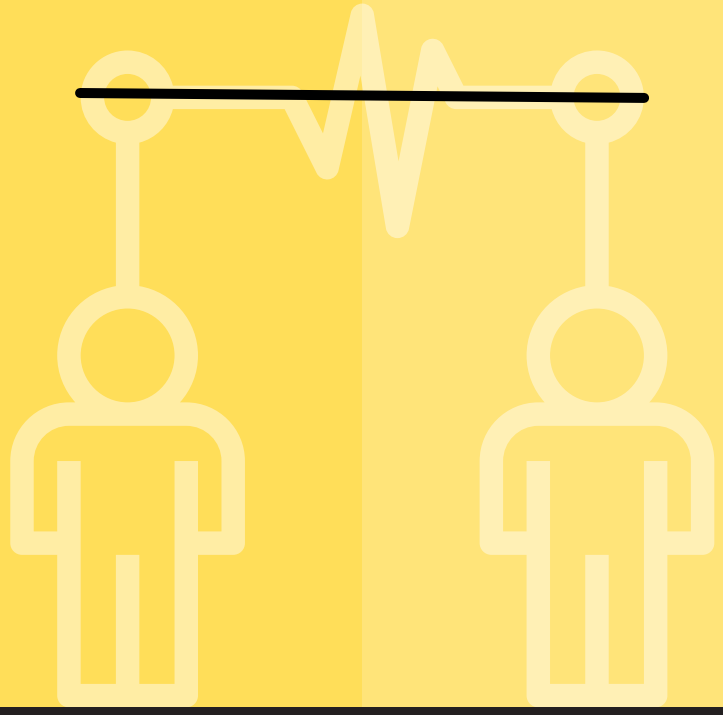
ONE CANNOT NOT COMMUNICATE

- PAUL WATZLAWICK -

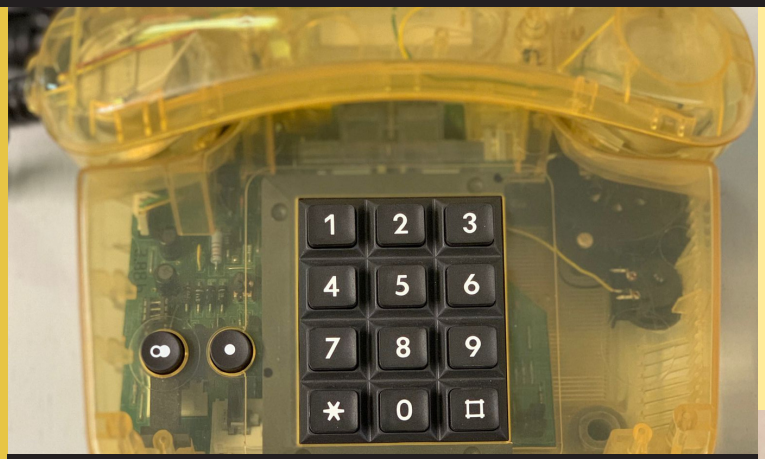


communication technology

Era of manual telephone engineering

With the invention of the microphone and the receiver *Reis* became the pioneer of the telephone engineering. As the first one he transformed audible signals in electronic ones and vice versa. Call connection via manual exchange (Miss of the department).

1861 Johann Philipp Reis, first archetype of a telephone
1876 Alexander Graham Bell, patent for the first usable telephone (Bell-telephone-set)
1877 first telephone-set connection Berlin-Potsdam 23 km
1877 Siemens&Halske produce the Bell-telephone-set
1880 Siemens make the telephone suitable for daily use via induction coil and horseshoe magnet
1881 first exchange agency, Berlin
1877 The postmaster general Heinrich Stephan issued an order in the official gazette of the „Deutsche Reichspost- und Telegraphenverwaltung“(German Empire Post and Telegraph administration) which instructed the usage of the telephone-set.



Era of the automated telephone and radio engineering

At first only in local areas the automated telephone link was possible. In 1927 began the systematical upgrading of the long-distance system. Up until 1966 the realisation of the participant direct dialling and until 1972 the full-on realisation of the direct dialling telephone service took place.

1891 Almon Brown Strowger, patent for the „Stowger-switch“
1896 Ercisson develops the number plate, „dial plate“
1920 the two-motion selector, 1930 the motor-uniselector by Siemens as well as the noble metal motor-uniselector by Siemens via standard of the German Post stayed in use up until the 80s
1937 Foundation of the Empire Post research institute in Berlin, since 1942 research base “Seeberg” Kleinmachnow (broadcasting, telephone engineering, television, broadband technology, radar)

Era of the digital communication technology

Via the advent of the digital ISDN-telephone technology à raise of profitability. For the time being continued usage of “copper”-nets. With the rapid increase of data communication new services and transmission mediums became necessary (internet and glass-fibre technology).

1979 German federal Post decides to digitalize their telephone exchanges
1985 electronic dial system digital (EWSD) by Siemens
1992 digital communication technology SDH (based on optical waveguide) comes to use
2012 today businesses like Deutsche Telekom, the mobile provider O_2 and the net provider Netfox represent the communication technology in this region

The capacity of up-to-date microprocessors, memory circle circuits and optoelectronic transmission methods have revolutionized the communication. We are in the information age!