

Mobile Applications In The Wake Of Coronavirus In India

¹Aniket Das, ²Venkata Sriram Srinivasarao Eluri, ³Rupak Kumar Ghosh, ⁴Arindam Ghosh, ⁵Jadhav Aditya Vishwanath

¹Student, ²Student, ³Student, ⁴Student, ⁵Student,
Lovely Professional University, Phagwara, Punjab, India.

Abstract : WHO has designated Coronavirus [1] as a global pandemic, and people around the world are perturbed. Governments all around the world have put forth their best endeavour to battle with COVID-19. With the whole economy getting mangled with the deadly Coronavirus digital technology and mobile application have been the critical arsenal lately in the war against Covid-19. In this paper, the current study provides a holistic viewpoint on the use of digital technology and mobile application [2] in India for the containment and mitigation of novel Coronavirus and its severe impact on education and health sector. These experiences will lead to better pandemic preparedness and prevention in the future.

IndexTerms - Mobile application, COVID-19, education system, digital technology, India.

I. Introduction

Covid-19 or (SARS-CoV-2) is a deadly communicable disease that was declared internationally as public health emergency by WHO on 30th of January 2020, and ever since it was discovered, it has affected around 200 countries with 40,627,419 cases and a death rate of alarming 1,122,717. With more than 9 million current active cases worldwide to contain and curb the novel coronavirus has put forward unprecedented challenges to the government and people of the world.

With the closure of the schools, colleges and business all around the world mobile application, digital technology and the internet have proved to be the most valuable resources ever possible. The current situation of the pandemic has allowed digital technology and mobile application to proliferate in the health and education sector extensively. India had also been facing route of difficulties lately including steep fall in GDP.

II. Methodology

This document provides information about functional and technical requirements. This paper highlights all User Stories [4] based on the research on user's requirements. For implementation purpose, the document will act as the initial point for designing and developing by the team.

III. India and the pandemic

India with the population of 1.3 billion was one of the first countries that got affected by China originated novel coronavirus reporting its first case on 30th January 2020 and with the surge in cases by late march 2020 the situation in India was alarming. Since then India has been under a nationwide lockdown. Education, business and corporate sector, etc., have been impacted drastically and the result being GDP of India collapsing to -23.9 per cent in the second quarter of 2020.

The educational institution adopted online teaching method since traditional teaching pedagogy were difficult to adhere in this home-quarantine period. In the beginning, it was arduous for both students and teachers to acquiesce with the adopted methodology of online teaching[3] but successive training campaigns assisted students and teachers to cope up with the recently adopted online teaching practices

Govt instigated actions such as Quarantine [4], social distancing [5], containment, screening and launched apps like Aarogya Setu that had played a preeminent role in containment and mitigation of the coronavirus.

In India, Aarogya Setu is a COVID-19 monitoring and tracking app. It provides individuals with self-assessment, contact tracking, disease monitoring, risks assessment and relevant advisories. It connects vital health services with the people and alerts them about COVID-19 cases in their dwelling and also provides with the bed counts in the nearby hospital. The app is the perfect use case of digital technology where technologies like Big Data [6], Machine Learning [7], Artificial intelligence [8] have been used to curb COVID-19.

'Turn the disaster into opportunity' as quoted by the prime minister. This nationwide lockdown from the past several months has endured a drastic impact on the education system of the country. Educational institution and ministry took the initiative to resume education in the country [9]. Therefore, mobile applications like Google meet and zoom are being used in schools and colleges to complete the academic tasks. Online coding and educational platform like Byju's and white hat junior have now taken initiative to train the young minds of the nation. The nationwide lockdown due to coronavirus has provided both youngsters as well as adults with plenty of time to learn about anything they had been aiming for. Online Indian education apps like Unacademy is helping in grapple the new normal, providing preparations for JEE, NEET, UPSC and other entrance exams. Educational institutions such as FIITJEE and Aakash, have shifted their coaching classes to the mobile platform. The promptness and reliability of these mobile application and action plans at this unprecedented time is commendable.

IV. Vocal for local

In early September, amidst of border tension Indian govt. banned 118 Chinese origin Apps in India citing security issues. With more than half a million-user base these apps were accused to be a threat to Indian security and sovereignty by the Ministry of Electronics and Informational Technology. The biggest blow was for top-grossing gaming apps on the list and US also supported these apps ban. This provided a good opportunity for the Indian govt. and the developers to roll out the Indian alternative of these banned Chinese origin apps and promote the make in India campaign in terms of digital technology. Prime Minister Modi in his

monthly talk show have asked the citizens to use Indian goods and service and also promote them worldwide. India not only wants to use its local products but also wants its people to promote the local product among the masses and now since these apps are developed in India itself, we all know that the security and sovereignty of India remain integrated and India stands as a self-reliant nation.

V. Conclusion

In these unprecedented times, India now has faced a lot of hardship lately. India, a country with a population of 1.3 billion, none of us were prepared for what was about to happen. COVID-19 is a highly transmissible virus and spread across India exponentially. The mortality rate against coronavirus is giving jitters to health authorities and government. The whole of the economy has collapsed, disease and starvation simultaneously caused the death in India. Additionally, economic and mental collapse concomitantly along with virus incursion had claimed lives in India. The education sector in India stopped during the early stages of lockdown but due to availability of mobile phones and Wi-Fi network in urban India education resumed online whereas rural India remains unprivileged of education since march and the situation is still questionable.

Necessity is the mother of invention and pandemic forced us to think out of the box. As lockdown and social distancing forced us in the confines of our home, digital technology and mobiles apps have been a lethal arsenal against corona-virus so far. We have been primarily dependent upon mobile application. Mobile applications like Aarogya Setu have helped individuals and health care personnel extensively. Mobile application for audio and video conferencing helped in resuming the education sector in urban India, whereas work from home for job workers has provided relief in mitigating mental stress.

The dreadful repercussion from coronavirus and a probable second wave has left the citizens with a lasting impact. It is hard to imagine the horrific distress caused by COVID-19 will be forgotten over time but still citizens of India have abided to the government guidelines for coronavirus so far. We are still uncertain with the future of this disease due to the high transmissibility rate and no availability of any effective vaccine [10] so far.

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