"Information technology in the service of authority. Genesis, implementation and use of the Universal Electronic System for Registration of the Population in the Polish People's Republic"

(summary)

In the 1960s, in the West, computers - previously treated as specialized equipment proper only for scientific and military calculations - were used for the first time to process data. Over time, a number of new applications were found for these devices in areas such as accounting, statistics and planning. However, it is not capitalism but socialism (and its inherent idea of the central control of all aspects of life) that was, as it seemed to the theoreticians of this system, simply created to be embraced in the computerization modes.

In the atmosphere of enthusiasm and faith in the new technology, the model of the National Information System was developed in Poland - an ambitious and innovative concept in the world assuming that all aspects of the central state control would be encapsulated by a network of connected IT systems. Computers were to process and analyze mass data on the Polish economy and society, and then provide management at all levels with fast, accurate and well-directed information. However, attempts to implement the National Information System convinced the authorities at various levels that such a system may be - from their perspective - not only inadvisable, but even harmful. Its introduction in a company or institution mercilessly revealed deficiencies in the performed work, errors in decisions taken by management or inaccurate documentation. The idea was therefore quickly abandoned. Nevertheless, one of its elements - the issue of population registration - was taken up at the Ministry of the Interior.

In the early 1970s, the Ministry of the Interior launched the MAGISTER system, gathering information about all Polish citizens with higher education in the memory banks of the departmental computers. Each person included in the system was characterized by more than 130 features, not only as obvious as name, date of birth, completed studies or employment history, but also by full data on the property status, family, housing situation, and even on the distances and travel times to work. Soon enough, MAGISTER became the nucleus of a much larger project.

Since the beginning of the decade, the Ministry of the Interior had been developing the concept of the Universal Electronic System for Registration of the Population (Polish abbreviation: PESEL), which was supposed to collect information on all Polish citizens in computer databases. The best domestic IT specialists were engaged in these works ant they were provided with very good financial conditions and educational opportunities also in the West. During one year (which was unprecedented in those times), a modern building in the capital was also erected for the PESEL project-related works. Thousands of people were hired to integrate and unify all paper registers and personal files kept in state institutions, and then transfer information contained in them to a computer data bank.

An impulse for these costly and labor-intensive activities were the benefits that the Ministry's officers were to gain from the system's operation. After all, PESEL databases were able to provide precise answers to questions about people the Ministry

was interested in. Tedious operational activities that had previously demanded the involvement of a number of personnel became much simpler thanks to the use of computers.

Obviously, the implementation of the PESEL system was to be beneficial also for the citizens. It was to eliminate the need to fill in multi-page forms in offices (which was a nightmare of the reality of that period) and put an end to collecting piles of documents related to medical and employment history. In case it proved necessary to find certain information, all papers would have been replaced by a computer printout obtained in a few minutes.

As was argued, the population registration system should make life easier for the decision makers dealing with, for instance, distribution of kindergartens or schools (the computers would provide data on children at an adequate age), planning public transport routes based on the analyzes of residence and employment data, or health care workers responsible for controlling the fulfillment of the periodic vaccination obligation.

Despite the enormous organizational and financial effort suffered by the Polish People's Republic, all these benefits became a reality only in the Third Polish Republic. The PESEL project, implemented for almost a quarter of a century in the Polish People's Republic, was completed only in the 1990s. The system is still in use today, and its most visible sign - an 11-digit record number - is used by all citizens.

The vision of mass electronic data processing and the application of IT tools for management, strongly promoted at the threshold of the 1970s by IT specialists and economists, turned out to be unnecessary in the practice of the functioning of the Polish People's Republic. A comprehensive description of the history of the PESEL system - its conditions, genesis, implementation and practical use - allows to see how the Polish People's Republic utilized ideologically the previously independent information technology to satisfy its needs and goals. It also allows for making another observation: a country where information chaos prevailed, and computerization was superficial and ineffective, it was possible to computerize and manage it effectively - whenever this coincided with the intentions of the authorities.

As a result, it is the achievement of the Ministry of the Interior (i.e. the PESEL system) and not research institutes or enterprises that remains the greatest success of Polish computer science and also a splendid symbol of the Polish People's Republic. Showing only a section of the socialist reality, it says so much about the Polish People's Republic as a whole.