [4]. Particularly unavailability of credit cards, lack of awareness and knowledge and complex legal procedures restrict the growth of e-commerce industry.

E-commerce industry in Pakistan observed significant growth over the last few years as the industry has been estimated at Rs. 51.8 billion in Fiscal Year (FY) 17 which increased to 99.3 billion in FY 18 [5], showing growth of 92%. The government has taken certain measures to promote e-commerce and ICT technologies which provide basis of growth for the sector. E-commerce policy and Digital Pakistan policy are major steps in this regard. The evolving digital payment infrastructure and e-commerce transactions show the growth prospects of the sector. Nevertheless, there exist a number of issues in e-commerce development and the major challenge is the non-availability of proper infrastructure for online payments as the cash payments are still the most popular mode of payment [6]. This is due to the lack of awareness about e-banking and insecurity and trust deficit on e-commerce [7]. People are not well aware regarding ecommerce advancement in the technology which is a major concern as well. In this context, the existing study discusses the relevance of e-commerce growth for Pakistan economy and the latest possible data is used for the purpose.

Specifically, the present study aims to explore the following research questions;

- What is the existing state of e-commerce in Pakistan?
- What are the prospects of growth and opportunities in e-commerce sector?
- What are the major challenges that the e-commerce sector is facing?

2. STUDY METHODS

The study adopts the descriptive analysis to examine the prospects and challenges related to e-commerce sector in Pakistan. Secondary data is extracted from the published sources to highlight the significance and existing situation in this regard. The first phase of the study was based on empirical literature related to importance, challenges and growth prospects of e-commerce. Data for retail e-commerce market, number of e-commerce merchants accepting digital payments, e-commerce transactions, e-commerce index and markets of online shoppers is included in the study. Policies documents are reviewed to present the relevant rules and regulations and initiatives taken by the government to promote the e-commerce sector. In this regard, the study reviews the e-commerce policy and the significance of e-commerce activities during coronavirus spread. Furthermore, review of Digital Pakistan Policy is done and the initiatives for promoting e-commerce sector are discussed accordingly.

3. RESULTS

3.1 State of E-commerce in Pakistan

Pakistan has observed exponential growth in e-commerce activities in the past few years [8]. This has become possible based on the lower transaction costs, convenience and increasing internet penetration. Due to this, both consumers and enterprises have started focusing on online trading. Besides e-commerce industry has expanded its spread beyond the major cities of Karachi, Lahore and Islamabad which has broadened the influence.

<table>
<thead>
<tr>
<th>Province</th>
<th>Order share (%)</th>
<th>City</th>
<th>Order share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Punjab</td>
<td>55</td>
<td>Karachi</td>
<td>24</td>
</tr>
<tr>
<td>Sindh</td>
<td>36</td>
<td>Lahore</td>
<td>17</td>
</tr>
<tr>
<td>Khyber Pakhtunkhawa</td>
<td>5</td>
<td>Islamabad &amp; Rawalpindi</td>
<td>10</td>
</tr>
<tr>
<td>Balochistan</td>
<td>2</td>
<td>Sialkot</td>
<td>2</td>
</tr>
<tr>
<td>Azad Jammu &amp; Kashmir</td>
<td>2</td>
<td>Multan</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hyderabad</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>43</td>
</tr>
</tbody>
</table>

Source: E-commerce Index (Daraz)¹

¹ https://www.slideshare.net/DarazCareers/ecommerce-index-powered-by-daraz
The largest portion of online orders generates from Punjab (55%) while in terms of city wise order market share, 24% of orders are made from Karachi (Table 1). Although the e-commerce is expanding beyond apart from three major cities, however the penetration of e-commerce is still lower in majority of the cities and especially the spread of e-commerce towards rural areas is negligible. Khosla and Kumar [9] pointed out that the online shopping in India is a threat for offline retailers as online enterprises provide better prices and attractive promotional strategies. Pakistan has a retail market of over 900,000 merchants and over 2000 online merchants out of which less than 50 online merchants accept digital payments [10].

Digital payment infrastructure has evolved gradually in Pakistan due to surge in branchless banking and growth in subscription of 3G/4G networks. Now both online marketplaces and e-retailers are integrating these systems into their models. At the end of FY 18, the number of e-commerce merchants using e-payment gateway of banks increased to 1,094 as compared to only 571 at the end of FY17 (Fig. 1).

During FY 18, the e-commerce transactions increase continuously as in first quarter, 826.6 thousand e-commerce transactions were occurring which amounts Rs. 4753.8 million (Table 2). The number of e-commerce transactions increases to 947.8 thousand with transaction amount of Rs. 5055.6 million. The usage of e-wallets is also increasing in Pakistan with the passage of time.

Fig. 2 explains the structure of e-commerce in Pakistan. Majority of the e-commerce retailers belongs to marketplaces for goods like Daraz.pk, FoodPanda, Shophive or online marketplaces for services such as ride-hailing platforms which includes Careem and Uber. In India, a major portion of online services are based on travel and hotel bookings, however the same are still not well established in Pakistan.

Internet penetration is the basis for promoting e-commerce, however the lack of internet penetration in Pakistan is a major deterrent in making gains in e-commerce sector. This is attributed to tax levied on internet usage which increases the cost for consumers, thus resulting in lower internet usage among the masses.

According to United Nations Conference on Trade and Development’s (UNCTAD) Business to Consumer (B2C) E-Commerce Index, China is the top ranked country in Asian region while Korea is the second on the list (Table 3). It can be observed that Pakistan is amongst the lowest ranked country as compared to other Asian countries particularly with South Asian countries.

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**Fig. 1. Number of E-commerce merchants accepting digital payments in Pakistan**

*Source: State Bank of Pakistan*

**Table 2. E-commerce transactions**

<table>
<thead>
<tr>
<th>Quarter</th>
<th>E-commerce transactions (Thousand)</th>
<th>Amount (Rs. Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1-FY18</td>
<td>826.6</td>
<td>4753.8</td>
</tr>
<tr>
<td>Q2-FY18</td>
<td>840.0</td>
<td>4421.5</td>
</tr>
<tr>
<td>Q3-FY18</td>
<td>807.2</td>
<td>4446.2</td>
</tr>
<tr>
<td>Q4-FY18</td>
<td>947.8</td>
<td>5055.6</td>
</tr>
</tbody>
</table>

*Source: State Bank of Pakistan*

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2 https://www.sbp.org.pk/ecodata/index2.asp
Fig. 2. Structure of E-commerce in Pakistan
Source: State Bank of Pakistan

Table 3. UNCTAD B2C E-commerce Index, 2019

<table>
<thead>
<tr>
<th>Rank 2019</th>
<th>Economy</th>
<th>Share of individuals using Internet (2018 or latest)</th>
<th>Share of individuals with an account (15+, 2017)</th>
<th>Index Rank 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>China</td>
<td>89</td>
<td>95</td>
<td>16</td>
</tr>
<tr>
<td>19</td>
<td>Korea, Republic of</td>
<td>95</td>
<td>95</td>
<td>22</td>
</tr>
<tr>
<td>21</td>
<td>Japan</td>
<td>85</td>
<td>98</td>
<td>24</td>
</tr>
<tr>
<td>73</td>
<td>India</td>
<td>34</td>
<td>80</td>
<td>80</td>
</tr>
<tr>
<td>86</td>
<td>Sri Lanka</td>
<td>34</td>
<td>74</td>
<td>93</td>
</tr>
<tr>
<td>103</td>
<td>Bangladesh</td>
<td>15</td>
<td>50</td>
<td>88</td>
</tr>
<tr>
<td>112</td>
<td>Nepal</td>
<td>34</td>
<td>45</td>
<td>115</td>
</tr>
<tr>
<td>114</td>
<td>Pakistan</td>
<td>16</td>
<td>21</td>
<td>117</td>
</tr>
</tbody>
</table>

Source: UNCTAD 2019

Table 4. Internet shoppers as a share of internet users and of population (2017)

<table>
<thead>
<tr>
<th>Economy</th>
<th>As a share of internet users (%)</th>
<th>As a share of population (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>China</td>
<td>69</td>
<td>39</td>
</tr>
<tr>
<td>India</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Indonesia</td>
<td>33</td>
<td>10</td>
</tr>
<tr>
<td>Japan</td>
<td>49</td>
<td>42</td>
</tr>
<tr>
<td>Korea, Republic of</td>
<td>60</td>
<td>54</td>
</tr>
<tr>
<td>Nepal</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Pakistan</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: UNCTAD 2019

Only 5% of internet users shopped online in Pakistan in 2017 as compared to 8% in Bangladesh and 11% in India (Table 4). Similarly only 1% population in Pakistan does online shopping which is quite lower and needs to be increase in order to expand the size of e-commerce. Internet is vital for encouraging e-commerce as Olarreaga and Austin [11] and Borga and Koncz Bruner [12] found that internet promotes trade in physical goods while it also increases digital services [13]. In a survey of e-commerce enterprises by World Bank, firms in Pakistan pointed out connectivity as major barrier for cross-border e-commerce.

3.2 Challenges in E-commerce Growth

Payment gateways such as Paypal play a key role in e-commerce growth as it allows traders to easily receive money and promote business through trust factor. However, the service is not available in Pakistan due to high costs of entry, money laundering issues and clearance complications [14]. Recently Islamabad High Court has asked the government to take measures in order to bring services like Amazon and PayPal in Pakistan [15]. Information and Communication Technology (ICT) infrastructure is basis for expanding the e-commerce, however there is lack of access towards affordable ICT infrastructure in Pakistan. According to Global Innovative Index (2019), Pakistan ranked at 111 and 118 in terms of ICT access and its usage respectively. E-commerce industry in Pakistan is also facing issues which include payments and logistics, customer related issues and lack of institutions and trade bodies to promote the industry [16]. Adoption of digital platforms is slower as compared to developed countries due to lack of education and major portion of population being residing in rural areas.

Specific e-payment regulations are required to confine legal suspicions and introduction for modern technologies and e-payment alternatives to debit cards and credit cards [17]. Kshetri [18] pointed out that regulatory and legal barriers are major hindrances that decrease the e-commerce diffusion pace in developing countries. Survey by World Bank Group observed that trade barriers and taxes in export markets are major impediments for small seller firms of Pakistan. Besides, multiple taxes on IT products also increases the cost of production for businesses. Javed [19] pointed out that lack of cross border infrastructure, investment barriers and lack of digital connectivity are major challenges in trade integration among South Asian countries. According to Saez et al. [20] infrastructure and skills restrict the digital trade sector in Pakistan. The report further stated that energy outages affects the annual sales of businesses as around 61% IT firms pointed out the electricity as major impediment in growth. The issues existed in product delivery which includes tracking of delivery and inventory management. Then only a limited range and variety of products are available online and majority of business community is still out of the e-commerce network.

3.3 Growth and Prospects

The growth of e-commerce sector is beneficial for economy as it not only provides revenue to the government but also through e-commerce the geographical reach of trading activates grows significantly [21]. Coronavirus (COVID-19) on one side has affected the world economies through limited trading activities while on the other hand, it also creates an opportunities for some sectors. New online buying habits and behaviors have developed in COVID-19 as people have shifted towards e-commerce. People in countries like Brazil, China, Germany, Italy, The Republic of Korea, Russian Federation, South Africa, Switzerland and Turkey are now more inclined towards e-commerce and digital solutions. Consumers now prefer to remain at home and do online shopping which is providing more options while further experience driven mobile apps and sites are emerging around the world to satisfy the growing demand. E-commerce is also seen as an alternate strategy for business chains around the world to avoid sales dropout [22]. E-commerce enterprises in Pakistan are getting advantage of the lockdown and lower physical movements in the markets as consumer spending on groceries in post lockdown increased by 58% [23]. The major increase in sectors including food and grocery, telecom and subscriptions and online shopping were observed. ‘Daraz.pk’ which is the largest online marketplace in Pakistan witnessed nine times surge in its online orders since March.

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Besides, e-commerce sector also helped in provision of new employment prospects during COVID-19 [24].

Evolution of e-commerce enterprises such as Daraz.pk is an example that e-commerce can flourish in Pakistan and KCCI report [25] indicates that Daraz alone can create one million direct and indirect jobs by 2022. World Bank also indicates that e-commerce is helpful in boosting job creation and economic growth in developing countries. Quite recently, an e-commerce firm in Turkey has created 1,000 jobs in only three months while it also promotes women participation in national economy. E-commerce policy of Pakistan [26] also aims to generate 130 million jobs and related prospects for youth. ICT infrastructure will be develop through providing internet services and establishing new IT valleys and server farms. The prime example in this regard is of Alibaba which has created 30 million job opportunities particularly for youth, disadvantaged groups and rural communities [27]. Digital Pakistan Policy [28] focuses on a national e-commerce gateway to develop internet merchant accounts. E-banking facilities will also be develop to promote the usage of mobile financial service. Laws and regulations have been initiated to enable the financial institutions to enhance the electronic transactions. To further promote digitization of economy, e-commerce policy intends to introduce slabs to discourage the Cash on Delivery. Being a bulk of youth population and growing usage of internet among the masses, Pakistan can tap the potential of e-commerce. Survey findings of Saleem et al. [29] also stated that young people who belong to the age group of 20-2 are more likely to purchase online.

E-commerce is also beneficial for Small and Mid-Sized Enterprises (SMEs) as it allows higher international visibility and prospects for flexible employment especially for women and people living in remote areas [30]. There are around 90% SMEs out of total enterprises in Pakistan which employs 80% of non-agricultural labor force and SMEs also contribute approximately 40% towards GDP [31]. Considering these significant numbers, e-commerce can significantly promote the business activities and develop further employment prospects including opportunities for women and people living in far off areas. Besides formal enterprises, informal enterprises especially women led are more common on social media sites where women are engage in trading of goods and services.

The provision of ICT infrastructure and skills help in digital trade integration among economies [32]. The Digital Pakistan Policy by Ministry of IT & Telecom focuses on facilitating the IT industry through subsidized bandwidth, software technology parks and research and innovation which will boost the digital trade in Pakistan.

Pakistan can learn from the experiences of neighboring countries including China and India which are the top two in terms of number of online shoppers (Table 5). Pakistan has around 71 million broadband subscribers and 69 million 3G/4G subscriber which make it one of the highest untapped markets for e-commerce in the world [33].

E-commerce has also prompted many youth which are now actively involved in startups through their innovative ideas. The startups have helped in connecting the domestic market with the global markets. One remarkable benefit of e-commerce is that it provides the detailed data which can provide valuable guidelines to enterprises regarding the preferences of consumers and the existing trends. Based on these, the enterprises can gauge their future planning and earn profits.

4. DISCUSSION AND CONCLUSION

E-commerce has boosted the global economy and played a key role in economic development of many countries. However, there are certain challenges in adopting e-commerce for many developing countries which include barriers including cognitive aspects, economic and sociopolitical factors. Lack of credit cards usage, lack of awareness and knowledge and complex legal procedures hinders the growth of e-commerce industry.

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Pakistan has observed exponential growth in e-commerce sector in the past few years. Lower transaction costs, convenience and increasing internet penetration has provided basis for this growth. This has also helped in expanding the network of e-commerce beyond the major cities of Pakistan. Many Business to Customer (B2E) platforms are initiated and becoming popular among people. Online shoppers are also increasing with the passage of time and people are paying attention towards online platforms for shopping. E-commerce policy and Digital Pakistan Policy are key measures from the government regarding policy formulation to boost the e-commerce sector. Branchless banking and growth in subscription of 3G/4G networks promoted the digital payment infrastructure. The amount and number of e-commerce also grew significantly in recent past. However the percentage of internet shoppers in Pakistan is quite low as compared to the regional counterparts.

The major challenges in e-commerce growth in Pakistan include payment gateways, infrastructure related to ICT, customer related issues and lack of trade bodies to promote the industry. Recently, State Bank of Pakistan allows the pilot operation of e-commerce payment gateway which can be helpful in addressing payment challenges to some extent. There is lack of e-payment regulations which restrict the diffusion of e-commerce. The major impediments for small sellers firms include taxes and trade barriers.

After the spread of COVID-19 and the imposition of lockdown, consumers shifted their demand towards e-commerce enterprises which helped in boosting the e-commerce sector. Food and grocery, telecom and subscriptions observed a significant growth. However, certain measures are required to foster the growth of e-commerce in Pakistan. Currently cash on delivery is the major mode of transactions for which it is required to make digital payments cheaper so that more people can attract towards e-commerce. The government of Punjab has announced to decrease the GST on payments made by digital platforms. This is a welcoming step which should be followed by other provincial governments. Specific laws are required to promote e-commerce including data protection, cyber security and privacy laws. E-commerce stores should also tackle the delivery fraud in order to enhance the security and consumers’ confidence. The legislation will help in growth of the sector and it will also assist in avoiding preventable litigations. Securities and Exchange Commission of Pakistan and Competition Commission of Pakistan should regularly conduct the regulatory impact assessment to gauge the socio-economic impact of regulation on businesses and consumers. Firms should also focus to provide services and adopt internet marketing to reach at the maximum possible consumers.

State Bank of Pakistan and Pakistan Bureau of Statistics should regularly provide the data on e-commerce to provide the updated information regarding the sector. It is required to increase the internet penetration beyond the major cities including the rural areas. Research and development in corporate sector and academia should be focused through policy interventions so that new products can be brought into the markets which are aligned with the international demand. Malaysia has developed a digital chamber of commerce and the same can be adopted in Pakistan while the chamber should have a sole purpose to promote e-commerce. Better human capital and intellectual property protection is required for technology innovations which will assist in promoting digital goods and services.

The current study used descriptive analysis for e-commerce related prospects and challenges in Pakistan. In future research, the study will try to

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Table 5. Top 5 markets of online shoppers

<table>
<thead>
<tr>
<th>Country</th>
<th>Online shoppers</th>
<th>Country</th>
<th>% of population</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>1 billion</td>
<td>Sweden</td>
<td>84.65</td>
</tr>
<tr>
<td>India</td>
<td>360.1 million</td>
<td>Korea</td>
<td>80.56</td>
</tr>
<tr>
<td>USA</td>
<td>258.5 million</td>
<td>UK</td>
<td>79.8</td>
</tr>
<tr>
<td>Indonesia</td>
<td>107 million</td>
<td>Norway</td>
<td>79.25</td>
</tr>
<tr>
<td>Japan</td>
<td>89.9 million</td>
<td>USA</td>
<td>78.9</td>
</tr>
</tbody>
</table>

Source: EShop World Report 2019
follow a proper model for further in-depth analysis.

COMPETING INTERESTS

Author has declared that no competing interests exist.

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