• WHAT ARE THE FUNDAMENTAL ELEMENTS OF TELECOM.

THE EVOLUTION OF TELECOM

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WHAT IS TELECOMMUNICATIONS?

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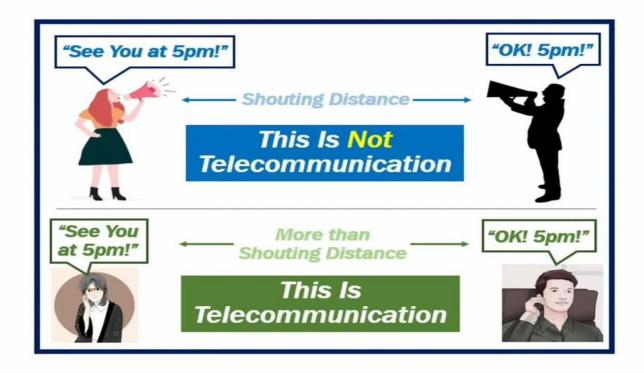


Telecommunications means communication over long distances.

We commonly use the contraction telecom with the same meaning.

It includes the exchange of information via audio, video, electronic data, and other types of transmissions over considerable distances.

Telecom is a huge sector that has grown significantly since the advent of the Internet and mobile phones.



Telecom today refers to any long-distance communication using electronic means.

However, the meaning also includes all non-electronic forms.

For people to refer to it as telecom, the communication must be greater than shouting distance from sender to receiver.



There are many types of telecommunication technologies today.

Examples include radio & TV broadcasting, telegraphs, the Internet, satellites, microwave, fiber optics, landline & mobile phones.

According to Wikipedia:

"Since the 1990s the boundary between telecoms equipment and IT hardware has become blurred as a result of the growth of the internet and its increasing role in the transfer of telecoms data."



Telecommunications has been around for a long time.

Smoke signals, for example, have been used by humans for tens of thousands of years to transmit news, call people to gather somewhere, inform about danger, or ask for help.

The use of homing pigeons began in Ancient Persia thousands of years ago. Ancient Roman soldiers communicated by pigeon post extensively.



A Video Call to Family from Mount Everest

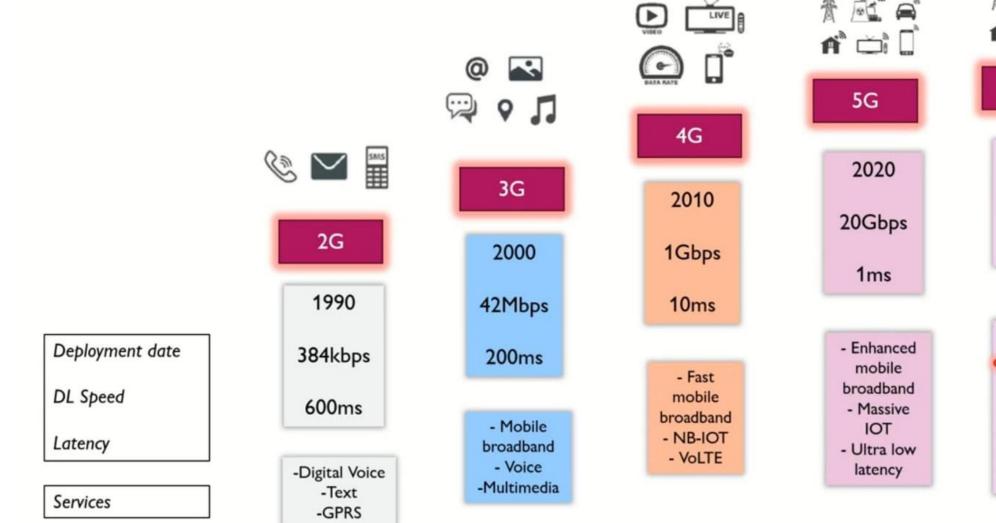
The 20th century saw a revolution in telecom thanks to wireless technology.

Guglielmo Marconi, an Italian Inventor, created a radio wave-based wireless telegraph system at the beginning of the 20th century.

The Internet, which emerged 80 years later, dramatically changed how we communicate on a global scale.

Thanks to smartphones, social media, and emails, we can today stay in touch with people from anywhere on the planet.

Evolution of Telecom Technologies



6G

2030

1000Gbps

0.1ms

- Immersive

comm.

Integrated Al

- Massive

comm.

- Hyper

reliable low

latency