



Industrial Engineering Journal

ISSN: 0970-2555

Volume : 51, Issue 11, No. 1, November : 2022

## **A Detailed Study on Mobile System**

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### **Abstract**

A thorough examination of the latest advancements in mobile systems is given in this review article, emphasizing on three key areas: security, performance, and future technologies. It integrates existing studies and literature to provide a summary of the changing terrain in the design and execution of mobile systems. In addition to exploring modern options like biometric authorization, secured enclave tech highlights the obstacles presented by cyber security threats. The study also discusses how new developments in artificial intelligence, Internet of



Things (IOT) unity, and 5G networks are influencing the development of mobile systems. The review emphasizes the challenges posed by cyber security threats and explores contemporary solutions, such as biometric authentication, secure enclave technologies, and block chain integration.

### **Keywords**

Mobile phones and tablets Mobile Technology Wi-Fi Networks Internet of Things (IOT), computing at the edge, and mobile apps Mobile Security cellular platforms Location-Based Services Mobile Operating Systems Cloud Computing for Mobile and Wearable devices Sensing on mobile Mobile Data Administration User Experience.

### **I. Introduction**

Smart phones and tablets are now the key to merging individuals into an integrated internet in the age of omnipresent computing. In-depth analysis of the dynamic environment of cell phones is undertaken in this research paper, which also examines the complex interactions between hardware, software, and user experience. Understanding the subtleties of mobile system design, security, and performance is crucial as smart phones and other mobile devices continue to pervade every aspect of contemporary life. This paper explores recent research findings, highlighting the most recent advances, enduring challenges and possible future paths in the field of mobile systems. This research aims to offer a comprehensive knowledge to researchers, developers, including consumers involved in determining the course of mobile computing by combining various perspectives and novel developments. Societies and economies are transforming as a consequence of mobile computing, and the Global Internet of Issues may end up to be the biggest network the world has ever seen. There will be links between millions of electronic devices that will encourage development and boost creativity for decades.

While it would appear that the smart phone revolution is now well under way, we are only beginning to look into the way connected technology might be integrated into our lives. We have just begun to consider large-scale systems for the IOT, how they will be put shared, as well as what we will be able to do with them.



## II. Security System

Mobile safety, also referred to as cell phone safety is the protection of smart phones , tablets, and laptops against hazards associated with wireless computing .In the field of mobile computing, its importance has increased. Particularly worrying is the safety of both private and professional data that has recently been saved on smart phones .More individuals as well as companies are making use of smart phones for organizing and organizing their professional and private lives in addition to communicating. These technologies have radically changed how information systems are organized within businesses, which has led to the development of new hazards. Smart phones are collecting and gather a growing quantity of private information, to which access must be limited in order safeguard user confidentiality and corporate proprietary data.

## III. Future Technologies

Since the beginning, virtual reality and augmented reality have generated enthusiasm. Surprisingly, 2021 has seen major advances, and its use cases are not anymore restricted to gaming applications .IOT, which is a network of tangible objects connected by a network and integrated with gadgets, sensors, and software, is everywhere. IOT technology in the smart home is an established instance. The introduction of 5G technology has had a major impact on the field of mobile app development.

Technology is recorded using block chain in a way that makes hacking the system challenging. The rise in confidentiality of information found in apps created with block chain technology enables those apps more secure.

## IV. Conclusion

In the past 15 years, mobile phone networks have been developed along with the advancement of the Internet.

Mobile communications rapidly combined with traditional forms of communication to become a common occurrence in professional as well as personal environments. The tourism industry is unavoidably impacted by this. Smart phones and tablets are now the key to merging individuals into an integrated internet in the age of omnipresent computing. In-depth analysis of the dynamic environment of cell phones is undertaken in this research paper, which also



examines the complex interactions between hardware, software, and user experience. Understanding the subtleties of mobile system design, security, and performance is crucial as smart phones and other mobile devices continue to pervade every aspect of contemporary life.

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Industrial Engineering Journal

ISSN: 0970-2555

Volume : 51, Issue 11, No. 1, November : 2022

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