

A REVIEW OF DIGITAL TECHNOLOGIES IN POST COVID-19 ERA

Okafor Uchenna Rita and Eduzor Chukwunonso Mabel

Department of Science Laboratory Technology, Federal Polytechnic Oko

okafor2uche@yahoo.com

Abstract

The aim of this paper is to know where the digital technologies stand in all aspects of life. What was life with digital technologies before the COVID-19 Pandemic and during the high wave of COVID-19 Pandemic? The high use of digital technologies during the pandemic has made a shift on more innovations on digital technologies. The post COVID -era will lead to more dependency on digital technologies and will lead to a better efficient life.

Keyword: Digital technology, Post COVID-19 era, Benefits, Innovations, set-backs.

Introduction:

‘Digital’ as a word is coined from the Latin word “digitus” meaning finger; and it refers to the one of the oldest tools for counting. Whenever information is stored or converted into a digital form or format, it means it is converted into numbers (which are zeroes and ones). Digital technologies are electronic tools, systems devices and resources that generate, stores or process data.

In recent times, digital technologies have been the core technology used by individuals in all sectors of life (Ogbonnia & Chiamaka, 2020). The widespread use of digital technologies in the forms of various electronic tools (such as computers, phones, robotics, drones, cars and other vehicles etc.) can be witnessed by a great percentage of the world population. The main aim of digital technologies is to form a connection between the individual effortlessly, rapidly and affordably. Individuals are connected to each other with a large range of digital services

(like internet and social media) and resources.

Digital technologies are accelerating far more quickly than anyone could have imagined (Diamandis, and Kotler, 2020) and these have changed almost every aspect of human life in recent years such as communications, work environment, entertainment, travel, banking and commercial sector (buying and selling).

The COVID-19 pandemic (known as corona virus 2019 pandemic) is an ongoing pandemic caused by severe acute respiratory syndrome Coronavirus2 which was first found on December 2019 in Wuhan, China(Ciotti, Ciccozi, Terrinoni, Jiang, Wang, and Bernardini,2020). The disease was declared a pandemic by WHO (World Health Organization) in March 2020. COVID-19 is transmitted through a number of means, primarily saliva, other fluids from the body and excretion. These fluids can spread when an infected person speaks,

breaths, coughs, sings or sneezes; the virus is also spread when an infected person fluid is in contact with surface (making it a contaminated surface). The exact route of transmission is rarely proven conclusively (COVID-19 transmission, 2020) (Karia,Gupta,Khandait,Yadav,2020), but mainly the infection occur when people are near each other for long enough (close contact)(

Ferretti,Wymant,Kendall,Zhao,Nurtay,Abel er,Fraser,2020).

Preventive measures guidelines advised include social distancing, wearing a mask in public, hand washing, ventilation and air-filtering, covering one's mouth when coughing or sneezing, cleaning surfaces with disinfectants self-isolation to people exposed to the infection.

All sectors which also involve STEM (science, technology, Engineering and Mathematics) have all been affected by the COVID-19 pandemic. There is therefore need to check the importance of digital technologies in our world as the world assumes what we called the new normal (Post COVID -19 eras).

The main objective of this work is to see where digital technologies stands in the post COVID-19 era and the way forward for this technology to the world in the future.

Benefits of Digital Technology

Digital technology is one of the innovations that have rapidly grown through the history of life. The benefits of digital technology can be seen various aspect of life such as;

a) Social connectivity: Technology has made it easier to stay in touch with friends,

family and colleagues around the world. Websites, apps and softwares have all been created to help users to socialize.

b) Communication Speeds: As innovation continues to get better in technology, the internet speeds have increased since the early days.

C) Versatile work end: The nature of work has also been changed by digital technology. There are many jobs available that does not actually require the physical presence of the person.

d) Learning Opportunities: Online courses have been an area in which digital technology has imparted the educational sector. Individuals can learn ideas, courses, and topics among others online through the internet. Digital technology also helps people with disabilities in a better way of learning.

e) Automation: Technology has made machine smart, smart technology means it is safer, and has better experience for the user.

f) Information Storage: The storing of information in large scale has been made possible due to digital technology. This storage can also be accessed easily by the user at any given time.

g) Editing: The photography & videoing sector has been improved recently due to digital technology. Editing of text, photos, video can be done easily and better than before.

h) Geolocation: When in a new area or location and one is trying to locate a venue, the use of global positioning system (GPS) and mapping (digital technology) has made it possible and better.

I) Entertainment & News: This sector has also gotten better due to the invention of

digital technologies. It has invented thinks like computer games, video streaming. News can be seen immediately as it is released due to digital technology.

j) Banking and finance: The new norm is online banking performed through a phone application. Bank users now make transfers, pay bills, and check accounts using their apps. Another crucial area in this sector is the financial technology (Fintech).

k) Buying and selling: Online commercial stores have also become a big goal due to digital technologies. Companies like Jumia, Konga, Amazon, Aliexpress has helped in the advancement of buying and selling of goods. There are more aspects of life in which digital technologies has being beneficial to man other than the above mentioned areas.

As there are many benefits of digital technology, so also there are setbacks accustomed to this technology. The digital challenges/set backs are real and prove to be impediments within the course of attainment of knowledge and information (Jansen & van der Merwe, 2015). Some of these setbacks are;

- a) Cyber-crime: This involves illegal activity
- b) Cyber insecurity: The unauthorized use of computer system learning way to combat such negative activities when using digital technologies by individuals are necessary and important.

Covid-19 Pandemic and Digital Technology

Due to COVID-19 pandemic, Authorities and government worldwide have responded by laying rules for travel restrictions,

lockdowns, workplace hazard controls and in some situation complete shutdown of companies and facilities. These have resulted into global social and economic disruption leading to a large global recession. All sector and areas worldwide including digital technologies have all been affected by the impacts of the pandemic.

During the pandemic, digital technologies was a gateway in solving the problems encountered mostly as the world shutdown. The use of digital technology was aimed at protecting individuals, maintaining important services, communicating essential information and fostering socioeconomic interaction for the benefit of all.

During the pandemic we saw the important of digital technology in areas of life as have never seen before.

Examples are:

- a) Buying and selling: Companies like Jumia, Konga, Amazon, Aliexpress were frequently made use of during the pandemic waves by individuals for getting their daily needs. Most of these companies also use drones in goods delivery.
- b) Social Activities: Due to the social distancing rules laid by the authorities, individual resort to social media to get connected to other people around the world which helps in combating loneliness, boredom and extreme cases of depression
- c) Education: Digital technology can be competent and valuable with the main purpose of making improvement within the learning area (Higgins, Xiao & Katsipataki, 2012). The use of digital technology in the educational sector was enhanced during the Pandemic due to the

physical closure of schools. Students are taught through online platforms. Webinars were also used for online seminars and training. E-conferences were also possible due to these technologies.

d) Banking Operations: In the banking sector, due to the restriction of movement, physical money collection was only possible through ATM (Automated Teller Machine) and POS (Point of Sale) terminal.

The current happenings occurring round the world was made available immediately through social media (e.g. twitter). The database used for knowing the number of confirmed cases, active cases recovered case, death as a result of COVID-19 infection was made possible due to digital technologies.

The use of digital technologies has increased during the high wave of the infection (COVID-19) to help in different aspects of life.

Digital Technology in Post – COVID-19

The post COVID -19 eras will make use of more digital technologies in different areas of life. Innovators will find ways to make digital technologies more proficient and more users friendly.

Improvement in digital technologies will also have some negative impact on the social interaction between people. There will be less physical meeting and communication between individuals.

There will be an increase in unemployment due to the use of technologies like use of drones for home deliveries, robots for health and security search of passengers at the airport terminals.

Digital technologies have also resulted to the rampant flow of fake news which has caused fear in peoples and communities at large.

These negative impacts of digital technologies on the societies is one aspect innovators will have to find ways to curb because digital technologies has already come to stay and it will always be the core aspect of technology.

Conclusion

Digital technology is a prominence sector in human life. When individuals make use of digital technology they communicate with others, share information, acquire information, generate awareness, upgrade their knowledge and skills, device innovative strategies and methods in their work and so forth. To efficiently make use of digital technologies, one has to possess the knowledge and skills on how to operate it.

COVID -19 pandemic has ravaged our world and this has led authorities to fall back mainly to digital technologies in helping their citizens for better living. The use of digital technologies during the COVID-19 high wave period has helped the world at large. Thus making scientist, technologists, and innovators to find ways to improve the digital technologies as the world tends to adjust to the new normal in the post COVID-19 era.

Recommendation:

In reviewing the progress of digital technology in recent years, one can see the improvement and rapid progress and changes it makes in all areas of life. It is an innovative sector that man keeps exploring for betterment of life and its endeavors and so I

recommend for more people, institutions and innovators to help in the teaching of how to make use of this inventions.

I also recommend for more ideas and regulations should be introduced so as to curb the challenges which results as to using this technology.

References

- Ciotti, M., Ciccozzi, M., Terrinoni, A., Jiang, W. C., Wang, C. B., and Bernardi, S. (2020). The COVID-19 Pandemic. *Critical Reviews in Clinical Laboratory Sciences*, 579(6), 365-388.
- Diamandis, P.H., and Kotler, S. (2020). *The Future is Faster than you think: How Converging Technologies are Transforming Business, Industries, and Our Lives*. Simon & Schuster, 2020.
- Ferretti, L., Wymant, C., Kendall, M., Zhao, L., Nurtay, A., Abeler-Dörner, L., ... and Fraser, C. (2020). Quantifying SARS-CoV-2 Transmission Suggests Epidemic Control with Digital Contact Tracing. *Science*, 368(6491), eabb6936.
- Higgins, S., Xiao, Z., and Katsipatakis, M. (2012). The Impact of Digital Technology on Learning: A Summary for the Education Endowment Foundation. Full Report. *Education Endowment Foundation*.
- Jansen, C., and van der Merwe, P. (2015). Teaching Practice in the 21st Century: Emerging Trends, Challenges and Opportunities. *Universal Journal of Educational Research*, 3(3), 190-199.
- Karia, R., Gupta, I., Khandait, H., Yadav, A., and Yadav, A. (2020). COVID-19 and its Modes of Transmission. *SN Comprehensive Clinical Medicine*, 2(10), 1798-1801.
- Medicine, T. L. R. (2020). COVID-19 Transmission—up in the Air. *The Lancet. Respiratory Medicine*. 8(12), 1159.
- Ogbonnia, O. O., & Chiamaka, E. (2020). Social Media Network and the Moral Decadence of the African Child; Consequences and Control.