

THE USE OF SOFTWARE AND SOFTWARE TOOLS IN THE CONDUCT OF SOCIOLOGICAL RESEARCH

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Abstract

Research can be expressed in a targeted theoretical way. In this case, the main emphasis in the preparation of the program is on theoretical and methodological problems: interesting the issues will focus on the study of scientific literature, the construction of the concept of the subject of research, etc. In this case, the object of research is determined when performing additional theoretical work. The study works on the program taking into account the social characteristics of the social object after receiving a specific social order. Sociologist his research the subject searches for the object of study in accordance with its concept.

Keywords: Sociological research, research program, software, software, software tools.

Introduction

In the process of the transition to current market relations, significant changes taking place in society, relations between people cannot be studied on a scientific basis without practical sociological studies. It is necessary that the scientific management of society always rely on the results of practical sociological research. In solving existing social problems, in the social development of society and its management on a scientific basis with the provision of a planned forecast, the results of practical Sociological Research perform important tasks.

Particular attention should be paid to its methodological basis in order to ensure that empirical data is reliable, scientifically substantiated, in order to increase the quality level and effectiveness of sociological research. In this section, let's dwell on xycycu, the methodology, main methods and means of conducting practical sociological research.

MAIN PART

Practical sociological research can be obtained as a sequence of logically related methodological, methodological and organizational and technical processes. The main objective pursued from this sequence of prosedures is to obtain empirically verified substantiated information about the social phenomenon or process under study. Two main methods of obtaining sociological knowledge are officially recorded. These are empirical and theoretical methods that in their place produce two levels of sociological knowledge, namely empirical and theoretical. Until the end of the 19th century, the development of theoretical and empirical sociology was special. From time to time there was a debate about the ratio between theory and empiricism. In the late 19th and early 20th centuries, the famous French sociologist Emil Durkheim was able to combine theoretical and empirical sociology in his scientific activities.

Today, the production of software products, which are considered the basis of the development of the information and communication sphere, is of particular importance as an important condition for the development of the national economy. The effective use of information exchange



technologies, which are actively used in every aspect of our life, depends on the uniqueness, popularity and innovative novelty of the software in them. The laws “On informatization”, “On Telecommunications”, “On the protection of ECM programs and databases” are important in the development of the industry.

Today in our country there is no sphere in which information and communication technologies have not penetrated. This, in turn, opens a wide path to the consistent development of the softwares industry. In particular, more than 260 business entities engaged in the creation, production and implementation of software products are currently operating in our country.

Sociological research is not limited to the fact that it simply captures the main socio-political events taking place in society, but also comprehensively reveals its true essence and content. In this regard, sociology is also valuable among the social sciences for its precision and concreteness, the fact that its scientific answers to the questions under consideration are based on details and have been repeatedly verified. The methodology of sociological research also provides a basis for predicting the level of change in the prospects of social situations, not limited only to a full-fledged response to the current state of social situations. The analysis of empirical data consists of a set of organizational, technical, methodological and mathematical tasks carried out at the final stage of sociological research.

"Sociological research techniques-represent the unity of special methods, expressing the productive and in-place use of one method or another. The sociological research process refers to the method, tool, process of completion of all cognitive and organizational activities of the organization of research"[1].

The next stage in the development of information techniques is associated with the emergence of technical means of information transmission (Telephone, Telegraph, radio). But the psychophysiological capabilities of a person as a reflective system gradually collided with the complexity of controlled processes, and this led to the emergence of a completely new means of information-computers. With the advent of computers, a new stage in the development of the media began. A person, trying to overcome the psychophysiological limitations of his organism with the help of technical means, is imposing mental labor, information processing and even some abstract thinking functions on information techniques.

The emergence of modern information technical means is based on the advanced achievements of the development of Science and technology-electronic industry, communication technical means, audiovisual techniques. Informatics embodied the new relationship of Science and production.

In the early stages of Social Development, people used natural means of information transmission, and later created them. At the next, civilizational stage of the development of society, information technology is associated with the emergence of artificial external memory – writing. Writing played a large role in the human transition from biological evolution to social evolution, greatly increasing the level of social character of his knowledge of being.

There are different views on the prospects for the development of computer technology. According to some experts, in the near future, an incredible increase in the quality and quantity of computers will occur. Others estimate that silicon technology will be the complete opposite as a result of its loss of relevance. But now other materials with semiconductors are also being tested, in the future it is envisaged to create a "neural-network" approach to the construction of computers, optical elements, computers on the basis of Molecular Biology. As always, the obsolescence of



one natural principle leads to the transition to new natural principles, materials, energy.

The development of software tools has become a major network, the profession of a programmer – a mass profession. In the US, the programming industry is now growing by 30% per year. It is no coincidence that about 70% of the world software production industry belongs to the United States. The total number of software services firms exceeded 4,000 in the US, 3,000 in the UK, and 2,500 in Japan[2].

Various software products are used to process and analyze empirical information. In particular, data analysis is possible using the Microsoft Excel office application, as well as a number of add-ons to it: "Data Analysis", AtteStat,

Real Statistics, Sigma Magic, Statistician, StatPlus, XLSTAT. The analysis of arrays of sociological information is usually carried out using universal statistical packages. According to the results of the study of publications in the Google Academy search platform for 2018, it was found that today SPSS Statistics, SAS, R, Stata are most often used when writing scientific papers. For twenty years, the leadership has remained with the SPSS program, currently owned by IBM. The undeniable advantages of this package are a friendly graphical user interface, data management and statistical analysis capabilities, and the presence of a command language (syntax). SAS and Stata have great capabilities compared to SPSS in programming user applications.

For structural equation modeling and, in particular, confirmatory factor analysis, specialized packages IBM SPSS Amos, LISREL, Mplus, SmartPLS are used, and for latent class analysis - IBM SPSS Amos, Latent GOLD and Mplus. It should be noted that in addition to commercial software products, there is also freely distributed software for solving problems of processing sociological survey data, for example, R, SAS University Edition, PSPP.

On August 21-26, 2023, the International University of Westminster in Tashkent organized a summer school with the cooperation of the Association of sociologists of Uzbekistan, the International University of Westminster in Tashkent and Friedrich Ebert in order to develop scientific dialogue with leading scientists in sociology and related fields for young students, doctoral students, teachers, researchers and practitioners.

This school will help sociologists of Uzbekistan join the international network of sociologists and improve their scientific qualifications. In addition, there is an opportunity to join the International Association of sociologists and the Association of sociologists of Uzbekistan, to demonstrate its sociological activities on a global scale.

This school was held with the aim of improving the qualifications, professional knowledge and skills of talented and most active young sociologists, students, undergraduates, doctoral students, the formation of research skills in accordance with international standards using scientific and practical methodology and methods, and the qualitative and effective development of empirical sociology in the future.

The correct analysis of the results of sociological research makes it possible to effectively use them in the future, in managerial activities, in the prior perception and planning of social processes.



CONCLUSION

Preparation of recommendations consisting of the main proposals arising from the analysis of reporting data is an integral part of any report. The recommendations are of a defining nature and include aspects that apply only to scientific and practical activities. In doing so, it should be assumed that in the event of a doubt about the correctness of the recommendations given, individuals should be able to obtain the necessary grounds from the context of the report. If the analytical sections do not include the necessary calculations for some reason, the practical proposals are not justified, further further research should be indicated.

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