

5G AND BANKING

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ABSTRACT

Purpose- Technological developments in mobile telecommunications have evolved immensely after the transition from analog technologies that were widely used in 1980s to digital technologies connecting to globe with wireless cellular technologies. This study intends to review telecommunication technologies starting 1970s (1G technology) through 2020s (5G technology) and analyze the expected effects of 5G technology on the future of banking sector. In addition, it is envisioned how 5G technology will shape the future of the banking industry.

Methodology- The study is conducted by having a comparative review of digital technology developments in the last 50 years. This study examines the effects of developments in communication technologies on the banking sector and banking services. The research design of this study is the relationship between the advancements in telecommunication technologies and the future of banking sector. The following section cover the comparison of 1G-2G-3G-4G-5G Technologies.

Findings- 5G banking featuring video communication, data protection and digital wallets will create a permanent shift for banking customers and their habits. Globally, bank customers are adopting to digital apps as their primary touchpoint for their banks and this transformation will change the structure of bank branches as well as financial services industry. As a result of the analysis, it has been observed that an important innovation and structural transformation period has been entered in the banking sector with the use of 3G and 4G compared to the year before 2000, which we define as traditional banking era.

Conclusion- With the wide use of 5G technology after year 2022, the banking sector is expected to enter a new and disruptive restructuring and service innovation. 5G is expected to carry the banking industry to another level where automation and machine-to-machine communication act as a game changer.

Keywords: 5G, banking technologies, advancements in telecommunication, future of banking.

JEL Codes: F10, G10, G20

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