



Development of Digital Communication

Digital Communication

Definition: electronic transmission of information that has been encoded digitally (as for storage and processing by computers)



Applications

In telephone networks, digital communication is utilized for transferring many phone calls over the same copper cable or fiber cable



Date Message is sent through a transmission from one source to another

(1906) Teletypewriter

Code

- **Definition:** A system of words, letters, figures, or other symbols used to represent others, esp. for the purposes of secrecy
- **Morse Code (1837)**
 - Variable-length binary code for telegraph
- **Baudot Code (1875)**
 - Fixed-length binary code of length 5

Morse Code (1837)

- Transmits text information as a series of on-off tones, lights, or clicks
- Each character (letter or numeral) is represented by a unique sequence of dots and dashes
- Can be helpful for people with severe motion disabilities in addition to sensory disabilities



Baudot Code (1875)

- Each character in the alphabet is represented by a series of bits (fixed-length of 5)
- Used through communication channels like telegraph wire or radio signals



Binary Code

- Represented by text or computer processor instructions by the use of binary number system's two-binary digits 0 and 1
- ASCII (American Standard Code for Information Interchange): 7-bit binary code



Coding

- **Definition:** The process of assigning a code to something for the purposes of classification or identification.

Scripting Language: Scripting is usually a property of the primary implementations of a language

Programming Language: artificial language designed to communicate instructions to a machine

