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ABSTRACT

Many elegant applications are being included now that 5G wireless communications technology is accessible. On the other side, 5G criteria are far from combining the needs for the development of new technologies.

These include put off, resource sharing, energy per bit, capacity, and data rate. To fulfill these strict objectives, analyzers are focused on 6G wireless communications, which provides a broad variety of technologies and an array of new applications. A number of executives at some of the world's major telecommunications and technology companies, 6G, the next generation of mobile internet following 5G, is expected to arrive around 2030. In this study, we analyze the network dimensions current scenario and future direction of 6G communication in depth.

KEYWORDS:

6G, Machine learning, Artificial intelligence, IoT.

1. Introduction:

A new communication system is produced roughly every 10 years, increasing new features and technologies. Despite the fact that 5G has not yet been made public, present research is focused on 6G communication technology.

6G will need a shift in the design of communication networks. Multiple important needs must be reconciled. It enables sustainable expansion in a trustworthy manner.

Since the roll-out of 5G systems is well under way, research has switched to 6G mobile cellular technology. This initiative seeks to give a future vision of communication in order to stimulate future study. We strive to present a complete overview of the technology and communication demands in the 6G future.

Some of these characteristics may already be addressed by the 5G architecture. In principle, we believe that any enhancements to the 5G framework that can be implemented to suit new performance objectives while retaining backward compatibility and at a reasonable cost will be included in 5G development.