

THE HISTORY OF THE EMERGENCE OF INFORMATION TECHNOLOGIES

Usmonov Murod Sadikovich
Jizzakh State Pedagogical University Docent

Abstract

By the concept of information and Communication Technology (ICT), we understand the combination of methods, tools and techniques for searching, storing, processing, presenting and transmitting graphic, text, digital, audio and video data based on personal computers, computer networks and communications.

Introduction

Let's get acquainted with the history of the emergence and development of Information Technology. After a person learned to speak, the opportunity arose to collect information in his memory, which was the first step towards the development of Information Technology. The next step is associated with the invention of writing, which appeared in the 5th-6th century BC. People of that time could not only remember information, but also record it on an item. After a person learned to speak, the opportunity arose to collect information in his memory, which was the first step towards the development of Information Technology. The next step is associated with the invention of writing, which appeared in the 5th-6th century BC. People of that time could not only remember information, but also record it on an item. The appearance of the record made it possible to carry out all stages of data processing: collection, analysis, storage and communication to another person. The first written signs in history were painted on a hard surface. These were separate drawings that reflected the idea of the ancient man about the world and life processes. We can say this is the main form of pictographic writing. In the Bronze Age, images of repeating systems appeared, which today we recognize as ideographic writing. These are the first units of reference that were gradually converted to hieroglyphic writing (this happened in the 6th century BC). The development of handicrafts and production led to the appearance of signs that reflect numbers. In the 3rd century BC, the Babylonians invented a counting system. In the 5th-6th centuries BC, Crete used the tithe system. Later, the Arabs learned to write accounts of Indians. In the 5th-8th century, Europeans used numbers. These signs are the same as today's numeral sign. The next step in the development of information transmission was the creation of a cross-sectional record. During this period of history, the Babylonian language acquires international status and begins to use it in diplomatic negotiations and in the conclusion of trade agreements. Now the information has begun to be conveyed in terms. In the 10th and 11th centuries BC, the Finnish Alphabet was invented, which caused a huge leap in the development of Information Technology. Based on the Phoenician alphabet, the Greek alphabet was created, which later began to be used in the regions of Western countries. The evolution of written signs peaked in the 15th century, when Europeans came up with punctuation marks of the modern type. Mathematical symbols



continue to develop thanks to graduation qualification work and the work of scientists. Fundamental discoveries in mathematics led to the creation of algebraic symbolism. In the 14th and 17th centuries, signs of addition, subtraction, multiplication, equality, Infinity, rank and other types were created. The information exchange system has gone through many stages of development. The first stage was associated with the development of speech, which made it possible to exchange knowledge at the initial stage. Today we use speech as a commonplace, but the emergence of speech is a great achievement in the development of information transmission. Before the invention of paper, the breakthrough in the development of information led to the transition to more stable data carriers — stones, boards, clay boards, etc. Papyrus was used as the first paper analogue. Then parchment was invented, and the book (6th century BC) became the final period of the development of information carriers of the paper era. In ancient times, the methods of information transmission in Greece, the Persian Empire, Egypt and China took on a new look. Within these states, a postal system was used — messengers handed over written messages hand in hand. The first libraries with free access were formed. The library becomes the first reference center in history, where knowledge can be gained by reading on a papyrus. In the 10th century, there was a "paper stage" of the development of AT. This is due to the fact that in the 10th century, paper was produced on an industrial scale. Stable communication channels and a large number of people engaged in data transmission made it possible to provide information to the population of large states. Higher education institutions of Italy, France, Germany and England played the role of informative "banks". The revolution in the development of it was the release of printed books. The first cars appeared in Germany. Books began to be mass-produced, and this was a new stage in the formation of Natural Science. The quality of information transmission began to improve after the emergence of scientific and technical terms. The volume of data increased as a result of the mass production of books and periodicals. Later, huge encyclopedias were created, which made it possible to quickly find information in alphabetical order. A new stage of development in the field of Information Technology began at the end of the 19th century, when the International Postal Service, telegraph, telephone, radio and film Service appeared. In 1911, drawings could be transmitted wirelessly or on television. Large-scale improvements in industrial television, the creation of a typewriter, the emergence of telephone and radio communications, have brought about drastic changes in the field of information processing. The efficiency of data transmission and processing has improved significantly. In the 1940s and 60s, technologies in the field of creating electrical equipment actively developed. After the 60s, electronic technologies were introduced, and the first computers appeared. Now AT has been able to influence not only the form, but also the content of information. As a result of technological progress, the concept of using automatic control devices for technological processes is being developed. At the same time, informatization of Education (electronization) the introduction of electronic means and computer technology was used first in the process of preparing for technical specialties, and then (in the late 60s-early 70s) in the preparation of students in the humanitarian sphere. There was a need to teach the basics of algorithmization and programming, elements of logic algebras, mathematical modeling on a computer. Such training led to the formation of the algorithmic style of thinking of students, a thorough mastery of the



programming language, the development of computer skills. But the lack of software tools understandable to the average user did not contribute to the widespread use of computer technology in the field of humanitarian education. From the mid-70s to the 90s, the development of computer equipment developed. The models produced were much stronger and more convenient than the previous ones, which, as a result, made it possible to use them for the study of various (chemical, physical, social, pedagogical, etc.) processes. In the field of Education, automated teaching, knowledge management and learning process management systems are increasingly used. Modern models are characterized by comfort, large amounts of memory, new information and telecommunication technologies, multimedia technologies and virtuality, as well as an understanding of the process of informatization and its social consequences. The emergence and development of an information society makes it possible to comprehensively apply information and communication technologies in education, which is determined by a number of important factors.

References

1. Law of the Republic of Uzbekistan “on education”, 2020.
2. Dadabaeva R.A., Nasridinova Sh.T. et al. Information and communication technologies and systems. Tutorial. "Psalm-standard", 2017. - 552b.

