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“COVID-19 Has Become a Catalyst for Innovations in Service Industry”

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# Editorial Write-up

National conference was organized online on 12<sup>th</sup> March 2021 on “COVID-19 has become a catalyst for innovations in service industry.” Undoubtedly, the pandemic was a time of anguish; but with it also came a time for hope. The rapidly spreading Coronavirus pandemic put immense strain on large businesses and start-ups alike. Investors were on edge, valuations came down and skilled workers were being laid off across industries. However, there was a spurt in the service industry as many new businesses started during the tough time.

And as we prepare to go back to the normal world which will be changed forever because of the pandemic which changed the culture, the time is ripe to reset everything with newness.

Just about every major disaster has similarly affected humanity and business, and there is no reason to believe that the coronavirus will impact us differently. The earliest known pandemic in history was the Plague of Athens in 429 BC that took almost 100,000 lives and changed how people think about life and disease. Since then, there have been hundreds of epidemics where each one has cost society anywhere from several thousand to tens of millions of lost lives.

Our national conference was a great success. We had researchers all over India who read papers. Most papers dwelt on how social media has played a major role during the pandemic and how organizations coped with work from home. Some researchers also presented papers on birth of new apps and how customers were getting used to those apps.

We are proud to bring out our online research journal post the research conference.

Do give your comments and suggestions on [editor@tqijtm.com](mailto:editor@tqijtm.com)

Happy reading!

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# Use of Social Media Marketing in Health Care Sector – “The Covid Effect”

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## **ABSTRACT**

*Social media and social networks are the rage these days. The healthcare industry in general and the pharmaceutical industry in particular, are being reshaped by the proliferation of electronic communication through social media. Consequently, marketing practices are also evolving rapidly. Pharmaceutical marketers need a better understanding of how social media works and how they influence marketing strategy. This article discusses how social media and social networks are redefining marketing strategy and provides a framework for analysing the effects of social media on patients, physicians, and marketers. It gives insights into how hospitals, pharmacies and Pharma companies are using social media.*

## **KEYWORDS**

*Indian Pharmaceutical Industries, Hospitals, Social media marketing, social media research.*

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Digital or social media marketing is the marketing of products with the help of Technology.

It is also termed as e-marketing, web marketing, online marketing or Internet marketing. It also includes the management of digital customer data and electronic customer relationship management (e-CRM) systems. Social Media marketing allows the placement of media along many different stages of the customer engagement cycle.

In the healthcare sector, digital marketing is an extension, which can be implemented across verticals namely the customers i.e., Doctors, Hospitals, Patients, Chemists & Pharmacies and Sales Team. For Health care Professionals (HCPs) it is used to provide services, scientific data, business analytics etc. to the specialists in order to promote their products/services. In Patients it is used to ensure awareness & adherence to the therapy. For the sales team it is used to make customer calls more interactive & upgrade their skills and motivation.

It is observed that during and post the COVID period, marketing and communications have taken on even greater importance to ensure and enhance the level of engagement with the consumers served by the vertical. The health care sector which includes pharma companies, hospitals, doctors, pharmacies, chemists are expanding their capabilities to utilize varied channels to reach the communities through telehealth appointments, targeted mobile-messaging platforms and useful social media content across varied platforms, including Facebook as well as Twitter, Instagram and others.

While Pharmaceutical companies are reshaping their commercial models to prepare for the uncertainties ahead, two things have become crucial for launching success in this new challenging environment post the pandemic. The two being **Personalization and Digital Enablement**.

In these conditions with Covid cases on the increase across the globe the healthcare industry faces a

challenge. Apart from tackling the spread, the industry has to develop new innovative therapies & diagnostics to clinicians, patients and healthcare systems – even as R & D, manufacturing and supply chains struggle to maintain their business.

The traditional model of Pharma companies was face to face meetings of the medical representative with the medical professionals to promote their products and thereby generate prescriptions and business. But post pandemic the traditional pharma commercial model will find it not so easy to adapt to a different world. When the medical representatives will venture back into the field, they will have to face challenges of the new landscape and thereby have to consider a new approach for launches which would be digital, local and personalized.

As per the report from McKinsey, they have identified five factors to be considered for commercial launches in coming times i.e. during and post pandemic period. Leaders should pay close attention to these five factors while formulating new strategies.

These factors are (1) Rapidly personalized content (2) Analytics enabled engagement (3) Innovative patient channels and services (4) Nimble front line operations and (5) Closed loop execution.

**Rapidly Personalized Content:** Since each healthcare professional's preference is so variable and changeable, pharma companies should create the content for each individual doctor considering each individual's interest. The content would be personalized.

**Analytics – Enabled Engagement:** Facilitate personalized engagement via tools that support representative decision making, integrate user feedback, and enable the optimization of channels and content mix thereby fostering continuous learning.

**Innovative Patient Channels and Services:** The new hurdles created by the COVID-19 pandemic call for innovative services from pharma companies, as well as from healthcare systems and professionals, to stay connected with patients. Some companies have stepped in to facilitate interactions with HCP's by offering telemedicine diagnostic platforms in app form or through integration of web, text and voice. Maintaining or adjusting treatment can also be difficult in today's circumstances, especially for infusions, injections, and other therapies that require attendance at a hospital or clinic. Innovative

companies are developing alternative infusion sites, enabling "at home" infusion, and offering guidance on how to minimize risk when visiting health facilities.

**Nimble Frontline Operations:** You have to reimagine the frontline and equip your medical representatives with remote selling capabilities, digital channel expertise, analytic insights and learning tools. As virtual calls replace in-person visits, reps can foster a sense of proximity with HCPs by learning to make the most of cameras, screen sharing, and other interaction tools. Soft skills such as deep listening will help sales reps gather insights on physicians' unmet needs and sources of dissatisfaction. Feeding these insights back into CRM systems will enhance their predictive power and enable the organization to rapidly correct course where needed. It may be noted that now with less time spent travelling and waiting to see HCP's, reps have more time at their disposal to pursue value added opportunities.

**Closed-Loop Execution:** Implement closed loop execution by linking local execution with launch plans to get insights and support rapid responses to changes in circumstances. The main objective is to avoid keeping any customer communication gap open and innovate ways to contact individual customers in a closed loop. The approach is micro marketing which deals with individuals rather than segments.

Apart from this, health care are making adjustments in their Marketing in response to the pandemic. Practically every hospital wants to make sure their public relations teams are communicating openly and proactively with their respective patient communities throughout these testing times.

There are four suggested strategies which marketers can implement now to sustain their organizations in the short term.

**Balance COVID initiatives with Lead Generation for High Value Service Lines:** For healthcare communication leaders, it is imperative to focus on initiatives that capture commercial volumes, and drive revenue growth. Hospitals have to balance COVID communications with building a pipeline of candidates for primary care, elective procedures and speciality care. Many hospitals are meeting the post covid demand by offering virtual seminars, conducting pre-op visits via telehealth.

**Meet the increasing Demand for Health Information:** The demand for online information on health has been growing steadily which is seen in the increasing number of online health care related search. To get smarter and more informative on health issues, consumers turn to healthcare providers especially during COVID because hospital and health system websites are among the most trusted sources of information on coronavirus.

**Engage Consumers where they Work and Live (which is often the same place):** Similar to ordering a pizza or buying books online, consumers today look for getting medical diagnosis and treatment plan from the comfort of their home via a smart phone or computer screen. It has made consumers more inclined to avoid traffic and crowded waiting rooms after COVID. Consumers are now aware of the ease, convenience and quality of the online tools in addition to time and cost savings and hence adopt the same.

**Rely on your Partners:** COVID has created a 24/7 environment for nearly all healthcare professionals. Agency partners with expertise in digital & content strategy coupled with experience can amplify your brand, maintain consistent outreach and build a pipeline of prospects for business.

To prove the same, I had studied the social media marketing sites of various verticals in the health care sector, and given below are my observations.

Three verticals were researched namely:

- (A) Hospitals
- (B) Pharma companies and
- (C) Online Pharmacies

The **Hospitals** researched were (1) Apollo group of hospitals, (2) Fortis hospital, (3) Kokilaben Dhirubhai Ambani hospital, (4) Manipal Hospital and (5) Wockhardt Hospital.

The **Pharmaceutical companies** that were researched were (1) Cipla Ltd., (2) Cadila Health Care, (3) Dr. Reddy's Pharma, (4) GSK and (5) Mankind Pharma and the **Pharmacies** were (1) PharmEasy, (2) Net Med, (3) 1 mg- Health & Wellness

## HOSPITALS

### Apollo Group of Hospitals:

Their Facebook page has 2.3 million followers. They conduct live streams on an average 5 times a week,

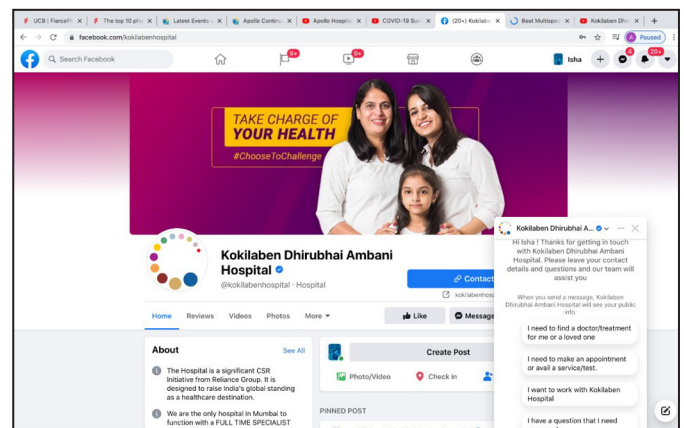
followed by Q & A session. It is because of the facebook page the hospital comes in direct contact with the end consumer. On facebook they have the **BOOK NOW** hyperlink that redirects you by giving you slots to book appointments. It is a very user-friendly account. Apollo has their own app too. The Youtube channel has 138,000 subscribers with 32,118,401 views. They replicate the content of facebook on Youtube thereby expanding their viewership & customer list. Another aspect is the monetary benefit by using these platforms i.e. the channel earns money by the number of clicks on the site.

### Fortis Hospital:

Their facebook page has 1.2 million followers. They have **BOOK NOW** which redirects you to their website. They do not have live streams as of now. The Youtube has 110,000 subscribers and 25,111,828 views. They replicate the content of facebook on Youtube. On You Tube they have put up a "Fortis Tele consultation Guide" which gives a mock demo on how to use the same for the benefit of consumers who are not so tech savvy.

### Kokilaben Dhirubhai Ambani Hospital:

Facebook has 1.1 million followers. Their **CONTACT US** button redirects you to their website to book appointments. The special feature of their facebook page is they have a Standardized direct message giving you the various options of the services you need for e.g. (Hi Isha, what exactly -----?) which is personalized, basically a closed loop execution. They too have live streams. Their You Tube as of now has 19.1k subscribers and 30,64,421 views.



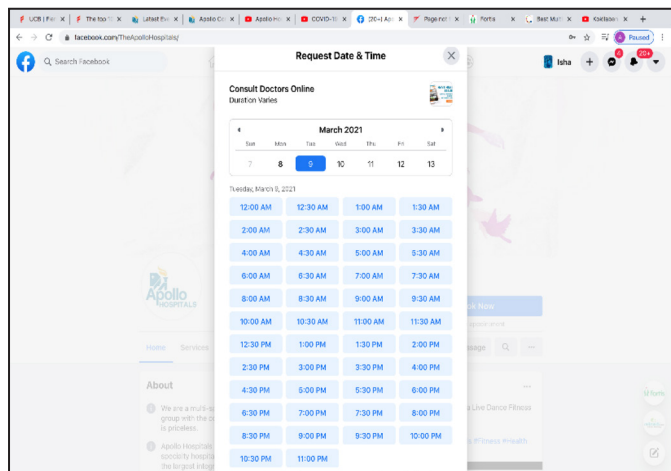
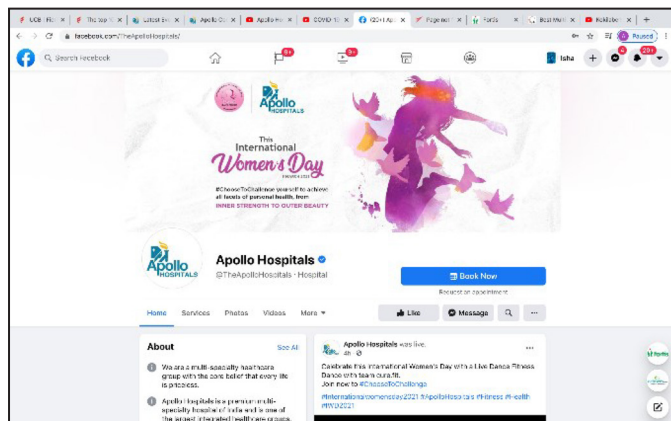
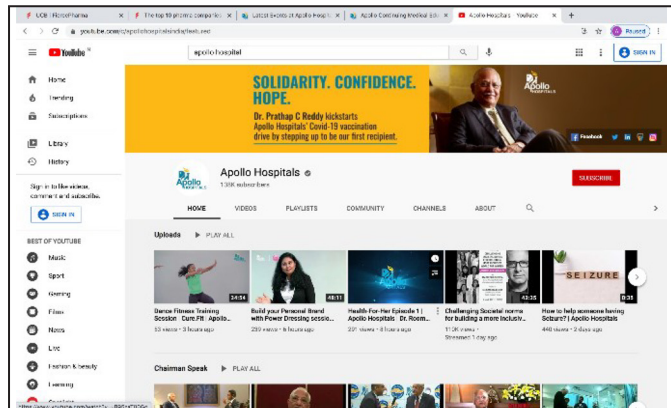
### Manipal Hospital, Mangalore:

The facebook page has 507122 followers. The **CONTACT US** button takes you to their website. On their website they have a live Customers Chat

too. They too have live streams at least 3 to 4 times a week. Their You Tube channel has 197K subscribers with 21,493,220 views. They are monetizing their video that is giving advertisement and earning money from the same.

**Wockhardt Hospital:**

The facebook page has 287,638 followers. They too have a **BOOK NOW** which redirects to their website. They also have live streams. They are active on YouTube having 5,020 subscribers.



**PHARMA COMPANIES**

**Biocon Ltd.:**

Their Facebook page has 45,299 likes. They post a lot of informative videos and also have interactive sessions. They also conduct weekly live streams and insightful TEDTALK sessions.

**Cipla Ltd.:**

Their Facebook page has 64,268 likes. Cipla’s “Berok Zindagi” campaign bagged the Best Social Media Brand in Healthcare (Pharma) (Silver) at the Social Sammie Awards 2021.

**Dr. Reddy’s Laboratories:**

Their Facebook page has 186,778 likes. They have been listed in the 2021 Bloomberg LP Gender Equality Index (GEI) for the 4th consecutive year. Their CONTACT US button routes you to their website. They are active on the following platforms i.e., Facebook, LinkedIn, Twitter, and You Tube. They conduct Guest Dialogue sessions regularly.

**GSK Pharma:**

They are very active on various platforms on social media i.e. Twitter, Facebook, YouTube, Flickr, LinkedIn and Instagram. Their corporate Twitter feed allows you to follow GSK news and activities. Facebook page contains news and features about the company. The You Tube channels contain a range of videos from careers, responsibility and innovation. The LinkedIn page allows you to interact in a professional network and update prospective employees with job opportunities and related GSK articles. The Instagram account gives you an inside look at their science, their people and their history. Quoting the words of Marc Speichert , the chief digital officer who says that they brought together marketing related teams – including data, analytics and insight, media, content and PR, ecommerce and digital innovation under his leadership and created an end-to-end marketing services function at the very core of it. Besides another core element of its strategy has involved forming partnerships. They tied up with Google, the tech company as a media centric partner which extends through programmatic advertising and content marketing to innovation.



Their Facebook page has 359,421 followers. They have live streams, beside also Quiz which is very interactive. Their LEARN MORE button directs you to their website.

#### **Mankind Pharma:**

Their facebook page has 44,883 likes.

### **ONLINE PHARMACIES**

#### **PharmEasy:**

It is an online pharmacy for medicines, healthcare products and Lab tests. Their SHOP NOW button routes you to their website. They also have a chat page wherein you can choose an option or type your own message and they reply within a day. They also have a separate app too for ordering medicines.

#### **Net Med:**

The facebook page has 259,569 likes. They also have a button SHOP NOW which routes you to their website. Their website is such that once you are their member you get regular refill reminders, so you never again come up short of medicines. It is known as 'India Ki Pharmacy'. They have brand ambassadors like Kareena Kapoor and Renuka Shahane for their promotion.

#### **1mg-Health & Wellness:**

Their facebook page has 192,928 likes. The application is available as a web portal and as a mobile app too. The features offered are search for drugs, cost comparison of generic and prescribed drugs, doctors search and appointments, diagnostic tests and preventive healthcare. They are active on messenger too and reply within an hour to your queries. They have live streams too.

#### **Apollo Pharmacy:**

Their facebook page has 194,158 likes. They too have a **SHOP NOW** button which routes you to their website. They also have Prescription Reminder Service.

Hence it may be noted that the Corona Effect has actually changed the traditional marketing to a digital platform very quickly. This is a boon for the Health care sector. Infact the Healthcare sector, be it

Pharma companies, hospitals, chemists or medical professionals, all are spending on agencies to develop their online platform. Hospitals and healthcare systems are adjusting their messaging to patients and the public as the COVID-19 pandemic evolves. Many hospitals are leveraging the talent of their staff to produce high-quality, high value webinars, reaching a wide range of stake holders, including board members, donors, local businesses and non-profits, first responders, government officials and families. Many hospitals use social media to communicate with and provide assistance to patients and families within their communities. Providing an alternative mode of communication can help to make a patient interaction more comfortable and less clinical. Physicians who create a Facebook page for their practice are able to leverage this huge user base as a way to stay connected to their patients and attract new customers.

The digital channels such as email and social media have become more prominent. The reach and engagement levels have increased significantly. The readership and engagement on digital channels has increased and more data is being used to drive the strategy and ensure the best allocation of resources. Social Media use is growing and not likely to disappear and the general public and healthcare organizations are already engaging in social media for healthcare communication and treatment. Although there are some challenges surrounding maintaining privacy and confidentiality and the reliability of the material exchanged on the web, the benefits to the general public and healthcare organizations outweigh the mediums limitations.

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- (3) <https://www.marketingweek.com/gsk-digital-transformation-safe/>
- (4) Above mentioned Digital Platform information is based on the respective Pharmaceuticals, Hospitals' Facebook and Youtube analytics.

## **Strategies for MSMEs During COVID-19**

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### **ABSTRACT**

*COVID took a massive toll on business, particularly on MSME who are vulnerable due to size and scale of operations. MSME both in urban as well as in rural areas has been instrumental in being the most vibrant and dynamic engine of growth of Indian economy over the past few decades. As per the MSME Ministry Data, the sector contributes around 16 per cent of the manufacturing GDP and 25 per cent of service sector GDP. It maintains an annual growth of 10 per cent. The number of MSME units is estimated to be at 42.50 million, registered and unregistered together with a staggering 95 per cent of the total industrial units in the country. It contributes nearly 45 per cent of the total Indian manufacturing output and 40 per cent of the total exports. The sector provides employment to 106 million people, 40 per cent of India's workforce and, next only to the agricultural sector. The sector also produces more than 6000 products. Further, these MSMEs ensure regional balance by taking industrialization to rural and backward areas since about 20 per cent of MSMEs operate in rural and backward areas. Looking forward, with the Indian economy expected to touch \$5 trillion by 2025 MSMEs have a significant role to play in the economic development. Hence this paper seeks to understand the survival and revival strategies of MSME.*

### **KEYWORDS**

*Covid-19, MSME, Strategy*

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### **INTRODUCTION**

In the current COVID-19 pandemic situation, MSMEs are fundamentally hit hard encountering loss of creation and pay. However, they have a critical task to carry out in the economy. Both, the Government and Reserve Bank of India, have approached with a few monetary help measures to imbue greater liquidity in the market, encouraging banks to lend more and make a favorable climate to meet the demand and supply of MSME products. Specifically, MSMEs are relied upon to get ready Business Contingency Plan suggesting strategies to survive, stabilize and surge under lockdown environment. In this regard, their efforts need to be strengthened.

Micro, Small and Medium Enterprises (MSMEs) sector emerged as the most vibrant and dynamic engine of growth of Indian economy over the past few decades which was evident from its contribution. As per the MSME Ministry Data, the sector contributes around 16 per cent of the manufacturing GDP and 25 per cent of service sector GDP. It maintains an annual growth of 10 per cent. The number of MSME units is estimated to be at 42.50 million, registered and unregistered together with a staggering 95 per cent of the total industrial units in the country. It contributes nearly 45 per cent of the total Indian manufacturing output and 40 per cent of the total exports. The sector provides employment to 106 million people, 40 per cent of India's workforce

and, next only to the agricultural sector. The sector also produces more than 6000 products. Further, these MSMEs ensure regional balance by taking industrialization to rural and backward areas since about 20 per cent of MSMEs operate in rural and backward areas. Looking forward, with the Indian economy expected to touch \$5 trillion by 2025, and with groundbreaking economic reforms kicking in, MSMEs are expected and bound to play a much more important role. In this regard, the recent National Manufacturing Policy envisaged a rising share of the manufacturing sector in GDP from 16 per cent at present to 25 per cent by the end of 2022 and, MSMEs have a significant share in the same. This Policy also aims to create 100 million additional jobs in the next decade. But these expectations seem to be far away from their realization in view of the current COVID-19 crisis in the country. Hence, it calls for understanding the impact of COVID-19 on MSMEs, measures taken by Government of India (GOI) and Reserve Bank of India (RBI), need for preparing business contingency plan to come out of the COVID-19 crisis and look for a live MSME case in its successful preparation such plan to guide other enterprises.

## REVIEW OF LITERATURE

The ongoing COVID-19 pandemic is causing unprecedented disruptions to economic activities across countries, and India is no exception. The pandemic has severely affected and continues to disrupt global value chains (GVCs), domestic production network, trade, services and MSMEs thereby affecting overall growth and welfare. The current pandemic is working its way through a highly globalized world with interconnected financial markets and production networks. The complete lockdown and current ongoing partial lockdowns have both demand-side and supply-side effects on the Indian economy. On the supply side, the restrictions of movement of goods, services and personnel affects the production networks. The plunge in economic activities and overall output growth leads to employment loss. The supply shocks will further create demand-side effects by reducing the economy's disposable income, savings and giving rise to unwanted uncertainty.

Therefore, the economic impact of COVID-19 is expected on every sphere including growth,

international trade, financial markets, unemployment, income, poverty and many more variables. The impact of the virus spread is expected to lead to a huge loss as global trade is severely affected. The Indian growth model depends on the export-led-growth (Mishra, 2019), and hence can experience massive impact on growth due to lockdown amidst the virus spread. On the international trade front, it is expected to plunge in a range of 13-32 per cent under optimistic and pessimistic scenarios, respectively (WTO, 2020). In another estimation, McKibbin and Fernando (2020) utilized the computable general equilibrium (CGE) modelling and reported that global GDP would be reduced by around US\$2.4 trillion in 2020 under a low-end pandemic considering the Hong Kong Flu as a reference point. However, the fall can extend to the tune of over US\$9 trillion in 2020 in case of a serious outbreak like the Spanish flu. Ozili and Arun (2020) noted the spillover effects of COVID-19 and hailed that the social distancing measure of virus controlling led to the shutdown of financial markets, corporate offices, businesses, and events which in turn may have significant impact on economic growth. As per the International Labour Organization (ILO) estimation, the total value added of industrial enterprises in China declined by 13.5 per cent during the first 2 months of 2020 (National Bureau of Statistics of China, 2020). There are many projections and estimations by institutions and scholars on the economic fallout of COVID-19 pandemic. Though there are variations in degree and magnitude of the fall out, now there is a reasonable amount of coconscious that the economic impact would be severe on the world economy and on Indian economic growth, much more than the global financial crisis (GFC) of 2008. IMF in its latest estimate in June 2020 projected that the global economy may shirk by 4.9 per cent, almost three times more than GFC, and the Indian economy is likely to witness 4.5 per cent negative growth for the 2020.

Regarding the impact on employment and income, ILO (2020) estimated that global unemployment can range between 5.3 million and 24.7 million from a base level of 188 million in 2019 pushing these people towards below poverty line. Most existing studies focused on global growth, trade, and unemployment, a few are country specific, especially India. In this context, the present study aims to assess COVID-19 on Indian economy and highlights key policy measures to control the possible fallout on the economy. The study contributes the

existing literature while analyzing the impact on Indian economy with more focus on growth, trade, manufacturing and MSMEs. The detailed procedure of the assessment is reported in the next section.

**OBJECTIVE**

- The Objective of this research paper is:
- a) To study the impact of COVID 19 on the business of MSME.
  - b) To study the survival strategies adopted by the business of MSME.

**RESEARCH METHODOLOGY**

The present study relies on the secondary data to make an impact assessment of COVID-19 on Indian economy. The data sources are reports of reputed global consultants’ reports, research publications, and research journals.

**IMPACT OF COVID-19 ON MSMEs**

The disruption caused by the COVID-19 pandemic in India has produced far reaching implications on trade, industry, and commerce. MSMEs are severely hit hard. To elaborate, Kotak Institutional Equities states that, only 7 per cent of small and medium enterprises (SMEs) surveyed would be able to survive for more than three months if their business continues to remain closed down for a longer period. While 97 per cent of the enterprises surveyed had paid salary to their employees for March 2020, as many as 34 per cent of the SMEs

would not be able to pay salary for April and May 2020. This is further confirmed by Money Outlook which states that, India is currently home to over 75 million MSMEs and close to 25 per cent of these firms would face closure, if the lockdown imposed due to the COVID-19 goes beyond four weeks while a whopping 43 per cent will shut shop if pandemic extends beyond eight weeks. Similarly, the Local Circles Survey conducted during April 2020 and receiving response from 13,970 MSMEs finds that, 74 per cent of them are looking at shutting down or scaling down their ventures in the coming six months battered and bruised by COVID-19. Moreover, 47 per cent respondents claimed to have less than one month of cash left to run their business. CRISIL forecasts that consumer discretionary services and products are worse hit by COVID-19 disruptions and revenue could dip up to 30 per cent in FY1 in worst case scenario. Lastly, according to the Financial Stability Report – June 2020, 65 per cent of loans to MSMEs were under moratorium as on April 30, 2020. But there is uncertainty around their ability to eventually repay bank dues. Looking at the difficulties of MSMEs during lock down and immediately thereafter, both, Government of India (GOI) and Reserve Bank of India (RBI), came out various measures on a war footing which are worth examining.

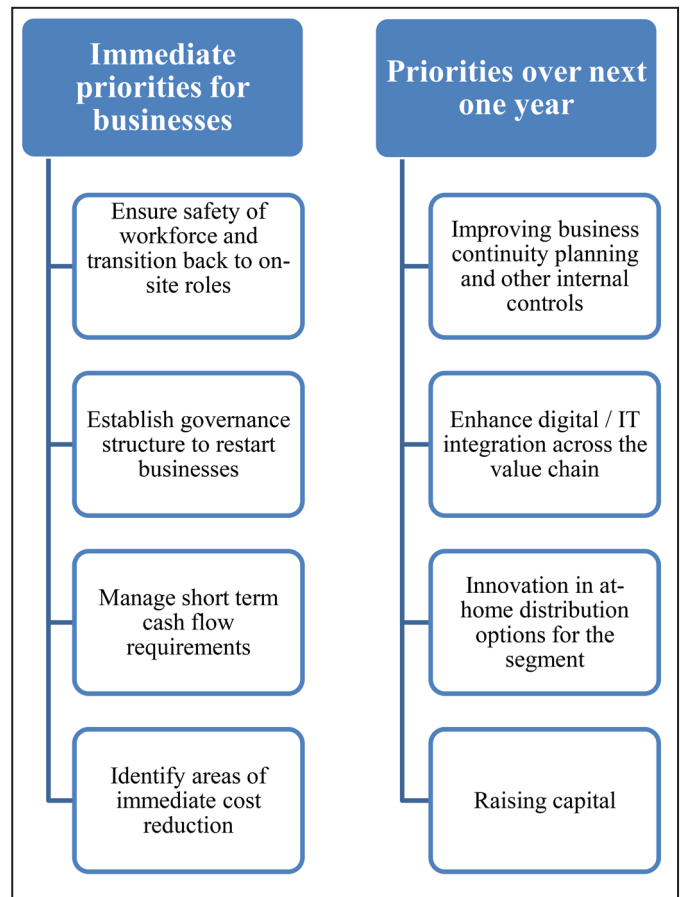
**STATE OF THE MSMEs SECTORS IN INDIA DUE TO COVID-19**

MSMEs stare at labour and raw materials supply	Deficiency of convenient capital (both- Human and Financial resources)	Agony of long-term sustainability and failure.	Uncontrollable market condition or circumstances leads to cut-throat competition.
Back-stabbing in providing or delivering quality infrastructure.	Issues in Cope-up with upgradation of technology.	Hard to impression the end-users and stake holders.	Deprivation of research and Innovation.
Impending fiscal policies.	Failure in framing strategies and its implementations.	Absence of trained and skilled people to raise up business in any situation.	Low-slung of emotional corresponding of things and increasing negative sentiments.
	Neediness of Leadership.	Imbalanced regional development.	

## STRATEGIES FOR MSMEs

MSMEs facing the threat of COVID-19 are advised to prepare the Business Contingency Plan (BCP) which helps for business survival, stabilization, and surge. This plan addresses COVID-19 concerns ranging from any disastrous happening to assessment, mitigation, and continual readiness of business organization in ubiquitous terms. The process of BCP consists of: (i) identifying resources like finance, diversifying products, marketing through social media, skill development of workers and specific facility without which organization cannot survive, (ii) identifying potential risks in the context of COVID-19 pandemic after wider consultations with all stake holders like employees, investors, lenders and management, (iii) prioritization of each potential risk after conducting an impact analysis (iv) preparing the BCP specific each risk and measures to protect the organization from potential threats and (v) taking measures in advance so that the organization is not caught off guard in the event of any further disaster of COVID-19. For MSMEs, the BCP suggests three strategies namely:

- (i) **Survival Strategy** under lockdown by acquiring new skills, withdrawing the present business line when it is draining out cash resources and then diversifying resources towards a new potential business line.
- (ii) **Stabilization Strategy** by preserving financial resources, saving cash losses by operating at least at breakeven level and restraining from excessive borrowing so as not to fall in debt trap.
- (iii) **Surge Strategy** ahead on restoration of normal business conditions by marshalling all the resources under the organization command. While the BCP is well appreciated in the context of COVID-19, MSMEs generally lack in preparing the same. Consequently, they face existential threats as they are not able to meet urgent obligations like payment of wages, payment of rent, payment of electricity bills and other operating expenses when there is no revenue generation due to lockdown. Towards this end, it is appropriate to discuss a live MSME case which prepared the BCP and implemented it successfully.



## PROSPECTS FOR MSMEs TO SHINE IN INDIA AS MAJOR SOURCE OF LIGHT

- Indian regulators should give much attention on Innovation Economy by strengthening all MSMEs with vibrant strategies.
- Both Central and State government should workout new strategies to avoid bottlenecks in such kind of situation in future too by enforcing Intellectual Property Rights in MSMEs from Investments risk. As Sri Nitin Gadkari, Union Minister said that “a Rs 10,000 crore “Fund of Funds” has been approved by the Finance Committee and will be placed before the Union Cabinet for approval. This fund, he said, would facilitate MSMEs to raise money from the capital mark”.
- Accelerate the traditional industries’ working conditions and revisit its marketing (including building brand leadership) tactics too.
- MSMEs can promote and focus on interdisciplinary research.
- Scaling up of technology clusters and consider the MoUs of European countries.

- Both Central and State government, Judiciary and other authorities must proceed with operative step in implementation of IP system for MSMEs.
- India has hundreds and hundreds of GI tag products (Geographical Indication) which come under MSMEs. It is a high time to take benefit from this IP and grab the market.
- Effective addressing of infrastructural issues and build a qualitative lab for better innovation and research.
- Motivate, Assist, and encourage the MSMEs who are fighting to take patents, copyrights etc through their R & D.
- Creative effective global standards in association with large scale industries.
- Making MSMEs and Start-up products and services user friendly by adopting effective environment approach.
- MSMEs should undertake to enhance the skills of employers as well as employees.
- MSMEs should learn or undergo the crisis leadership management training and development programmes to meet the wicked circumstances like COVID-19.
- Indian MSMEs should pay attention to digital sector, soft power projects and complete the digitalization of MSMEs.
- Most Indian Venture Capitalists are wealthy and can also turn off MSMEs growth to avoid cut-throat competition and hurdles.
- Effective or revisit the HR policies as per MSMEs requirement to meet global standards and sustainability.
- Effective and Strong accounting and auditing policies should be strictly implemented by MSMEs for greater growth.
- Strengthening effective supply chain concrete process.
- Effective utilization of Make in India, Atal innovation machine, Start-up India, and other schemes towards holistic development of the Indian economy.
- Initializing appropriate alternative responses for production and delivery of services by MSMEs.

- Developing effective Communication system among employers and employees.
- Enhancing the emotional intelligence.

## CONCLUSION

With the lockdown, MSMEs were worried about their survival and revival. To elaborate, they experienced reduced labour supply as workers were unable to go to work due to restricted movement in lockdown and therefore they went to their hometown, to be with their family. The supply chain was also disrupted leading to severe shortage of components as well as intermediate goods in many MSME clusters. Further, there was a steep fall of demand for their products due to loss of income at the individual level in many cases, fear of infection as COVID-19 contagion had increased uncertainty about everything. Because of loss of production and income, there was severe liquidity shortage as MSMEs had to meet fixed cost though virtually no production resulted into continuous loss. Coming to credit supply, lending institutions were reluctant to lend, though they were flush with funds, due to the all-round uncertainty. In general, the overall confidence was extremely low. While both GOI and RBI introduced relief packages for MSMEs to create more liquidity in the market and to facilitate the lending institutions to lend more, much was expected from enterprises also. MSMEs ought to prepare and implement the Business Contingency Plan on a war footing which suggests strategies for their survival, business sustainability and further growth.

## RESULTS AND DISCUSSION

**Table 1: Respondents Age**

Age Group	Frequency	Percentage (%)
18-25	55	36.67
26-40	61	40.66
40 and above	34	22.67
<b>Total</b>	<b>150</b>	<b>100.00</b>

Source: Field Survey

The study revealed that 40.66% of respondents belonging to the age group of 26-40 were more brand conscious. 36.67% of respondents belonged to the age group of 18-25 whereas 22.67% of respondents were above 40 years of age. It means the Middle-aged groups (26-40) were more experienced to

brands and preferred branded products followed by the customers within the age group of 18-25.

**Table 2: Respondents Work Status**

Work Status	Frequency	Percentage (%)
Student	42	28.00
Businessman	38	25.33
Professional	49	32.67
Others	21	14.00
<b>Total</b>	<b>150</b>	<b>100.00</b>

Source: Field Survey

Work Status greatly influenced the customer preference of any of the branded products. The customers demand for branded product depends upon his position i.e. work status. The results revealed that 32.67% of respondents were professionals, 28% of respondents were students, 25.33% were businessmen, and 14% respondents belonged to other class. Professionals are student class has more craze for branded products.

**Table 3: Respondents Family Income (monthly)**

Income Level	Frequency	Percentage (%)
Less than 10,000	18	12.00
10,000-50,000	33	22.00
50,000-1,00,000	56	37.33
1,00,000 and above	43	28.67
<b>Total</b>	<b>150</b>	<b>100.00</b>

Source: Field Survey

Family Income may be in the form of wages, salaries or other forms of earnings received by a family in a given period of time. Branded products are usually costly because of its quality and goodwill. More the family income more is the demand for branded products because of affordability. 37.33% of the respondents were within the family income 50,000-100,000, 28.67% of respondents had family income above 100,000. Lower income groups hardly preferred branded products because of its affordability.

**Table 4: Factors affecting Customer buying behavior**

Factors	Frequency	Percentage (%)
Price	42	28.00
Brand Name	54	36.00
Quality	31	20.67

Factors	Frequency	Percentage (%)
Location (Convenience)	07	4.66
Trend	16	10.67
<b>Total</b>	<b>150</b>	<b>100.00</b>

Source: Field Survey

Price and brand name were two important factors that a customer considered while selecting a product for purchase. Brand name develops positive perspective about a product. It is considered as a mark of prestige and safety for its customers. Branded products are always believed to be the best in all aspects. 36% of respondents preferred the purchase of branded products, 28% of respondents considered price while buying a product, while 20.67% of customers considered quality before buying a product.

**Table 5: Media Influence on buying Decision**

Media	Frequency	Percentage (%)
Newspapers and Magazines	28	18.67
Television	63	42.00
Radio	12	8.00
Online Media	47	31.33
<b>Total</b>	<b>150</b>	<b>100.00</b>

Source: Field Survey

Advertising is considered as the most efficient promotional tool for informing customers about a product. Advertising informs the customer about the product and all its features. Proper advertising media need to select for informing about a product to customers at large. 42% of the customers watched advertisements on television, 31.33% watched advertisements online. 18.67% found advertisements on Newspapers and magazines, while only 8% of the customers listened to advertisements on radio.

**Table 6: Brand Loyalty**

Brand Loyalty	Frequency	Percentage (%)
Stick to Existing Brand	56	37.34
Try New Brand	53	27.33
Decide a Brand (based on special offers)	41	35.33
<b>Total</b>	<b>150</b>	<b>100</b>

Source: Field Survey

Brand loyalty indicates the customer's fondness for the product. 37.34% of customers stuck to existing brand, 35.33% of customers decided a brand based on special offers while 27.33% of customers tried new brand. The customers today have become very rationale and they analyze a product's brand before final purchase.

## CONCLUSION

Brand name or logo is assurance given by company about the product quality and safety. The brand names or logo always leave a strong imprint about the product on customers' mind. Brand name gives product its identity. Branding is also one of the strategies that the company followed for success of its sale during Covid-19. In short, the study revealed that brands have an effect on customers' mind. Any product that the customer wishes to purchase looks for its brand before purchase especially during Covid-19. Age, income, work status, family income and media influence etc. have greater influence on customer's buying decision of a particular branded product during Covid-19 pandemic.

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# **‘Use of Social Media Marketing for E-Commerce Platforms: A Case Study of Myntra and Facebook’**

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## **ABSTRACT**

*There were 3.7 billion users of social networking sites as of January 2019. The increasing usage of Social media by individuals created a whole new paradigm in the marketing communication field and grabbed the attention of the marketers across the globe from small firms to huge business houses to establish themselves as a brand. The indispensability of social media for building brands made it one of the major topics for researchers around the world revolving the marketing discipline. For instance, if we consider the most popular social media ‘Facebook’, the data says that the revenue generated by Facebook through advertisements from the marketers is 2 times more in the first quarter of the year 2019, when compared to the first quarter of the year 2017; the number of active business/brand pages on Facebook alone is over 60 million and 75% of these brands have promoted their advertisements and contents in the form of paid promotions. For the purpose of this research study Facebook was used as a Social Media Marketing Tool and Myntra was taken as the E-Commerce site. The sample size of 100 Facebook users was taken for the study and hypotheses was tested using the test of Coefficients, while the analysis was conducted with the help of Statistical Software SPSS. The results of the collected and analysed data show that there is a high correlation between use of Facebook and advertisements of Myntra (E-Commerce Platform). The study suggests that Social Media is a significant tool for Marketing.*

## **KEYWORDS**

*Social Media, Social Media Marketing, E-Commerce, Branding*

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## **INTRODUCTION**

Social Media has become an integral part of almost every homo - sapiens on this blue planet. It has effect over things ranging from soap to software, individual to community and village to globe. The consumption of social media has become one of the most important works after job and sleep.

The evolution of Social Media can be traced back to the year 1990s, when Broadband Internet gained much hype; as it allowed the users to share self-created content; another significant development in this field was the advent of first Social Networking Site (SNS) ‘SixDegrees.com in the year 1997,

followed by many other such SNS in the year 2002, few such sites are Friendster and MySpace. The scholars, Voss and Kumar (2013), in their study, suggested that “rapid technological advancement have driven companies to reconsider their marketing communications strategies”. Currently, SNSs have not only become indispensable part of our lives, but have attained lots of significance in the marketing communication area for building brands; which is an outcome of “increased usage of SNSs and the alterations social media has brought about in the manner individuals, as well as the marketers, interact” (Hutter, *et.al.* 2013). Due to the endemic usage SNSs allows the marketer “to engage in

fruitful conversations and reviews with millions of target audience across the globe on a daily basis.” In the work of Writer (2013), it has been rightly marked that “today, SM is the vital tool that marketers possess to build their brands in this cut-throat competitive business environment”. Every seventh citizen on the planet now has a Facebook account, and almost four out of five Netizens use at least one social networking site. With the growing number of internet and social media users, understanding online consumer behaviour has become essential for big brands. The rise of social media resulted in a shift in media use, prompting businesses and organisations to use social media as part of their communications and public relations campaigns. As a result, social media has become a more widely used medium in E-Commerce to sell services and resources to existing and potential users.

## LITERATURE REVIEW

Social Media and Social Media Marketing are two words, which are often used interchangeably, but there are fundamental concepts which distinguish both of them. Every single virtual citizen irrespective of region, religion, culture, nationality, is well aware of these two terminologies, as these two have touched the lives of individuals of every stratum. Social media is “the medium for disseminating self-generated information, serving as the basis for establishing brand awareness” whereas “social media marketing is the link between a brand and its audience, offering an individual channel for customer-centric networking and interaction” , Using Social Networking Sites (SNSs) for the purpose of ‘Segmenting-Targeting-Position’ (STP) of an offering and establishing it as a Brand is termed as ‘Social Media Marketing’. According to Chan & Guillet (2011) “social media marketing is the retractions of the marketing conceptions; when fused with social media, catering the target audience”.

Social Media Marketing influences Brand Value, sales volume, and WOM (Word of Mouth); moreover, social media influencers utilise and share data and reviews about the brands. The marketer has to keep in mind that the content must vary from product to product and to serve as well, as each brand whether it’s a product or service carries different set of attributes and mean for the consumers. The

more customised and uniform message/content on Social Networking Site the more it will gain the Brand popularity. This is what the Social Media Marketing strives for along with calling action form the target audience and triggering campaigns aimed at enhanced customer attitude for the brand.

Social Media Marketing is way beyond the traditional or conventional marketing. It gives a two-way communication channel that binds the marketer and the customers effectively. “It brings congruency between the two, providing them a platform for real-time interaction, helping marketers in Branding, as well as creating and maintaining Brand Loyalty” (Erdoğan & Çiçek, 2012). One significant phenomenon on SNs is E-Word of Mouth (E-WOM), which has an overwhelming effect on the virtually present consumers’ buying decision process. It also affects the purchase behaviour due to which marketers are taking it as an opportunity. The basic reason behind this advantage is that “it is the customers who are continuously exploring brands options, reviews of such brands”.

## RESEARCH OBJECTIVES

- a) To find out the relation between sales of E-Commerce Platforms (Myntra) and use of Social Media as a Marketing Tool
- b) Understanding the impact of the use of Social Media as a Marketing Tool

## HYPOTHESIS

- H0: There is no impact of use of Social Media Site (Facebook) for the marketing of E-Commerce Platform (Myntra).
- H1: There is an impact of use of Social Media (Facebook) for the marketing of E-Commerce Platform (Myntra)

## RESEARCH METHODOLOGY

This research paper is based on empirical evidence for validating the facts. The Sample size is small; of 100 respondents who have their profiles on Facebook and also use E-commerce site Myntra. Further, a well-designed questionnaire was prepared to gather first-hand responses, the responses were classified, and the results are presented with the help of graphs, and each graph is being discussed for further clarity of the results and further the hypothesis have been tested with the help of SPSS, using correlation.

## DATA ANALYSIS RESULTS

**Table 1: Test of Coefficients**  
**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics		
	B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF	
(Constant)	.014	.092		.155	.877	-.168	.196						
Use_SM	.940	.052	.876	17.950	.000	.836	1.044	.876	.876	.876	1.000	1.000	

a. Dependent Variable: Marketing of E-Commerce Platforms

From the above table, the P-Value of the effect of use of social media for the purpose of ‘Marketing of E-Commerce Site (Myntra) is .877, which is less than .05 and it means that the variable ‘Marketing of E-Commerce Site (Myntra) is highly significant or influenced by the Use of Social Media. So, as per the above results, Ho (Null) is rejected, and H1 is accepted that use of social Media Site (Facebook) significantly creates an impact on ‘Marketing of E-Commerce Site (Myntra)’.

## SUGGESTIONS & CONCLUSION

With the help of literature review and above data analysis, there is enough evidence to conclude that use of Social Media plays a great role in the process of ‘Marketing of E-Commerce Site (Myntra). The marketing team at E-Commerce sites, always seek to create a vibrant and interactive community on Social media sites for customer engagement. The marketing teams need to understand that social media marketing tools or SNSs act as a fuel to the fire in the game of self-promotion with the object of keeping consistency and clarity in the message across almost every social media platform; this is what other e-commerce tech driven companies can learn from one of the most widely used platforms which is Myntra.

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# Success Story of Dharavi Slum in Controlling COVID-19 Pandemic

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## INTRODUCTION

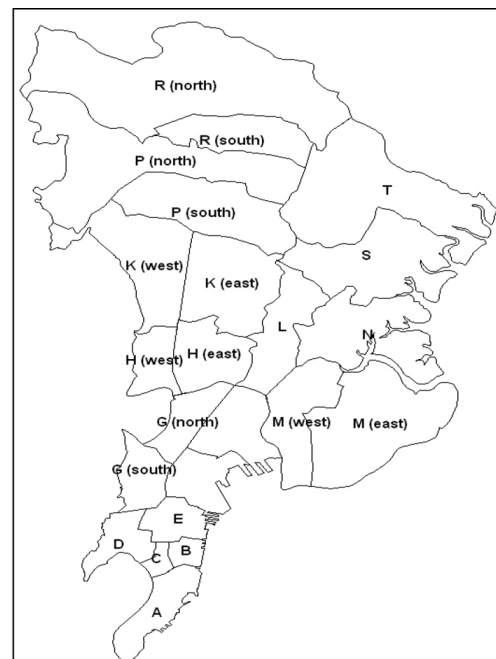
The World Health Organization declared the outbreak of coronavirus disease 2019 (COVID-19) on March 11, 2020 highlighting the importance of preventive measures to limit the transmission of infections. Pandemic evoked dramatic global disruption and placed immense burden on healthcare systems globally. Around one billion people are living in urban slums across the globe. Slums and informal settlements emerged as hotspots for COVID-19 transmission. The urban slums are highly susceptible to COVID-19 infection due to short supply or unavailability of adequate water, toilets, sewers, drainage, waste management systems, housing and other basic necessities. The challenges of slum communities are not new, but during the COVID-19 pandemic, they demand innovative solutions more urgently than ever for containing the spread of the virus.

On the first day of April 2020 when the first case of COVID-19 was diagnosed with a subsequent death in Dharavi, Asia's largest and densely populated urban slum, it sent jitters among the authorities, already struggling to contain the spread of COVID-19 in Mumbai. It was feared that Dharavi's cramped setup would soon lead to community transmission, making matters worse and throwing a medical challenge seen never before. Subsequently, Dharavi emerged as one of the most challenging hotspots in India. Multiple strict measures to contain the spread were implemented since the beginning of the outbreak of COVID-19 in Dharavi in April 2020. These measures resulted in the low spread of cases and reduced mortality by June 2020. This case study focuses on the challenges faced by the state Government and Municipal Administration and the control measures taken to stop the spread of COVID-19 in Dharavi. The information presented

was obtained through the analysis of recent policies, official press, articles, reports, presentations and credible data sources.

## DHARAVI – ASIA'S BIGGEST SLUM

Dharavi, is a sprawling slum located in the heart of Mumbai, India's financial and entertainment capital. It is located in the G North Municipal Ward of Mumbai (Fig. 1) and considered to be one of Asia's largest slum. Dharavi has an area of just 2.1 square kilometers and a population about a million. With a population density of over 2,77,136/km<sup>2</sup>, Dharavi is one of the most densely populated areas in the world. Dharavi slum was founded in 1884 during the British colonial era, and grew because of the expulsion of factories and residents from the Peninsular City Centre by the colonial government and from the migration of rural Indians into urban Mumbai. Hence, Dharavi is currently a highly diverse settlement religiously and ethnically.



Source: Wikipedia (Map made by K. Pfeffer).

**Fig. 1: Ward wise map of Mumbai**

Dharavi has an active informal economy in which numerous household enterprises employ many of the slum residents. Leather, textiles and pottery products are among the goods made inside Dharavi. Many of its residents work as helpers and chauffeur to the well settled residents of Mumbai. Dharavi is also the plastic recycling hub of Mumbai. This area is the hub of international exports with an annual turnover estimated over US\$ 1 billion. There are more than 5000 GST registered small scale enterprises in this location. Dharavi has suffered from many epidemics and other disasters, including a widespread plague in 1896 which killed over half the population of Mumbai.

### **CHALLENGES FACED IN TACKLING THE COVID-19 IN DHARAVI BY GOVERNMENT AND MUNICIPAL CORPORATION**

When the first case of COVID-19 got diagnosed with subsequent death in Dharavi, Mumbai authorities sensed their worst nightmare was about to begin. People learned that the deadly virus may have already possibly taken a firm grip on the overcrowded slum. Because of the huge density of population and lack of living space it was expected that the pandemic would create havoc in Dharavi as social distancing was next to impossible. The Government and Municipal authorities faced several challenges in tackling the COVID-19 pandemic in Dharavi.

#### **a) Totally New Disease:**

The coronavirus of 2019 (COVID-19) first appeared in the Wuhan City of Hubei Province of China. It is highly transmittable. World Health Organization (WHO) published several advisories based on updates of knowledge. As the disease was new, Medical Experts were in dark about exact treatment. SOPs were issued by the authorities were changed frequently which created some sort of misunderstanding. Day by day new symptoms of the disease were found and Medical Experts also became somewhat clueless. Under such circumstances it was difficult for authorities to decide line of action in a crowded slum like Dharavi.

#### **b) Panic Situation:**

Worldwide spread of pandemic within short period of time and unavailability of proper Medicine

for curing the disease, made situation panic. This condition worsen as there were continuous news of failure of advanced countries from Europe and even U.S. in tackling the situation aroused due to pandemic. Moreover, at the beginning stage of pandemic death rate in these advanced countries was very high. In Dharavi, this situation was more dangerous as for Dharavi residents' lockdown imposed due to pandemic not just killed opportunities, but also created a situation where they found that their future opportunities were also curtailed. It was the stigma of being residents of Dharavi. The residents from Dharavi were refused the job only because they were staying in Dharavi. For Government authorities it was very tricky situation as they were to handle the people without disturbing their emotions.

#### **c) Diverse settlement in terms of Religion and Culture:**

The original inhabitants of Dharavi were Kolis, the fishermen but today their number is less than 2%. Majority of Dharavi population is made of migrants both formal and informal mostly from other districts of Maharashtra, Tamil Nadu, Gujrat, Uttar Pradesh and Bihar. Moreover almost people of all religions stay in Dharavi. So only in area of 2.1 sq. km. there is diverse settlement in terms of religious and culture. Due to this, it becomes difficult task for authorities particularly in making a Public Awareness about dos and don'ts to be followed by public without disturbing their cultural values.

#### **d) Congested Houses (Overcrowding):**

In Dharavi 8 to 10 people live typically in a cramped 150 sq. ft. rooms (kholis) with no natural light or ventilation and without provision of safe drinking water. Within a densely packed area of Dharavi many people lack even a postal address, which itself poses unique challenges for health care services

#### **e) Poor Sanitation:**

Most of the Dharavi households did not have a private toilet facility inside their homes. There are around 450 community toilets which cater to needs of 80 percent of the population. Mahim creek is a local river that is widely used by local residents for open urination and defecation. Also open drain with sewage discharging into creek facilitating the spread of contagious diseases. All these factors make overall condition filthy, unhygienic and unsafe. This makes

fertile ground for community transmission. Due to this already overloaded Government Machineries faced serious problems in tackling the situation.

**f) Daily Wage Workers:**

In Dharavi most of the migrants from outside are informal daily wage workers who don't have kitchen in their houses and depend on outside food on daily basis. In lockdown all hotels and restaurants and food kitchens were closed which created additional problem for Government/Municipal authorities. Further almost 35% of residents need to step out of their homes to collect drinking water from public taps, tube well.

**g) Absence of First Line of Defense for COVID-19:**

For COVID-19 the advisory from Government suggested three points as a first line defense to fight with COVID-19 viz. Wearing of Mask, keeping distance of 6 feet and washing of Hands regularly with soap water. However, in Dharavi, wearing masks in suffocating atmosphere of improperly ventilated rooms was almost difficult. Further due to crowding at public taps for water in restricted hours of water supply, use of community toilets by almost 80% of population makes almost impossible to keep the social distancing. Isolation is an unfamiliar word for those living in Dharavi. Unavailability of water inside the room for almost 35% of population of Dharavi, posed a huge challenge of washing hands to keep away from infections. As no medication is available for COVID-19, entire world was relying on first line defense mechanism to fight with COVID-19. However, in Dharavi due to absence of this first line mechanism as advised by the Government, local authorities i.e. Municipal Corporation faced serious challenges in controlling the spread of virus.

**h) High Vulnerability for Other Communicable Diseases:**

In Dharavi, a filthy, unhygienic condition is a common phenomenon. It has further worsened due to overcrowding, unsafe drinking water and poor sanitation. Particularly in monsoon due to accumulation of rain water, overflowing drains, etc. there was a chance of burden of other communicable diseases like Dengue, Malaria and even other water borne diseases. It was really a serious overburden for the health system.

**STRATEGIES USED TO COMBAT COVID-19 IN DHARAVI**

**a) Proactive Approach:**

Municipal Corporation of Greater Mumbai (MCGM) planned a change in strategy to control spread of corona virus in Dharavi. Instead of adopting the "reactive" approach of identifying virus- infected people, they designed a "proactive" one. It meant going after the virus before it infected people. The Municipal administration called this model as "Chasing the Virus" rather than waiting for people to report it. This model found to be successful.

**b) Four 'T' Approach:**

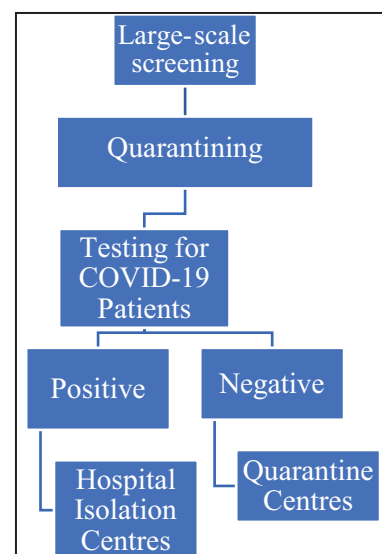
Under "Chasing the Virus" model, MCGM has actively followed four 'Ts' viz. Tracing, Tracking, Testing and Treating which are briefed as follows:

*Tracing*- Screening was done for all the households in the area by doctors and private clinics. People were also screened in mobile vans.

*Tracking* – After the screening there was a follow up with suspicious patients.

*Testing* – Fever camps were setup to screen and proactively test people.

*Treating* – Infrastructure prepared in the Dharavi itself for not only treatment but also to provide people food 24\*7. Only critical patients were moved outside Dharavi for admission to hospitals while 90% percent patients were treated inside Dharavi. Fig. 2 shows Protocol followed in Dharavi for controlling COVID-19 cases.



**Fig. 2: Protocol followed in Dharavi**

Between April and mid-July MCGM Medical team screened 0.4 million people on two symptoms of COVID-19; temperature checks through infrared thermometers and blood oxygen levels through pulse oximeters. Nearly 15000 people who had symptoms, were tested for COVID-19. While those who tested positive were sent to isolation wards in hospitals, those who tested negative were also monitored for 14 days in quarantine centers. This not only helped pull the virus out of the system, but also reduced burden on conducting large scale testing.

### **c) Quarantine, Isolation and Treatment Facilities:**

Along with surveillance and screening, MCGM had started building infrastructure to meet the consequences of community transmission. In Dharavi, home quarantine was next to impossible, ramping up of quarantine facilities was essential to halt the spread of transmission. To ensure judicious use of limited resources, medical care centers for COVID-19 were divided in 4 categories.

#### *i) Corona Care Centre Type 1 (CCC1):*

These facilities were meant for high risk contacts and those awaiting reports and were arranged in hotels, lodges, halls or newly constructed buildings and they don't have round the clock medical staff.

#### *ii) Corona Care Centre Type 2 (CCC2):*

These facilities were meant for asymptomatic to mild positive patients. They have round the clock medical staff and oxygen facilities. Food, multi-vitamins and medicines are supplied free of cost to people admitted.

#### *iii) Dedicated COVID-19 health Centre (DCHC):*

These facilities were meant for moderate to critical patients.

#### *iv) Dedicated COVID Hospital (DCH):*

These facilities were meant for critical patients. Municipal administration took decision and converted schools, marriage halls and community centres into quarantine facilities. One of the major steps they initiated was taking over Rajiv Gandhi Sports Complex at Dharavi with 300 beds. Round the clock war room was established for monitoring every aspect of tracing, testing, quarantine and lockdown in the containment zones.

### **d) Stringent Lockdown:**

The Municipal administration imposed stringent lockdown and sealed border of slum with 24 check posts set up at all entry/ exit points to monitor movement control. Authorities deployed drone to discourage large gatherings and alert police. The State Government deployed Central Reserve Police Force and State Reserve Police Force. It was the first time, these forces were engaged in active infectious disease management. A huge army of volunteers swung into action for implementing containment measures. All forms of transportation services and movement of vehicles were stopped, small industries, shops and market across the slum area were shut down with immediate effect. For effective implementation of lockdown and reducing the discomfort to the public due to stringent lockdown, the administration had ensured door-to-door regular supplies of milk, vegetables, grocery, and other essentials. The central rooms of several departments were setup for fulfilling demands of population.

### **e) Well Planned Sanitation:**

Poor sanitation in community toilets in Dharavi have been the key source of spread of infectious diseases like COVID-19. Immediately after the detection of first case of COVID-19 in Dharavi in April, the MCGM acted swiftly. In order to improve sanitation public toilets and community toilets were disinfected and fumigated twice daily. Foot operated devices for using washbasins, toilets flush were installed. Public awareness campaigns about sanitizing hands and washrooms were regularly conducted. Help of local Community Based Organizations were taken to implement sanitation drive effectively. Necessary materials such as sanitizers, phenyl, sodium hypochloride and safety gears such as hand gloves, masks, PPE kits, etc. were provided. The drive of 'Flush the Virus' was implemented by way of effective sanitation.

### **f) Public-Private Partnership:**

The coronavirus pandemic has shown the importance of public and private sectors partnership during an emergency response. All 350 local medical practitioners were encouraged and supported with resources to open their clinics to attend the patients and communicate to MCGM in case any COVID-19 suspect were found. The Municipal administration

hand over a 7-day supply of PPEs to doctors. These local practitioners worked as a bridge between Municipal officials and people in Dharavi. Inclusion of the private practitioners proved to be a wise step as people had faith in the local doctors and followed instructions diligently. Municipal officials had proactive collaboration with industrialists, Philanthropists and arranged Oxygen Cylinder, Gloves, Masks, Medicines and Ventilators.

**g) Community Participation:**

Community Partnership and ownership are always crucial for controlling pandemic and other epidemic outbreaks. The Municipal administration and Police took help of religious leaders to spread awareness by regularly playing out audio clips from mosques and temples, Whatsapp Group of Local boys were formed to amplify precautionary messages. They shared information as to where dry ration or food was needed. Local volunteers designated as “COVID warriors” joined hand with administration for ensuring regular supplies of essential groceries and medicine in containment zones. The Municipal Corporation identified and collaborated with local influential leaders for easy access to the area and residents. Some Community Volunteers equipped with thermal scanner and pulse oximeter also helped in screening efforts. Community kitchens provided breakfast, lunch and dinner to those housed in quarantine centers. With the help of NGOs and philanthropists essential ration and food packets were arranged for needy population.

**OUTCOME OF THE EFFORTS**

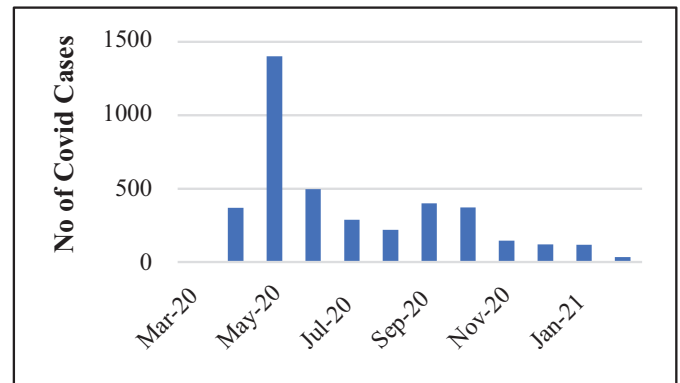
Various strategies and innovative approaches used in Dharavi to implement- Dharavi Model to combat spread of COVID-19 proved to be very successful. Dharavi had 369 Cases in April 2020 with a 12% growth rate and a case doubling period of 18 days. The public health measures and proactive strategy adopted by Municipal administration helped in reducing the COVID-19 rate to 4-3% in May 2020 and further to 1.02% in June. Table No. 1 shows number of COVID cases reported in sections of G/North Ward i.e. Dharavi, Dadar and Mahim.

*Table No. 1*

	DHARAVI	DADAR	MAHIM
Mar-20	0	0	0
Apr-20	369	34	35

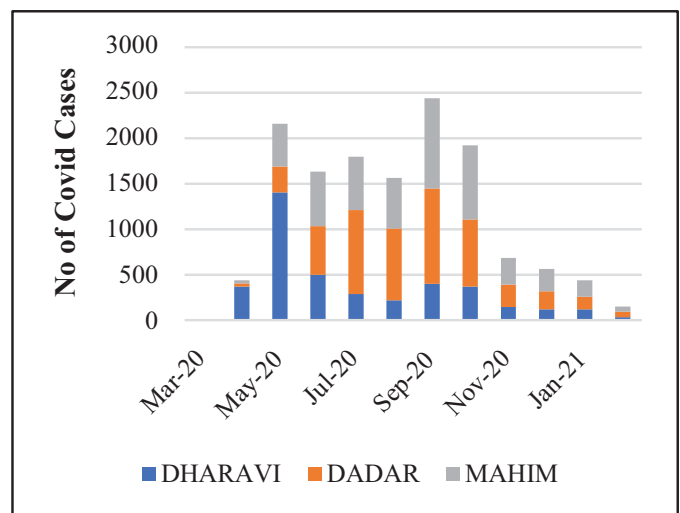
	DHARAVI	DADAR	MAHIM
May-20	1402	285	472
Jun-20	497	535	601
Jul-20	288	921	587
Aug-20	219	787	558
Sep-20	401	1045	992
Oct-20	371	735	814
Nov-20	145	244	296
Dec-20	119	198	246
Jan-21	117	139	182
Feb-21 (till 12 <sup>th</sup> Feb)	33	61	54
<b>TOTAL</b>	<b>3961</b>	<b>4984</b>	<b>4837</b>

The Fig. 3 shows progressive reduction in COVID-19 cases from April 2020 to February 2021 in Dharavi area.



*Fig No. 3*

The Fig. 4 shows the comparative analysis of number of COVID-19 cases in Dharavi, Dadar and Mahim.



*Fig No. 3*

All these three sections are located in G/North Ward of Mumbai. Dadar and Mahim areas are having



all legal settlements like buildings and apartments having toilets, Good sanitation and educated public. However, from fig.iv it can be seen that number of cases reported in a month in Dadar and Mahim are greater than that of Dharavi. It shows a huge success of controlling COVID-19 spread in Dharavi. In July, World Health Organization (WHO) praised the Dharavi Model. WHO mentioned that “Dharavi should be seen as an example across the world” in controlling the virus spread.

## CONCLUSION

Dharavi, Asia’s largest slum effectively controlled spread of COVID-19. Initially it was predicted that there will be total failure of Municipal Administration due to inherent difficulties and limitations in Dharavi viz. congested houses, poor sanitation, unsafe water, use of community toilets, etc. However, with limited resources Municipal Administration was successful in curbing the spread of COVID-19. Dharavi model of “chase the virus” with implementation of 4Ts i.e. Tracing, Tracking, Testing and Treating, growth rate of COVID-19 was reduced. The Dharavi COVID-19 containment model of Visionary Leadership, Innovative Experiments, Proactive approaches,

Public-Private Partnership, Community Participation and effective implementation of strategies could offer lessons to other poor and densely packed urban slums around the world.

COVID-19 pandemic should be treated as an opportunity by policy makers for making urban poor more inclusive and resilient. Government should take further decision for making basic services available to slums along with public health and access to education.

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# **A Study to understand the Shift from On Store Buying to E-commerce during Pandemic**

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## **ABSTRACT**

2020 was a year of remarkable changes. COVID 19 disrupted the entire world and new norms of business operations emerged irrespective of the sector. People adapted themselves to new technology so that they could tackle the situation and take one step ahead towards progress. May it be working from home or may it be ordering groceries online, the way how we look at the situation now, has completely changed. From business perspective as well the methods which were once seen as alternatives is now the core modus operandi. Talking about one such sector which has seen a considerable spike in its usage is E-commerce. It is significant to note that voluntarily or involuntarily there has been a shift in the consumer buying behavior and the associated platform that they use in order to cater their needs. The study tries to investigate the usage of E-commerce platform before and after the pandemic. Further this paper aims to study the shift of the consumers from traditional buying methods which is conveniently called as the “on store buying methods” to “E-commerce” platform and continuity of usage of such platform in future even in the situation of normalcy.

## **KEYWORDS**

*COVID19, In Store buying, E-commerce, consumer behaviour*

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## **INTRODUCTION**

The pandemic necessitated each and every individual to discover new way of life. Not only in daily routine but also in any complex decision making process one had to find new ways and means of survival. Being a basic instinct of any living organism the rule of “survival of the fittest” applies. The same was also applicable during the times of pandemic. It would not be wrong to say that we identified new ways of operation and redesigned the existing means to survive. Lot of us adapted to this new normal, a simple example can be many of us who had not explored the online medium earlier have now started using it more frequently. Simple examples can be increase in the usage of e-wallet for payments, use of internet banking for banking

transactions, use of E-commerce to buy groceries, medicines, daily essentials etc. The platform which saw a spike in their usage is the E-commerce platform. To understand the term E-commerce it simply means buying, selling or trading activities through online space. This paper aims to study the shift of consumer from on store buying to E-commerce during COVID 19.

## **RESEARCH OBJECTIVE**

- To understand the shift of consumers from on store buying behavior to E-commerce space.
- To study the factors that facilitates the usage of E-commerce space.
- To study the continuity of usage of E-commerce platforms

## RESEARCH METHODOLOGY

### Primary Sources:

This study is based on primary data collected with the help of structured questionnaire consisting of 7 questions closely related to the objectives of the study. This study selected the respondents through convenient random sampling method to fill their responses through close ended questionnaire. The conclusions are derived from 41 respondents.

### Secondary Sources:

Secondary Sources include data collected from various books, national and international articles, and research studies. The methodology also includes surveys conducted by global research organization, thoughts and writings of various researchers in the stream of academic and corporate industry.

### Limitation of the Study:

While the questionnaire was presented with the guidelines of answering the questions with the best and true knowledge, the circumstances under which maybe some consumers or respondents replied with a false notion, was a discrepancy that was uncontrollable. Also since the sample size was very limited the conclusions may not be applicable to the entire population.

### Findings and Inference from Research:

Below are summarized findings from the primary research conducted on 41 respondents through a structured questionnaire mainly focusing on the objective of the study. In total there were 7 questions focusing on studying the shift from on store buying to E-commerce platforms especially under pandemic scenario.

The findings say, most of the respondents who participated in the survey had been using E-commerce platform even before pandemic scenario. Only 9 participants mentioned that they had not used any E-commerce platform before the pandemic, hence majority of the respondents of course have at least once used the E-commerce platform before pandemic. This data is further supported by the observation or responses in question 3 wherein 30 respondents mentioned that they “Strongly Disagree” to the evaluation point of “I have started using E-commerce platform for the first time during pandemic”

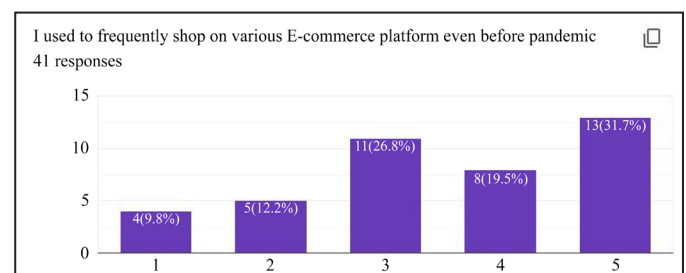
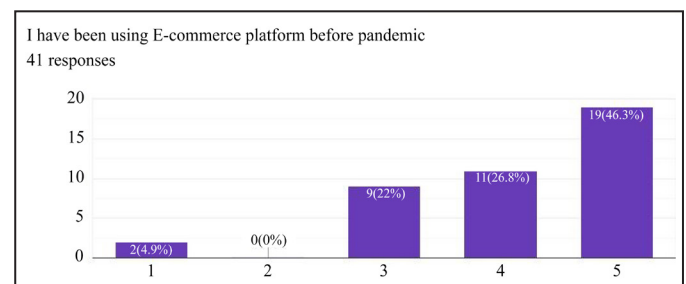
But a noteworthy point remains that most of the respondents agreed that their usage of E-commerce platform considerably increased during the pandemic. This is actively highlighted in question 4 where 31.7% of the respondents said that they “Strongly agree” that their usage increased and 19% of the respondents said that they “Agree” to shift in the platform. On the parameters like:

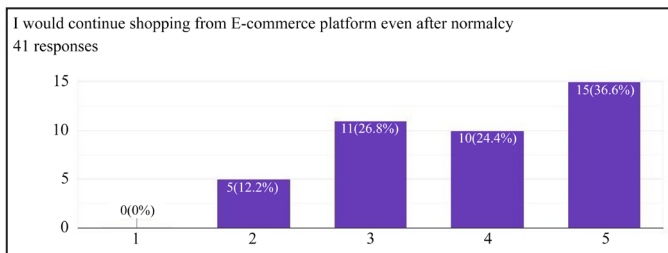
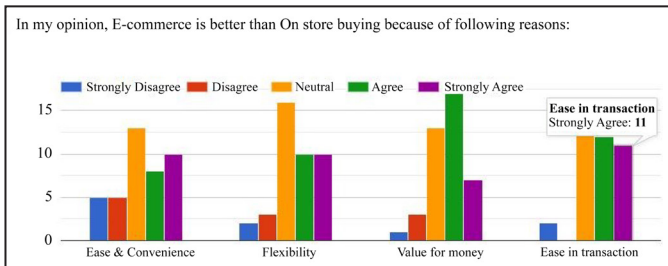
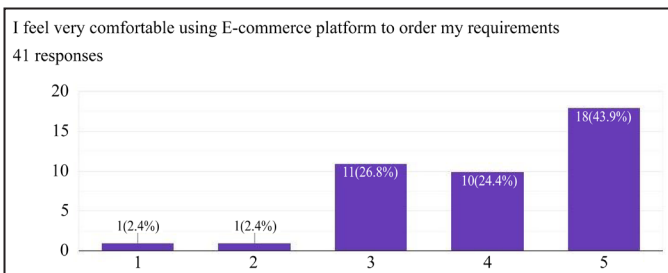
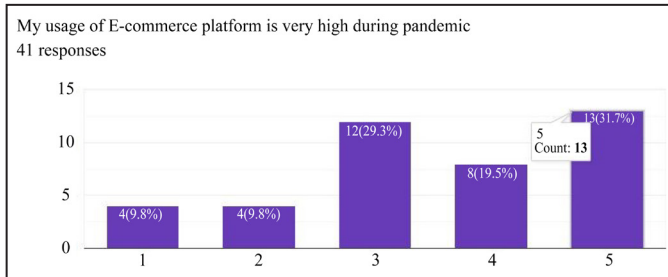
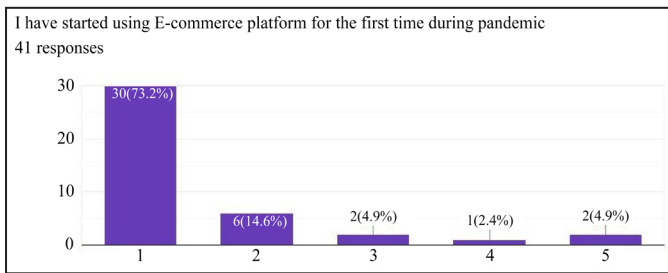
- Ease & Convenience
- Flexibility
- Value for money
- Ease in transaction

Out of which ease in transaction was rated highest parameter as a strength of E-commerce platform followed by Ease & Convenience and Flexibility and the last parameter to be Value for money. Hence 43.9% of respondents “Strongly Agree” that they feel very comfortable in using an E-commerce platform.

An important aspect of the study was also to analyze if the respondent group would continue using the platform even in the state of normalcy to which 36.6% and 24.4% of respondents were towards positive inclination saying “Strongly Agree” and “Agree” followed by 26.8% being “Neutral ” about this aspect and 12.2% disagreeing to continuing using it.

Following few charts summarizes the findings from the survey supporting the findings and inference of the research.





## CONCLUSION

Towards the conclusion of this research it is important to note that the pandemic scenario not only affected the economy in general but also affected the mode of operation for common man in general. The so called “new normal” as it is said is here to stay or will fade away with time is what we need to learn and understand. However it will not be inappropriate to say that most of them have accepted this change and want to take it up as a state of permanency which is also seen as a trend in the usage of E-commerce Platform.

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# **Effect of Brand on Customer Buying Behavior: A Study of Belagavi City**

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## **ABSTRACT**

*Brand holds a greater importance in customer's product purchase decision. Every business firm considers customer satisfaction a priority. The customers see the brands in different perspective and expect better quality of brands. A customer survey was carried out in the Belagavi city and the study has used descriptive analysis to know how effect of brands on customer buying behavior during Covid-19 pandemic. As a matter of safety or precaution the customer demanded more for branded products during the period of pandemic. A sample survey of 150 respondents was carried out using a structured questionnaire for primary data. Results identified that respondents less than 40 years of age group expect better quality of brands, majority of them were professionals, and student class who have more concern for branded products, 36% of respondents preferred particular branded products. 37.33% of the respondents preferred brands with higher family income 50000-100000, about 42% of the customers watch advertisement through television for brand awareness and customers today have become very rationale they analyze a product brand before final purchase. Study concluded Age, income, work status, family income and media influence etc have greater influence on customer's buying decision of a particular branded product during Covid -19 pandemic.*

## **KEYWORDS**

*Brand, Customer Buying Behavior, Belagavi City*

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## **INTRODUCTION**

Modern Era is an Era of branding, where the customers prefer products to be branded. The customer today is more attracted towards branded products because they believe in their quality. People are more used to branded products as they are a mark of pride and prestige. It is often believed by the customers that branded products have a long life because of its quality. Nowadays most of the business firms prefer to create a brand for their product, as to create recognition and distinct identity from competitor's product. Every firm is making tremendous effort to enter the market competition. Branding of a product

increases sales and in turn increases the profits of the firm.

Brand holds a greater importance in customer's product purchase decision. Every customer chooses branded products to avoid uncertainty and quality related issues. Nowadays branding has become very common in almost all the industries and firms like, fashion, automobile, electronic, furniture, construction etc.

Every business firm considers customer satisfaction a priority. The customers see brands in different perspective and expect better quality of brands. As the customers get satisfied with a specific brand they become loyal

customers to that specific brand. The study of customer behavior is another important task for producers and marketers. Proper customer understanding helps to set up proper branding of a product. For this the customer needs to understand customer purchase behavior towards product. In short "Customer Behavior is the study of individuals, organizations and groups and also the study of all those processes which are related with the customers and their choices about products, services, brand and their usage."

## REVIEW OF LITERATURE

Winkielman *et. al.*, (2000) explained that Branding works as a signal. It allows customers to quickly recognize a product as one they are familiar with or one they like. It acts as a memory cue, allowing customers to retrieve relevant information from memory. This information may be about past experience of the brand, brand perceptions or brand associations. The information we have stored about brands is crucial in guiding our decisions Holt, (2015) considers Branding as one of the important aspects of business strategy. Branding is central to creating customer value, not just images and is also a key tool for creating and maintaining competitive advantage. Hislop, (2001) stated that Branding is the process of creating a relationship or a connection between a company's product and emotional perception of the customer for the purpose of generating segregation among competition and building loyalty among customers.

Saleem and Raja (2014) posited that brand image is a reflection of a brand held in customer memory. They added that, in simple words, brand image is basically what comes into the customers' mind when a brand is placed in front of the customer.

According to Loken, Ahluwalia, Houston (2010) Brands are important to brand owners at two quite different levels. Firstly, they serve as a focus for customer loyalties and therefore develop as assets which ensure future demand and hence future cash flows. They thus introduce stability into businesses, help guard against competitive encroachment, and allow investment and planning to take place with increased confidence.

Mohajerani and Miremadi (2012) explained that image is the overall impression made in the minds of the public about something. They also stated that the image of service organization is diverse, and therefore, each customer has different types of expected impression,

experiences and contacts with the organization, and that leads to a different image acceptance.

Suhartanto & Kandampully, (2003) stated that Brand Image is developed in the customer's mind through the impacts of promotion, advertisement, public relations, word-of-mouth and customer's encounter with the products and services.

## CONCEPT OF BRAND

Brand is a promise that the product will perform as per customer's expectations. It shapes customer's expectations about the product. Brands usually have a trademark which protects them from use by others. A brand gives particular information about the organization, goods or service, differentiating it from others in the marketplace. Brand carries an assurance about the characteristics that make the product or service unique. A strong brand is a means of making people aware of what the company represents and what its offerings are.

Brands simplify customers' purchase decision. Over a period of time, customers find out the brands which satisfy their need. If the customers identify a particular brand and have information about it, they make quick purchase decision and save a lot of time. Also, they save search costs for product. Customers stay reliable and loyal to a brand as long as they believe and have an implicit understanding that the brand will keep on meeting their expectations and act upon in the desired manner consistently. As long as the customers get benefits and satisfaction from consumption of the product, they will more likely continue to buy that brand. Brands also play a crucial role in signifying certain product features to customers.

A brand, in short, can be defined as a seller's promise to provide consistently a unique set of characteristics, advantages, and services to the buyers/customers. It is a name, term, sign, symbol or a combination of all these planned to differentiate the goods/services of one seller or group of sellers from those of competitors. Some examples of well-known brands are Mc Donald's, Mercedes-Benz, Sony, Coca Cola, Kingfisher, etc.

## OBJECTIVES OF THE STUDY

1. To understand the concept of brand.
2. To know the influence of brand and customer buying behavior of products in Belagavi city during Covid-19 pandemic.

## RESEARCH METHODOLOGY

A customer survey was carried out in Belagavi city and the study has used descriptive analysis on the effect of brands on customer buying behavior. A sample survey of 150 respondents was carried out using a structured questionnaire for primary data. Samples were selected based on simple random sampling method.

## RESULTS AND DISCUSSION

**Table 1: Respondents Age**

Age Group	Frequency	Percentage (%)
18-25	55	36.67
26-40	61	40.66
40 and above	34	22.67
<b>Total</b>	<b>150</b>	<b>100.00</b>

Source: Field Survey

The study revealed that 40.66% of respondents belonging to the age group of 26-40 were more brand conscious. 36.67% of respondents belonged to the age group of 18-25 whereas 22.67% of respondents were above 40 years of age. It means the Middle-aged groups (26-40) were more experienced to brands and preferred branded products followed by the customers within the age group of 18-25.

**Table 2: Respondents Work Status**

Work Status	Frequency	Percentage (%)
Student	42	28.00
Businessman	38	25.33
Professional	49	32.67
Others	21	14.00
<b>Total</b>	<b>150</b>	<b>100.00</b>

Source: Field Survey

Work Status greatly influenced the customer preference of any of the branded products. The customers demand for branded product depends upon his position i.e. work status. The results revealed that 32.67% of respondents were professionals, 28% of respondents were students, 25.33% were businessmen, and 14% respondents belonged to other class. Professionals are student class has more craze for branded products.

**Table 3: Respondents Family Income (monthly)**

Income Level	Frequency	Percentage (%)
Less than 10,000	18	12.00
10,000-50,000	33	22.00

Income Level	Frequency	Percentage (%)
50,000-1,00,000	56	37.33
1,00,000 and above	43	28.67
<b>Total</b>	<b>150</b>	<b>100.00</b>

Source: Field Survey

Family Income may be in the form of wages, salaries or other forms of earnings received by a family in a given period of time. Branded products are usually costly because of its quality and goodwill. More the family income more is the demand for branded products because of affordability. 37.33% of the respondents were within the family income 50,000-100,000, 28.67% of respondents had family income above 100,000. Lower income groups hardly preferred branded products because of its affordability.

**Table 4: Factors affecting Customer buying behavior**

Factors	Frequency	Percentage (%)
Price	42	28.00
Brand Name	54	36.00
Quality	31	20.67
Location (Convenience)	07	4.66
Trend	16	10.67
<b>Total</b>	<b>150</b>	<b>100.00</b>

Source: Field Survey

Price and brand name were two important factors that a customer considered while selecting a product for purchase. Brand name develops positive perspective about a product. It is considered as a mark of prestige and safety for its customers. Branded products are always believed to be the best in all aspects. 36% of respondents preferred the purchase of branded products, 28% of respondents considered price while buying a product, while 20.67% of customers considered quality before buying a product.

**Table 5: Media Influence on buying Decision**

Media	Frequency	Percentage (%)
Newspapers and Magazines	28	18.67
Television	63	42.00
Radio	12	8.00
Online Media	47	31.33
<b>Total</b>	<b>150</b>	<b>100.00</b>

Source: Field Survey

Advertising is considered as the most efficient promotional tool for informing customers about a product. Advertising informs the customer about the product and all its features. Proper advertising media need to select for informing about a product to customers at large. 42% of the customers watched advertisements on television, 31.33% watched advertisements online. 18.67% found advertisements on Newspapers and magazines, while only 8% of the customers listened to advertisements on radio.

**Table 6: Brand Loyalty**

Brand Loyalty	Frequency	Percentage (%)
Stick to Existing Brand	56	37.34
Try New Brand	53	27.33
Decide a Brand (based on special offers)	41	35.33
<b>Total</b>	<b>150</b>	<b>100</b>

Source: Field Survey

Brand loyalty indicates the customer’s fondness for the product. 37.34% of customers stuck to existing brand, 35.33% of customers decided a brand based on special offers while 27.33% of customers tried new brand. The customers today have become very rationale and they analyze a product’s brand before final purchase.

**CONCLUSION**

Brand name or logo is assurance given by company about the product quality and safety. The brand names or logo always leave a strong imprint about the product on customers’ mind. Brand name gives product its identity. Branding is also one of the strategies that the company followed for success of its sale during Covid-19. In short, the study revealed that brands have an effect on customers’ mind. Any product that the customer wishes to purchase looks for its brand before purchase especially during Covid-19. Age, income, work status, family income and media influence etc. have greater influence on customer’s buying decision of a particular branded product during Covid-19 pandemic.

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# **The Study of Growth of the Digital Payment System and its Sectoral Impact During COVID-19 Pandemic (Lockdown)**

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## **ABSTRACT**

*In late December 2019, a previous unidentified coronavirus, currently known as coronavirus affected normal life of people. Many people lost their life and livelihood. Due to rapid increase in COVID-19 cases, government imposed complete lockdown (approx. for 6 months) and restricted movement of people because coronavirus is contagious disease. Lockdown and other guidelines like wearing mask, use of sanitizer and maintaining social distancing were introduced as containment measures. This pandemic curtailed the economic activity and reduced demand of the people. Many industries were severely affected like aviation and transport industries, manufacturing industry, tourism and hospitality, education, automobile industry and others. On the other hand, some industries were positively impacted by COVID-19. Those industries got great push during the pandemic. These are: healthcare and wellness industries, ed-tech or e-learning, online gaming OTT (Over the Top) platform for entertainment, virtual meeting apps etc. Due to COVID-19 people were avoiding to come in contact with anyone. As a result, they were trying to move towards contactless medium for availing services and exchanging money. This pandemic forced them to move towards digital payment system for making payment of transactions via Unified Payment Interface (UPI), e-wallet, online payment through cards etc. This paper shows selected sectoral impact of COVID-19 pandemic during lockdown (2020) from digital payment perspective and usage of selected modes of digital payment in Pandemic.*

## **KEYWORDS**

*COVID-19, Pandemic, Digital payments*

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## **INTRODUCTION**

The spread of coronavirus disease (COVID-19) pandemic is the greatest challenge we have faced since World War II. This pandemic has led to loss of human life, loss of livelihood and loss of public health. Due to increasing cases of COVID-19, government imposed nationwide lockdown. Consequently, it caused adverse effects on various sectors of Indian economy namely, manufacturing concerns, travel and tourism, hospitality, education sector, railways, retail, automobile sectors and so on. This pandemic put livelihood of millions at risk. According to World Health Organisation's Report published on 13<sup>th</sup> October, 2020, "Tens of millions

are at risk of falling into extreme poverty while the number of undernourished people, currently estimated at nearly 690 million could increase by up to 132 million by the end of the year."

The crises and recession induced by COVID-19 has forced people to change their way of working and it acted as a catalyst to usher in unprecedented changes in every industry. Almost all the sectors were struggling to survive as the demand of the customers was dwindling but in some sectors exceptional high growth was observed. Healthcare and wellness industries, ed-Tech or e-learning, online gaming, OTT (Over the Top) platform for entertainment, virtual meeting apps showed boom.

This pandemic forced people to shift towards online platforms or digitalisation. They started adopting online services like online shopping via E-commerce companies, e-payment/digital payment, e-learning, online business and so on.

## OBJECTIVE OF THE STUDY

To study the impact of COVID-19 pandemic on the usage of digital payment system.

## RESEARCH METHODOLOGY

This paper is based on secondary data information. The data was collected from various reports, magazines, journals and websites.

## DIGITAL PAYMENT SYSTEM

In July 2015 Prime Minister Narendra Modi launched Digital India Campaign with the vision to transform India into a digitally empowered society. On November 8, 2016, Government of India announced that ₹500 and ₹1000 currency notes would cease to be legal tender. It was government's biggest step to fight against fake notes and black money to end corruption and to create a cashless economy. With this move government encouraged people to go for digital transactions. Digital payment system gained popularity during the pandemic among people.

## MODES OF DIGITAL PAYMENT SYSTEM

Digital payment system provides various modes of payment for payment of goods and services over internet or digital mode. It doesn't involve physical exchange of money. Digital payment is also known as electronic payment or e-payment (Sahayaselvi, Franciska, 2017). For facilitating digital transaction, various modes are available for instance banking cards, e-wallets, Unified Payment Interface (UPI), mobile banking, internet banking, POS and so on.

### Banking Cards:

Banking cards are payment cards which are in plastic form issued by banks to their customers or client to offer number of services for their convenience. It includes debit cards, credit cards and ATM cards. These cards are directly linked with depository account of the customer and amount deducted from the same for every transaction. For secure payments it provides two factor authentications: PIN (Personal Identification Number) and OTP (One Time Password). These cards can be used at various

platforms for e-shopping, peer-to-peer fund transfer, e-wallet, POS (Point of Sale), ATM (Automated Teller Machine), Mobile ATM vans and so on.

### Unified Payment Interface (UPI):

UPI is instant real time payment system for fund transfer between two banks. It was developed and introduced by NPCI (National Payment Corporation of India) in 2016. It is a payment method that powers multiple bank accounts into single mobile application. Each participating bank provides its own UPI application for Android, Windows and iOS mobile platform. It offers bank balance enquiry, transaction history, send money via account number, IFSC (Indian Financial System Code), mobile Virtual address, MMID (Mobile Money Identifier). No transaction cost is charged for transactions through UPI.

### Mobile Banking:

Mobile banking uses software called app or application provided by banks to offer banking facility. Mobile internet banking is digital payment service which is provided by banks to their account holders to carry out financial transaction through registered mobile number. To access mobile banking facility, a dedicated mobile app is developed by respective banks. For instance, SBI Yono by State Bank of India, Cent Mobile by Central Bank of India, iMobile Pay by ICICI bank etc. This mode allows customers to conduct different financial transactions using mobile device or tablet. Customers can avail facilities like balance enquiry, bill payment, fund transfer etc. through installed mobile banking application.

### E-wallet/Digital wallet Mobile wallet:

E-wallet carries money in digital form. To use digital wallet, users have to link their debit or credit card information to mobile wallet app. An individual can use e-wallet after loading money to digital wallet to make purchases or fund transfer. Many banks and private companies have their e-wallets. For instance, paytm, freecharge, mobikwik, oxygen, jio money, Airtel money, SBI Buddy, Vodafone m-Pesa, ICICI Pockets, Axis Bank lime etc.

### Internet Banking:

Internet banking is another mode of digital payment system that enables customers of bank to execute financial transaction through bank's or financial

institution's website. It is also known as online banking, e-banking or virtual banking. It includes RTGS, NEFT, IMPS.

#### **National Electronic Fund Transfer (NEFT):**

It is nationwide fund transfer system that allows the fund transfer between two bank account holders. The settlement of funds under NEFT takes place in hourly batches. There are twelve settlements starting from 8 a.m. to 7 p.m. on week days (Monday-Friday) and six settlements from 8 a.m. to 1 p.m. on Saturdays. Maximum transaction limit is fixed at ₹2 lakh.

#### **Real Time Gross Settlement (RTGS):**

Under RTGS fund transfer system, the settlement of fund transfers takes place at the time instruction received (i.e. on instruction by instruction basis). This option is made for large value transactions. The remitted minimum amount is ₹2 lakh and there is no such maximum limit. The settlement of RTGS transfer is available to bank from 9:00 hours to 16:30 hours on week days and from 9:00 hours to 14:00 hours on Saturdays. Timings may vary depending on the customer timings of the bank branches.

#### **Immediate Payment Service (IMPS):**

It is instant payment service for fund transfer. It offers 24x7 fund transfer service. Maximum limit for fund transfer is ₹2 lakh.

### **SECTORAL IMPACT OF COVID-19 PANDEMIC DURING LOCKDOWN (2020) FROM DIGITAL PAYMENT PERSPECTIVE**

Due to wide spread of coronavirus, government introduced complete lockdown for some period of time which restricts the movement of people and flow of goods and services. Consequently, it adversely affects several sectors of the Indian economy. Some of the sectors are given below:

#### **Manufacturing Industry:**

COVID-19 crises have affected the manufacturing industry adversely. Steep fall in supply and demand disrupted the production activities and machines remained idle for long period of time and cause huge loss to the industry. This results in loss of employment and shut down of many small manufacturing concerns facing cash constraint for

long time. On the other hand, those company which are dependent upon manufacturing concern like steel industry, plastic producing industry, machine tools, and other were also adversely affected.

#### **Aviation Industry:**

During pandemic, lockdown as containment measure flight were cancelled across the board that resulted in dramatic drop in demand for air transport passenger or cargo. Consequently, freight reduced to a great extent. This forced the airlines company towards cost cutting measures like firing or pay cuts in 2020. Restriction of flights affected the usage of digital payment. It will affect digital payment for short term lifting of restrictions by government.

#### **Hospitality and Tourism Industry:**

This pandemic has massively impacted tourism and hospitality sector across the globe as many countries restricted travelling. India has witnessed significant decline in tourism industry. This sector covers various segments like tour, hospitality, travel agents, air, land and sea transportation industry and other, were also affected. Tourism and hospitality contribute 40% of digital payment. It will affect digital payment for short to medium term due to travel restriction. (*Sanjay Doshi (KPMG), 2020*).

#### **Hotel and Restaurant:**

As the cases were increasing across the entire world, the primary focus for government was safety of their people. Therefore, government-imposed lockdown in the country to restrict the movement of people and results close down of cinemas, park, hotels and restaurants. In this way, it disrupted the travelling ecosystem and caused heavy loss to the business of this industry. Avoidance of public place by people affected digital payment for medium term after lifting the restriction. (*Sanjay Doshi (KPMG), 2020*).

#### **Retail Industry:**

COVID-19 adversely affected the normal life of the people, as entire country was under quarantine. Consumers of the retail sector were forced to stay at home. This encouraged them to move towards online purchasing. As per the government guidelines, retailers of essential goods were allowed to open their shop for some time with following norms of social

distancing. But due to supply disruption, retailers were unable to fulfill the demands of the customers. This made loss to the entire retail industry especially non-essential goods dealers. Digital payment under this industry will impact for medium term because people will try to avoid purchase of non-essential goods even after the lifting of imposition of lockdown. (Sanjay Doshi (KPMG), 2020).

## USAGE OF SELECTED MODES OF DIGITAL PAYMENT COVID-19 PANDEMIC

The lockdown period was significant period that limited the spending among customers for purchasing, payment of bills, fees, and donation and so on. The first lockdown was announced at the end of March 2020. This situation forced people, to some extent, to adopt digital payment system because of risk of transmission of virus and imposition of restriction on movement by government. Following are some selected modes of digital payment used in pandemic:

### Automated Teller Machine (ATM):

ATM uses debit card or credit card for cash withdrawal. During lockdown, the usage of ATMs installed at various places declined. It may be because of fear of transmission of virus via exchange of currency.

### Banking Cards:

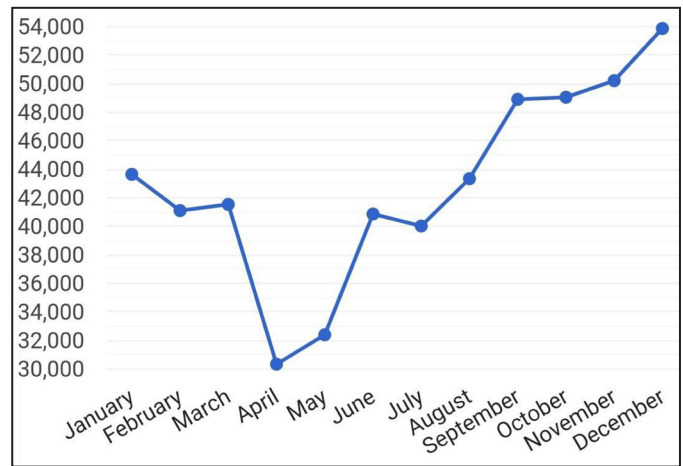
The usage of banking cards was expected to increase due to online transactions due to limited opening of physical or offline shops. Transactions via cards used for payment of insurance premium, online education, donation, media or entertainment etc.

### E- Wallets:

This mode of payment showed more number and volume of payment as it was a safer mode of payment and ease of use. A significant shift in consumer behaviour and habit of using e-wallet was observed instead of cash for making payments.

### Unified Payment Interface (UPI):

There was positive impact on adopting UPI payment mode during pandemic. As it includes QR (Quick Response) Code. It is directly linked with bank.



Source: NPCI, RBI (2020)

The above graph shows the total transaction volume (lakhs) made in digital mode of payment. Indian government announced first lockdown on 22<sup>nd</sup> March, 2020. After this month, the month of April depicts decline in payment in lieu of COVID-19 and accompanying containment measures, but it shows quick recovery in the subsequent months across various modes of digital payment. Therefore, we can say the impact of digital payment was positive during pandemic lockdown. A recent poll conducted at a forum jointly hosted by KPMG in India and ET Edge, on impact of COVID-19 and its resultant lockdown, concluded that 81 per cent respondents reported higher usage of digital payment methods than cash.

## CONCLUSION

COVID-19 outbreak has adversely affected millions of lives in the entire world. Government has announced first lockdown on 22<sup>nd</sup> March, 2020 for safety of the people. Lockdown restricted the movement of people and led to shut down of many businesses. Only few sectors like hospitals and medical stores, retail shops for necessary goods were allowed to operate but for limited time with social distancing and with other preventive measures. COVID-19 pandemic has impacted various sectors of the economy like aviation and transport industries, manufacturing industry, tourism and hospitality, education, automobile industry and so on. It cut down the demand. On the other hand, some sectors showed tremendous growth like healthcare and wellness industries, ed-Tech or e-learning, online gaming OTT (Over the Top) platform for entertainment, virtual meeting apps etc. Due to the fear of transmission of virus, people were avoiding

to interact and exchange currency. This encouraged them to adopt digital payment system and subsequent months saw growth.

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# **Managing Employee Relation in Work From Home Decision**

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## **ABSTRACT**

*Employee relation is the relation between employers and employees. An organization with a virtuous employee relations program provides fair and consistent treatment to all employees so they will be committed to their jobs and loyal to the company. Employee relations can make or break the workplace climate. Employee relations' covers the contractual, practical, as well as the physical and emotional dimensions of the employee-employer relationship. The term employee relation is also used to highlight the efforts a company or the HR department makes to manage that relationship. These efforts are usually formalized in an employee relations policy or program.*

*ER is a crucial factor when it comes to overall organizational performance. Because good employee relationship management translates into increased employee wellbeing (and performance). And, since employees are the engine of any organization, one would want to ensure that both employer-employee and cross-employee relations are well-maintained.*

## **KEYWORDS**

*Organisational performance, Workplace climate, Employee relation, Pandemic, WFH*

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## **INTRODUCTION**

Employee relations are essential to a company's success. Poor employee relations lead to high attrition. It is very important that managers should maintain positive relationships with their employees. For maintaining a healthy employee relationship, a clear communication is the key ingredient without which one cannot have a positive employee relationship specially in WFH model. Now the question is how to have an effective employee relation while maintaining social distancing? WFH along with the benefits has its own challenges in IT industry.

In this research paper the author has studied how the employee relation was maintained during work from home scenario specially in IT companies like Infosys, TCS, Lester, Absolut data.

## **METHODOLOGY**

**Primary data:** Informal interviews with employees of IT industry from above mentioned companies.

**Secondary data:** articles from newspaper, HR magazines, Interviews of HR heads on websites.

## **EMPLOYEE RELATION IN PANDEMIC**

IT companies have moved to remote working. How can we effectively maintain excellent employee relations when faced with social-distancing? Managers and employees encounter a new set of challenges. With lack of clear communication, staff can lose track and purpose. With zero in-person contact, work can lose meaning, job satisfaction can take a hit – and as is well-documented, work life balance starts to wobble over the edge. All this can negatively impact working relationships.

While working from home comes with benefits, unfortunately employee relations is not one of them. An area that relies on communication, on personal interactions and one-on-ones – is unlikely to benefit from the long-distance set-up. With the right strategy, however, managers can adapt to the remote workplace and create even more responsive and fulfilled teams.

While dynamics will shift drastically once people select to be physically present in office, 2021 & forward will always be a combination of a hybrid presence model, hot desks and changing work benefits. 2020 pushed us into the land of no return. Most organisation will never return to 100% workforce in the office model.

#### **A. Major transformation is observed in 2 areas they are:**

##### *I Digital transformation:*

Digitalisation was the urgent need almost in every possible sector though certain element cannot be replaced by technologies. COVID-19 disrupted the way businesses operate. IT firms who were open for work from home and flexi hours concept, for them, the transition was bit easier as compared to the IT firms who were rigid with work from office model. The former were already prepared with the new way of working.

##### *II New working model:*

**Work from home model:** Remote working cannot be implemented over night it has to be systematic. Proper planning and organisational support is a must for the implementation. This model will be successful provided company is in a position to have a very clear communication and employees take the accountability.

*A successful employee relation needs a strategy which is customise as per the team and individuals in a company.*

#### **B. Benefits of ER:**

1. Low attrition rate
2. Stress free environment
3. Avoid conflicts
4. Clarity of job – better output

#### **C. How to implement successful Employee Relation:**

1. **Clear communication:** is the key factor in WFH model as communication is the base of any relation. Most of the IT companies start their day by having a virtual meet like Lester Infotech, Mahindra they have a small meeting at the start of the day.
2. **Do not assume:** As a manager or the boss should not assume anything be clear and convey every detail do not assume things to be self-explanatory ask questions take their response be an active listener.
3. **Delegate clear objectives:** Clear expectations are important to have a successful ER. Boss should be approachable for clearing the doubts or issues.
4. **Empathise:** It is very important to note down or to understand the issues or problems faced by the employees.
5. **Appreciating hard work or positive reinforcement:** A kind word of appreciation will lift the morale of the employees.
6. **Make employee feel valuable:** Many large corporations, with guidance from behavioural scientists, are implementing various measures to combat physical and emotional stress faced by their employees.

#### **D. Actions taken by,**

##### *I Infosys:*

1. Managers have more one-on-one conversation with their team members and receive feedback.
2. Shorter duration meetings almost on daily basis.
3. Infosys conducts regular surveys to understand the pulse of its employees.
4. It has come up with four specific codes to guide managers for engaging with their teams. The four Cs are: connect, collaborate, celebrate, and care. [www.businessday.in](http://www.businessday.in).<sup>1</sup>

##### *II TCS:*

Well-designed and transparent communications plan for critical messaging and sharing of accurate information.

1. New leave policies.
2. Real-time collaboration using various online communication tools.
3. Emotional and professional coaching via industry leaders and life coaches.
4. Mental health support with the help of counsellors, psychologists and psychiatrists via dedicated helplines.
5. Use of digital technology like AI chatbots, which are designed to help employees focus better on work when away from the normal workplace.
6. Engaging, empowering and energizing the workforce via motivational speakers, experts from various walks of life through webinars, and dedicated organizational communications channels.
7. Online learning to help employees stay updated and acquire new skills using various online teaching applications and platforms.
8. A continuous employee awareness campaign to promote hygiene across multiple organization communication channels. [www.tcs.com](http://www.tcs.com),(2020). <sup>2</sup>

Source:

1. <https://www.businesstoday.in/opinion/columns/how-infosys-keeps-its-employees-happy/story/238729.html>
2. [https://www.tcs.com/content/dam/tcs/pdf/perspectives/covid-19/Why%20the%20Emotional%20Well-Being%20of%20Your%20Employees%20Should%20Be%20a%20Top%20Priority%20During%20COVID-19%20\(1\).pdf](https://www.tcs.com/content/dam/tcs/pdf/perspectives/covid-19/Why%20the%20Emotional%20Well-Being%20of%20Your%20Employees%20Should%20Be%20a%20Top%20Priority%20During%20COVID-19%20(1).pdf)

**E. Absolut data:**

A company providing customized AI and advance analytics solutions, they are

1. **Mental and Physical Health:** Conducting regular online sessions by health experts and activities like virtual Yoga sessions and joint meditation sessions to help employees stay calm, focused, boost mental health, and feel connected while they WFH.
2. **Fun Activities:** activities and games like ‘Bollywood Quiz’, ‘WFH selfie corner’, ‘Gratitude week’. Participating in these contests keep the monotony out of work and also keeps the mood uplifted working remotely.



Source: <https://blog.smarp.com/17-ways-to-boost-employee-experience>.

Employee Relation is all about the care company shows toward the organisation the better the relation lower is the attrition, high productivity, increases brand value.

**CONCLUSION**

1. Companies like TCS, Infosys, are taking all the possible steps in keeping their employees engage and maintaining a positive relation with them whereas extra initiatives are not seen in small size companies.
2. As per the study it has been found that the companies who have better ER have better employee retention rate.
3. Transparent communication is the key to have a successful ER.
4. Employee Relation is not only built on a better pay package, employee care, respect will be the factors to build the long-lasting bond.
5. Companies should instruct their seniors or the immediate boss to be empathetic with their juniors as the pandemic was uncertain nobody was prepared for that and we really don't know who is going through what.
6. HR has to develop new strategies to engage employees, maintaining employee relation virtually will be a challenge but companies like HUL going out of the way in maintaining employee relation as per their new policy they will be helping their employees in domestic violence cases.
7. Hiring emotional counsellors to help the employees undergoing depression or any other issues.



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# **Data Science Applications: Applications of Data Science in with concrete real life use cases**

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## **ABSTRACT**

*Digital world creates massive amounts of data every second thanks to the communication devices, sensors, and computation we use. They capture information of great value to businesses and governments across the globe.*

*Search engine companies such as Google, Yahoo and Microsoft, for instance, have created an entirely new business model by capturing the information freely available on the web and providing it to people in useful ways. They collect trillions of bytes of data every day and continually add new services such as satellite images, driving directions, and image retrieval.*

*Data Science, one of the most significant advances of this century, refers to an emerging area related to the collection, preparation, analysis, visualization, management, and preservation of this data – both structured and unstructured.*

*To discover, extract, compile, process, analyse, interpret, and visualize data, data science incorporates several technologies and academic disciplines. It includes mathematics, statistics, computer science and programming, statistical modelling, database technologies, signal processing, data modelling, artificial intelligence, machine learning, natural language processing, visualization, predictive analytics, and so on.*

*In this paper we introduce five common applications of data science that build upon those concepts. The goal is to debunk the impression that data science is some type of obscure black magic and give the reader concrete examples of how it is applied in reality.*

## **KEYWORDS**

*Data Scientist, analysis, predictive analytics, modelling, machine learning*

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## **INTRODUCTION**

### **What is Data Science?**

Data science is the domain of study that deals with vast volumes of data using modern tools and techniques to find unseen patterns, derive meaningful information, and make business decisions. Data science uses complex machine learning algorithms to build predictive models. The data used for analysis can be from multiple sources and present in various formats. Let us see why data science is essential in the current scenario.

### **Why Data Science?**

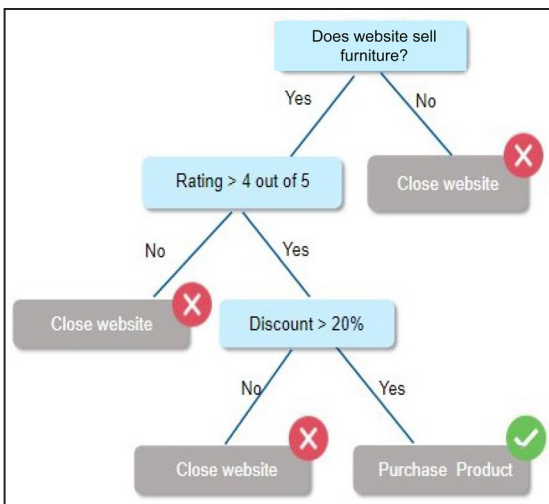
Data science or data-driven science enables better decision making, predictive analysis, and pattern discovery. It lets you:

- Find the leading cause of a problem by asking the right questions.
- Perform exploratory study on the data.
- Model the data using various algorithms.
- Communicate and visualize the results via graphs, dashboards, etc.

In practice, data science is already helping the airline industry predict disruptions in travel to alleviate the pain for both airlines and passengers. With the help of data science, airlines can optimize operations in many ways, including:

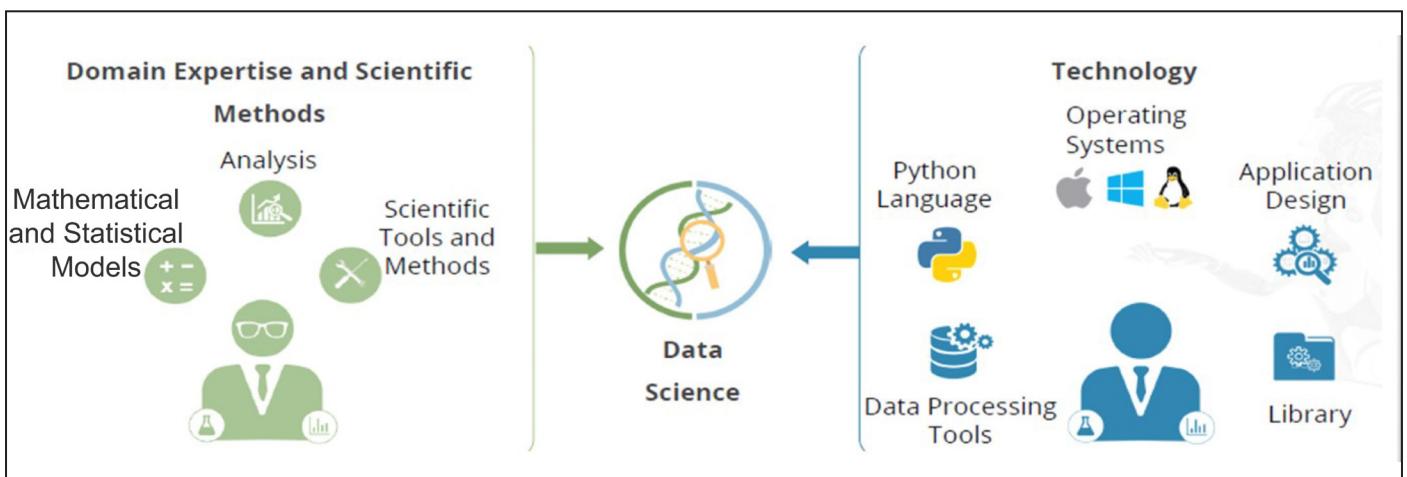
- Plan routes and decide whether to schedule direct or connecting flights.
- Build predictive analytics models to forecast flight delays.
- Offer personalized promotional offers based on customer booking patterns.
- Decide which class of planes to purchase for better overall performance.

In another example, let's say that someone wants to buy new furniture for their office. When looking online for the best option and deal, they should answer some critical questions before making their decision.



## COMPONENTS OF DATA SCIENCE

Data Science is domain expertise and scientific methods combined with technology.



## Application 1: Recommender Systems:

Recommender systems, also known as recommender engines, are one of the most well-known applications of data science. Recommender systems are a subclass of information filtering systems, systems that cut through the noise of all options and present users with just the subset of options they'll find appealing. The data being filtered can range from products on an E-commerce site to dating matches that appear as you search for 'the one'.

Recommender systems offer a more intelligent approach to information filtering than a simple search algorithm by introducing users to items they might not have otherwise discovered. Recommender systems generally take either a collaborative or content-based approach to filtering. Collaborative filtering considers a user's previous behaviour, as well as the behaviour of similar users. Content-based filtering provides recommendations based on discrete attributes or assigned characteristics.

Data scientists at energy software company Tendril opted for a hybrid approach that combines both collaborative and content-based filtering. Tendril provides analytics and consumer solutions to energy suppliers, including which energy products consumers would most likely consider. "We use Support Vector Regression models to predict household energy consumption to provide our clients with in depth personalized information about their customers," explains Mark Gately.

**WHAT IS A RECOMMENDER SYSTEM?**

A model that filters information to present users with a curated subset of options they're likely to find appealing

**HOW DOES IT WORK?**

Generally via a collaborative approach (considering user's previous behavior) or content based approach (based on discrete assigned characteristics)

**WHAT IS A REAL USE CASE?**

Tendril uses recommendation models to match eligible customers with new or existing energy products

**Application 2: Credit Scoring:**

If you have ever applied for a credit card or a loan, you're likely already familiar with the concept of credit scoring. What you may be less aware of is the set of decision management rules evaluating how likely an applicant is to repay debts behind the scenes. The first general purpose credit scoring algorithm, now known as the FICO score, was introduced in 1989.

The FICO score is still one of the most widely used models in the United States today, though peer-to-peer and direct lending organizations have focused on developing new techniques over the past few years. These new machine learning models and algorithms capture innovative factors and relationships that traditional loan scorecards couldn't, like how applicants manage monthly cash flow or whether friends or community members would endorse the applicant.

One such company is a pioneer in financial technology and mobile consumer lending since 2005. "We developed complex statistical and machine learning models to enable smarter lending decisions," explains the Director of Business Lending. "By getting creative with our approach and adopting innovative technologies, we've been able to reinvent how both consumers and businesses obtain loans. This has allowed us to reach prospective customers that in the past may have been overlooked by traditional banking institutions."

**WHAT IS CREDIT SCORING?**

A model that determines an applicant's credit worthiness for a mortgage, loan or credit card

**HOW DOES IT WORK?**

A set of decision management rules evaluates how likely an applicant is to repay debts

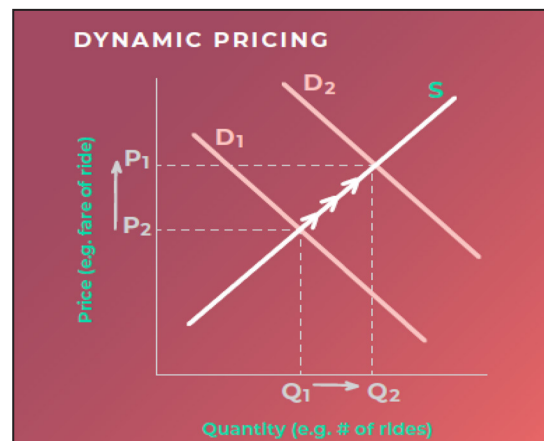
**WHAT IS A REAL USE CASE?**

A financial services company uses machine learning models to reach prospective customers that may have been overlooked by traditional banking institutions

**Application 3: Dynamic Pricing:**

You walk out of the store, arms full of groceries, only to realize that a torrential downpour began as you perused the produce inside. You struggle to retrieve your phone, check your favourite ride app and are dismayed to find...a 2.1x surge!?

Welcome to your first lesson on dynamic pricing. Businesses use dynamic pricing algorithms to model rates as a function of supply, demand, competitor pricing, and exogenous factors (e.g. weather or time). Many fields, from airline travel to athletics admission, ticketing, employ dynamic pricing to maximize expected revenue. The nuts and bolts of dynamic pricing strategies vary widely, though generalized linear models and classification trees are popular techniques for estimating the "right" (lowest/highest) price that consumers are willing to pay for a book, a flight, or a cab.



A peer-to-peer car rental service operating in over 2,500 cities, uses dynamic pricing to suggest prices to the people who list and rent out their cars on the platform. "Dynamic pricing helps us to balance supply and demand and ensure that both our travellers and our hosts are getting a fair market deal," explains the company's Director of Data Science and Analytics. "Three years ago we started to model supply and demand dynamics, so working on dynamic pricing was an intuitive next step."

We quickly realized that the gap between model development and model deployment, in production, was much bigger than expected. It requires a very wide spectrum of skills: from knowledge of statistical modelling to software architecture best practices.

**WHAT IS DYNAMIC PRICING?**  
Modeling price as a function of supply, demand, competitor pricing and exogenous factors

**HOW DOES IT WORK?**  
Generalized linear models and classification trees are popular techniques for estimating the "right" price to maximize expected revenue

**WHAT IS A REAL USE CASE?**  
A car sharing company uses dynamic pricing models to suggest prices to the people who list and rent out cars

risk of not graduating more efficiently, so they can intervene and help those students graduate.

**WHAT IS CUSTOMER CHURN?**  
Predicting which customers are going to abandon a product or service

**HOW DOES IT WORK?**  
Data scientists may consider using support vector machines, random forest or k-nearest-neighbors algorithms

**WHAT IS A REAL USE CASE?**  
EAB combines data from transcripts, standardized test scores, demographics and more to identify students at risk of not graduating

**Application 4: Customer Churn:**

Churn rate describes the rate at which customers abandon a product or service. Understanding customers' likelihood to churn is particularly important for subscription-based models; everything ranging from traditional cable or gym memberships to recently popularized monthly subscription boxes.

Data scientists looking to predict customer churn may consider a variety of algorithms for the job, such as support vector machines, random forest, or k-nearest-neighbours. Beyond the accuracy of a given model, data scientists must also balance the trade-off between precision (correctly predicting a churning customer) and recall (how many predictions were actually successful). So what's better? Classifying every churning customer but occasionally mislabelling a non-churning customer? Or identifying fewer churning customers, but not mislabelling non-churners? It's a difficult decision that requires in-depth knowledge of the business case and years of experience. These are familiar questions for the data scientists at EAB, the education division of The Advisory Board Company. EAB provides data driven applications and insights to hundreds of institutions of higher education. "A key component of our Student Success Collaborative product, used by academic advisors and other administrators, is a predictive model of student graduation," says Harlan Harris, Director of Data Science. "We combine data from transcripts, standardized test scores, demographics, and other facts about students to provide a graduation risk score. Colleges and universities use these scores to identify students at

**Application 5: Fraud Detection:**

Financial technology, or 'FinTech,' companies offer financial services like banking, investing, and payment processing via software, rather than through traditional banking institutions. Companies processing massive volumes of financial transactions also need a quantifiable way to detect and prevent fraudulent transactions from being processed.

Traditional fraud detection presents a fairly straightforward problem: Is a transaction legitimate or not? Otherwise called a binary classification problem. This can be trickier than it seems, especially when you have thousands (or even millions) of legitimate transactions occurring for every instance of fraud. To add insult to injury, a single occurrence of fraud can cost a company an exorbitant amount of money. To combat this, some data science teams pair supervised classification techniques with anomaly detection algorithms to identify outliers and pick out suspicious behavior.

Dmitrijs L̄vovs is responsible for managing risk at VIA SMS Group, where over €60MM is loaned to consumers across 6 countries every year. The risk analytics team at VIA SMS Group use advanced algorithms to assess whether an applicant is fraudulent prior to considering whether or not to underwrite the requested loan. "We write our decision algorithms in the R programming language and implement them into our web and mobile apps in the server-side language of PHP. By using R, we can leverage a combination of complex data lookups and state of the art algorithms to identify fraudulent transactions," explains Dmitrijs.

**WHAT IS FRAUD DETECTION?**

Detecting and preventing fraudulent financial transactions from being processed

**HOW DOES IT WORK?**

Fraud detection is a binary classification problem: "is this transaction legitimate or not?"

**WHAT IS A REAL USE CASE?**

Via SMS Group uses a combination of complex data lookups and decision algorithms written in R and implemented in PHP to assess whether a loan applicant is fraudulent

## CHALLENGES FACED BY DATA SCIENCE

### 1. Data Preparation:

Data scientists spend nearly 80% of their time cleaning and preparing data to improve its quality – i.e., make it accurate and consistent, before utilizing it for analysis. However, 57% of them consider it as the worst part of their jobs, labelling it as time-consuming and highly mundane. They are required to go through terabytes of data, across multiple formats, sources, functions, and platforms, on a day-to-day basis, whilst keeping a log of their activities to prevent duplication.

### 2. Multiple Data Sources:

As organizations continue to utilize different types of apps and tools and generate different formats of data, there will be more data sources that the data scientists need to access to produce meaningful decisions. This process requires manual entry of data and time-consuming data searching, which leads to errors and repetitions, and eventually, poor decisions.

### 3. Data Security:

As organizations transition into cloud data management, cyberattacks have become increasingly common. This has caused two major problems –

*Confidential data becoming vulnerable:*

As a response to repeated cyberattacks, regulatory standards have evolved which have extended the data consent and utilization processes adding to the frustration of the data scientists.

Organizations should utilize advanced machine learning enabled security platforms and install additional security checks to safeguard their data. At the same time, they must ensure strict adherence to

the data protection norms to avoid time-consuming audits and expensive fines.

### 4. Understanding the Business Problem:

Before performing data analysis and building solutions, data scientists must first thoroughly understand the business problem. Most data scientists follow a mechanical approach to do this and get started with analysing data sets without clearly defining the business problem and objective.

Therefore, data scientists must follow a proper workflow before starting any analysis. The workflow must be built after collaborating with the business stakeholders and consist of well-defined checklists to improve understanding and problem identification.

### 5. Effective Communication with Non-Technical Stakeholders:

It is imperative for the data scientists to communicate effectively with business executives who may not understand the complexities and the technical jargon of their work. If the executive, stakeholder, or the client cannot understand their models, then their solutions will, most likely, not be executed.

This is something that data scientists can practice. They can adopt concepts like "data storytelling" to give a structured approach to their communication and a powerful narrative to their analysis and visualizations.

### 6. Collaboration with Data Engineers:

Organizations usually have data scientists and data engineers working on the same projects. This means there must be effective communication across them to ensure the best output. However, the two usually have different priorities and workflows, which causes misunderstanding and stifles knowledge sharing.

Management should take active steps to enhance collaboration between data scientists and data engineers. It can foster open communication by setting up a common coding language and a real-time collaboration tool. Moreover, appointing a Chief Data Officer to oversee both the departments has also proven to have improved collaboration between the two teams.

### 7. Misconceptions about the Role:

In big organizations, a data scientist is expected to be a jack of all trades – they are required to clean data, retrieve data, build models, and conduct analysis.

However this is a big ask for any data scientist. For a data science team to function effectively, tasks need to be distributed among individuals pertaining to data visualization, data preparation, model building and so on.

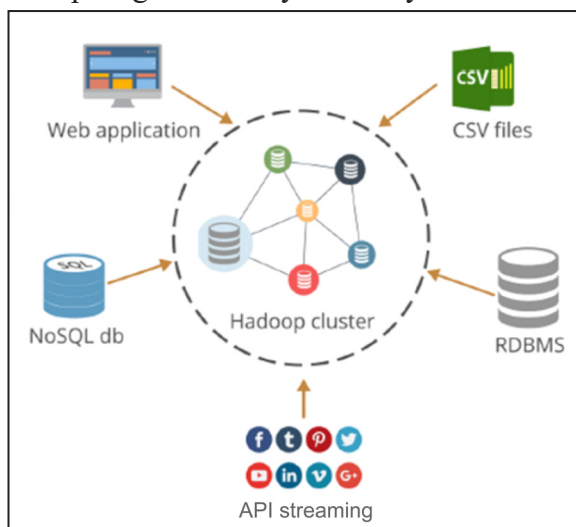
It is critical for data scientists to have a clear understanding of their roles and responsibilities before they start working with any organization.

### 8. Undefined KPIs and Metrics:

The lack of understanding of data science among management teams leads to unrealistic expectations on the data scientist, which affects their performance. Data scientists are expected to produce a silver bullet and solve all the business problems. This is very counterproductive.

Therefore, every business should have:

- Well-defined metrics to measure the accuracy of analysis generated by the data scientists
- Proper business KPIs to analyze the business impact generated by the analysis.



## CONCLUSION

This paper explored five applications of Data science in finance. The technology grows every day and this list is set to expand. For now, finance companies which adopt AI will improve their operations, marketing, sales, customer experience, revenues and overall quality of deals. At this stage, finance seems well ahead of accounting what comes to utilizing data science applications and big data to bring added value to the decision-making process. However, these concepts still seek establishment among the field – which may be hard to attain

during a phase of new innovations constantly lurking around the corner. Still, the ongoing change should be embraced and not rejected, if it brings new possibilities not achievable otherwise. Resistance and issues can be won by widening the knowledge within the emerging technology and by cooperation between involved fields.

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# **Risks of Covid on Supply Chain Management of Healthcare Products in India and Measures to Combat them**

**Dr. Shaheen Gazala**

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## **ABSTRACT**

*Covid-19 brought unprecedented problems and misery. With nations under lockdown and international movement restricted doubts lingered in the mind whether supply chains were working effectively. It was a big task to ensure that the pharmacy needs of the people were met. The risks associated with delivering genuine pharmaceuticals with no infections was manifold, which the Government of India successfully met. Though there was a shortage especially of ventilators and of the raw materials for the production of APIs but, more or less needs of the people were taken care of. The call for Atmanirbhar Bharat laid emphasis on reducing the dependency on foreign countries. This was one of the measures suggested for making supply chain work. Rest various other suggestions were given so as to ensure that the supply chain worked efficiently.*

## **KEYWORDS**

*Covid-19, misery, genuine, infections, ventilators, Atmanirbhar Bharat*

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## **INTRODUCTION**

The outbreak of Covid was as widespread as sudden. The world was caught unawares and was unprepared for a pandemic of this nature. Emerging from China, it soon spread to different parts of the world. China acted swiftly and with immediate lockdown it was able to control the spread in its territory. However the other nations were not so lucky. It took some time for larger part of the world to understand the virus and to act for its containment. With more than a year since the pandemic broke out the world at large is still reeling under its impact.

The most severe effect other than the loss of lives has been on supply chain management. With complete lockdowns being implemented nationwide and international movement restricted, this sector was badly hit. Supply Chain Management of pharmacy was the talking point during the pandemic. The reason being China is the main destination for APIs (Active Pharmaceutical Ingredients). Most of the pharmaceutical companies of India had enough inventories of APIs to last them a few months.

However it was feared that if the pandemic continued for a longer period then it could create unprecedented problems. The paper looks into the risks Covid posed on the supply chain management in the health care products and the measures to combat them.

## **REVIEW OF LITERATURE**

Nexdigm in its article titled, '*Impact of Covid-19 on Supply Chain3: Responding with Resilience Indian Pharmacy Sector*', reiterates the fact that though Covid-19 has been tough on the Indian Pharmacy, India has responded with resilience. The pharmaceutical companies acted swiftly and the government supported them adequately in order to ensure that there was no shortage of pharmaceutical products. The pharmaceutical companies drew a plan of supply chain. They reformulated the demand on the basis of priority. Control rooms were set up which coordinated with the pharmaceutical companies, industries and the government.

David Alvaro, Emilie Branch and Cynthia A. Challenger in their article titled, '*The Covid-19 Pandemic Magnifies Pharmaceutical Supply Chain*



*Issues*', emphasized the issue that the world is going to face due to Covid. They surveyed and found that 24% respondents were extremely confident there would be no shortage of pharmacy while 22% were extremely doubtful about it. It reiterates that world is dependent on China for its pharmacy and in this pandemic it's going to be difficult to maintain the supply. Spurious medicines were already a problem with 250,000 deaths happening annually according to WHO. With the shortage of the presence of fraudulent medicines is going to rise further.

Hannah Balfour in the article titled, '*Covid-19 Update: Corona Virus and the Pharmaceutical Supply Chain*', expresses the fact that Corona if lasting a few months would not disrupt the supply chain because the companies had a stock of inventories for 6 months to a year. However, if the factories in China didn't go back to work in few months then there could be serious implications. Another reason for the disruption in supply could be that India had restricted the exports of its pharmaceutical products. India had done it because they depended on China for APIs which could be in short supply in the near future.

## **RISKS OF COVID ON SUPPLY CHAIN MANAGEMENT**

There is not an iota of doubt that the pandemic of this nature would have far reaching consequences on the health and economy of the country. The battle was on various fronts. There was the risk of losing lives and also of infecting many others. The risks posed by Covid on supply chain management have been enumerated as follows:

### **1) Packaging, Formulating APIs:**

Active Pharmaceutical Ingredients relies on various raw materials like chemical building blocks, regulatory starting materials and chemical intermediates for its manufacture. They are usually formulated in countries where they are supplied. With the corona outbreak it had become risky to package and transport these APIs maintaining all the safety protocols.

### **2. Short term Drug Supply constraints:**

There was a risk of short term supply of drugs. The following of safety protocols and the closure of international corridors resulted in supply

constraints of various drugs. Most shortage was experienced in ventilators. ICU patients increased with the outbreak of corona and so there was a supply constraint of the product.

### **3. Operations Risk:**

There was a risk of operations being halted due to employee constraint, reduced transportation, and numerous safety checks. The medical premises restricted capacity of employees to avoid crowding. Pressure on cold storage increased as the companies looked forward to stocking their inventories in order to be prepared for increased demand. There was also a danger of operational size not increasing as the companies would not look forward to expanding as the launch of new products could be halted, delayed or slowed down.

### **4. Regulatory Risk:**

The laying down of so many regulations would slow down the newly launched drugs in reaching the patients. It could also delay in cost-cutting of these treatments. The numerous quality checks would further slowdown the rate at which drugs reached the patients.

### **5. Geo-political Risk:**

The outbreak of Covid in China and its subsequent spread to different parts of the world opened new geopolitical risk. Ties between China and US hit a new ebb. This could lead to numerous problems for the companies operating in both the countries. The closing of international borders could lead to rise in sentiments of nationality. Countries could give the call of producing nationally the products through Research and Development.

## **MEASURES TAKEN TO CUT DOWN THE IMPACT OF COVID**

India's logistics sector is rapidly evolving despite facing enormous challenges (PYMNTS, 2020). For battling pandemics like Covid it's very important to have a robust logistics. It required integration between production, distribution and the transport and communication system to effectively operate the supply chain. Today, we are facing an unprecedented crisis which has made us look into the vulnerabilities of our logistics supply chain (Mahnken, 2020). In spite of the challenges posed by Covid and the state of logistics, India has done well to maintain the

supply chain. Various measures can be taken which can further help in combating the problems posed on the two fronts. Following are the details of the measures to be taken.

### Short Term:

#### 1. *Increasing the local content:*

Keeping in tune with Atmanirbhar Bharat the government should take initiative to increase the local content in the manufacturing of pharmaceuticals. This would help reduce dependence on imports and would also help the domestic manufacturers to have enough orders. With exports being hit and demand being curtailed due to loss of jobs, domestic producers are reeling under the pressure. The coverage of the products must be widened.

#### 2. *Discontinuation of quality testing reimbursement fee:*

The Medical practitioners have to pay an expensive fee for getting quality testing standard from US FDA/CE. The government reimburses this fee. It might be a good idea to stop the reimbursement as it would save an adequate amount of money. The government could better utilize this money to improve the logistics of the country.

### Medium Term:

#### 3. *Development of Common Infrastructure:*

The government should take initiative to build common infrastructure around medical clusters. This would significantly lower the cost of transportation and would make the companies more competitive in overseas market. These clusters could be as AMTZ in Andhra Pradesh, Medical Device Park in Hyderabad, and HLL Medipark Ltd in Tamil Nadu.

#### 4. *Demand Creation:*

The government should cap the trade margins of medical equipments. The cost of these equipments is very high. If the upper ceiling is fixed then the cost would be minimized and the medical equipment would be easily accessible. During Covid times the use of medical equipments has multiplied especially for ventilators. There is an acute shortage of ventilators in the country. If the government regulated the trade margin then medical equipments could be made available to the general public. The government should have different caps for different products. This would ensure that the most expensive

and most in demand product would be capped differently from the other products.

#### 5. *Tax/Duty Modifications:*

The government could undertake health cess exemptions in order to help pharmacy sector to boost revenue. The corporate tax could also be reduced from 22% to 10%. This would help the pharmaceutical sector to maintain liquidity. They would be in a position to maintain liquidity which was much needed in the pandemic situation. However, the government could experience revenue loss. This revenue loss could be checked by capping the maximum limit to the exemptions. The loss would be only in short term. With the surge in demand in the long term there could be enough revenue generated to overcome the loss.

#### 6. *Supply-Chain Measures:*

To maintain the supply chain government could provide import duty and other exemptions. This would help make the export industry more competitive. If the medical equipments have advanced equipments then this will make them more competitive in the export market. There would be loss of revenue in the short term. To avoid this a time limit could be set, that for this duration of time the exemptions would be in place.

#### 7. *Green Channels:*

It could be a great idea to establish green channels across international airports and ports where the movement of medical equipments takes place. This would ensure that the movement of goods happens with the Covid protocols. It could also help in building new ties and strengthening the old ones. The exclusive facilities for the medical equipments would ensure the supply chain works smoothly.

### Long term:

#### 8. *Incentivize Research and Development:*

There is a need to strengthen research and development in Medical equipments. If we could produce cost effective local MRI, CT Scan and other technologies then it would not only help economize but would also reduce our import dependency for substandard products from Korea and China. A lot needs to be done in the research and development field if we want to be self-sufficient in medical equipments. India could also seek international cooperation in

developing research and development. A major impediment could be that the developed economies would vehemently oppose it. As a response India could make them the preferred trade destinations for the medical equipments.

9. *Boost exports:*

Establishment of a dedicated export council could be a key to the promotion of export. The export market is dominated by key players and major developed economies. It would not be easy to break their monopoly. It would need forward and backward linkages with MSMEs. Government would have to ensure that the export council is provided with the required facilities so that it can perform better.

10. *PPP model to utilize cost optimization and volume:*

The public-private-partnership could be an effective tool for setting up medical parks. Presently most medical equipment facilities are concentrated in one geographical area. This led to rise in cost and reduction in profit. If the government of India collaborates with the private enterprise and diversifies this manufacturing then it can lead to better profits.

## CONCLUSION

Covid-19 no doubt poses a huge challenge to the whole supply chain management especially for the

pharmacy. It poses manifold risk to the production, distribution as well as the consumption. In Covid times when safety parameters are paramount it is difficult to cater to the increasing demand. Nevertheless, if the Government of India brings about the measures discussed above then we can take the pandemic head on. However the implementation of the measures is no child's play. It requires calculations, analysis and some risk like dealing with loss in revenue in short term to implement the measures. It would require brainstorming by who's who in the governance to actually implement these measures. We will come to know in the time to come how effectively it has been implemented. With prayers on the lips and hope in the heart we pray that pandemic dies off soon.

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# **Covid-19 has become a catalyst for innovations in Service Industry Sub Theme: ROI**

**Siddhartha Sankar Bose**

*M.Com, MBA, PhD*

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## **ABSTRACT**

*The topic for this International Conference could not have been more appropriate. 2020 – The year that just went by was worse than a nightmare for most of us around the world. As we try to stare back at the mammoth upheaval caused by Covid-19, we cannot but help notice that perhaps it is not all that bad. In some cases, especially in the Service Industry, there have been plenty of innovations forcefully brought about by the ‘new normal’. Hence, it would not be incorrect to say that Covid-19 has indeed become a catalyst for innovations in the Service Industry.*

*ROI is one of the frontrunners for being labelled as a consistent SMR for finding the efficiency and effectiveness of Service Industry, and hence the selection as a sub theme. However, advanced research informs us that ROI is no longer restricted to its original linkage to the accounting concept of Profitability in an Organization. With the rapid change in technology coupled with the sudden onslaught of the VUCA world; there is an increase in the scope of the Service Industry. Innovations not only form the perfect recipe for staying ahead in this competition but also to be profitable. Instead of opening up new Service Industry which shall meet ROI expectations, it is always better to strengthen the existing ones. This is done by encouraging Centre of Excellence (CoE) in the Organizations which has tremendous potentiality in contributing towards increased ROI.*

## **KEYWORDS**

*New normal, SMR, Profitability, VUCA, CoE*

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## **INTRODUCTION**

Amidst the clamour and worldwide outcry of the devastating impact of Covid-19 pandemic throughout most part of last year; for ‘some’ Industries especially in the service sector it has proven otherwise. ‘Some’ refers to those companies in the service industry who have successfully adapted to the new requirements and/or demands brought about by this ‘new normal’ created by this pandemic induced VUCA conditions. These selected few service industry companies were able to successfully ‘ride the tide of change’ and reap the benefits. Those who could not or did not change with the situation joined the majority of naysayers who went on complaining about the catastrophic ‘merciless pandemic’.

Advanced management strategy discusses the concept that what appears as threatening is actually an opportunity with a deliberate misleading garb. It is deliberately camouflaged so that the competition is reduced and the opportunity is available only to a select few who dare to persevere beyond the facade of threat and gloom.

The secret of success of the Service Industry, or for that matter any industry is to remain relevant and up to date to the changing needs and requirements of the customers which is in turn influenced by so many factors. Covid-19 was coincidentally one such factor.

## EVOLUTION OF SERVICE INDUSTRY

A gradual and systematic evolution is one of the most important facets of the customer process management. Business Process Management which later modified to Customer Process Management directly indicates the constant initiative to further enhance the customer experience spiral. There is no alternative to meeting the ever-increasing customer expectations. This directly helps the respective Industry to stay relevant and reap more profits. The Service Industry along with the Goods Industry has thus evolved along this path. Having said so, it may be mentioned that the Service Industry is in the process of constant evolution since the very beginning. In this respect, it may be mentioned that the Covid-19 pandemic was just a coincidence. Its presence has only tweaked the change in the service industry in a particular trajectory befitting the particular requirements only. The service industry would have changed anyways. The only difference brought about to the Service Industry by the Covid-19 pandemic was the specific change in the response that was required.

Changing customer preferences along with newer demands have majorly resulted in new service requirements of individuals. This forms the basis for the evolution of the service industry over time. These changing demands are influenced by various factors including the existing environmental as well as geo-political developments that take place. Covid-19 is one such uncertain development which abruptly happened taking all of us by surprise. Like any other development, new requirements needed to be fulfilled. The difference in this particular case was two-fold. The stringent compliance that needed to be fulfilled in this particular case along with the development of several new customer requirements has seen the birth of several new service industries. Most of these new service industries came into existence in order to tackle the onslaught brought about by Covid-19. In this sense of the term, it is correct to say that Covid-19 acts as an innovation to the service industry.

Any manufacturing or service industry business is expected to be profitable. In other words, it is supposed to yield a positive return on the amount invested for the business project. This is also referred to as Return on Investment or ROI.

## RETURN ON INVESTMENT (ROI)

ROI is considered the thumb-rule of any business which measures the profitability (ability to make profits) from its venture. It is the percentage of Profits made as compared to the Investments made to earn the same. ( $ROI = \text{Profits}/\text{Investments} \times 100$ ). This is the starting point for ROI determination. However, it was pointed out that this apparently simple formula does not consider several qualitative factors which contribute positively towards increase in ROI.

Although this simple ROI formula helps to give an immediate thumb-up or otherwise for investments being made, it fails to take into consideration several qualitative factors – e.g.; the environmental, social and governance or the ESG factors. Take the case of Green Finance which is a rather new entrant in the block. There are other functions with its ‘Green’ versions also – like ‘Green Marketing’ etc; but currently we will discuss certain concepts in Green Finance. Carbon Credit Accounting – the social impact thereof is still not explicitly defined. These gaps were attempted to be addressed by slightly modifying the simplistic ROI to ROI<sub>Int</sub> (Return on Integration). The term integration signifies the ESG factors or the qualitative factors which is already discussed. Although, it may be said that specific guideline for such factors is yet to be formally implemented.

Different companies/verticals have handled the pandemic differently. While there has been no pre-set guiding norm for this, each organization has tried to aim at maximizing their revenue amid all challenges. E-commerce sales have increased (approx. by 32.4% in 2020 YOY) at the cost of a decline in brick-and-mortar sales by 3.2%. (Davis, Sarah *et. al.* Jan’21).

Except for some companies who are already doing business through E-commerce, transition to the online mode is likely to result in substantial investments. This needs to be factored when computing the resultant ROI. In fact Brenner, Michael in his article IT ROI and Resilience in the age of Covid-19 (July’20) has indicated that decision-makers are looking to frameworks for investing in critical IT capabilities.

A McKinsey & Company article published in July’20 on the topic ‘From surviving to thriving: Reimagining the post Covid-19 return’, the authors Kevin, Sneader *et. al.* have focussed several ways

and means a company needs to 'SHAPE' up for prioritizing on rapid revenue recovery. The word 'SHAPE' is an acronym which introduces the essential pre-requisites. They are: **S**tart-up mindset; **H**uman at the core; **A**cceleration of digital tech and analytics; **P**urpose-driven customer playbook and **E**cosystems and adaptability. Without digressing, it may be mentioned that clearly the focus is on maximising ROI in the 'new normal'. As the title of this article mentions that the focus on maximizing revenue or ROI with speed is not only to survive, but also to thrive. Since this is currently yet to be put into practice, it augurs well to say that any unit which follows these norms towards moving their ROI northwards can ideally be an exemplar for the others to follow suit.

Subbaraman, Shweta who is the lead consultant of Digital Experience at ITC InfoTech has discussed about several means of maximising Marketing ROI in her article titled "Four Strategies for maximising Marketing ROI in the post Covid era". Some of the important ones are: monetize loyalty for growth, optimize promotion effectiveness for higher ROI. It is clear that the new situation has thrown open lot of opportunities for increasing ROI (be it marketing or overall), the only challenge is to capitalize on the 'new normal situation' thrown open by the pandemic. It is clear that the original or existing ROI concept falls short of capturing the ROI concept and its impact in totality.

The Researcher concludes that ROInt is preferred compared over the simple ROI from the inclusive point of view. However, since the ROInt is yet to be implemented or used in a compulsory manner; the Researcher advocates the nodal model of successful replication as in a Centre of Excellence (CoE). The concept of CoE was first discussed in the NATO summit in 2002. However, a connection between ROI and CoE was established by Dcosta, Floyd of Capgemini in his article titled "Setup a Centre of Excellence for maximum ROI on your Social Strategy" in 2012. In this article it is mentioned that to invest and set up a CoE for social strategy helps Organizations to efficiently align corporate systems and processes.

In November'2020 Broek, Astrid Van Den has emphasized that the extra investments to make goods and/or services complaint in this pandemic needs to be factored while computing ROI. Needless

to say, this tends towards the inclusive concept of ROI which has been discussed earlier.

The importance of ROI in businesses which is already critical has become clearer during this downturn caused by the pandemic situation worldwide. Increasing restrictions in business during this pandemic have put the focus on ROI spot-on, and that too when an investment in ROI is supposed to take care of all the additional costs required under the current situation. This further requires that when an 'upgraded ROI' is functioning perfectly well as per its expected criteria and sets an example, it needs to be replicated across other units in the same organization and similar other organizations too. The phrase 'upgraded ROI' has been used to mean ROInt (Return on Integration) so as to include the ESG factors rather than the earlier vanilla ROI concept.

The concept of setting up an exemplar (ROI in this case) so that it may be replicated is exactly the concept of CoE. A CoE is an 'ideal' unit in an Organization, which besides fulfilling its own pre-requisites perfectly well, is available to other units in the same organization to facilitate theirs. The Researcher herein introduces the Centre of Excellence (CoE) which proves to be the perfect champion for this cause.

## CENTRE OF EXCELLENCE (CoE)

In its simplest form, a CoE is any unit which besides performing its own duties helps other units to perform their duties effortlessly too. Although the concept of CoE was being mentioned across several forums during 1990-95, it was first officially discussed by NATO in November'2002. Bose, Siddhartha S (December'2020) describes a CoE as 'first among equals'. CoE's popularity saw exponential growth in India and around the world across several disciplines and verticals. Organizations as well as the Government of the country realized the importance as well as the tremendous potential of the CoE. This saw mushrooming of CoE's and huge Government funding aimed at giving wings to these CoE's. The World Bank opened up several CoE in several parts of Africa – all aimed towards helping Africa come out of their poverty.

Taulli, Tom in his article RPA (Robotic Process Automation) CoE in the Forbes Magazine in January 2021 has mentioned that CoE is looked up to as a leadership module which helps standardize

the framework and thereby strengthen the central governance structure. The author further states that the purpose of the CoE's is to align disjointed parts in an organization and thereby handle any challenges that may come in the way. While this addresses plans to increase ROI in the organization, it again points to the leadership role of the CoE (already mentioned) which needs to be replicated.

Estrada, Sheryl of Randstad, US in her blog titled 'Coronavirus cued digital shifts with strong ROI, survey says' has hinted that there is sufficient evidence collected from feedback of 276 C-suite Executives and departmental heads from the IT sector in the US which goes to say that stronger ROI has paid off for more investments made in technology purchase decisions. However, the author also mentions that some felt that expectations were higher than actual growth in certain cases. The author also mentions that her survey says that more than 60% respondents felt that CoE's will certainly replace traditional hierarchies in organizations.

## CONCLUSION

Through several examples discussed above, it is clear that Covid-19 has acted more as an impetus or catalyst for Innovations in the Service Industry. This comes from the premise that behind every 'threat' there is an 'opportunity'. Further, it has also been discussed that the concept of ROI has been augmented with new requirements which needs to be factored in. This is in line with the VUCA norms thrown in by the current pandemic since the service industry has to measure up to lot of stringent norms and requirements which was not required earlier. The way forward is when each of these units becomes exemplars or role models. This is the concept of CoE which has also been discussed. The author now brings in a new dimension – the concept of determining the efficiency of these CoE's through a

commonly identified and agreed upon SMR (specific measurable return) which in turn ascertains if the capacity of that particular organization needs to be further expanded. This has been discussed at length by the author in his Research on CoE.

As has been recommended in the above mentioned Research Paper, these measures certainly need to be implemented at the earliest. This would perhaps be the ideal moment to introduce this change in the service industry as one of the many firsts towards bringing in a fully efficient and self-reliant economy. This in turn will set up a system of control, a system of checks and balances – all of which will go to ensure northward movement of the ROI in the Industries and hence in the overall development of the economy.

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# **Intrinsic Realization of Students about their Teachers' Pivotal Role during Covid-19 Pandemic**

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## **ABSTRACT**

*The Covid-19 pandemic brought the world into uncharted waters. It changed the world forever. For many people and sectors the lockdown was not only a nightmare but also a big curse because it affected the physical as well as mental health. And under these circumstances the seeds of such a dramatic transformation in education was being planted.*

*And in this "school's out, but classes on" situation one could feel the importance of teacher's guidance and emotional support as they not only completed their syllabus of concerned subject but also took care of the mental well-being of the students.*

*The importance of teachers in a nation building can't be ignored. One cannot discuss the role of education in the development of any economy without giving central attention to the teachers. Teachers not only create effective learning environment by their sheer will but can also help handle and deal with various issues that students are facing in their life. It is a well-known fact that the quality of a child's relationship with their teachers in the early grades has important implications for the child's concurrent and future academic and behavioral adjustment. An emotionally mature teacher is capable of tolerating a reasonable amount of frustration, to make effective adjustment. And during this lockdown the stress level of the students was at the peak. In India the youth is deviating from the right path due to high stress level and anxiety. They need a guide or a mentor to understand their problem and to give better solution to them. After the parents only a teacher can solve this problem.*

## **KEYWORDS**

*Covid-19, Students-teachers relationship, Emotional Intelligence.*

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## **INTRODUCTION**

The corona period has emphasized on the importance of use of mask, maintaining social distancing, proper washing of hands, and use of sanitizers. It has also shown how teachers physically, mentally and emotionally support and care for students. Teachers have shared their thoughts, experiences and strategies to cope up with stress. In this pandemic the parents also realized that the teachers were not only responsible for completing the syllabus but also gave a vision to their children.

Now a days either in government colleges or private colleges there is a massive presence of stress. And through emotionally connectedness anyone can cope up

with the stressful encounters so that all can do work in a good manner.

In this scenario if we want to succeed in our personal as well as professional life we need to enhance our ability to read and recognize the people and signals and react appropriately. One research claimed that most of the students of college are in stressful environment. The proportion of respondents are-

- 29% - Respondents are in stressful situation.
- 23% - Respondents are in extremely stressful situation.
- 19% - Respondents are in moderately stressful situation.



- Above 17% - Respondents are in slightly stressful situation.
- Above 10% - Respondents are not in stressful situation (Pullokaran, 2018).

The concept of emotional intelligence has gained popularity and acceptance over the years. Emotional intelligence is identifying, understanding and managing one's own emotions as well as of others. It is used to guide thinking and behavior. It also refers to how well we handle ourselves and our relationship based on four domains - self-awareness, self-management, empathy and skilled relationship.

*Goleman, 1996*

Anybody can be angry- that is easy. But to be angry with the right person, to the right degree, at the right time, for the right purpose and in the right way- that is not easy.

*Aristotle (Greek philosopher)*

Emotional intelligence is the most important determinant of the extent of professional and personal success in life. This is recognized that IQ may account for only about 20% of a person's success in their life. The remaining 80% depends largely on a person's emotional intelligence.

*Singh, 2001*

Today, the workplace environment is rapidly changing. It is said that a high IQ may assure you a top position, but it may not make you a top person.

Emotional intelligence is the capacity for recognizing our own feelings and those of others, for motivating ourselves, and for managing emotions well in ourselves and in our relationships.

*Goleman, 1998*

It means that emotional intelligence is a very important factor in our life and these emotional competencies, abilities and concepts are learned not only from our parents but teachers also.

Now a day's students are in a sea of trouble and teachers can play a rough diamond in this situation for them. Students have lots of age-related issues, career related issues, home related issues, friend related issues at college.

*Nayyar, 2019*

## REVIEW OF LITERATURE

1. Ghum Yao, Jialong Raw, Tao Jiang, (2020) found that teachers should not only assume the role of transmitting knowledge, but also play the role of "leader" and "Accompanist" through effective guidance and communication.
2. Fransiska Tukan, (2020) has highlighted the teacher's challenges and strategies using application in online teaching during this pandemic.
3. Xiaoqiao Cheng, (2020) revealed that the new concept of challenges of "school's out, but class's on" during this pandemic in education sector.
4. Nidhi Agarwal, Ruchika Gupta and Geetanjali Chandra (2020) revealed that in educational institutions in India the teachers who have high emotional intelligence it's ensures the better transmit of knowledge from teachers to students.

The review process revealed a few works on the challenges and strategies of teachers from general universities to tackle the new concept of teaching (virtual teaching) but the need was to study about the presence of teacher's emotional intelligence level or emotional connectedness during this pandemic and find out the importance of emotional relationship of teachers and students.

## OBJECTIVES

1. To study the relationship between teachers and students during this pandemic.
2. To find the role of emotional intelligence in stress management after this pandemic.
3. To study the impact of teachers in our society.

## RESEARCH METHODOLOGY

This article is based on secondary data information which was collected from various reports, newspapers, journals and websites.

## DISCUSSION

Students are not consumers of facts they are active creators of knowledge. Schools and colleges are not just structure of bricks but the center of lifelong learning.

Teachers are not just teachers but also inventors, discoverers and researchers.

This work includes teachers of general universities, medical colleges, research institutions and technical colleges where teachers and students are engaged in innovative practices with development of new medicines, ideas and methods to cope with the situation.

The pandemic has proved that the teachers not only share their knowledge and teaching skills but also their life with the society. During the lockdown period when we were spending time with our family at home, they were creating new things, tablets, new technologies, vaccines for our life. Teachers of social science were creating awareness and helped develop the mindset to adapt to this environment and accept this new life. Through counselling and advertisement they were spreading the message and motivating the people. Today, education is not limited to the boundary walls of one college or one University. Webinars and online counselling are going on for all. Teachers also came forward and joined hands with health workers and doctors in spreading this awareness among the masses to develop the insight to prevent this threat.

## CONCLUSION

The pandemic made it evident that after parents only a teacher could support and handle the students. They motivated a lot in the critical situation. Under the umbrella of blessings of teachers we could control our anxiety, curiosity and stress. Parents also realized that children were forgetting the discipline and manners enforced by the teacher. Teachers play the central role in cultivating character by inculcating

self-discipline and empathy. After parents, it is only a teacher who can give right direction to one's life. And for this a good relationship between teachers and student is needed.

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# **Impact of Covid-19 on Consumer Behavior towards Cosmetic Industry**

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## **ABSTRACT**

*Beauty may be in the eyes of the beholder, but there is no debate on the attractiveness of cosmetic industry. Sales of beauty products for both men and women have seen a steady growth since a decade. Today, irrespective of gender, beauty regime has become an important part of lifestyle for everyone. The recent wave of Covid-19 has not spared the entire world and has shown its mighty impact on the sale of beauty products too. The new regulations to safeguard our lives from the deadly virus have changed the entire dynamics of beauty industry. Safety is the first priority today for many, across all facets, beauty included. The lockdown forced people to experiment more often with Do It Yourself ideas ditching the expensive luxurious beauty brands and be safe at home. Major beauty brands today use Omni Channel retailing giving consumers the option to choose from a wide range of integrated channels available. But considering the Indian population a class of customers still prefer offline channels over online channel and likes to get the trial of product before purchasing it to gain confidence. Work from home, strict Mask usage, limited social events - some of the new trends taught people to be comfortable in their own skin and limit the usage of beauty products. The changes in the economic conditions leading to fall in the disposable income of people added to the negative sales of beauty products.*

## **KEYWORDS**

*Consumer Behavior, Cosmetic industry, Pandemic, Omni channel, BPC (Beauty & Personal care)*

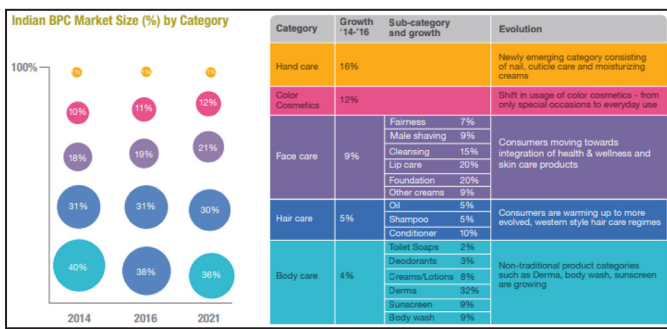
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## **INTRODUCTION**

From getting the secrets out of our own ayurveda to experimenting organic ingredients, Indian cosmetic industry is continuously evolving. A bunch of startups, creating new verticals and making most of the changes are the drivers of the evolution process. The Indian cosmetic industry is growing rapidly at a rate of 13-18 percent, more than that of US or European markets. It is categorized into five categories viz., face care, body care, hair care, hand care and color cosmetics. Indian cosmetic industry is estimated to be worth USD 8 billion. There has been a steady growth noticed in this industry.



**India BPC Market (US\$ Billions) 2014-2021**



Source: A. T. Kearney

The above image shows the growth trend for each category under BPC industry during 2014, 2016 to 2021.

From brick and mortar beauty stores to E-Stores cosmetic industry has come a long way. Simple kitchen ingredients have proven their effectiveness over Indian Beauties, but time constraints, multiple responsibilities direct people towards these ready beauty solutions leading to growing cosmetic industry. Some of the factors people consider before purchasing a beauty product is safety, naturalness and convenience of purchase. Major brands have got it right and have started producing environmentally safe, simple, natural products giving good results and thus attracting customers. Considering the pandemic situation all over the world, industries faced major losses initially. Beauty industry was not spared by the virus. Considering the work from home situation with Covid-19 regulations imposed there was a negative impact on the operations of salons, spas and beauty retail stores. First quarter noticed a major decline in sale of beauty products. Perfumes and colored cosmetics were the hardest hit categories. Safety and hygiene issues dominated customer choices and forced beauty producers to get more safe products over the shelf. Omni channel strategy was a saviour as customers couldn't reach the physical stores due to imposed lockdown. Beauty retailers gave numerous purchase options to customer, giving them the much needed convenience for purchase.

## METHODOLOGY

This research is based on secondary sources of data collected from various research articles, books, survey results etc.

## OBJECTIVES

1. To understand the factors affecting consumer buying behavior towards beauty products.

2. To analyse the impact of Covid-19 situation on the sale of beauty products.
3. To understand the future trends of beauty industry.

## FACTORS AFFECTING CONSUMER BUYING BEHAVIOR TOWARDS BEAUTY PRODUCTS

Retailers focus on motives of purchase to attract and retain the customers. These motives are the drivers of consumer buying behavior. The factors that affect the purchase of beauty products are:

### Psychological factors:

Human psychology is the major factor affecting consumer preferences and likes and dislikes for a particular product or a service. Some of the important psychological factors impacting purchase of a beauty product are motive behind the purchase, perception towards the brand or the product or service, learning, attitude and beliefs developed through learnings.

### Social factors:

Human beings are social animals always seeking for social acceptance. Thus before purchasing any product customers evaluates the social impact of that purchase. Family being the first contact group, family size and roles played by family members influence the purchase behavior of consumers. Reference groups are aspiration groups which shape the attitude and beliefs of customers. As a member of society every individual plays multiples roles for example Parent to children, Manager to organization etc. and these roles as well influence their purchase pattern.

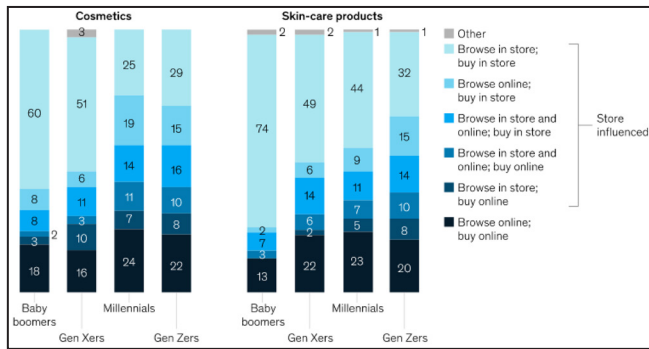
### Cultural factors:

The culture where he or she has been brought up shapes the values, beliefs, behaviors and preferences of a person. Buying decisions are influenced by customs, traditions and beliefs of a customer. Culture includes subculture which forms market segments and marketers develop product according to these segments.

### Personal Factors:

Buying is influenced by personal factors like age, income, occupation, lifestyle, personality and self concept. The age group a person belongs to is a decisive factor in choosing purchase platform.

Following analysis helps understand the impact of age on purchase behavior:



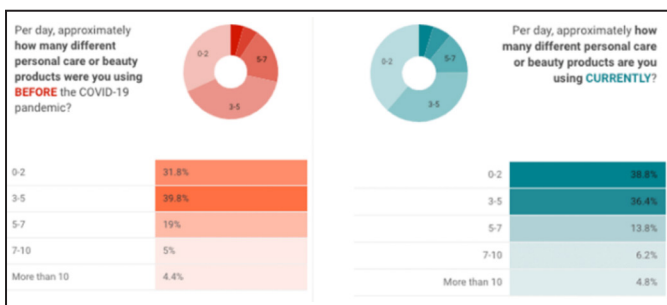
**Shopping Habits by Age Group**

Source: McKinsey & Company

**IMPACT OF COVID-19 SITUATION ON THE SALE OF BEAUTY PRODUCTS**

Going through a shock in the first quarter the Indian Cosmetic Industry has stabilized itself by switching their manufacturing to produce hand sanitizers, cleaning agents and offering free beauty services as well along with various offers. The global beauty Industry generates billions of sales in a year along with providing numerous employment opportunities making it a very important factor of economic development. The pandemic has forced people to change the personal care regimen and thus forcing the beauty industry to upscale their products and services in terms of safety and hygiene as expected by customers today. The questions of concern for beauty industry today are why and how the personal care habits have changed for the customers? Will the new regimen prevail after getting back to workplace? What will the new normal look like?

Data was collected from 500 female respondents by Premise Data using survey method to understand customer purchase behavior before and after Covid-19 situation towards beauty products, which gave the following results:



There was a drop in the use of personal care products per day noticed during Covid-19 situations.

Which of the following personal care or beauty products did you use on a daily basis BEFORE COVID-19?		Which of the following personal care or beauty products are you still using on a daily basis SINCE COVID-19?	
Haircare	61.6%	Haircare	57.8%
Deodorant or antiperspirants	58.8%	Deodorant or antiperspirants	56.8%
Makeup	55.8%	Oral care	50%
Facial skincare	51.6%	Bodycare	48.4%
Bodycare	48.6%	Facial skincare	46.4%
Oral care	48.6%	Makeup	44.4%
Fragrance	36.2%	Fragrance	28.6%
Other	4.2%	Other	4.4%

The declined usage was noticed especially in makeup, skincare and fragrance products, whereas oral care, deodorants, hair care demands have remained considerably stable.

Further according to the survey conducted 66.11% people preferred less make up, 17.22% preferred no makeup look and 16.67% preferred more make up during pandemic times.

Why have these make up routines changed? 38.89% said their makeup routines have changed because of the local mask wearing policy, 31.11% changed due to the work from home setting, 11.11% due to the social distancing policies.

Nearly 55% of respondents said they are not sure if they will return to normal make up routine reflecting the change in the female’s relationship with beauty products.

It was also found that 33% of people spend less on personal care products in comparison to their spending before pandemic.

**FUTURE TRENDS IN COSMETIC INDUSTRY**

The future trends are seen changing the dynamics of this industry. There is a considerable increase in the demand for men’s grooming products, increasing the scope of this industry. Companies also understanding this trend, are offering a plethora of options for male consumers. This segment is expected to grow in double size by next 3-4years.

The next trend seen is people are ready to spend fortune on Bridal grooming. Social media is a key influencer here. Not just Bride and Groom, but also friends and relatives spend a huge amount on grooming for attending weddings. There is a rise of 25-30% annually in this segment thus making it most attractive segment in future for the marketers.

Consumers today do not just focus on looking good but on feeling good majorly, thus shifting their preferences towards all natural, safe, nontoxic products. Increasing stress levels contribute to sleep deprivation and higher fatigue levels leading to search for wellness products. Focusing on this trend marketers should come up with more wellness products and lessen chemical products in future.

Going through this pandemic since a year now, people are more influenced by I-care and thus looking more for technology enabled products to groom themselves without stepping out. So the demand for beauty devices is increasing and will keep up the trend in coming years.

Urban Clap starting the trend of beauty services at home fueled the desire of customers to get beauty services at home comfort without stepping out. Salons, Spas should understand this trend and extend their services at home for their customers. This market is expected to grow at an annual rate of 20%.

There is a major shift from offline to online purchase since few months, considering this trend marketers should provide Omni channel experience to customers. Not every customer is comfortable with single channel for the purchase, thus marketers should provide them with multiple channels but integrated ones.

## CONCLUSION

Although there is no definite answer to what will be the new normal at the end of the pandemic, consumer preferences are changing towards the beauty and personal care products. The Indian cosmetic industry was no different for the Covid-19 and thus had seen a fall in its demand in the first quarter but analyzing people's preferences the marketers adapted themselves to the new trends coming up.

Consumer's choices are shifting towards more safe, hygienic, organic, toxic free products, marketers failing to understand this trend will not be able to survive in the future.

## SUGGESTIONS AND RECOMMENDATIONS

- Drop the harmful range of products having toxic substances like silicones, parabens etc.
- Provide seamless, integrated experience to customers across the various channels available.
- Develop more environment friendly products.
- Provide customized beauty solutions to attract and retain your customers.
- Develop product with simple, all natural ingredients rooting from our Ayurveda to keep your customers safe.

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