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Lessons from the Last 24 months of the Pandemic

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Abstract

Arguments to the effect that times of crisis herald new opportunities for collaborative creativity, innovation, and change are fairly common. Nevertheless, a pandemic such as COVID-19 has caught the world by surprise. As a result, a number of countries have been thrown into confusion and crisis mode due to this Pandemic. This study is based on an extensive analysis of the developmental response to the Pandemic over the past two years. During this time, the system has been engulfed by inadequate response to the crisis. The authors carried out a "futures exercise," which revealed the need for further investigation to be carried out in a number of fields. These fields include but are not limited to information technologies, privacy and ethics, robotics, artificial intelligence, and biological technologies. In this study, the authors talk about opportunities that have come about as a direct result of the unfortunate Pandemic that is still going on.

Keywords: COVID-19 and Ethics; Robotics; AI; Biological Technologies

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Introduction

A pandemic such as COVID-19, which had multiple virus strains, caught the entire world by surprise, and as a consequence, many countries were thrown into a state of confusion as a direct result of this. Even though they come with associated costs, crises frequently present opportunities that should not be ignored. Some crises, like the COVID-19, are seen as the forerunners of many innovations, such as the new social idioms, language, and behaviours that subscribe to the new normal. Other crises, like the COVID-19, are seen as the forerunners of fewer innovations. There is no denying that the virus was allowed to flourish in labs for unknown scientific and esoteric reasons, all of which took place behind a veil, despite the fact that the virus's place of origin, China, is a fact. However, whether or not China was the source of the virus is a matter of debate.

The fact that we are making progress in innovation and planning for the future gives us cause for optimism. But of course, there are a lot of things that can be learned from the events that took place during COVID-19, and one of those things is that bugs will continue to mutate. Because of this, it will be necessary for humans to be more accepting, vigilant, and prudent in their preparations for the next attack and the attack after that. On the other hand, the world has become increasingly dependent on virtual technologies provided by platforms such as Zoom, Google Meet, Cisco WebEx Meeting Center, etc. It is said that it was able to maintain its pandemic returns and emerged as the year's biggest lockdown winner (Richter, 2022).

The realisation that a lot of work needed to be done in the areas of population, habitat, and migration is commensurate with real-time technological advancement in areas such as information technologies, privacy and ethics, robotics, and artificial intelligence, amongst a variety of other areas was seen as an opportunity (Syrowatka et al., 2021), There are many other things that can be learned from the events of COVID-19.

Needless to mention that in the year 2020, every single person on the planet was able to bear witness to the unprecedented global Pandemic, which brought the entirety of the planet to its knees (Guggenberger et al., 2021). The Pandemic had a significant, and far-reaching impact on every aspect of human life. As a direct result of the implementation of COVID-19, significant changes have been made to how we work and communicate, as well as our mobility throughout the office. The COVID-19 disaster turned the world upside down and exacted a significant financial toll on the remaining population of the world as a result of the fact that millions of people perished along with their loved ones and how they supported themselves and their families. To begin, the authors discuss the effect it has had on people's movement from one town to another and one country to another as all economic activity and labour suddenly stood down.

COVID-19: A Migrant Crisis

Pandemic conditions posed an insurmountable migration obstacle in all its myriad forms. Both encouraging migration and causing it as a result of a lack of development in a country can be considered forms of development. Inadequate healthcare, employment opportunities, climate change vulnerabilities, the marginalisation of socio-economic or ethnic groups, and the provision of inadequate services can have a decisive impact on people's real and perceived future life prospects in a country or a community, which can then lead to the decision or the need to move (Migration Data Relevant for the COVID-19 Pandemic, 2021). These aspects are frequently connected to the underlying structural conditions, such as poor governance, acute and chronic poverty, as well as conflict and insecurity. Migrants, particularly those working in jobs with lower pay and who are living in irregular situations, may be more likely to be affected by and vulnerable to the spread of COVID-19. On the other hand,

migrants play an important role in the response to COVID-19 by working in critical sectors. In the new community in which they are temporarily residing, migrants make up a smaller percentage of families. They are compelled to leave their homelands in search of better employment opportunities and earnings, and in the process, they frequently have to abandon their families. Because of the COVID lockdown, the experiences of the migrants have been very different. During the Pandemic, a significant number of migrant workers attempted to reach their destination by any means necessary. There is a segment of society that is considered to be the most marginalised because its members must rely on hourly wages to maintain their standard of living and, consequently, have a greater need for the society's compassion and understanding in times of crisis. Because of the lockdown in India, the livelihoods of the country's 40 million internal migrants have been negatively affected (Bhattacharyya et al., 2020; Jha & Lahri, 2020). Their work in these roles is regarded as "low skilled" by employers in the labour market. Labour migration policies that centre on these rights must undergo a process of re-evaluation (Bhattacharyya et al., 2020).

Online Education Shifts in South Asia

The Pandemic has significantly impacted the educational system's administrative structure in South Asia. Over the course of the past twenty years, western societies have witnessed an ongoing shift towards online and hybrid business models. However, as a direct result of the COVID-19 virus, schools worldwide have been forced to close their doors. Over 1.2 billion children around the world did not attend any form of formal education in the year 2020. (Li & Lalani, 2020). E-learning, in which instruction is delivered over the Internet and on a variety of digital platforms, has seen meteoric growth as a direct result of this, and it is the most notable example of the profound transformation that has taken place in education as a direct consequence of this (Li & Lalani, 2020).

Students and their teachers are now able to participate in more productive forms of distance learning as a direct result of the increased use of technology in educational settings. As the number of people who have been infected with the Coronavirus continued to rise, many countries issued orders mandating the immediate termination of all face-to-face educational programmes that educational institutes offer. This was being done in an effort to prevent the virus from spreading any further. As discussed above, many educational institutions began providing online classes through a variety of online platforms such as Google or Zoom in order to avoid the education system being disrupted as a result of the quarantine measures. This was done in order to prevent the education system from being negatively impacted. This cutting-edge online technology also makes use of robotic teachers that are outfitted with artificial intelligence (AI) software and hardware (Syrowatka et al., 2021). Students who take part in distance learning develop their expertise in a variety of technologies that are based on the Internet, which encourages them to think analytically and become inventive. Students who do not participate in distance learning do not develop their expertise in these technologies. Recent research has shown that students who receive their education online not only have an easier time learning and retaining the information they are taught also requires much less time than in traditional classroom settings. This again provides evidence that the alterations caused by Coronavirus may be here to stay for the foreseeable future. The process of retraining for the future should begin with providing access to learning opportunities of a high standard that can be completed online. This step is essential due to the fact that it enables individuals to future-proof their abilities and search for new opportunities for expansion and improvement (Wood,2022). Many people are already working in what could be considered the future workplace. And despite the fact that the total number of jobs lost as a result of the technological revolution will be outnumbered by the number of 'jobs of tomorrow' it creates, the immediate impact could displace many workers and leave them without the skills necessary to perform new roles that are more technical. This

is due to the fact that the total number of jobs lost as a result of the technological revolution will be outnumbered by the number of 'jobs of tomorrow' it creates (Wood,2022).

On the other hand, this results in creating new opportunities, which in turn require developing new skills. The solution lies in the increased emphasis placed on the process of retraining by businesses and individuals alike. This can be done in a number of different ways. Sixty-six percent of the companies that were surveyed for this report anticipate seeing a return on investment within the next year as a direct result of the efforts that they have put forth to upskill and reskill their workforce. The Pandemic has sped up the pace of rapid change that the world was already experiencing at an accelerated rate, and it has sped it up even further. Technologies such as artificial intelligence (AI) and automation are continuing to cause structural change and disruption in the labour markets. Even so, the fact that such a precarious future is being created for such a large number of people continues to be a major source of worry.

During the lockdown period, the educational pedagogy of South Asia alongwith other parts of the world was shaken up, and a significant amount of reform was necessary. In the wake of the pandemic lockdowns, in contrary to the claims made above, digital inequality in online education was brought to the forefront in five developing countries: India, Pakistan, Bangladesh, and Nepal. Also included in this group was the nation of Afghanistan. The use of digital media in people's day-to-day lives is restricted as a result of the fact that a significant portion of the population in economies that are still developing has limited access to even the most fundamental digital services (Mathrani et al., 2021, Mukhter & Chowdhary, 2020). This is because access to even the most basic digital services is limited. As a result of the lockdown, there was an erratic decrease in the mobility of students participating in international exchange programmes. (Schleicher, 2020). The tools available to students for online education ranged from educational content they could explore at their discretion and formally structured learning programmes that they could complete at their own pace to real-time lessons led by their teachers using virtual meeting platforms (Schleicher, 2020). One of the studies conducted by the Organization for Economic Cooperation and Development (OECD) found that the use of information and communication technology (ICT) was included in the training of teachers in a percentage ranging from 37% to 97% (Reimers, 2021). During the time of the emergency, the creation of alternative forms of education delivery presented an opportunity for innovation and creativity. Many teachers took advantage of this opportunity, demonstrating exceptional professionalism in the process. The connection between students, and their teachers have grown significantly more substantial due to the rise of online learning platforms. They improved by learning more about their subjects, a new teaching method, and information and communication technology. As discussed above, they were exposed to new ways of instructing students, such as through PowerPoint presentations, videos, video conferences, online lectures on zoom meeting, etc (Yaseen and Joshi, 2021). At this juncture, it is possible to state that COVID-19 facilitated the digital space of teaching-learning, which assisted students sitting in the most inaccessible locations to connect with educational opportunities.

COVID-19: Demographic Changes

The COVID-19 Pandemic also opened the door to a greater intellectual explosion about the future of the human mind, similar to that of the Spanish flu1918. A sea change has occurred in the areas of population, habitats, migration, real-time technological advancement, privacy and ethics, robotics and artificial intelligence, and biological technology, reshaped the course of the future (Aburto et al., 2022). Pandemic has long changed cities and affecting people worldwide. The global pandemic outbreak has provided us with valuable lessons in pandemic disease preparedness. The impact of Coronavirus on our lives was unprecedented, it has affected the health and lives of more than 51.82 million, with

nearly 1280000 recorded deaths in 215 countries(Aburto et al., 2022).

Disease outbreaks prompted a worldwide response in the areas of street cleaning, drainage systems, garbage disposal, and public health systems as a result of the disease outbreaks. Among the past tragedies, the COVID-19 Pandemic was the first in human history to be observed through scientific lenses, and as a result, it was the first to be wholly monitored, described, and communicated to the general public on a daily basis using statistical tools. In the year 2020 alone, more than 1.8 million lives have been lost as a result of COVID-19 around the world. Although staggering, this estimate conceals the uneven impact of the Pandemic across different countries and demographic characteristics such as age and gender, as well as the effects on population health, years of life lost, and longevity. It has been reported that the life expectancy at birth is the most widely used indicator of population health and longevity (Aburto et al., 2021). It refers to the average number of years that a synthetic cohort of new-borns would live if they were to experience the death rates that have been observed in a given period throughout their entire lifespan, on average. Before the Pandemic, life expectancy at birth typically increased almost monotonically in most countries over the twentieth and twenty-first centuries. Losses in life expectancy were largely attributable to increased mortality above the age of 60 years and linked to official COVID-19 deaths.

The virus infected both the human population and the demographic structure of it. The elderly members of the population were found to be particularly susceptible to the disease. They continue to face grim futures. The routines of the elderly, as well as the care and assistance they received, were changed due to COVID-19. It is essential to identify and promote risk reduction and prevention opportunities to meet the demands of the ageing population, which is experiencing severe outcomes brought on by COVID-19 infection. Following the Pandemic, the delivery of medical care was modified. The Pandemic has not only taken a devastating toll on the lives of many older persons but has also exposed a range of discriminatory practices against the frail aged. The Office of the United Nations High Commissioner for Human Rights saw that the COVID-19 Pandemic provided a glaring example of widespread ageism and age discrimination against elderly people. The United Nations Human Rights Council (UNHRC) proposes that prejudice and/or discriminatory actions or practices against older persons that are based on their chronological age or on a perception that the person is ‘‘old' are examples of what the term “ageism” refers to.

In most cases, this is reflected in negative generalisations about older people, such as the idea that they are fragile, resistant to change, unproductive, and in need of protection as well as expensive health and care services. During the Pandemic, there was a rise in ageist comments and hate speech. Older people were singled out as the cause of lockdowns and portrayed as vulnerable and a burden on society(UNHRC, 2021).

Spread of Technology

Professionals in the field of health information from all over the world took part in the efforts to improve the response to the ongoing Pandemic as well as any potential future public health emergencies that may arise. As a direct consequence of this, people all over the world have experienced profound shifts in their relationships with the many forms of technology at their disposal. The current era has been dubbed the “tell everything world” by a few individuals in an attempt to describe it. The use of remote processes such as teleworking, telemedicine, online education, and online commerce, amongst other examples, is growing increasingly popular. In the not-too-distant future, a larger percentage of people will work from the comfort of their own homes, and an increasing number of social interactions will take place online (OECD, 2020). The Pandemic has opened the door for regular people to begin making money from selling their own smart devices, applications, and computer systems. Pandemic made it possible for people to work

outside the confines of a traditional office setting by giving them access to advanced digital tools such as video conferencing and virtual meeting platforms. This made it possible for people to work outside the traditional office setting. The conclusion reached in an OECD paper and communicated to the rest of the world is that

- The COVID-19 crisis made telework permanent. Before the crisis, telework varied across countries, sectors, occupations, and firms, so policies can help spread it.
- Long-term, telework could improve worker well-being, gender equality, regional inequalities, housing, and emissions, but it risks innovation and worker satisfaction.
- Policymakers should ensure that teleworking remains a choice and is not "overdone" to protect long-term innovation and worker well-being. "Hidden overtime" may be solved by social partner cooperation.
- To improve teleworking productivity and innovation, policymakers can promote managerial best practises, self-management, ICT skills, home office investment, and fast and reliable broadband (OECD, 2020).

Due to panic buying by people in every region of the world, the Pandemic caused not only delays but also "out of stock" boards and even disruptions in online shopping. Even when shopping online, 'out of stock' signs were prominently displayed. A similar situation prevailed in supermarkets. In an effort to restrict the movement of people and, as a result, limit the spread of Coronavirus, online shopping has become an absolute necessity across the world. The convenience of shopping for groceries and other goods online has been significantly bolstered by the development of advanced logistics systems that make use of robots as the primary delivery mechanism. The feat accomplished by the Coronavirus is staying alive on the surface for more than 24 hours and spreading to other people, making people handle mail and even shooing parcels a day or two later.

The use of cash as a method of payment has undergone some changes recently as a result of the possibility that the Coronavirus could spread to people who have not been infected with the virus. Instead of cash, retailers and vendors began favouring card transactions. In order to pay for goods and services, a number of countries all over the world have started the process of switching from using physical currency to using electronic or contactless payment systems (Renu, 2021). Numerous e-platforms have been developed Ito make it possible to make purchases and effectively market goods and services over the Internet without physically interacting with customers. This has resulted in a significant reduction in the cost of doing business.

Work from Home

Since the global spread of the COVID-19 Pandemic, a large number of businesses have pleaded with their employees to work from home in order to avoid coming into direct contact with other members of the working staff and mingling with them (Vyas and Butakheio, 2021).. The utilisation of virtual private networks and voice over Internet protocols, the facilitation of virtual meetings through the use of platforms such as zoom or google, and the utilisation of facial recognition technologies that allow a person to appear behind a virtual background are all examples of how technology helps to make remote work more accessible (Vyas and Butakheio, 2021). Working remotely has helped save several unnecessary meeting hours and provides flexibility to business employees. It turned out that work was no longer carried out in a physical location; rather, it is now "a space where Zoom serves to empower workgroups to connect and bring their best ideas to life." In the year 2021, Eric S. Yuan, the founder and chief executive officer of Zoom, briefly mentioned this (Richter, 2022). Yuan argued that his company, which goes by the name "zoom," was energised to help lead the evolution to hybrid work, which would allow for greater flexibility, productivity, and happiness to be brought to both in-person

and virtual connections. The fiscal quarter that ended on April 30 marked the fourth consecutive quarter in which Zoom's revenue seemed to be greater than one billion dollars. This milestone was achieved when the company's fiscal quarter ended. When compared to the total revenue of $188 million recorded in the quarter prior to the Pandemic, this represents a significant increase. Companies from all over the world continue to embrace a hybrid work model, which has not only proven to be effective in keeping the ball rolling during the Pandemic but has also proven to be popular with workers who have embraced the new freedom to work from anywhere. This has proven to be effective in keeping the ball rolling during the Pandemic. As we submit this study for publication after reviewer comments, the United Kingdom seems to have ushered in 4 days a week of work without affecting the wages (Bateman, 2022).

Access to Health

Early in the COVID-19 Pandemic, telehealth usage surged as consumers and providers sought ways to safely access and deliver healthcare. In April 2020, overall telehealth utilisation for office visits and outpatient care was 78 times higher than in February 2020 (Bestsennyy et al., 2021). Advanced technology has improved Telehealth and the administration of healthcare to patients with the Coronavirus. Telehealth adoption by the healthcare administration is readily bridging the gap between physicians, patients and health systems enabling everyone, symptomatic patients especially, to interact through virtual channels with their doctors from the comfort of their home, further helping in reducing the spread of the virus to mass populations and the medical staff on the frontline. The findings of a study by Forbes (Bestsennyy et al., 2021) indicate that the utilisation of telehealth has peaked 38 times higher than before the Pandemic. Utilisation levels have largely stabilised, ranging from 13 to 17 per cent across all specialities, following an initial spike to more than 32 per cent of office and outpatient visits occurring via telehealth in April 2020. This utilisation accounts for more than two-thirds of what we anticipated could be accomplished through the use of virtualisation for customer visits(Bestsennyy et al., 2021).

Both perceptions towards telehealth and usage have declined slightly since the peaking of COVID-19 in the spring of 2020. There are still some barriers to overcome to maintain consumer and provider adoption of virtual health, such as perceptions of technology security, and models are likely to evolve to optimise the provision of hybrid care that combines in-person and virtual components (Bestsennyy et al., 2021). Accordingly, investments in virtual care and digital health, in general, have skyrocketed, fuelling further innovation. According to the report, venture capitalist investment in digital health will be three times higher in 2020 than in 2017, despite the report being published for the first time in 2017(Bestsennyy et al., 2021) New business models may be the way to go. Virtual healthcare models that would evolve and proliferate from purely "virtual urgent care" to a range of services enabling longitudinal virtual care, as well as integration of telehealth with other virtual health solutions, are being considered (Bestsennyy et al., 2021). Models of hybrid virtual/in-person care have the potential to improve consumer experience/convenience, access, outcomes, and affordability and will always be appreciated.

Leisure and Entertainment

Online entertainment has been enhanced by technology tremendously during this time. All over the world, different platforms have been created to bring the music and entertainment industries together. Cloud raves and online streaming are significant ways many people tend to get unmaintained by listening to musicians or actors of their choice worldwide. The Pandemic drew many people into playing games online to keep themselves occupied and entertained. Others who seek online entertainment have made streaming media and binge-watching. (Renu, 2021). In the year 2020, a number of movie theatres and production studios were forced to temporarily close their doors. The entertainment available at home and on mobile devices were both impacted as a result. Due to

the quarantine that was placed on millions of people, viewers were forced to watch video entertainment from the convenience of their own home. Concurrently with the Pandemic, new streaming video services began streaming internationally through prominent studios such as Disney, Universal, and Warner Bros. joined (and competed with) existing services provided by Netflix, Hulu, and Amazon. As a direct consequence of this, viewers who stayed at home had access to a wide variety of screens and service providers through which they could watch premium television and movies. Although industry analysts had previously commented that this trend was already beginning before the Pandemic, many people believe that the Pandemic has sped up the pace of (Adgate, 2021).

Innovation in Biology

COVID-19 opened new avenues for biological innovation, reshaping the scientific enquiry culture. This has affected the scientific enquiry culture. During the Pandemic, responses and vaccine development reached cutting-edge levels. COVID-19 in Vienna, Austria, brought the biotechnology industry's importance to light. As a result, we are more vulnerable than ever to global biological threats. The situation caused this. Preparedness is key to monitoring access to biological weapons and creating beneficial biological inventions for society. This can be done by monitoring access to biological weapons. After the Pandemic, people became interested in biological technologies. The rapidly improving generation of biological tools and capabilities offered cautious optimism. Biological innovation of products with superior performance and sustainability, as well as faster diagnosis and access to bio-nano technologies (Kamaraj,2020).

The current Pandemic appears to be an example of natural selection, with the COVID-19 virus's ssRNA acting as the selective pressure to determine which offspring are best suited for continued existence. This natural selection may be a result of the recent Pandemic. Human DNA and COVID-19 interact on the nanoscale, causing a response. COVID-19 was thought to induce an immune response against the virus. If this interaction occurs, we'll gain nanotechnological insights needed to prevent, diagnose, and treat COVID-19. This article discusses the potential benefits and drawbacks of COVID-19, as well as a potential answer provided by nanotechnology, to meet current and article requirements (Kamaraj, 2020).

Increased Robotic Usage

When the coronavirus crisis escalated into a full-blown pandemic at the beginning of the year 2020, forcing a large number of businesses to close their doors, companies that manufacture robots found themselves in an unusual situation: many of them saw an increase in orders (Guizzo and Kleet 2020). Robots are exempt from the need to wear masks, are simple to disinfect, and, of course, they never get sick (Guizzo and Kleet 2020). Throughout the course of the Pandemic, robots have played an increasingly important role in the provision of services, the disinfection of public areas, and the assistance of health workers in preventing the spread of the virus. Several countries' responses to the challenges posed by Pandemic included the adoption of new technologies, such as those in the fields of robotics, artificial intelligence and digital technologies such as the Internet of things (IoT). Our relationship with technology has been irrevocably altered as a result of Coronavirus, which has hastened the transition towards digitalisation (Barfoot et al., 2020).

COVID-19 has sped up the adoption and modification of existing robots and led to the creation of new ones. COVID-19 will show that more robots are ready to work alongside human healthcare professionals. Robots reduce human interaction, which is impressive (Lew, 2020). Drones, delivery robots, and administrative robots are managing this Pandemic. The robot is exciting because it has real functions and can move freely among patients and clinical staff. Mobile robots could be used to dispose of dead bodies, provide automated navigation guides, and transport infected patients to health care workers (Lew,2020). Professor Schmitt sees a utopian future in which working robots will not replace humans but will free them to do

creative, strategic, and relational work (Lew, 2020).

The Arena of Artificial Intelligence (AI)

AI has helped businesses automate and improve business processes and engage customers. With AI, we can make sense of the growing amounts of data much faster than before (Syrowatka et al., 2021); AI helped predict infection rates and ICU demand and capacity during the COVID-19 Pandemic. This period was time-sensitive (Marr, 2021). AI predicted infection rates, ICU demand, and capacity. AI systems detected an unknown type of pneumonia in China before the world did (OECD, 2020). Besides, AI identified disease clusters, monitored cases, predicted future outbreaks, and mortality risks, and diagnosed CCOVID-19 disease by allocating resources, facilitating training, maintaining records, and recognising patterns. Several AI applications are raising hopes in the pandemic fight. AI forecasts the virus's spread. It was used to develop early warning systems to extract information from social media platforms, calls, and new cities. AI mobilised health applications on smartwatches, phones, cameras, and other wearables. Diagnose, trace contacts, and monitor efficiently COVID-19.

Indeed, the Pandemic accelerated evidence-based AI innovation (McKendrick, 2021). AI and robotics have sped up the growth of digital assistance used in health care applications such as Chatbots and the CDC, in banking and e-commerce to provide conversational tasking with PayPal, and in call centre service. AI-based methods have been developed for pandemic epidemiological modelling. AI-based interventions are helping understand the global spread of the COVID-19 Pandemic.Using composite intelligent technology with the blessing of combined technologies is the future, thanks to the Pandemic. COVID-19 pushes AI research towards global development by highlighting trust, ethics, equality, and sustainability. It remains to be seen if AI is a mass enabler of these technologies through robotics, drones, and vehicle automation and if it will eventually replace human touch, human communication, and the affective domain in all human endeavours.

Privacy and Confidentiality

The virus is a significant impediment to national health-care systems' ability to control the disease's spread and respond appropriately to its numerous effects. Working people had to change their personal dynamics in relation to technology and speed up several lessons in a matter of days. As a result of the increased speed, new innovative solutions in e-commerce and working from home have emerged. Along with social media sites like Facebook, a slew of new communication platforms were unveiled. Although there was a lot of information available, it was also heavily censored by popular platforms like Twitter, Facebook, and YouTube, among others. Because most of these platforms are owned by one of the other corporations, everything appeared to be very well orchestrated and controlled. People had to pay the price in terms of privacy to maintain their relationships and communicate with one another through technology. Dissension was tolerated less than it had ever been. Any information that didn't sit well with Presidential adviser Dr. Fauci, the CDC, governments, and pharmaceutical companies were simply suppressed in the United States, and the WHO remained silent throughout the period, speaking only in a diplomatic and restrained manner. Dissent was persecuted and, in many cases, silenced. rights to privacy have been under siege from various angles, and data deals are just one of them. Personal information should not be treated as a commodity that can be bought and sold by third parties. Buying or selling personal information with the intent of abusing that information in some way is unethical, and personal data was frequently traded off during the Pandemic with little regard for the individuals. This clearly indicates that they will have far less personal jurisdiction in the future to protect an individual's right to personal privacy. This invasion has occurred due to a lack of data literacy among the general public, and the future will tell us how societies will tolerate it. Human rights, such as protecting personal information

and privacy, can be suspended in an emergency. They have the ability to be temporarily reduced in the event of a public emergency (Zwiter and Gstrein, 2020). Another factor that adds to the already complex nature of this situation is the use of data gathered and sourced from corporate agencies concentrating on excessive corporate dominance as a solution to the problem of surveillance capitalism (Zwiter and Gstrein, 2020).

COVID-19 remote work weakened systems against cyberattacks (OECD, 2020); cybercriminals have launched ransomware attacks against hospitals, research centres, and other critical infrastructure. These threats encourage all organisations to adopt cybersecurity best practices and invest in relevant Research and Development (R&D) technology.

Discussion and Concluding Remarks

The Pandemic hastened the dominance of technology in lives worldwide, turning them into digital creatures with all the benefits and drawbacks that entails. It was quickly adopted, and they were critical in keeping our society running during the lockdown and quarantine periods. Some cities in China were in 'static mode,' which we understand is one step ahead of quarantine, at the time of writing this manuscript, amid lockdown protests. The country appears to have implemented an ineffective Zero-Covid policy (Corr, 2022). With the amount of technology available in China, it is safe to assume that robots run the cities.

According to CNN's Fareed Zakaria, who covers international affairs, the fact that we are all still alive today indicates that we survived the Pandemic and are now living in a world that has been changed by its aftermath (Zakaria, 2021). This is not because the Coronavirus has been completely eradicated; rather, we have exceeded an important threshold. On the other hand, we now have a better understanding of what makes a pandemic (Zakaria, 2021). We have first hand knowledge of the difficulties and expenses associated with responding to it. Even if the COVID-19 Pandemic is halted, there will almost certainly be additional epidemics of other diseases in the coming years. We have now entered a new era known as the post-pandemic due to the enormous amount of information and experience we have accumulated. One final sentence to emphasise our point: If one examines the art and science of Omicron mutations, one must conclude that zero-COVID-19 in the era of this variant is a near impossibility. We imagine that even a layperson who lived through the Pandemic would have gained some basic knowledge of microbiology and epidemiology.

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