# Technological determinism



Technological determinism means technological changes in a positive or negative way. Technological determinism is the notion that technologies will inevitably change a society and its basis of different values, virtues, or vices. Social determinism is a theory that proves the superiority of the society over person's nature and thus, over the behavior. According to this point of view it is a society that determines the technologies; their " inevitability" is strongly based on the society needs.

According to Wikipedia a digital (system) is a technology that uses discrete data values. It is the opposition to non-digital (or analog) system, which provides information as a continuous functioning. Digital representations are discrete, but the information they present can be either discrete (numbers and letters), or continuous (sounds, images and other measures). The word 'digital' has Latin root 'digitus' that means 'finger', as fingers were used for discrete counting. This term is widely used in electronics and computer technologies, particularly in case when the real information is converted into binary numeric form as in digital audio and digital photography.

### Network

A network is a set of computers and other hardware components interconnected by communication channels for sharing resources and information. If at least a single device starts one process of sending or receiving data to or from at least one active external device, it is said that the two devices are in a network. In the same way, if more than one computer is connected to another through a communication cable for the exchange of information they create a computer network.

Networks can be classified according to various characteristics, such as the medium used for the data communication protocol, topology, transfer performance and scope. Rules for communication and data formats for the exchange of information in a computer network form the basis for network programming. Computer networing is sometimes considered as a subdiscipline of engineering, telecommunications, computer science, computer engineering or information technology, as it is based on the theoretical and practical application of these disciplines.

# Description of Interactive

Human communication is the basic example of interactive communication. It contains two separate processes: human to human and human to computer interactivity. Human-human interaction is the communication between people.

In addition, human-computer interactivity is the way to communicate with new media. Human-computer interaction model consists of three main components: the human environment, the task and the computer environment of two streams of information. It is the machine, which takes control of communication between humans and computers. We should understand the peculiarities of this process and the tasks performed by humans and by computers. Computer interface shows the information flow and the human control over computer. It is composed of human interactivity and different conceptualization concepts. Therefore, complex systems are able to detect and respond to a human behavior in terms of interaction. In

this perspective, interaction includes responses to human physical manipulations like movement, body language, and changes of mental states.

Automation is the use of machines, systems and technologies to maximize work efficiency. It is suitable to apply automation for increasing productivity and / or quality of human labor, to scale and / or to achieve predictable quality level. Misapplication of automation, which is more common, is an attempt to remove or replace human labor. In short, while the adequate automation can raise the output to 3-4 times without increasing the running costs, incorrect application of automation saves only a fraction of the current level of labor costs. In the context of industrialization, automation is a step beyond mechanization. Mechanization provides operators with machinery to assist in physically hard work; automation greatly reduces the need for human sensory and mental abilities, increases the load capacity, repeatability and speed. Automation plays an important role in the world economy today.

# Data-based Approaches

Database is traditionally considered as a collection of related data. This approach allows several independent users to access the database simultaneously and concurrently. This approach could be used in various fields outside of engineering, ranging from economics to astronomy; it has other names, such as inverse modeling, the time series analysis, empirical and physical models. System identification is a general term to describe mathematical tools and algorithms that are based on dynamic models to

describe the measured data. A dynamic model in this context is a mathematical description of the dynamic behavior of a system or process.

### Cultural forms

Verbal context refers to surrounding text or talk of an expression (word, phrase, conversational turn, speech act, etc.). The idea is that the verbal context determines our understanding of the text as a whole or expression in particular. So, citation of people out of the context is traditionally considered not normal. Contemporary linguistic science often takes texts, speeches or conversations as an object for its analysis. Thus modern studies in the field of verbal context are carried out in terms of analysis of discourse and its inner relations (e. g. interrelations between separate sentences in the text).

## Produsage

It was Bruns who offered a new term "produsage" for description of the community collaboration while creating and sharing the information. He also highlighted its strong influence on the media, the law, economic and social beings, and democratic personality as one whole. "Produsage" offers a new access to conceptualizing these phenomena by removing usual assumptions connected with the age. The research of unusual environments is based on the work in the field of participatory journalism.