

WHAT IS TELECOM?



Telecommunications have impacted our economic, social, and cultural greatly. There is a strong correlation between economic development and the development of telecommunications.

Telecoms affect how people make decisions, see the world, and develop their intelligence and how governments establish their relationship with citizens.

Telecom is a communication technique to transmit a remote message normally in a bidirectional way (any type of information, whether signs, signals, data, images, voice, sound). In the modern world, telecom includes telephony, data, radio, telegraphy, facsimile and television.

Telecommunications began in 1839 with the initial development of the telegraph on electricity to communicate key messages through electrical impulses. By 1857 the phone was developed, allowing voice communication.

Around 1901 Guglielmo Marconi had made the first radio broadcast that crossed the Atlantic, beginning the use of radio waves, allowing transmit messages wirelessly. By 1927 the first version of a television cathode tube was developed. The term “telecom” was first coined in 1930.

By the 1960s the use of telecommunications was guided by the development of communication satellites and the start of the Internet by 1969.

By the 1980s digital networks appeared and by 1993 the commercial use of the Internet was allowed and simultaneously extended worldwide using fiber optics which allows the flow of large amounts of information.

In 2001, a satellite in Europe made the first transmission of digital cinema.

Telecommunications are currently in a process of convergence through the use of faster devices, compact, multifunctional, leveraging the development of wireless networks. It takes three elements to occur telecommunications:

1. A transmitter converts the message into a physical phenomenon, a signal
2. A transmission medium, which includes a channel that may degrade the signal interference, noise or distortion of the channel.
3. A receiver, able to retrieve the message to which humans can perceive.

Sometimes it is duplex systems, which transmit and receive elements (eg cell phones). When there is only one transmitter and one receiver, communication is a point-to-point, when multiple transmitters and multiple receivers interact called multiple systems. It's called communication network where several transmitters, receivers and channels send messages to each other.

According to the type of signal, communications can be analog (continuous wave signal with respect to the information, so it can be degraded) or digital (information encoded in simple values as 1s and 0s)

The most important physical media are insulated metal cables (telegraph), submarine cables, insulated wires (the phone is the most common), coaxial cable, twisted pair, fiber optic and structured cabling.

Source: <http://www.artinaid.com/2013/04/what-is-telecom/>