

Challenges at the Time of Covid-19, and Innovation to Combat with Situation

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Abstract- 21st century was moving ahead in a pleasant way. Suddenly it was hit by the pandemic, Covid-19, which changed the life of everybody. Offline mode was transformed by the online mode. The platforms such as Google Meet, Webex, Zoom helped in a tremendous way to connect people and also to complete their work from the available resources at home. E-commerce was at its boom during this period and those who grabbed the opportunities initially were awarded consequently. On the contrary, those who were operating in physical mode were severely hit. For online education, Coursera, Byjus are working to help the students in their respected fields of work. This paper will cover the technological aspects during COVID-19.

Keywords- Pleasant way, Google Meet, COVID-19 etc.

I. INTRODUCTION

Everything before covid-19 was pink or spirit, life was running smoothly, 21st century was blooming like any other day. Thereafter, an outbreak of novel coronavirus began in the city of Wuhan, China which was quickly escalated with confirmed cases in many countries. There were certain symptoms for this virus i.e. cough, fever, cold, pneumonia, etc. due to which the situation of global health emergency was increased. Hence one by one, countries started winding up themselves from public places to international as well as from domestic places also. The situation went out of control as it began to escalate the infected human and surface contact due to which more and more people went into Quarantine.

Technology served people a lot during the pandemic situation. Henceforth, people started working from home through web cameras and video conferencing platforms such as Google Meet, Zoom, WebEx, Microsoft team, app, etc. With the help of digital technology, it has brought new innovations in challenging time. Therefore, it helped in each and every sector like judiciary, corporate, learning education etc. Above raised things took place in online platforms because it made the work easier and flexible.

Without raising the fact, the economy of the countries is not treading worst situation just because of the new age technology. Furthermore, plethora of mental health apps are serving to control the anxiety and stress: many have been made to track the health and situations of covid-19; such as: ArogyaSetu app.

Therefore, all advanced technologies have become the legacy for the challenging situation. They all have bettered not only to professional but also personal lives too.

1. Invention in the span of covid-19:

Epidemic and pandemic have rooted the world since ages. From H1N1 followed by Ebola and SARS we have been learning to develop ourselves more with the advent of each outbreak. Technology cannot vanish the situation but could help to a great extent in its spreading, empowering and warning people.

During 2019, with the spread of the virus, there was an increase in the demand of hand sanitizers and masks which led to the immense shortage of these products in the market. So, to find the shortest way "Automatic mask machines" came which manufactured masks which were 40% cheaper than imported masks.

Rudhaar, a very low cost ventilator was launched by the team of scientists and engineers in India. At the same time Reva University has developed a JeevaSetu Ventilator. Low cost PPE kit has been developed by Indian Navy doctor namely, "NavRakshak". These PPE Kits are made of diaphanous material and could be used in hot and humid weather conditions. Digital thermometers which detect the temperature without actually touching the humans are being seen at airports, offices, railways, hospitals, stations and at other crowded places.

Invention of robotic technology in businesses, Health Care system etc, is a step forward to fight with the virus. There is no break in the use of technology and innovation in the challenging situation of pandemic. These technological advancements have improved our living standards which would not have been possible without data science.

II. LITERATURE REVIEW

(Geetika Sachdev 2020) has talked over OTT platforms which are experiencing high rise in their demand. A recent report made by Nelson found that there was nearly 60% rise in the amount of content people consume during lockdown. Furthermore, according to KPMG report, OTT consumption in India could start seeing a transition shift from the phone's screen to the big TV screen due to the lockdown effect with broadband internet. This pandemic made every sector employees to work from their homes. All the employees from different sectors are adapting this method. It's difficult for people to resume their work from home.

(Mihalis kritikos 2020) analysis has been done by Scientific Foresight Unit (STOA) meticulously on how 10 different technological domains are contributing to fight against the pandemic with innovative applications. It throws light on the significantly legitimate and regulatory challenges and on the socio-ethical dilemmas which is posed by their uses when applied in the public-health emergency context.

(P & Shahid, 2020), whose research is based on experience of the people doing work from home. They summarized that the working atmosphere is a key factor that allows people to work. The enthusiasm depends upon the working atmosphere. Family, being the crucial factor for this situation. Some employees are not able to work when their children and other family members are around.

So, keeping the factors in mind, employers should set up a controlled and supportive environment for the employees to persuade them to resume their work from home and to get the optimum output from employees. Other than the major sectors like tourism, manufacturing etc. The most affected sector during covid-19 is the education sector.

Students are befuddled about the education (Veena Shenoy, Sheetal Mahendher 2020) have found that adoption of technology has created the insurrection in India's higher education. The method has been adopted by higher education in Bangalore and students participation is more than the regular class involvement.

III. RESEARCH METHODOLOGY

The objective of the research is to find the developing trends in technology and its contribution in challenging and difficult times. The research is based on both Primary (survey) and Secondary (journal, articles, blogs, previous reports) data. The survey was conducted among 221 respondents of all ages, occupations and gender and was centric to Indian Nationals which showed that automation has become the fundamental key of combating the situation of pandemic.

From OTT Platforms like (Amazon Prime, Netflix, Sling TV) to work and e-Learning, people are eagerly adopting new innovations and technology.

IV. ANALYSIS AND ELUCIDATION

47% of population has accepted that they are dependent on digital/telecommunication devices.

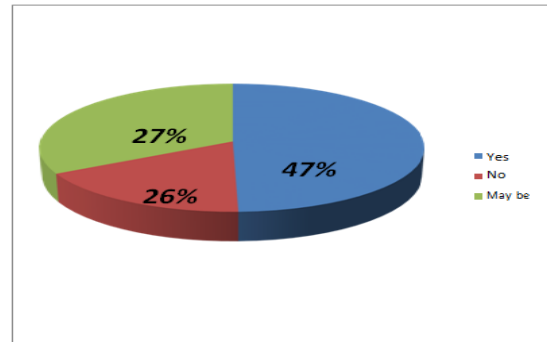


Fig 1. Enslavement to Digital Technology.

40% people accepted, they spend around 4-8 hours on laptop, mobile phones and electronic gadgets.

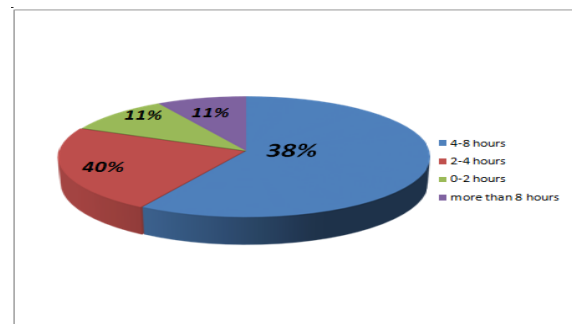


Fig 2. Use of Mobile, Internet or Digital Devices.

Around 70% people accepted the reality that after COVID-19 their life become reliant on social media. Rest, 4% didn't accept the fact. The fear of pandemic made people to stay inside their house.

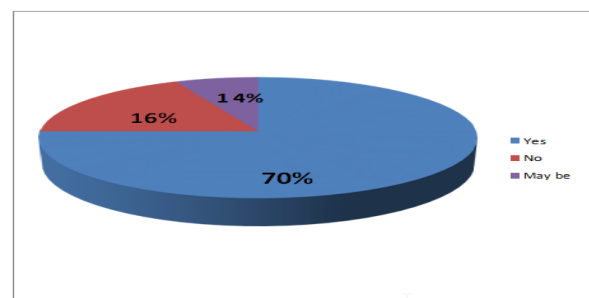


Fig 3. Addiction on social media after COVID-19.

According to the survey conducted after the pandemic the count shows, need of large companies like Zoom, Skype, Microsoft has been increased and heavy traffic has been shown on their app. And the demand of video conferencing apps has been increased. 30% people preferred Zoom, 18% people preferred Google Meet, 15% Skype and 24% preferred Microsoft team.

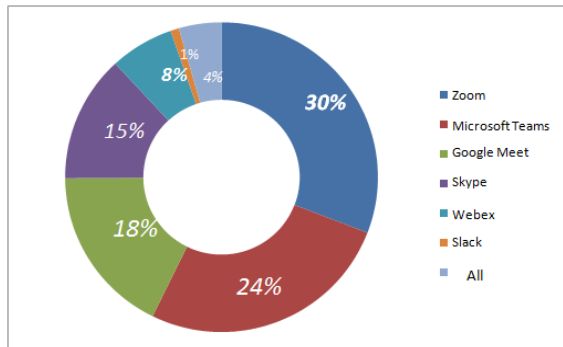


Fig 4. Use of Video Conferencing apps.

Most of the companies and universities have started a short period E-certificate courses to utilize this lockdown period. 65% people are using E-learning platforms to gain knowledge.

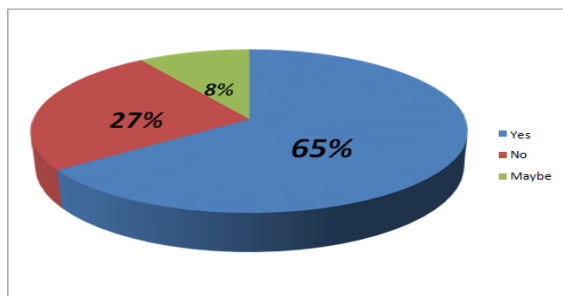


Fig 5. Use of E-learning sites.

During this pandemic, most of the people have faced depression, mental and psychological health problems. To combat this situation people had taken the help of motivational talks and videos, healthy meditation, etc. 45% people use motivational videos for the peace of mind.

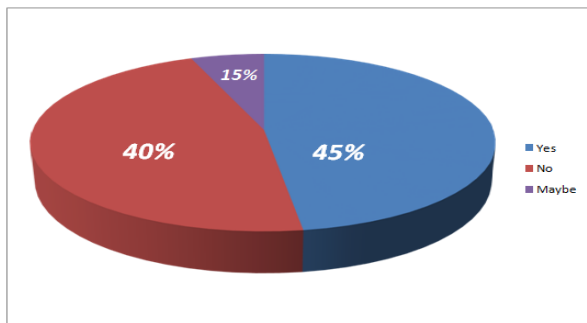


Fig 6. Use of fitness, meditation, motivation and healthy content.

Around 34% people spent their time on OTT platforms like Amazon Prime, Hotstar, Netflix etc. 21% people spent their time on E-learning platforms rest 32% people spent their time on social media platforms.

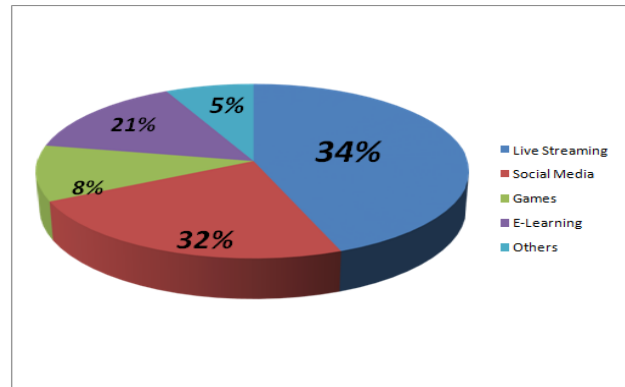


Fig 7. Time distribution at home.

V. DETECTION

Due to this covid-19 new technology and contraction has come across the globe with new technological aspects as most of the youth is at home and doing their work from their comfort zone. Students are attending classes in online mode, professionals are doing their meetings with the help of video conferencing, necessities are being delivered at home.

Ministers and officers are having roundtable meeting and conferences at home, use of OTT (over the top) platform is increasing day by day and this is helping and supporting our lives to fight with this pandemic.

Earlier this was not possible due to lack of resources. But, now a days smart phones, new technologies, new inventions have blessed us with the new innovations of the era which makes our life more thrilling.

1. Growth of apps in the era of Technology to detect COVID-19:

There are so many government institutions, companies, agencies which have really worked hard to track the virus with the help of an app, from their mobile phones. Consequently, "Arogya Setu" app was made which was provided by government for updating about number of covid-19 patients and with the help of Bluetooth and GPS it can detect the atmosphere of one's surrounding.

2. Expansion of Video Conferencing portals like Google Meet, Microsoft Team and other online portals:

Due to this pandemic, the need of communication tools has expanded like zoom, WebEx, Google meet etc. The concept "work from home" isn't a short-term concept because it provides much more flexibility and pliability. All the cloud companies and meeting tools have boosted their concept and configure because they gained a lot.

3. Growth of apps to reduce stress, anxiety and mental pressure:

The spread of Covid-19 has really put in packet one's life, not economically, but mentally, physically and emotionally because the concept "social distancing" made people more anxious and stressed. Excess use of mobile phones and other electronic appliances made their lives more restless.

So, to fight with this battle, many apps have been developed for improvement of mental health and also other apps have been developed which provide meditation, healthy content and wellness to the diseased person.

4. Distance Learning:

Due to the spread of Covid-19 in March 2020, government announced to close the Educational Institutions. So many private companies, digital technologies and cloud companies played a major role to continue this education while sitting at home with the help of MS teams, Zoom, WebEx acceptor.

It includes AI and enabled robotic teachers to carry out online projects and assessment to make students involved and busy.

5. E-Transfer mode of payment:

After demonetization, India is moving towards E-Commerce and to make digital India because it reduces corruption and also it is more convenient to do digital payments. Many apps like Google pay, Phonepe are there which helps us to do online payments. Because the change of cash in physical mode can carry virus. Online payments can be done without physical interaction.

6. OTT Platforms and Online Entertainments:

Online entertainment has played a vital role in this pandemic because due to social distancing, families and friends got separated from their loved ones, but apps like Facebook, Instagram, Twitter, helped a lot to communicate across the globe.

Online entertainment was in demand because it provided all the funny and factual content that reduces stress. Online sources like Netflix, Amazon prime, sling TV etc have boomed their business and gained a lot by providing useful content to their users.

Gyms, cinema halls, swimming pools, malls and restaurant were shut down due to the fear of spread of virus. Sources like OTT platforms bring immense joy to the hearers and helped them to utilise their leisure time.

7. Speedy and Thrifty Innovation:

Due to lack of resources everyone was trying to develop new state-of-art and every country was tried to be innovative. So, millions of hand sanitizers were made within days, thousands of masks were made, low-cost PPT

kit was made, train coaches were converted to hospital wards, etc.

VI. CONCLUSION

In this new era, technologies have helped a lot to overcome this pandemic. This helped in every possible outcome to make our life more comfortable and stress free. Growth of virtual meetings, artificial intelligence based communication, Rular broadband, iot solutions satellite-based asset tracking, 5G etc, are usual which helped us to combat with this pandemic and to save the life from depression.

This catholic didn't come at once but as it spreaded, it ruined the whole globe. N. But the development of technology helped us to combat with the problems and to communicate with our families friends and loved ones. To fight with this pandemic, technology has been the most important weapon that played the vital role from education to entertainment, mental health to healthy wealth, etc. New technology has proved its importance necessity in our lives, COVID-19 has proven that without technology our life is not easy.

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