



Research Article

E-commerce growth in Pakistan: A critical review in light of Abhijeet Banerjee's poverty alleviation theory

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ABSTRACT

This review paper looks at how e-commerce has shown up as a vital means of stimulating productivity and growth in the current digital age, penetrating the markets of most of the world deep without any signs of letting up. Moreover, it also looks at e-commerce growth and its usage in Pakistan in the recent times, its potentiality, and draws a comparison with China's successful usage of e-commerce to boost productivity and alleviate poverty, allowing rural areas also to reap the benefits the internet provides. Can Pakistan also somehow use e-commerce to do the same and lift out the millions struck in destitution, somehow fixing the economy in the process? Plagued by structural, geographical, educational, lingual, technological, and cultural issues, this paper also does a parallel analysis with Abhijeet Bannerjee's Poverty Alleviation Theory in hopes of rooting out the shortcomings Pakistan faces. This is done with the intention of identifying what can be done to rectify these glaring issues using an approach that's palatable to the Pakistani population.

Keywords: *E-Commerce; Technology; Growth; COVID-19; Poverty Alleviation; Cottage Industries; SMEs*

1. INTRODUCTION

E-commerce, by definition, has had various interpretations over the years which has continued to evolve well into the 21st century digital age. As of today, we can describe it as the digitalization of business with a comprehensive usage of Information Technology, with a focus on automated business processes using a global network - like the Internet. Briefly, it has various angles:

- Communications: Information delivery through any means of communication (phones, television etc.)
- Business process: automating business processes/transactions all around us in any way (ATMs)
- Online: Allowing buying and selling via the Internet
- Service: Reducing service costs and charges while improving product and service quality. (Ngai & Wat, 2000).

In practice, e-commerce first became possible only in 1991 with the rise and development of the internet era and today it represents a whole industry offering a wide variety of



services. With the description given above, we see that it's more than just buying and selling via the internet. However, since the internet has seeped into every known corner of the world, an encompassing understanding of it may be commerce through electronic means, primarily the internet.

In the following sections, e-commerce is analyzed in various lights; its presence and development in developing countries, its rise and growth in Pakistan, the sudden burst it received during coronavirus and the question - can the momentum caused by this burst somehow be used to alleviate poverty, and aid SMEs and cottage industries in Pakistan?

2. E-COMMERCE IN DEVELOPING COUNTRIES

E-commerce holds great potential in developing countries, however, due to a multitude of problems, that potential isn't being fully explored. Internet users have increased exponentially over the years which, naturally, includes developing countries. In 2002, globally, only about 6.53% of the world was using the internet and by 2018 that number rose to 50.763%. In Pakistan, back in 2002, only 0.055% of the population had access to the internet but as of 2018, that number rose to over 17% (World Bank).

Despite the multitude of economic, sociopolitical, technological, and cultural barriers hindering e-commerce, the growth is evident. In 2018, China, which may still be considered a developing country, had 610 million e-commerce users, out of the 1.4 billion global users (UNCTAD) - that's more than 42%. With its 2018 revenues going above \$1.15 trillion USD (Panova et al., 2019), China may well be called the leader in the e-commerce market since its population is also the third largest in terms of using the internet (Alyoubi, 2015). Despite this, however, the nation continues to struggle to fully capitalize on realizing its full potential. Latin America, too, saw an exponential increase in its e-commerce sector, up to 43 billion USD in the past decade. India as well saw a growth, with their revenues from e-commerce rising to 12.6 billion as of 2013. 70% of that revenue, however, was due to online travel systems, with e-retail being the one most rapidly growing.

Developing countries must continue to embrace it wholeheartedly as it will aid them greatly in economics and social development, increased commercial productivity, decreased business operating costs and a more intensified integration of international markets into domesticated versions (Alyoubi, 2015).

Economically, an increasing return to scale is seen with the usage of e-commerce in developing countries (Kshetri, 2007) and during the COVID-19 times, usage has only grown. As such, we can safely say that the potential for returns to be even higher is large.

2.1. HOW E-COMMERCE CAN INCREASE EMPLOYMENT - A STUDY OF CHINA:

5% of the total workforce in China, 15 million people, works in e-commerce. Through a joint experiment with the Alibaba Group and the World Bank, it was revealed how beneficial it was to allow for e-commerce expansion particularly for the rural and underprivileged areas and the way connected the lower classes to the broader market. They discovered that

households that made use of e-commerce had a higher per capita income than those that didn't.

People were able to sell their wares and crafts online to earn a respectable income. This not only taught them additional business skills but also made them more proficient with technology, breeding a healthy learning environment for older sellers. Furthermore, thanks to the exposure given through the internet, demand for their product was pinpointed - overcoming the hurdles of lesser demand due to lesser exposure in traditional business settings. Product brand value in local terms may also rise.

The Chinese government invested heavily in its internet, skill training and infrastructure to expand the economy, as well as introduced e-commerce to all the stages of the production chain. As such, e-commerce gradually became central to their business practices. As e-commerce continues to grow, so does the demand for more varied products, stimulating their production. As rural migrants observe the usefulness of e-commerce, they return home to work on e-commerce, earn a good living and restore the social fabric. With this and a continuously expanding e-commerce market, jobs are created not only in production but also logistics etc. (Xubei, 2020).

3. E-COMMERCE IN PAKISTAN

Information Technology (IT) isn't Pakistan's strongest department, however, in the wake of the novel coronavirus, it saw a predictably large surge in the usage of ecommerce services. Before the virus, however, reliance on e-commerce services was subject to debate. For years now, it has struggled to achieve commercialization in a cost-effective manner.

Technologically, as of 2013, about 30 million of the people in Pakistan were mobile users with only about half of them using the internet through it. Pakistan has been termed the 5th largest mobile market of Asia with a 10% smartphone penetration (Tribune, 2013). Few of the primary reasons that hinder further technological and internet penetration are lack of proper understanding of technology and mistrust of online sources. People prefer cash-on-delivery instead of digital payments. Concern for their safety and privacy has them hesitant to share card details, shipping addresses etc. online (Metzger, 2006).

Despite that a growth spurt was seen. As stated earlier, as of 2018, 17% of Pakistanis were involved in internet usage. According to multiple studies, 18% of all the retail purchases in Pakistan have been through online shopping and according to forecasts, by 2040, 95% of all shopping globally will be done online. A report states that by 2022, there could be a 25% increase in the exportation of IT for Pakistan. E-commerce earnings, in 2018, grew to Rs. 99.3 billion, a giant leap from the previous year's (2017) 51.8 billion. This could both drastically improve international trade for Pakistan along with peoples' lifestyle. For that to work, however, the technology sector needs to considerably be improved.

One way to gently introduce going cashless to sceptics is merchant accounts. Briefly, it's paying via a debit/credit card at a store. However, setting them up involves such a convoluted and troublesome process, along with a hefty service fee, that it's unfeasible for small businesses (Khan et al., 2013) and SMEs consist of 99% of all businesses in Pakistan.

Fortunately, the youth of Pakistan is far more adept and comfortable with technology than their predecessors, and slowly, things are changing, particularly due to the sudden shift in market dynamics due to coronavirus.

4. COVID-19 AND HOW IT PROPAGATED THE GROWTH OF E-COMMERCE IN PAKISTAN

From an e-commerce angle, at least, 2020 was a positive year for Pakistan.

COVID-19 forced customers to re-evaluate their options and give e-commerce a chance, allowing even sceptics to see the advantages of going cashless. There was a significant increase in online payments and purchases, especially hand sanitizers and hand wash the orders of which grew by eighteen times. Pakistan has always had trouble with going cashless, but this proved to be a good opportunity to test out its usefulness.

However, certain problems still stand. Since the circumstances are unprecedented, it affected businesses and producers too, not just the consumers. Shipping and production have seen significant problems during these times in Asia, Pakistan included, thanks to production halt, movement restrictions, limited capital etc. (Abiad et al., 2020). The positive thing is that eventually companies adapted to the “new normal” with online orders rising by nine times. 65% of all existing companies in Pakistan had to adapt to the change brought about in customer behavior due to the virus. Necessities were starting to be bought online from groceries to hygiene products, with pretty much all retailers having an additional online store. Some took to social media sites such as Facebook and Instagram, utilizing their store services, and showcasing a promising future for e-commerce growth. The private sector has massively contributed to this surge with there being a wide range of operational websites selling each commodity - such as daraz.pk, pakwheels.com, and zameen.com (Tribune, 2021).

As stated by the State Bank of Pakistan, a switch to e-payments could boost the economy by 7% and create at least 4 million jobs, with an expected GDP boost of 36 billion USD by 2025. Technologically, Pakistan still lags, but as of 2018 local and international online sellers witnessed a significant increase in their business, their revenues having almost doubled (Tribune, 2020). Certain retail grocery stores have partnered up with companies like Food Panda, which itself partnered up with the production company Brand verse and are using e-commerce to meet customer demand in a safe manner.

One other sector to see a stir was OFDO - Online Food Delivery Ordering Services. In the restaurant industry, they are viewed as something still in the process of coming to surface and cementing their position. However, thanks to innovation and ease of technology, it has been a wave that has only risen (Ali et al., 2020). Many people are utilizing this service because they wish to expose themselves to various cuisines within the comfort of their homes (Ganapathi & Abu-Shanab, 2020). Companies like Food panda have been taking safety measures and offering monetary incentives to riders as well, further intensifying peoples' trust in online food services.

5. E-COMMERCE, POVERTY AND SMALL INDUSTRIES

5.1. CAN COTTAGE INDUSTRIES AND SMEs BENEFIT FROM PAKISTAN'S GROWING E-COMMERCE MARKET? A LOOK AT THE EXPERIMENTAL APPROACHES TO POVERTY ALLEVIATION AS PERFORMED BY 2019 NOBEL PRIZE WINNER ABHIJEET BANERJEE

Would offering a better technological infrastructure, e-commerce services and better internet aid in alleviating poverty? While the world has witnessed substantial progress in eradicating global poverty, it remains deeply entrenched in our world. Too often, children in low and middle-income countries are unable to continue their education since the schools do not have the facilities to offer them quality education such that they may improve in reading, writing and math. Consequently, they drop out and forever remain trapped in a cycle of destitution and illiteracy. In an effort to come up with a solution to this problem, a number of theories were presented by various economists, however, just a theory alone cannot do much if doesn't show practical results. Because of this, by using microeconomic theory and data, 2019 Nobel Peace Prize winners MIT professors Abhijit Banerjee, Esther Duflo 2019 Nobel Peace Prize winners MIT professors Abhijit Banerjee, Esther Duflo and Harvard professor Michael Kremer theorize that the main reason the destitute are stuck in poverty is because they lack the resources to pull themselves out of this poverty. To prove their hypothesis, they performed certain experiments. This empirical approach is their unique aspect for which they won the award.

Certain experiments conducted by the team yielded rather positive results which may be useful in our own hypothesis of if e-commerce can offer resources and a platform for cottage industries and SMEs, connect them to the global market and alleviate poverty somehow. In an educational experiment in the 90s - the team decided to test the test score improvement of students at a school in west Kenya. Although according to results, simply handing over textbooks and resources didn't necessarily allow for a holistic test score increase. It did, however, bring about improvement in the top students' marks. Health interventions were also applied, but they too only improved presence in class rather than test scores - this led them to the conclusion that it was necessary to deal with specific underlying unmet needs of the children.

Later they took to Mumbai and Vadodara for their experimentation where their sample was of 15000 students in both cities combined. They hired academics to work with underperforming students and developed a computer program to help to aid learning through math puzzles. After a year or so, they saw substantive results, establishing that poor learning outcomes among the destitute was because schools were not adapted to their needs. Schools which were given resources to facilitate special needs students yielded higher learning outcomes (Hindu, 2019).

With that established, if catering to the needs of smaller businesses and offering them the appropriate resources with appropriate accommodations, it may be possible for e-commerce to bring about an overall reduction in poverty.

5.2. POVERTY AND E-COMMERCE

There are a multitude of examples that show how e-commerce can alleviate poverty.

NADRA created a digital identification card system with an incorporated a biometrics system. Having digital passports, birth certificates etc. all have aided the poor in getting themselves verified and overall smoothed the process, but a proper infrastructure integration is still lacking. One of the biggest problems is how it is not accommodating to them in terms of general technological complications, a big part of which is language. Naturally, a lack of proper education as well as no localized language user interfaces prevent technological proficiency and navigation.

Primarily the languages used are either English or Urdu but a large part of the population converse in regional languages for the most part. Websites, digital platforms, mediums etc. all need to support as many languages as possible with FAQs, proper instructions, and accommodation. The poor frequently require a middleman for getting everything done, hence, addressing these issues could bring them up significantly, also giving them technology handling skills in the process.

There exists a large potential for poverty to be alleviated through e-commerce. Earlier, in the “E-commerce in Developing Countries” section, we looked at how e-commerce can be helpful in increasing employment opportunities. Now we shall look at how it can similarly reduce poverty through e-commerce.

An e-commerce ecosystem can alleviate poverty in several ways; it is self-sustaining, lowers the need for continuous external investment and intervention (Jha et al., 2016) and in a way, can lead to emancipation by allowing the poor masses’ potentials to be realized.

There exist various examples of organizing the poor farmers and giving them the means of checking their mobile phones to gather information such as weather reports, current prices of products in the market to reap benefits. Once again, the example of China is before us - this nation, in 2015, intensified its attempts at alleviating poverty through the usage of e-commerce. They developed an application by the name of “Bank of China Philanthropy (BOCP)” the purpose of which was to provide a platform for the destitute and the farmers and increase their selling prowess by expanding their horizons, their customer breadth as well as allowing for more people to be able to look for them and their products. It brought together both producers and consumers, with the impoverished farmers listing agricultural products online for sale. A good amount of investment was made to forward the app, with the Chinese government investing in 174 million yuan in establishing a company that would support it, its usage, and operations. By the end of it, not only had the household incomes increased by 50% but the involved parties had also developed a multitude of necessary skills, such as greater technological proficiency (Huang et al., 2020). This is just one example of the potential of e-commerce in its usefulness.

In another example, in Gujarat, India, there exist computerized milk collection centers which have electronic weighing machines, electric fat testing machines as well as plastic card readers thanks to which farmers and shepherds alike can receive fair prices for their product when selling them to dairy companies. Before this, they had to rely solely on

manual means of calculations, however, after the introduction of this system, there was increased transparency between the corporations and the farmers, the processing speeds were higher, and the farmers were able to receive immediate payment for their products (Cecchini & Scott, 2003).

According to the World Development Report (2000/2001), attacking poverty offers the poor greater opportunity, increases their assets, makes them abler to manage risk and security which helps them in becoming more socially integrated into society. It also enables them to better utilize government services and expands their access to microfinance.

5.3. A LOOK AT FACTORS AFFECTING E-COMMERCE IN CHINA AND THEIR SUCCESS IN ERADICATING POVERTY VIA E-COMMERCE

Since 1978, China has managed to raise 850 million out of poverty. Going digital, as seen above, played a big role in that. With their efforts, they have had an average growth rate of almost 10% a year since 1978.

First - their investment in infrastructure which is one of the most important aspects of running an online business since delivery of goods depends on it. China has massively invested in roads for its rural regions, increasing their investment from 2001 to 2004 by nearly 350%. Over 60% of the rural settlements were connected to their urban town network by 2006. Over the years, this investment and focus has only increased (Liu et al., 2009).

Next, the business model the Alibaba Group, their largest e-commerce company, employs. Thanks to a system that allows them to connect to pretty much every part of the world, a globalized network is created that allows the company to bring together various small and medium enterprises, acting as an intermediary between them, allowing both consumers and businesses to buy and sell goods, catering to a B2B model, and creating a globalized network. This not only increases the variety of products provided but also allows for competitive pricing, encouraging the businesses involved to keep their prices as low as possible by establishing rivalry.

Third is language and education. One of the cardinal necessities to understand technology and its efficient usage is to be educated well enough to understand its finer workings. This is far more easily done when the user interface provided in your computers and phones is in your mother tongue which in this case would be Chinese language.

Fourth is internet provision. Last year in 2020, during the coronavirus burst, Chinese internet users went up to 989 million - almost 1 billion (Cheng, 2021) from a 1.4 billion population making over 70% of their population internet users. In contrast, in 2019, only 54.3% of their population used the internet. Within a year, more than 15% increase was seen (World Bank).

5.4. SMES, E-COMMERCE, AND THEIR CURRENT SCENARIO IN PAKISTAN

According to the Framework for SME Sector Development in Pakistan (2018), SMEs refers to small and medium enterprises that have, currently, ended up creating a more

competitive environment for both the consumer and producer. Currently, SMEs account for 99% of all the businesses in Pakistan. They play a gigantic role in the economic stimulation of many developing countries, proving themselves necessary for domestic market growth. Naturally, they require resources for survival and growth.

In 2014, the International Finance Corporation (IFC), an intermediary of the World Bank, collaborated with Bank Alfalah in Pakistan to launch the SME Toolkit. The kit offers advice on setting up your own business, trading information and how to grow a business with one of its targets being allowing access to relevant growth information for the development of SMEs. Many retailers, wholesalers etc. are making use of the internet to list their products up on to online shopping malls which also allows them to access the global market (Khan et al., 2014).

However, despite this, for the past decades, Pakistan's performance in the industrial sector has faced a downward trajectory, thanks to which there has been an intensifying trade deficit and lack of employment opportunities. The one largely being affected is youth thanks to which poverty keeps on intensifying - and SMEs, of course, is one of the most important sectors that could greatly benefit Pakistan as it comprises most of the businesses in the nation (Kureshi et al., 2009).

Extensive literature exists out there that emphasizes its importance, however, unfortunately its potential hasn't fully been realized due to lack of proper support systems, one of the reasons for which is a lack of any real interest in investing in the sector. If integrated properly into the structure, it could create a good amount of employment opportunities out of a small amount of capital in comparison (Berry, 1998).

Pakistan has failed to properly integrate technology into its economic structure and that hinders the development of SMEs (Bari & Cheema, 2005) thanks to infrastructural setbacks and low diffusion of technology (Awiagah et al., 2016). This is where the importance of e-commerce as a tool for SME growth comes, especially in the face of the coronavirus, wherein e-commerce saw a massive usage boost. This could subsequently boost economic growth and reduce poverty.

5.5. COTTAGE INDUSTRIES, E-COMMERCE, AND POVERTY

Cottage Industries, like SMEs also play an important role in Pakistan's economy but do not require the kind of resources SMEs or traditional industries do. Complicated and intensive technology is not required for them to flourish. Areas like Southern Punjab, which are not as flourishing or developed as rest of Punjab frequently sees poverty-ridden women working as the sole breadwinner of the family, usually in embroidery (Azid et al., 2001) and other times in the informal sector as maids or housekeepers. These women's' products are largely coveted in various regions - bespoke handiwork holds high value especially for the affluent. However, these women's' naiveté and lack of exposure results in them being frequently exploited by urban entrepreneurs. As such, their menial income has not succeeded in elevating them out of poverty (Azid et al., 2001).

Besides the problem of exploitation, these women are also subject to many other constraints. For starters, they must pass on their work to shopkeepers - they do not directly sell their product. (Azid et al., 2001) Another is that they do not play a dominant role in the family, thanks to social constraints, and lack the privileges a male usually has such as access to technology (often the men have cellphones and women don't in the lower class), decision influence, resources etc. (Khandker, 1987) Women only act as labor and more than half these women's families (53% according to a survey done by Azid et al., 2001) live below the poverty line.

In many cases women also do not contribute sufficient time to the activity - they perform non-economic activities, i.e., housework, due to social and familial obligations. Thanks to this, their business activities often either come to a halt or face lesser attention. Moreover, due to the concept of "*parda*" or veil (Azid et al., 2001) oftentimes they cannot firsthand experience the business process, unable to ascertain what value their work holds, settling for a paltry sum for their wares. Ultimately, thanks to a wide variety of reasons, a large part of which are social, cottage industries rarely receive room to grow. With e-commerce, working remotely will also be possible and a firsthand experience and view of the entire business transaction will be within these women's grasps.

6. CONCLUSION: CAN POVERTY ALLEVIATION THROUGH EXPERIMENTATION APPROACH BY APPLIED TO PAKISTAN BY THE USAGE OF E-COMMERCE?

Within the span of a single year, the entire world witnessed a dramatic change in its social fabric, including Pakistan. Thanks to coronavirus, not going outside has become the norm and e-commerce played a giant role in allowing people to adjust to the "new normal" which one can describe as a state that a society has adjusted itself to following a crisis – which in this case is COVID-19 and its aftermath.

E-commerce expanded in every sense of the word, even giving birth to sub-categories like S-commerce (social commerce) and M-commerce (mobile commerce). Products and services are being sold through not only social media, but also through mobile (android, iOS) app, being delivered right to your doorstep. This will only expand further, bringing Pakistan increasing opportunities in the production, technical and employment sectors and this momentum could also be used to eradicate poverty.

China managed to bring hundreds of millions of people out of poverty, largely due to e-commerce and its benefits. The economist Abhijeet Banerjee gave a solid hypothesis and substantiated it with results. Pakistan, too, can make use of these approaches to not only develop the e-commerce sector but also alleviate poverty to a good extent.

To apply these for maximum effect, certain problems must be addressed. One of the biggest issues Pakistan faces is lack of proper infrastructure in remote areas such as the north and Baluchistan. These regions are not only rural but their terrain, landscape and existing zamindar feudal system along with the authority the provincial government holds

offers little room for the Federal Government to intervene and build roads and better transport systems.

Moreover, lack of proper, homogenized education which prevents an in-depth understanding of technology as well as a reading ability that's either underdeveloped or non-existent. Too much emphasis is placed on the English language and in many cases, the children going to school (in present days) are first generation student and parents lack the ability to participate in their educational activities. Thanks to poor teachers as well as a disjointed method of teaching, too frequently students may learn to read and write some English, but not understand it in-depth because at home and everywhere else, they are accustomed to their mother language which is usually the regional language. This brings us to the next point. While the Android user interface can support Urdu language, that is not entirely helpful because in many parts of Pakistan, peoples' primary means of communication is their regional language - Punjabi, Sindhi, Pashto, Balochi to name a few.

Other than this is internet provision. While hardly anyone these days appears without a cellphone, network coverage isn't always the best in remote areas. Offering resources, as is the approach of Abhijit Banerjee and his team, can rectify this.

One deep-rooted, social issue in Pakistan is lack of a proper work ethic. Beggary is practically an industry at this point and it's near impossible to cross a road without seeing at least one beggar on it. A lack of desire and motivation to work leads to an underproductive labor force which leads to low productivity in production. As a result, economic growth turns sluggish and the whole nation suffers.

To rectify the above given issues, certain steps must be taken. For a start, a network could be developed for the existing cottage industries and farmers such as China's BOCP initiative. It could comprise professionals of the relevant fields imparting necessary knowledge in a suitable manner. Secondly, an improvement in the education system which will better help the newer generations understand and comprehend the more complex nuances of technology. That would eliminate the need for intermediaries for translation. Third, provision of better internet in remote areas.

One of the major concerns of Pakistanis over the years has been the lack of trust for online payment methods. The society strictly stuck to cash on delivery, avoiding giving out their personal details for fear of any negative usage of the information. While the fears are not entirely misguided, a well-developed, localized app similar to PayPal with full accountability that has the ability to create a national network connecting to all parts of the country is what is necessary. Currently there exist services like Easy Paisa and Jazz Cash, however, the scale of them is relatively limited. Fifthly, accountability for any underhanded actions. Punishments, exercising the rule of law in case of any deceit or fraud to hold them responsible for their actions. Finally, a platform for allowing the smaller industries to go global. Currently at the peak of all e-commerce sites sits Amazon, a global e-commerce monstrosity in terms of proportion. Closely following is the Alibaba group the business model of which allows it to compete with Amazon as the global e-commerce hegemon. In 2018 they acquired Daraz.pk.

E-commerce would not only alleviate poverty but also allow the smaller industries to access the global market which would allow for not only broader exposure but also reduce the persistent deficit in Pakistan's budget, stimulate export growth, allowing for reduced imports and bringing about a desirable balance in the balance of payments. It may also encourage international investments in the nation, opening its doors to wider varieties of product, establishing a more stable industrial sector, generate employment, raise literacy with the skill and knowledge it provides, stimulate production and overall boost international trade and subsequently, prompt greater economic growth.

In a nutshell, this paper attempted to have an encompassing overview of e-commerce in Pakistan, held alongside the Poverty Alleviation Theory, as well as what could be done to rectify the problems its currently facing in regard to it. Certain examples were given as possible solutions which would allow not only e-commerce but various other areas in Pakistan see an upward trajectory.

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- Abiad, A., Arao, M., Dagli, S., Ferrarini, B., Noy, I., Osewe, P., Pagaduan, J., Park, D., & Platitas, R. (2020). The Economic Impact of the COVID-19 Outbreak on Developing Asia. *ADB Briefs*, 2–13. <https://doi.org/10.22617/brf200096>
- Ali, S., Khalid, N., Javed, H. M. U., & Islam, D. M. Z. (2020). Consumer Adoption of Online Food Delivery Ordering (OFDO) Services in Pakistan: The Impact of the COVID-19 Pandemic Situation.

- Journal of Open Innovation: Technology, Market, and Complexity*, 7(1), 10. <https://doi.org/10.3390/joitmc7010010>
- Alyoubi, A. A. (2015). E-commerce in Developing Countries and how to Develop them during the Introduction of Modern Systems. *Procedia Computer Science*, 65, 479–483. <https://doi.org/10.1016/j.procs.2015.09.127>
- Awiagah, R., Kang, J., & Lim, J. I. (2016). Factors affecting e-commerce adoption among SMEs in Ghana. *Information Development*, 32(4), 815–836. <https://doi.org/10.1177/0266666915571427>
- Azid, T., Aslam, M., & Chaudhary, M. (2001). Poverty, Female Labour Force Participation, and Cottage Industry: A Case Study of Cloth Embroidery in Rural Multan. *The Pakistan Development Review*, 40(4), 1105–1118. Retrieved February 17, 2021, from <http://www.jstor.org/stable/41260380>
- Bari, F., & Cheema, A. (2005). SME development in Pakistan analyzing the constraints to growth. <http://hdl.handle.net/11540/6244>
- Berry, A. (1998). The Potential Role of the SME Sector in Pakistan in a World of Increasing International Trade (The Quaid-i-Azam Memorial Lecture). *The Pakistan Development Review*, 37(4), 25–49. <https://doi.org/10.30541/v37i4ipp.25-49>
- Cecchini, S., & Scott, C. (2003). Can information and communications technology applications contribute to poverty reduction? Lessons from rural India. *Information Technology for Development*, 10(2), 73–84. <https://doi.org/10.1002/itdj.1590100203>
- Cheng, E. (2021, February 4). China says it now has nearly 1 billion internet users. *CNBC*. [https://www.cnbc.com/2021/02/04/china-says-it-now-has-nearly-1-billion-internet-users.html#:~:text=By%20the%20end%20of%202020,Network%20Information%20Center%20\(CNNIC\)](https://www.cnbc.com/2021/02/04/china-says-it-now-has-nearly-1-billion-internet-users.html#:~:text=By%20the%20end%20of%202020,Network%20Information%20Center%20(CNNIC)).
- Ganapathi, P., & Abu-Shanab, E. A. (2020). Customer Satisfaction with Online Food Ordering Portals in Qatar. *International Journal of E-Services and Mobile Applications*, 12(1), 57–79. <https://doi.org/10.4018/ijesma.2020010104>
- Hindu, T. (2019, October 14). Economics of poverty: On Economic Sciences' Nobel. *The Hindu*. <https://www.thehindu.com/opinion/editorial/economics-of-poverty/article29683404.ece>
- Xubei, L. (2020). *How E-commerce Creates Jobs*. TEDxZizhuParkWomen. Retrieved from https://www.youtube.com/watch?v=qp-Rqt--k7M&t=90s&ab_channel=TEDxTalks
- Huang, C.-C., Jin, H., Zhang, J., Zheng, Q., Chen, Y., Cheung, S., & Liu, C. (2020). The effects of an innovative e-commerce poverty alleviation platform on Chinese rural laborer skills development and family well-being. *Children and Youth Services Review*, 116, 105189. <https://doi.org/10.1016/j.childyouth.2020.105189>
- Jha, S. K., Pinsonneault, A., & Dube, L. (2016). The evolution of an ICT platform-enabled ecosystem for poverty alleviation: The case of eKutir. *MIS Quarterly*, 40(2), 431–445.
- Khan, S. A., Liang, Y., & Shahzad, S. (2014). Adoption of Electronic Supply Chain Management and E-Commerce by Small and Medium Enterprises and Their Performance: A Survey of SMEs in Pakistan. *American Journal of Industrial and Business Management*, 04(09), 433–441. <https://doi.org/10.4236/ajibm.2014.49051>
- Khan, W. A., Yousaf, S., Mian, N. A., & Nawaz, Z. (2013). E-commerce in Pakistan: Growth Potentials and E-payment Solutions. *11th International Conference on Frontiers of Information Technology*, 247–252. <https://doi.org/10.1109/fit.2013.52>
- Khandker, S. (1987). Labor Market Participation of Married Women in Bangladesh. *The Review of Economics and Statistics*, 69(3), 536–541. doi:10.2307/1925545
- Kshetri, N. (2007). Barriers to e-commerce and competitive business models in developing countries: A case study. *Electronic Commerce Research and Applications*, 6(4), 443–452. <https://doi.org/10.1016/j.elerap.2007.02.004>

- Kureshi, N. I., Mann, R., Khan, M. R., & Qureshi, M. F. (2009). Quality management practices of SME in developing countries: a survey of manufacturing SME in Pakistan. *Journal of Quality and Technology Management*, 5(2), 63-89.
- Liu, C., Zhang, L., Luo, R., Rozelle, S., & Zhan, L. (2009). Infrastructure Investment in Rural China: Is Quality Being Compromised during Quantity Expansion? *The China Journal*, (61), 105-129. Retrieved February 28, 2021, from <http://www.jstor.org/stable/20648047>
- Metzger, M. J. (2006). Privacy, Trust, and Disclosure: Exploring Barriers to Electronic Commerce. *Journal of Computer-Mediated Communication*, 9(4), 00. <https://doi.org/10.1111/j.1083-6101.2004.tb00292.x>
- Ngai, E. W. T., & Wat, F. K. T. (2002). A literature review and classification of electronic commerce research. *Information & Management*, 39(5), 415-429. [https://doi.org/10.1016/s0378-7206\(01\)00107-0](https://doi.org/10.1016/s0378-7206(01)00107-0)
- Panova, Y., Tan, A., Hilmola, O.-P., Puvindran, M. H., Hongsheng, X., & Li, W. (2019). Evaluation of e-commerce location and entry to China – implications on shipping and trade. *Journal of Shipping and Trade*, 4(1), 1-25. <https://doi.org/10.1186/s41072-019-0045-6>
- Tribune. (2013, June 24). 30m internet users in Pakistan, half on mobile: Report. *The Express Tribune*. <https://tribune.com.pk/story/567649/30m-internet-users-in-pakistan-half-on-mobile-report>
- Tribune. (2020, July 8). Covid-19 boosts digital economy, e-commerce in Pakistan. *The Express Tribune*. <https://tribune.com.pk/story/2253806/covid-19-boosts-digital-economy-e-commerce-in-pakistan>
- Tribune. (2021, January 14). Economic development and e-commerce. *The Express Tribune*. <https://tribune.com.pk/story/2279849/economic-development-and-e-commerce>
- World Bank, World Development Report (2000/2001). *Attacking Poverty*, Oxford University Press. Retrieved from [www.worldbank.org/poverty/wdrpoverty/]