

# Economic Development after Covid

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**Abstract:-** The identification of Covid cases in China marked the beginning of a global crisis. The virus was first discovered in early 2020, leading to the lockdown of Wuhan city. Subsequently, it spread to India and the rest of the world, causing significant changes in the global economy. This article highlights various economic developments that have occurred during the Covid period, including the growth of the internet, advancements in the medical field, improvements in the IT sector, increased online transactions, enhanced family interactions, and improved healthcare for the people. However, it is important to acknowledge that the outbreak of the Covid-19 pandemic is a tragic event unfolding worldwide, reminiscent of the Spanish flu outbreak in 1918-19. Given the considerable uncertainty surrounding the economic outlook and the associated risks, quantifying the economic impact is challenging. Any unforeseen increase in uncertainty can jeopardize both economic growth and financial stability. In light of this, economists at the International Monetary Fund emphasize the need for targeted economic policies, fiscal measures, and appropriate monetary and financial stability policies to strengthen the global economy.

**Keywords:-** Pandemic, Covid, Population, IT Sector, People, Economy, Government.

## I. INTRODUCTION

Several cases of covid-19 were identified in China by the end of 2019. From the discovery of the virus in early 2020 until the "lock down" of Wuhan city on January 23, 2020, a total of 830 cases were confirmed. To reduce population mobility across regions, the Chinese government extended the Chinese New Year holiday. Social distancing and community quarantine procedures were implemented to slow down the spread of the virus. By February 16, 2020, more than 70,000 cases had been confirmed nationwide, but the number of new cases started to decline while the number of cured cases increased significantly. After a strenuous battle against the pandemic, Wuhan City reopened on April 8. Since then, only sporadic imported infections have been detected and effectively managed in a few regions, and China has not experienced a second wave of a massive

outbreak. On May 23, 2021, a newly discovered COVID-19 patient in Guangzhou was confirmed to be infected with the "delta variant" of the novel coronavirus. Fortunately, due to regional lockdowns and strict epidemic control measures, the spread was quickly contained. These facts highlight the importance of timely and effective infectious disease prevention and intervention measures implemented by the government. However, it is important to note that controlling infectious diseases requires limiting resident mobility and economic activities, which significantly impacts both the demand and supply of the economy. Additionally, the fight against the pandemic has delayed the resumption of production in various industries and incurred additional prevention costs, greatly affecting economic output. Therefore, it is crucial for authorities to strike a balance between efforts to control the epidemic and the resumption of economic activity.

## II. INTERNET GROWTH

In the beginning of 2020, the internet penetration rate in India had reached 50%, indicating that half of the population was already utilizing the internet. This growth was particularly significant considering that in 2015, only 19% of the population actively used the internet, with a user base of 243 million individuals. According to data estimations from the atlas VPN research team, India is projected to have 1 billion internet users by 2025. This surge in internet users is highly beneficial for both the Indian public and businesses, as it brings forth new opportunities and creates employment for millions of people, leading to the rapid development of India's digital landscape. The lockdown imposed due to the coronavirus pandemic has further amplified this trend. Even children attending primary school, government schools, or residing in rural areas are now participating in online classes, resulting in a significant increase in internet usage. The availability of information, education, social media, gaming, and entertainment, particularly sports, are driving the adoption of the internet. During these times of social distancing, users are compelled to explore and experiment with various digital solutions, accessing services and their advantages from the comfort of their homes. This has caused a monumental shift in both the adoption and frequency of internet usage.

➤ *Internet*

Today it can be said that the world has come at the world has come at the fingertips. The main factor for this is the internet. It is no exaggeration to say that the internet is a means of communication that can be used to communicate Over large areas and at high speeds at the same time. The computer can be said to be greatest invention of the twentieth century. The next step is the internet, which is used as a means of communication around the world through computers.

➤ *Web*

Several computers in an office are connected through a serial link. Computers in many locations through satellites called the internet. It's is also called a website because it connects many parts of the world like. We can type in a specific email address and go to the website we need to collect the information.

➤ *Technique*

Several computers are information and information from it is transmitted to the satellite. Information from the satellite. Information from the satellite to another master computer sends information to other computers connected to it. This service is provided by VSNL. Government owned companies and other private companies are doing it.

➤ *Usage*

The internet is the biggest medium of communication today. Modem treatment in medicine as well. The website contributes greatly to gathering information needed for surgeries and direct communication with western medical experts to collect medical. Now a days, magazines are also published on the internet. Using this, there is an opportunity for the public to know global information. It is noteworthy that today international companies use the internet rather than the post office to exchange information. In addition, the information needed by the students in the education sector can be collected and used by going to the website with a specific email address. However, it is regrettable that some people misuse the website and view pornography. We will use the good information medium internet for good works and improve the communication sector.

➤ *Search Site*

There are some search engines that let us know the address of a website about a particular field. With the help of these we can reach the required website.

**III. AT THE TIME OF COVID**

The telecom sector has experienced remarkable digital transformations in the country, thanks to the pandemic acting as a catalyst. This has had a positive impact on start-ups and the growth of small and mid-sized businesses. The pandemic has introduced us to a new way of life, where various aspects of our ecosystem, such as work, education, entertainment, social interactions, e-marketing, digital payments, and even medical consultations, are now conducted online. As a result, there has been a significant increase in internet data usage, with 84% of users accessing

the internet for entertainment purposes. This surge in internet usage can be attributed to the lockdown measures implemented due to the coronavirus. Even children, including those attending primary or government schools, as well as those in rural areas, are now attending online classes, further contributing to the increased internet usage. Additionally, access to information, education, social media, gaming, and entertainment has become more prevalent in this digital era.

➤ *The Number of Internet users Surged during the Covid Pandemic*

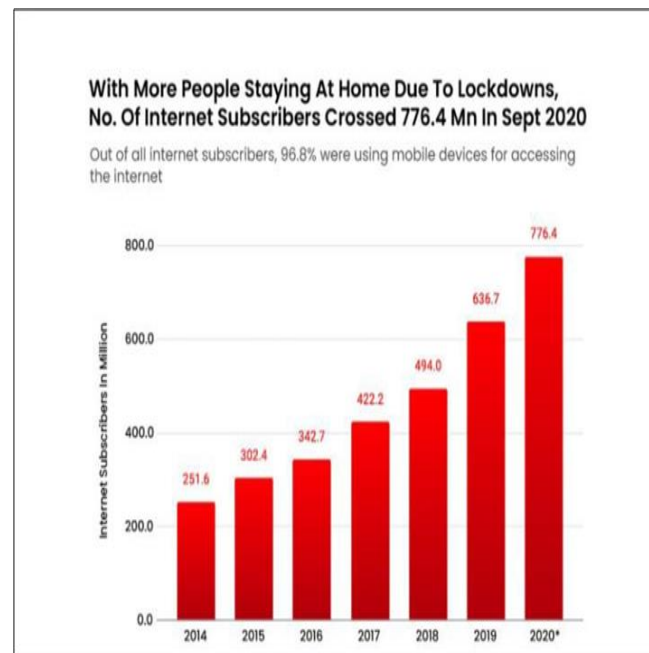


Fig 1 The Number of Internet users Surged during the Covid Pandemic

- This picture shows the internet users during the period of covid.

**IV. NEW TECHNOLOGY IN MEDICAL FIELD**

*A. Telemedicine*

Telehealth has proven to be a valuable tool in controlling the transmission of COVID-19. Virtual care platforms, utilizing video conferencing and digital monitoring, have been deployed globally to minimize exposure to the virus. When executed efficiently, virtual care has the potential to reduce healthcare misdiagnoses, privacy breaches, and more. Despite the apprehensions, the current pandemic has underscored the critical need to leverage technology for making healthcare accessible to all. These systems can be tailored to provide early intervention, enabling early disease detection and aiding patients in managing chronic conditions. In Canada, for instance, the number of video visits surged from around 1,000 per day in February to 14,000 per day by mid-May. Additionally, artificial intelligence has emerged as a valuable resource in expediting the diagnosis and risk assessment of COVID-19. For instance, in China, cloud-based technology has been utilized to identify COVID-19 pneumonia cases by

processing CT images rapidly, distinguishing the virus from other lung diseases and expediting the diagnostic process significantly. Furthermore, innovative tools like Sonavi Labs' flix, a digital stethoscope and software designed to diagnose respiratory conditions, have been instrumental in creating a reference library of clean audio files for COVID-19 at the American hospital in Dubai. Ellington West, the CEO & Co-Founder of Sonavi Labs, expressed optimism about the potential of their technology in identifying the unique acoustic signature of COVID-19, similar to how it has been successful in diagnosing pneumonia. By collecting and analysing data, the aim is to validate the classification algorithm for COVID-19, enabling all devices to detect the disease swiftly, accurately, and sustainably. The ongoing coronavirus crisis has placed immense strain on healthcare workers and hospitals, overwhelming them with the influx of patients.

- *The Application of Artificial Intelligence (AI) Technology in the Field of Telemedicine has Revolutionized the way Healthcare Services are Delivered.*



Fig 2 Application of Artificial Intelligence (AI) Technology

- *The above Image Depicts Advancements in Medical Technology.*

PPE, which includes facemasks, gloves, eye protection, and clothing, has been in high demand during the COVID-19 pandemic. Hospitals have also faced shortages of essential items such as testing swabs, kits, respirators, and ventilators. Sr. Paul Frisch, Chief of Biomedical Physics and Engineering at Memorial Sloan Kettering Cancer Centre in New York City, highlighted the importance of ICU care and ventilation for COVID-19 patients. To address the shortage of ventilators and supplies like nasal swabs and N95 masks, hospitals have turned to innovative solutions such as 3D printing. Advancements in technology, such as connected medical devices, have also played a significant role in the healthcare sector. In China, for example, the use of 5G network-powered telemedicine consultations has allowed for efficient medical treatment and responses to COVID-19. This shift towards connected healthcare has enabled real-

time monitoring of medical data, leading to continuous healthcare and improved patient care. Marwan Abdulaziz Janahi, Managing Director of Dubai Science Park, emphasized the transformative impact of these advancements in the healthcare sector.

## V. ARTIFICIAL INTELLIGENCE IS ONE OF THE KEY INNOVATIONS IN HEALTHCARE TECHNOLOGY

The expenses allocated to artificial intelligence and machine learning within the healthcare industry are projected to exceed 10.5% by 2024, an increase from 5.5% in 2022, as indicated by a recent research report from Morgan Stanley. AI in healthcare has the potential to enhance various aspects, ranging from patient communication to surgical assistance and the development of innovative pharmaceuticals.

### A. Improvement of IT Sector

#### ➤ Benefits

In comparison to numerous other industries, the IT industry is projected to experience a significant market expansion from US\$ 131 billion in 2020 to US\$ 295 billion by 2025. The primary factor driving this growth in the information technology sector is the heightened demand for software and social media platforms like Google Meet, WhatsApp video call, and Microsoft Teams. These online tools facilitate communication and enable employees who are in quarantine or working from home to stay connected with their companies, participate in conference meetings, and carry out their work simultaneously. Furthermore, the economy will receive a boost as people have come to realize the importance of the internet and technology during these crises, as they contribute to our safety and facilitate communication between healthcare professionals and the general public. Additionally, technology has played a crucial role in enabling colleges and schools to conduct online classes.

#### ➤ Progress in the IT Industry



Fig 3 Progress in the IT Industry



The image depicts the notion that an increasing number of individuals are working remotely from their homes, which in turn aids in preventing the transmission of COVID.

➤ *Before Covid 19*

India stands as the leading hub for IT exploration, with the Indian IT industry reportedly contributing to 79% of the total revenue in the industry. Prior to the global pandemic, employees were required to physically commute to offices for work, resulting in fewer opportunities in the IT sector compared to the current scenario post COVID-19. The IT industry is projected to generate a total revenue of \$191 billion during the fiscal year 2019-2020, indicating a consistent demand for tech spending even amidst an economic downturn.

➤ *After Covid 19*

The IT sector is experiencing a significant boost as the global impact of COVID-19 diminishes. The concept of working from home, which was introduced during the peak of the pandemic, has been embraced by numerous multinational corporations and startups. According to Anant Maheshwari, the president of Microsoft India, IT services companies will adopt a new normal of a hybrid workplace. This means that it will not be exclusively work from the office or work from home, but rather a combination of both. One of the top CEOs stated that IT has become the most prominent internet function following the surge in demand for IT services and support. In the post-COVID-19 era, IT will truly become the backbone of businesses. Despite the challenges posed by the pandemic, the Indian IT sector, valued at \$91 billion, has demonstrated resilience. As we enter 2021, there are promising growth opportunities as digital investments increase to address the challenges of the "new normal."

## VI. ONLINE TRANSACTION

Due to the COVID-19 pandemic, there has been a significant shift in the way businesses and consumers make payments. Cash and checks, which were once widely used, are now being avoided due to the potential risk of transmitting the virus. However, despite the health concerns, people still rely on cash for their daily needs, especially when it comes to purchasing essential items like groceries. This poses a challenge as bank branches are either closed or operating with minimal staff, and restrictions such as curfews and travel bans make it difficult for businesses to deposit cash into their bank accounts. In response to this situation, banks are encouraging users to adopt online banking services through their mobile phones as an alternative to cash. As a result, both customers and businesses are transitioning to digital payments. QR and UPI based payments have gained popularity during the COVID-19 pandemic, with modern payment apps and devices offering these options. QR codes can be easily scanned from paper or screens, allowing customers to make payments by selecting the "QR code" or "UPI payment" options on the merchant's POS terminal and entering the bill amount. This generates a dynamic code on the POS screen, which can be scanned by any Android or iOS mobile-based QR app or

UPI app. This shift to digital payments not only improves the customer experience with instant payments but also provides foolproof security and reduces transaction errors.

➤ *Several Online Transaction Apps are Displayed in this Image*



Fig 4 Several Online Transaction Apps are Displayed in this Image

- *Digital Payments are much Faster than Paying in Cash or Card. E-Payments ensure Safety and Security of the Users.*

➤ *Intracation with Family*

The COVID-19 pandemic not only impacts individuals' physical health, particularly their respiratory systems, but also extends its reach to affect the overall social well-being of communities. As the number of cases continues to rise dramatically, public anxiety and concerns have heightened in various regions across the globe. In response to the outbreak, numerous countries, including China, have implemented strict lockdowns and quarantine measures to contain the spread of the virus. One notable consequence of these prolonged lockdowns has been the increased amount of time spent with family members, leading to heightened interactions and altered relationships among individuals. However, these prolonged close interactions have also resulted in a surge in domestic violence cases worldwide, with children being particularly vulnerable to physical, emotional, sexual, and domestic abuses. The closure of schools has left billions of children out of educational institutions, as reported by the United Nations Educational, Scientific, and Cultural Organization (UNESCO). Families facing economic hardships are at a higher risk of experiencing domestic violence, further exacerbating the situation. Women, in particular, have been targeted by domestic abuse, prompting calls for their protection from organizations such as a Beijing-based NGO and an anti-domestic violence nonprofit organization in Jingzhou, Hubei. The increase in domestic violence during February 2020 compared to previous years has been a concerning trend. In the United States, there has been a significant rise of 21% in domestic abuses since the outbreak of COVID-19 in March. These acts of violence have affected both females

and children within households, leading to devastating consequences. One of the outcomes of this surge in domestic violence is an increase in the divorce rate. China, particularly Xi'an, has witnessed a record high in the number of divorce applicants during the COVID-19 epidemic. Additionally, the lack of scrutiny and consequences from external sources has granted abusers greater freedom to act. Despite the rise in domestic violence, the prolonged period of lockdown has also resulted in other significant changes within family dynamics. This paper aims to analyse the shifts in various family relationships, including the relationship between spouses, parents and children, siblings, grandparents and grandchildren, as well as adult children and their parents. The author conducted a questionnaire to investigate the extent of change in these different family relationships, comparing them to previous dynamics. By analysing the responses gathered through the author's questionnaire, the paper aims to understand the effects of spending an extended period within the family unit. Respondents were also given the opportunity to suggest effective solutions to address the issues that arise between family members. To ensure comprehensive analysis, the study was divided into various age groups and relationship categories, allowing for a more in-depth examination of the results.

## VII. HEALTH CARE OF THE PEOPLE

The global Covid-19 pandemic has resulted in a significant loss of human life across the world and has posed an unparalleled challenge to public health, food systems, and the global workforce. The economic and social upheaval brought about by the pandemic is profound, with millions of individuals facing the risk of plunging into extreme poverty and the number of undernourished individuals potentially rising by millions by the end of the year. Enterprises are facing existential threats, and a substantial portion of the global workforce is at risk of losing their means of livelihood. Workers in the informal economy are particularly vulnerable due to the lack of social protection and access to quality healthcare, as well as the loss of productive assets. The inability to earn income during lockdowns has left many without the means to provide for themselves and their families, leading to food insecurity. The pandemic has exposed the fragility of the entire food system, with border closures, trade restrictions, and confinement measures disrupting food supply chains and reducing access to healthy and diverse diets. The pandemic has not only decimated jobs but also placed the livelihoods of millions at risk. As individuals lose their sources of income, become ill, or pass away, the food security and nutrition of many are jeopardized, especially in low-income countries where marginalized populations, such as small-scale farmers and indigenous peoples, are facing the most severe impacts.

## VIII. CONCLUSION

The e-commerce and information technology debates within the WTO have gained renewed attention due to the COVID-19 pandemic. Developing countries are concerned about the distribution and accessibility of information and communication technologies. The implementation of social distancing measures as a response to the pandemic has resulted in a higher demand for internet and mobile data services, leading to significant growth in both business-to-consumer and business-to-business e-commerce sales. In addition to the global spread of COVID-19, the Indian government imposed a 21-day national lockdown and continued with a full lockdown in hotspot areas to contain the transmission of the virus. While these precautions may help mitigate the health crisis, they have also caused the Indian economy to enter a state of recession. The economic impact on India could be even more severe for two main reasons. Firstly, the economy was already experiencing a slowdown prior to the pandemic, exacerbating issues such as unemployment, low incomes, rural hardships, malnutrition, and inequality. Secondly, India's large informal sector is particularly vulnerable to the economic shock caused by the pandemic.

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