



The Role of Information Technology in Improving the Quality and Efficiency of the Process of Building and Construction in Uzbekistan

Tukhtashov Baxadir Narzievich

Senior lecturer, Samarkand state architectural and civil engineering institute

Abstract: *This article focuses on the coverage of technological processes in improving the quality of buildings and structures under construction in Uzbekistan. In addition, the cost of construction and installation work is taken into account.*

Key words: *buildings, structures, installation, technological process, construction and installation works, construction*

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Introduction

The construction of buildings and structures should be started only after the completion of the appropriate organizational and technological preparation. It should be noted that it is necessary to consider when choosing methods and methods.

Organizational and technical preparation for construction provides: systematic deployment for the implementation of construction and installation works; rational organization of them in the general technological sequence: reduction of the cost of work; improving the quality of construction.

First of all, the following organizational measures are carried out before the start of work on the construction site:

- drawing up a master plan for the development of a land plot;
- selection of a house project, development of working drawings and estimates;
- calculation of the amount of work by type and structural elements;
- drawing up specifications for the purchase of engineering equipment, metering and control devices, cable products and other products;
- solution of the issues of stage-by-stage provision of construction with materials, products and structures;
- selection of a construction organization for the implementation of the planned construction;
- reaching an agreement with a specialist, a trusted person of the developer on the performance of the function of technical supervision of the customer's construction lawyer;

- determination of the scope of work, deadlines and the number of workers for each stage of work (installation of foundations, walls, partitions, ceilings, roofs) in accordance with the labor costs indicated in the estimates.

Materials

The composition of the work of the preparatory period, the developer should bear in mind that before the start of construction, it is necessary to get acquainted with the legal framework governing the construction of real estate in this area.

After the implementation of the organizational measures, the preparatory period begins, during which they carry out work to prepare the site for the construction of a residential building and other structures:

- drawing up a construction plan for the site;
- clearing the territory of the construction site and demolition of buildings that are not used in the construction process;
- sampling of fertile soil layers from the locations of the proposed buildings and their storage in dumps;
- Territory planning and provision of modern surface water flows;
- designation in nature (on the ground) of the main axes of structures;
- artificial lowering (if necessary) of the groundwater level;
- arrangement of temporary entry and exit of vehicles on the territory of the site;
- site fencing devices;
- laying of temporary water supply and power supply networks;
- arrangement of sites and premises for storage and preservation of materials, products, structures and equipment;
- preparation of temporary premises and conditions for nailing workers;
- providing the construction site with fire extinguishing means.

Methods

On the diagrams of the building plan of the site, they indicate: the boundaries of the site; departure to the site; outlines of objects under construction; lines of temporary networks of water supply and power supply; storage areas for materials; storage place for the cut off fertile vegetation layer; the place of storage of the foundation pit and others.

The implementation through the above organizational and engineering and technical measures for preparation for construction depends on the choice of the project, the composition of the working documentation, the professional level of those who will carry out the construction.

Results

The cost of building buildings depends on the choice of the type of buildings, the composition of project documentation, the quality of engineering equipment and building materials used, the amount of preparatory work and other reasons.

The structure of construction costs, let's say for a turnkey house, is distributed approximately in the following ratio (Table 1).

Table 1. Cost structure for building a house

No	Name	Expenses, %
1	Box	40
2	Heating	9
3	Water supply, sewerage	7
4	Electricity	6
5	Finishing work	38
Total		100

The costs of building the "box" are distributed roughly in the proportions indicated in Table 2.

Table 2. Box costs

No	Types of jobs	Expenses, %
1	Foundations	15
2	Walls	30
3	Slabs and stairs	12
4	Roof	18
5	Facades and openings	25
Total		100

Conclusion

However, these percentages of costs for each particular home will differ significantly in some respects.

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