

ECONOMICS OF E-COMMERCE IN POST COVID ERA

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Abstract

E-Commerce business is one of the fastest growing sectors in India and has a great potential for future, soon expected to surpass United States to become second largest E-commerce Market in the world. E-Commerce is defined as buying and selling of goods and services, including digital products over electronic platform or internet. Unlike the brick n mortar model, where the buyer and seller meet physically, in E-commerce both meet virtually and transact. According to one of the reports, Indian E-commerce industry is expected to reach US\$ 200 billion in 2026 from US\$ 38.5 billion in 2017. India's internet economy is expected to double from USD 125 Billion in 2017 to USD 250 Billion in 2020 majorly due to E-commerce sector. Digital transactions are expected to rise to USD 100 Billion in 2020 and further a Trillion Dollar online economy by 2025 with the help of digital India campaign. The credit of healthy growth of E-commerce market goes to growing demand, increasing investment, various policy support and attractive opportunities. These projections were based on the market research in pre Covid-19 period but with the outbreak of Covid 19 in the last few months both the market and consumer behaviour are giving indications that E Commerce will hit the target of 200 billion mark much earlier. The present paper will discuss the economics of E-commerce in the light of paradigm shift in the consumers and suppliers behavior as a result of Covid 19 Pandemic.

Index Terms: E-commerce, Paradigm shift, Consumer Behavior, Brick and Mortar, Digital

I. INTRODUCTION

E-Commerce business is one of the fastest growing sectors in India and has a great potential for future, soon expected to surpass United States to become second largest E-commerce Market in the world. E-Commerce is defined as buying and selling of goods and services, including digital products over electronic platform or internet. Unlike the brick n mortar model, where the buyer and seller meet physically, in E-commerce both meet virtually and transact. According to one of the reports, Indian E-commerce industry is expected to reach US\$ 200 billion in 2026 from US\$ 38.5 billion in 2017 and offline retail market to reach US\$ 84 billion in 2021 from US\$ 24 billion in 2017. The vast growth is majorly on account of rising internet penetration, launch of 4G network, digitization and rising smart phone usage. According to the report by Indian Brand Equity Foundation (IBEF), the internet penetration has increased to 50.52 percent in June 2019 from 34.42 percent in 2017 and 4 percent in 2007, where Urban areas have around 88.26 percent and rural areas have 21.76 percent contribution. It is expected to grow further to 45 percent in near future. So, the overall internet usage is around 46.13 percent in India, while in terms of number of active users, India's ranking is second in the world.

E-commerce has four major segments, these are Business to Business(B2B), Business to consumer(B2C), Consumer to Business(C2B) and Consumer to Consumer(C2C) .There have been the revolutionary changes in E-commerce business over the past few years. These positive changes have encouraged E-Commerce industry domestically and globally as well. Government of India’s initiative to allow 100 percent FDI in April 2016, in B2B has led to exceptional performance of E-commerce industry. There are two types of Business Model in E-Commerce. One, Market based model acts as intermediary and provides an electronic platform to both buyer and seller. Market based entities can engage in transaction with the registered sellers on B2B basis but cannot hold inventory. This model offers services like shipment, delivery, payment gateway, logistic, call centre, rebranding and other fulfilment services for instance Flipkart and Amazon. In case of Inventory based model, inventory based entities offer their own products on the shopping website. They perform the entire process from the start-to-end, from purchasing the product, warehousing till dispatching. Jabong and Yepme are very good examples of such model.

II. INDIA AND E-COMMERCE

The Indian E-Commerce Industry has been showing an upward trend and is expected to become second largest E-commerce industry after U.S in the world by 2034. India’s E-commerce platform has the potential to grow four folds by 2022, if supported by rising income and growing internet users. Through the various campaigns like Digital India, Startup India, e-Kranti government of India is aiming at India’s Internet economy to get doubled by 2022 from US\$ 125billion to US\$ 250billion.

There have been certain key drivers for the growth of E-commerce industry which need to be mentioned. The first is the population driver.India is termed as the “Young Nation”. Most of the online shoppers are in the age group of 15 to 34 years. Men are more active in online shopping because of our cultural differences. Majority of the online sales are done in Tier I and Tier II metro cities like Delhi, Mumbai and Bangalore. These population drivers are given in the Figure 1.

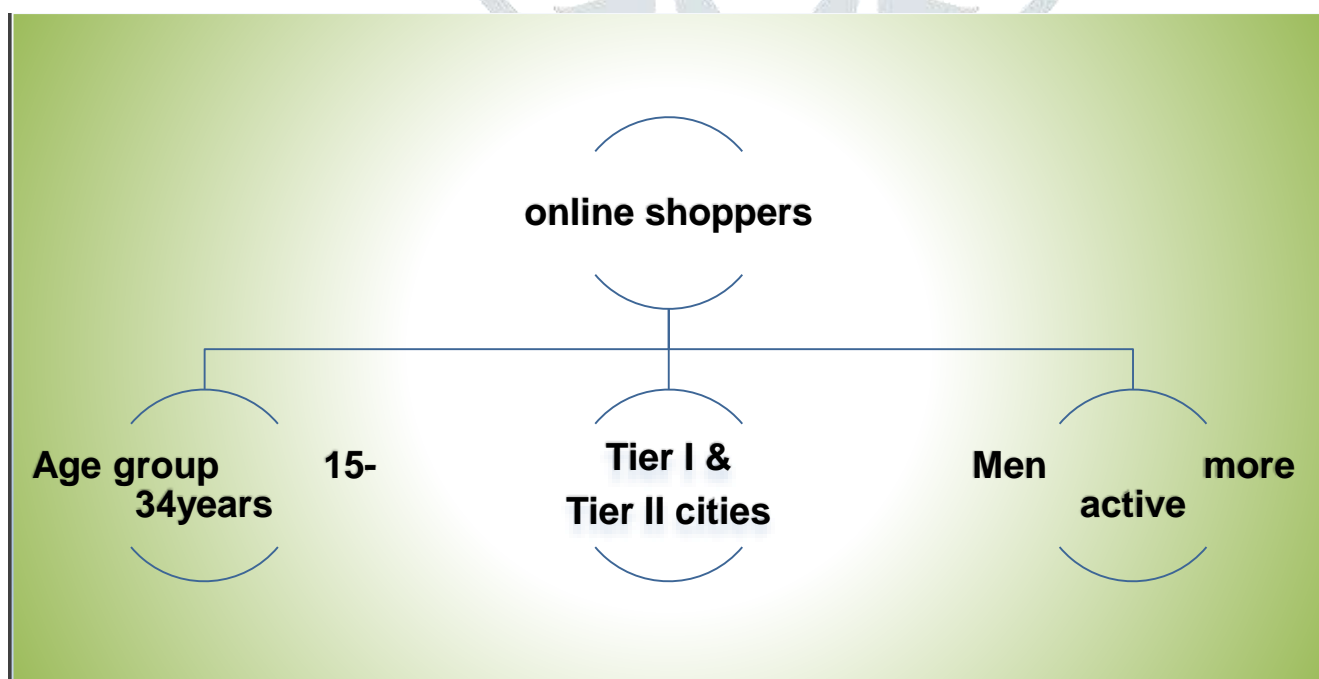


Figure 1 : Population Drivers for E-commerce

Source: Kart to Mart --Game Changer for Indian E-Commerce industry? Proceedings of International Conference on Business, Accounting, Finance and Economics (BAFE) 2019,

Another factor driving e-commerce industry is retail logistic market. Online retail market in India has gone up from USD 14.5 Billion in 2016 and further to USD 17.8 Billion in 2017 and is projected to grow to USD 73Billions by 2022at CAGR OF 29.2 percent .Retail logistic means flow of goods from the online seller to the customers through efficient logistic. The logistic includes supply, warehousing, distribution, production and reverse logistic. Logistic is one of the major drivers contributing to the growth of e-commerce retail industry. Another significant development in retail logistic market is introduction of E-commerce portals leveraging its parcel business network by India Posts. According to KPMG Report, “E-commerce Retail Logistics India”, E-commerce retail logistic market is expected to grow at 36 percent CAGR over next five years.

Increased usage of smart phone and rising internet penetration is another growth driver for E-commerce. Mobile is no longer just a medium of communication but is used more for entertainment and shopping. According to Mckinsey, “Indians are just behind China in mobile phone usage, with 1.2 billion mobile phone subscriptions and 12.3 billion downloaded apps in 2018.India is second largest internet user base having 627 million internet users across the country. It is increasing by 6 million every month. The size of E-commerce market has also increased by ten times at the end of 2018 in comparison to 2009.

III. GOVERNMENT INITIATIVES TOWARDS E-COMMERCE BUSINESS

The business models have been transformed through digital initiatives and online promotions, this has led to rapid growth in millions of new consumers in various segments. Government has undertaken various initiatives for digitisation of Indian Economy which is expected to boost the e-commerce in India Various Government initiatives and long term growth potential have been shown in the Figures 2 and 3.

Udaan	Internet Saathi	Umang	BharatNet
<ul style="list-style-type: none"> • Network Centric • B2B platform • Small and Medium businesses • Bangalore, Karnataka • Focusses on Predictability • Over 80 cities 	<ul style="list-style-type: none"> • Joint-initiative of Google & Tata Trust • Educate rural women • Digital literacy • Started in July,2015 • Rajasthan, Tamil Nadu 	<ul style="list-style-type: none"> • Unified Mobile Application for New-age Governance • Multi-Channel • Multi Lingual • Launched in November, 2017. • An app-based interface 	<ul style="list-style-type: none"> • National Optical Fibre Network • Renamed as BharatNet • Rural Broadband connectivity • World’s largest • Approved in Oct,2011. • PAN based

Figure 2 : Government Initiatives towards e-commerce business

Digital India	E-Kranti	Pradhan Mantri Gramin Digital Saksharta Abhiyan
<ul style="list-style-type: none"> • Flagship Programme • Launched in July,2015 • Improved online infrastructure • Increased internet connectivity • Aimed at digitization of India. 	<ul style="list-style-type: none"> • National e-Governance Plan 2.0 • Initiated in 2006 • Transforming e-Governance for Transforming Governance”. • 44 Mission Mode Projects 	<ul style="list-style-type: none"> • launched under Digital India program • Rural household digital literacy • Cover 6 crore rural people

Figure 3 : Government Initiatives towards e-commerce business

Source: Kart to Mart --Game Changer for Indian E-Commerce industry? Proceedings of International Conference on Business, Accounting, Finance and Economics (BAFE) 2019

Another factor which has given boost to E-commerce is the new digital payment habits of the consumers. Online payment solutions from the likes of Paytm, Amazon Pay and PayPal have induced the habit of contactless transactions in the consumers.

Amazon is biggest E-commerce operator in terms of revenue. Similarly Flipkart, Paytm, Myntra, Snapdeal etc. are facilitating to Indian Economy in terms of easy access , competitive prices , good quality and early delivery of goods and services.

E-commerce platform has also added to government revenue in terms of GST collection. With the increasing availability of smartphones at affordable prices and high-speed connectivity has made India one of the largest and fastest growing economy in digitization Indian E-commerce industry has performed exceptionally well due to above mentioned factors.

IV. COVID 19 PANDEMIC AND E-COMMERCE

With the outbreak of Covid 19 crisis which soon became a global emergency, the supply chains were disrupted, businesses were slowed down all over the world. Global reaction to the pandemic has led to closing of borders within and around the world in order to control the spread of virus. This has brought the manufacturing and distribution to standstill situation. There was a time when these operations could not function for weeks. This led to promotion of new products tailored to the situation. Covid19 pandemic has impacted all types of business including the e-commerce business on a massive scale. It has resulted in the paradigm shift in the consumer behaviour towards Utilitarian and Hedonic goods. **Utilitarian** goods are ones whose consumption is more cognitively driven, instrumental, and goal oriented and accomplishes a functional or practical task (Strahilevitz and Myers 1998). **Hedonic** goods are consumed for luxury purposes, which are desirable objects that allow the consumer to feel pleasure ,fun and enjoyment from the product available.

A recent survey has estimated that 71 per cent of consumers preferred social distancing and therefore changed their mode of shopping from physical to online to protect themselves and families from this pandemic. Majority of consumers are anticipating the long term implications of pandemic which is going to transform their life style in coming years According to a recent survey by Deloitte, more than 50percent of non millennial have started preferring online purchases of groceries and medicines whereas millennial continued buying branded goods and electronic items on line . In the same survey it has also been mentioned that 76 per cent of consumers switched to online shopping due to the health concerns. Kunal Shah, founder and CEO of credit card bill payment platform CRED, said, "While the trend stemmed out of necessity, the convenience, safety and accessibility of digital medium have led to a sustained behavioural change where we are seeing consumers continue spending on these channels post the lockdown as well."

Indian E Commerce industry is projected to grow to USD 200 Billion by 2026. This projection was based on the market research in Pre Covid-19 period but with the outbreak of covid 19 in the last few months both the market and consumer behaviour are giving indications that E Commerce will hit the target of 200 billion mark much earlier. Some of the key changes in consumer behaviour like changed traditional shopping habits, ordering the products online has increased the growth prospects of e-commerce Industry. This will prove to be a turning point for the e-commerce industry. This inflection point will emerge as a new world order in Retail Sector. Retail sector will have to be more agile in adapting to the new order. The retail sector players are required to work on their business models. Instead of depending only on offline stores they should open the doors for online shopping as well otherwise their survival will be in danger. The technology should be used to pick/pack/ship/deliver and various software should ensure the smooth and effective warehouse operations with minimum human interface.

Over the last few months it has been observed that there has been a shift of sales from offline to online. Many businesses like yoga studios, massage parlours, Salons and Gyms etc could not deliver their services. Later on, they attracted the customers by giving offering gift vouchers, online services through e marketing and various social channels. E commerce became the most sought-after platform for driving the consumption during the Covid 19 Crisis. Bigbasket, Grofers the big online grocery players are experiencing unprecedented demand and restricting the access to their website to existing customers only. Due to sudden rise in the demand for their services they stopped services to many locations due to their capacity constraints. One of the leading e commerce players Amazon is prioritizing its logistics capacity to serve essential items like health care, hygiene and personal safety products besides other high-quality products Covid 19 disruption has created fast changing and less predictable environments for most industries, businesses and other economic entities. Consumers have also entered a survival mode by staying safe and being digitally connected at all times. Change in consumer behaviour during Covid 19 has transformed retail market and created a new classification of market players that is

- Leaders – agile retailers, who upgrade to an omnichannel ecosystem
- Survivors – pure-play digital platforms
- Laggards- pure-play offline retailers who are still in waiting mode

These classifications of market players will depend on how e-commerce sector reacts towards strengths, Weaknesses, Opportunities and Threats. The SWOT Analysis has been done in the following Table

STRENGTH	WEAKNESS	OPPURTUNITIES	THREATS
Boundary less purchasing	Missing Instant delivery	E –Commerce Start ups	Supply chain Disruption
Hygiene and ease of use	Instant Checking of Goods missing	Extended use of AI/ML	Deceleration in demand
Range of Choices	Missing Tangibility and trialability, Personal Touch/ Touch & Feel Size and Fitting missing	Advanced Chat box for making orders and customer services	Stress on banks and financial sectors
24X7 Shopping	Shopping experience missing	Same Day /Drone delivery	Intellectual Property Rights
Availability of Reviews	Data Security	Robust retail CRM and marketing automation system	Systems reliability
Comparison shopping-price and product comparison	Complicated Exchange process	Internet Live streaming	Hiring of unsuitable and unethical employees
Discounts/Memberships	Frauds- Cyber frauds	Private Communications	Logistics and inventory management problems
Less Time Consuming	Sales and distribution frauds	Changing E-commerce Landscape	Taxation Issues
Convenience with comforts	Tailor- made products	Aggregation of Niche products	Cyber / Credit Cards Frauds

Figure 4 : E – commerce and SWOT Analysis

Source : Compiled by Authors

V. CHALLENGES AND OPPORTUNITIES FOR ENTREPRENEURS

Entrepreneurs and business leaders are looking at the pandemic as an opportunity to transform their traditional business model to a new business model. E commerce can win the customer acquisition and retention better by shifting the consumer priorities and behaviour as new habits after the pandemic. Agile business leaders act with

convenience and transparency ensuring to engage with their customers to grow their business, reinforce customer loyalty, and penetrate new categories and territories. The rise of digital commerce creating new customer touch points enabling shoppers to interact with businesses through complex network of categories and platforms.

Friction is the enemy of e-commerce and consumer as well so they should aim at to deliver superior frictionless shopping experience. The challenge of frictionless commerce is daunting, although savvy entrepreneurs are trying hard in making frictionless hyper personalized commerce. Their key focus is in aiding the shopper in discovery, purchase and post purchase experience. In response to the demand spike of new categories the industry should focus on restructuring the supply chain order in which e-commerce traditionally used to operate.

Entrepreneurs should react to the trends of diversifications and continuity of supply chain and inventory management to maintain the balance and normalcy during this pandemic time. Entrepreneurs should focus on redesigning their supply networks and supply chain strategy to respond to the new reality due to Covid 19. The World Health Organization (WHO) recommended the consumers to use contactless cards or smartphone payments whenever possible to help reduce the risk of spreading the Coronavirus. Consumers are increasingly ready to embrace contactless payments and digital wallets.

Entrepreneurs have an unprecedented opportunity to rework their business models and adjust their operational model to emerge as stronger business leaders. Lock down restrictions have resulted in transitional phase for consumers from offline to online shopping for essential and non-essential goods due to convenience benefits of hygiene and ease of use. This has propelled the growth in e-commerce space.

The entrepreneurs can encash the prevailing situation aiming at utilitarian v/s hedonic shopping behaviour. However the rapid growth of e-commerce sector has also propelled the rise in shopping frauds to many folds. These frauds can be in the form of sales and distribution frauds, counterfeit, expired and damaged products, kickbacks, bribes and conflict of interests, logistics and inventory managements, pilferage of original products by delivery person, cyber frauds, hiring of unsuitable and unethical employees. Organisations must adopt preventive measures to shield themselves from frauds by root cause investigation of suspicions and complaints, fraud risk assessment, due diligence check for new, existing and third-party sellers, employee's background checks, conducting fraud awareness sessions for employees, sellers and third party. Organizations need to be vigilant and pro active to build robust mechanism to thwart malicious fraudsters. Consumers and organisations should come together and take the required precautions to curb this menace and prevent the fraudsters.

Another innovative approach to solve the challenges faced by e-commerce industry is to use AI / ML algorithms to customize every e-commerce customers experiences reducing friction by identifying and segmenting the user base on common characteristics it is called Count Control-Account Takeover Protection. This approach has the ability to identify returning customers even if they log in from a new location or a new device. E-commerce businesses can give their customers an appropriate log in response such as step up authentication or frictionless experience rather than instantly blocking their access. Count control approach enables e-commerce companies fraud agents to see the health of the logging and take the quick pulse of number of blocks and challenges as well as failed log in attempts. How they choose to react will define the future of E Commerce. Many of them prefer frictionless experience in order to convert the occasional customer to most loyal customer.

E Commerce markets have witnessed an interesting development during Covid 19 Pandemic. There is a sudden surge in consumer demand for E Commerce goods and services due to implementation of lock down norms, social

distancing measures and continuous sanitization which led to increasing acceptance and adoption by traditional consumers and traditional businesses. Segments like on demand delivery services related to perishable goods, social engagement platform, OTT platforms, online collaborative tools and consultations, E pharmacists have found their turning point in the current scenario. These segments have observed a rapid growth in millions of new consumers.

The business models have been transformed through digital initiatives online promotion, omni channel sales, social commerce and e commerce approaches. Private equity firms and Venture Capitalists are also actively providing runway for a specific and targeted action plan. Various categories where e-commerce is responding are essential supplies, mass sanitizers, disinfectors, telemedicine etc. E- pharmacy, medical consultations video, mobile and other digital services fintech segments and increased digitization in supply chain The principles like portfolio of essential goods and services, cloud-based businesses and easy access to the customers regardless of the distance, destinations and distributions are playing an important role for e- commerce industry during this testing time.

However, there is a possibility that post covid period consumers may return to their old habits of offline purchases but many of them who found the value and satisfaction with their online purchases to continue to remain dependent on online consumption than offline consumption. In the long run we may expect a great turning point for digital transformation and e commerce platform.

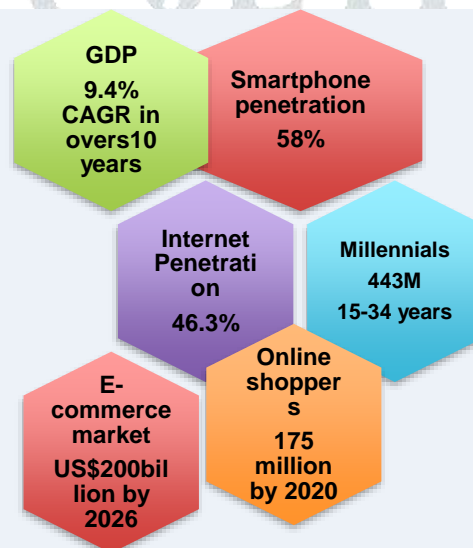


Figure 5: Long Term Future Growth Potential

Source: Kart to Mart --Game Changer for Indian E-Commerce industry? Proceedings of International Conference on Business, Accounting, Finance and Economics (BAFE) 2019

VI. CONCLUSION

We can conclude that the pandemic is likely to impact adversely the economies world over and the transmission routes may be through supply disruption, internal and international decelerating demand, stressed domestic and global financial system and falling industrial growth rates. In the light of the above discussion, the possible outcomes for the growth of economies and commerce as well may take three shapes in the post covid period. These are

- U shaped growth:** U shaped growth is expected if we are fully optimistic, the stagnant period will be very very short and thereafter the growth is definitely going to pick up very fast.
- ∪ (saucer) shaped growth:** If we are somewhat optimistic the growth is going to pick up after the short stay of stagnant of growth

c) L shaped growth: if we remain pessimistic growth tends to remain stagnant for a long time

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