**CHAPTER II**

**REVIEW OF RELATED LITERATURE**

**COVID-19 Pandemic and Digital Technology**

After the COVID-19 pandemic was declared, it presented itself with serious threats to every sector worldwide. Across the globe, collaborative government initiatives have scoped on the aim of deterrence and countermeasures against the SARS-CoV-2 for its concerning transmissibility rate, however, with different levels of success. However, the adoption of rapid digital integration into policy and public health has been critical in achieving the scale of management and information systems necessary for efficient implementation of these policies in the majority of successful countries. Amidst the COVID-19 crisis, it was demonstrated that governments that have sustained low COVID-19 per-capita fatality rates have adopted policies that involve early monitoring, testing, contact tracing, and stringent quarantine regulations (Whitelaw et al., 2020). But one salient characteristics when looking upon these countries is the application of digital solutions regardless of the usage. Hence, digital solutions have proved to be essential when it comes to pandemic management and response.

Digital technology for COVID-19 solutions and public health response has been diversely utilized. One innovative concept that has been implemented during the COVID-19 pandemic is the contact tracing (app-based, centralized, for rapid case identification, which has been is a prime example of the importance of digital integration to the COVID-19 response.

**COVID-19 Information Systems**

**Digos City COVID-19 Information**

The COVID-19 platform would have some recurring feature is its mobile-friendly responsiveness, minimalistic design, and interactivity that makes complex statistics accessible and available in a convenient way. This area of study is important because effective public health information communication plays a crucial part in controlling the COVID-19 pandemic. As the COVID-19 virus continued to ravage the world, adequate, reliable, timely, and relevant information became a highly essential resource for people to be consistently informed. That is why COVID-19 information systems are more critical than at any other time for handling data and information at the pace required by the ambiguity of the COVID-19 situation. Consequently, many have developed approaches to improve and expand the COVID-19 information system and public communication (Clarke et al., 2021; World Health Organization & Others, 2020). Health information systems were expanded at an unprecedented pace due to the urgency of the worldwide need for COVID-19 data and the widespread internet penetration (Ivanković et al., 2021; Max Roser & Ortiz-Ospina, 2022). That is because COVID-19 information systems may support decision-making and help individuals adapt their health behaviors to the crisis.

**COVID PULSE: A REALTIME WEB-BASED PLATFORM FOR INCLUSIVE DIGOS CITY COVID-19 INFORMATION CATALOG AND TRACKING**