

## Chapter 4

# Use of Digital Technology to Deal With COVID-19

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### 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

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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

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