

# Chapter 6

## Enhancing Public Safety in Developing Countries Using a Mobile Application Solution: Nigeria as a Case Study

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### **ABSTRACT**

*In today's world, the escalating global insecurity poses significant challenges for both developed and undeveloped countries. The high crime rates and shortcomings in reporting crimes are pressing issues, emphasizing just how crucial it is to ensure the safety of citizens. While law enforcement agencies play a vital role, relying solely on them is insufficient. Embracing modern technology and fostering active citizen participation are essential to address these concerns effectively. This research adopts an agile methodology to tackle the above concerns. The result of this approach is the development of a user-friendly mobile application that leverages cutting-edge technology. The primary objective of this application is to effectively map incidents of crime and provide real-time alerts, thereby significantly enhancing citizen security. With this, users are empowered to report criminal incidents directly from their smartphones, eliminating the need to physically approach law enforcement authorities.*

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## 1. INTRODUCTION

According to a report by the United Nations Office on Drugs and Crime (UNODC), there has been a rise in crime rates in developing countries, with some regions experiencing an increase of up to 3.3% per year (Heikkilä et al., 2021) . Crimes such as theft, assault, and robbery are the most reported, but there has also been an increase in more violent crimes like rape and murder. Due to the threats they have on economic growth and public safety, these crimes have increased to be a major concern for most governments (O'malley, 1992; Kure & Nwajana, 2022) . Particularly, the governments of developing countries have been facing challenges in ensuring the safety of their citizens, and the situation has become more concerning. While the government has implemented various measures to combat these crimes, the problem persists. Therefore, it is essential to explore alternative solutions that could potentially reduce these incidents and improve public safety (Achumba et al., 2013) .

Using Nigeria as a case study, this book chapter focuses on the development of a mobile app solution for enhancing public safety. The purpose of the app is to provide citizens with an easy-to-use platform for reporting incidents of crime and emergencies in real-time, as well as to access important safety information and tips. This will provide the authorities with vital information needed to respond quickly and efficiently to reported crime incidents (Desouza & Bhagwatwar, 2012). This study will explore the effectiveness of the app on improving public safety and reducing crime in Nigeria. Through this, we hope to explore the potential of mobile technology as a tool for enhancing public safety.

The research was conducted by adopting a quantitative research approach. This involved conducting online survey/questionnaires and receiving user insights with a purposive sample of 200 people living across the six geopolitical zones of Nigeria. The users were selected based on their willingness to participate in the study and their experience with crime in their community. The users were recruited using google forms, an online survey platform. The sample size was determined based on the principles of statistical power and precision (Das, Mitra, & Mandal, 2016) . The sample selection was random to ensure that the respondents are representative of users across Nigeria. The survey aimed to gather data on the respondents' perceptions of the proposed mobile app solution, their reactions to public safety mobile apps, and their willingness to adopt it in the future.

The outcome of this research is a comprehensive mobile app solution that addresses the security concerns of citizens in developing countries, with a focus on Nigeria. The mobile app will serve as a platform for reporting incidents of crimes, providing real-time information to the authorities and enhancing collaboration between citizens and the law. Based on the results of the survey, the app was designed to provide relevant safety features, such as emergency contacts, safety tips, upload of media – audio, photos, and videos, SOS alert, and real time location tracker. The app was designed to be user-friendly and accessible, with a simple interface that requires minimal technical skills to use. The research findings was used as a guide in the development of the mobile app solution, ensuring that it meets the needs and expectations of the target audience. By providing an innovative and practical solution to the security challenges in developing countries, this research aims to contribute to the improvement of public safety and enhance the quality of life of citizens.

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