Chapter 4
Use of Digital Technology to Deal With COVID–19

Alaattin Parlakkılıç

https://orcid.org/0000-0002-6834-6839
Ufuk University, Turkey

ABSTRACT

The aim of this chapter is to determine the areas of using digital technology to cope with the COVID 19 pandemic. PubMed and Google Scholar article content analysis was conducted, the governments' good practices were examined and Turkish filiation implementation studies were combined to obtain digital technologies to deal with COVID-19. The areas have been determined as planning and monitoring, contact tracing, infection screening, quarantine and self-isolation, clinical management, and medical procurement. As a result of the investigation, efforts coordinated by governments around the world have focused on successfully isolating and mitigating COVID-19 to varying degrees. Countries that maintain low COVID-19 mortality rates per person are implementing strategies that include early surveillance, testing, contact tracing, and strict quarantine. The low mortality rate in Turkey has been concluded due to Turkey's Filiation application. Turkey quickly locates and isolates the contacts at the rate, of 99.9%, and filiation success is based on the detection of cases through 10 hours.

INTRODUCTION

Governments are scrambling to find new methods of crisis management as COVID-19 continues to endanger public health and the world economy. The propagation of the infection is managed, tracked, and controlled using digital solutions. The patterns

include strategies like monitoring the COVID-19 epidemic, warning vulnerable groups, adapting social distance, and staying at home (Oecd, 2020).

Contact monitoring is an important public health measure to control COVID-19. Rapid detection and management of COVID-19 cases makes it easier to identify secondary cases from primary cases. Turkish fillation method is a fast and comprehensive monitoring method for Covid-19 contact tracing. In conjunction with robust testing and surveillance systems, contact tracing and strategies to reduce disease transmission are essential. Therefore, Turkish fillation method is an important effort that successfully reduces the number of cases (United Nations, 2020).

A range of digital technologies are employed to battle the disease. Digital technology can be used to identify and track the virus's spread. Information regarding viruses can be given by means of digital technology acting as virtual assistants. Digital technologies can be used with diagnostic robots to predict severe symptoms that require treatment . In addition, digital technologies are used in crowd monitoring to help enforce social distance rules (Karina, 2020). Monitoring and surveillance methods are also used, such as the use of location data stored or generated by the use of smart phones that monitor public surveillance, scanning public areas for affected persons using infrared cameras, facial recognition and computer monitoring technologies (Sanchez-Comas, Synnes & Hallberg, 2020).

The novel severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is the cause of COVID-19, an infectious disease with high contagiousness, a high fatality rate (greater than 1%), and an effective antiviral. The main focus has been to contain and lessen the pandemic because treatment or immunization cannot be given to all societies at once. Pandemic management using mitigating tactics and digital technology that help speed up intervention (Zhu et al., 2020). The following sub-objectives are anticipated as a result of this study's evaluation of the use of digital technology in the fight against disease during the pandemic:

- What are the pandemic's digital technology application areas?
- What are the leading digital technology applications in the world in combating Covid-19?
- How should the digital technologies used in Covid-19 be used?

DIGITAL TECHNOLOGIES IN THE PANDEMIC

Almost all of the methods used to control the COVID-19 are supported by the breakthrough technologies of the 21st century. Digital technologies offer new ways to better detect disease, prevent it, and improve patients. The digitalization process in health, which started in the 2000s, has gained great momentum today. As the World

20 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/use-of-digital-technology-to-deal-with-covid-19/339929

Related Content

Seeking Truth: The Shifting Context of a New Reality
Arthur Shelley (2022). *Handbook of Research on Global Media's Preternatural Influence on Global Technological Singularity, Culture, and Government (pp. 97-120).*
www.irma-international.org/chapter/seeking-truth/296544

A Semiological Analysis of Dudley's Political Cartoons in the Namibian Newspaper
Liicka Andimaand Rewai Makamani (2020). *International Journal of Semiotics and Visual Rhetoric (pp. 47-60).*
www.irma-international.org/article/a-semiological-analysis-of-dudleys-political-cartoons-in-the-namibian-newspaper/268426

Persuasive-Pervasive Technology: Rhetorical Strategies in Wearables Advertising
Jason Tham (2018). *International Journal of Semiotics and Visual Rhetoric (pp. 44-72).*
www.irma-international.org/article/persuasive-pervasive-technology/202475

The Role of Transcreation in Corporate Communication: A Case Study in the US Healthcare Sector
Mar Díaz-Millón (2021). *Innovative Perspectives on Corporate Communication in the Global World (pp. 159-176).*
www.irma-international.org/chapter/the-role-of-transcreation-in-corporate-communication/274641

Interactive Communication Systems and Technologies for Effective E-Learning
Aisha A. Al-Ajeel, Lujain A. Al-Anjariand Muhammad Sarfraz (2020). *Innovative Perspectives on Interactive Communication Systems and Technologies (pp. 277-289).*
www.irma-international.org/chapter/interactive-communication-systems-and-technologies-for-effective-e-learning/255311