

УДК 53-3937

Mohamad Mohamad¹, Antonina Afanasieva²

¹student of group PT-812m NU “Zaporizhzhia Polytechnic”

² senior teacher NU “Zaporizhzhia Polytechnic”

FUTURE OF 5G IMPACT ON MOBILE TECHNOLOGY AND IOT

The introduction of 5G networks is poised to have a significant impact on the future of mobile technology and the Internet of Things (IoT). 5G networks are the fifth generation of mobile networks and offer much higher speeds and lower latency than previous generations. This increasing performance will enable a wide range of new use cases and applications, particularly in the areas of mobile technology and IoT.

One of the key areas where 5G networks will have a vital impact is in the field of mobile technology. The increasing speeds and lower latency of 5G networks will enable faster download and upload speeds for mobile devices. This will make it possible for users to stream high-definition video, play online games, and use virtual and augmented reality applications with minimal lag. Additionally, 5G networks will also permit faster connections between devices, allowing for better coordination and collaboration between them.

The impact of 5G networks on IoT is even more profound. IoT refers to the interconnection of everyday devices, allowing them to collect and share data. The increasing speeds and lower latency of 5G networks will allow for larger number of devices to be connected, and will also enable them to communicate with each other faster and more efficiently. This will open up a wide range of new possibilities for IoT applications such as smart cities, industrial automation, and autonomous vehicles.

In addition to the improved performance, 5G networks also provide better security and reliability than previous generations. 5G networks have been designed to support a large number of connections and to handle large amounts of data traffic. This will enable them to support a wide range of

new use cases that were not possible with previous generations of mobile networks.

One of the key challenges of IoT is the sheer volume of data that needs to be transmitted and processed. 5G networks will allow for faster data transfer rates and lower latency, which will allow large amounts of data to be transmitted and processed in real-time. This will permit for a more efficient use of IoT devices and will also enable new use cases that were not possible before.

In conclusion, 5G networks will have a substantial impact on the future of mobile technology and the Internet of Things. The increasing speeds and lower latency of 5G networks will enable faster download and upload speeds for mobile devices, open up new possibilities for IoT applications such as smart cities, industrial automation, and autonomous vehicles and will also improve security and reliability. These capabilities will bring new opportunities for innovation and growth in different industries, but also it will bring new challenges for security, privacy and regulation. As these networks continue to be deployed, it's important for individuals, businesses, and governments to be aware of the potential risks and benefits and to take appropriate actions to take advantage of the capabilities that 5G networks offer.