Although the fact that there is still a lot of innovation in 5G with the publication of new 5G-Advanced standards, Nokia Bell Labs has already begun the process. When thinking about such a future, the following important new topics also stand out together with the new communication requirements.

2. Related work:

Muhammad Waseem Akhtar et al. have looked at the use of deep learning for network anomaly, network setup, and optimization [1].

Data may be sent via 6G with the greatest degree of security available.

AI technology opens up the prospect of autonomous 6G wireless systems. Intelligent agents have the ability to actively and automatically detect issues with networks and resolve them. AI-based network management keeps networks healthy by continuously checking their state.

In addition, AI techniques may give edge computers and devices intelligence, allowing them to understand how to handle security challenges on their own. According to Zhengquan Zhang et al., autonomous applications are also in the works for 6G [5].

Several technologies have previously been highlighted as possibly critical for 6G by studies. Our research examines the various technology's advantages and loopholes and gives suggestions for future study into 6G applications. Amin Shahrak and co. [6].

Almost every 6G vision now under consideration is examined in our study, which provides a thorough analysis of both physical and network layer technology.

Blockchains are used to manage and distribute the spectrum resources since they are unchangeable, unmodified decentralized databases, potentially eliminating the need for a central authority. CIC Senior Member Guangbin Xu and others [8].

For existing wireless communication networks to satisfy the needs of 6G, a number of potential technologies have been put up. According to Hutesh Baviskar et al. [9].

3. Application:

Every communication system offers space for new functions and applications. The emergence of AI, automation, and smart cities came with 5G. These innovations were, however, only partly implemented.

With 6G, more technologies and applications are available that enable faster data speeds, better dependability, lower latency, and secure, efficient transmission.

Fig. 1 depicts the importance of 6G communication.6G offered new uses, trends, and technologies. Some of these 6G technologies and applications are explored in this section.