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FINANCIAL AND ANALYTICAL SUPPORT OF THE INNOVATION STRUCTURE - THE COMPLEX OF URBAN ENERGY RECONSTRUCTION

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Abstract: *As one of the promising forms of integration, various complexes appear in the urban planning structure. The tendencies of the economy of the modern information society are such that the driving force behind the innovative development of society is science. It is offered to create in the city of Odessa "the Corporate scientific and technical complex town-planning power reconstruction "CSTC T-PPR", as innovative organizational structure which uses in practice the saved up scientific and technical potential for reconstruction of buildings of historical building of Odessa under standards power efficiency. The estimation of quality of operated processes "CSTC T-PPR", as modeling of function of scheduling and management is executed. The presented model of an estimation of quality of management is effective as allows to estimate dynamically result of administrative activity and on this dynamics to form detailed enough forecasts of development of operated process.*

Keywords: innovative structure; an operational administration building; the building organization; a corporate scientific and technical complex; town-planning power reconstruction; finishing labor.

A problematic urgency – in Odessa isolated building contract organizations (constantly varying), performing works at low scientific and technical level, without the general vision of a specific problem of reconstruction of historical building of a city are engaged in reconstruction of historical building of a city.

Problem statement in a general view – as one of perspective forms of integration various complexes act in town-planning structure; in the course of formation of plans of social and economic development of large cities even more often there is a situation when for increase of efficiency used financial, material and a manpower concentration of efforts, but also new progressive forms of the organisation of building manufacture – corporate, scientific and technical is necessary not simply, power efficiency [1].

Research objective – to offer the organizational structure using in practice the saved up scientific and technical potential for reconstruction of buildings of historical building of Odessa under standards power efficiency and to execute formation of streams (in the matrix form) a method of calculation of the organisation of internal painting and decorating of the Corporate scientific and technical complex town-planning power reconstruction "CSTC T-PPR" – a method of continuous development of fronts works.

Tendencies of economy a modern information society are that, which the science [2, c.29] becomes motive power innovative development of a society. For hi-tech, high technology, technically difficult goods and services the competitive potential is very important, as the enterprise, not capable to create the competitive goods in the future and services, it can appear in general the bankrupt. In the present it in the market can have competitive goods, but it a fruit of last works [3, s.21-22]. The concept covers «a town-planning heritage» both separate buildings, and large quarters, zones of the historical centers and a city as a whole. «The city is the integral of human activity materialized in architecture...». Such capacious definition to a difficult city organism was given by architect A.K. Byrov [4, c.103]. A new city – the instant phenomenon. Time having arisen, it becomes a historical category in the course of the development and is object of modern consideration. Value of a historical architecturally-town-planning heritage is defined by following positions [4, c.105]: architectural and town-planning achievements of last epoch are one of the major components of a historical and cultural heritage; history and culture monuments, the historical architecturally-spatial environment enriches shape of modern cities; presence of the developed ensembles causes aspiration to harmony with surrounding context.

According to varying social and economic conditions of a life in a city organism naturally die off old fabrics and are born new, therefore updating of cities occurs consistently, by replacement of an out-of-date supply available and gradual transformation by this basis planned structures in whole or its separate

elements. The purpose of reconstruction and restoration of an architecturally-town-planning heritage is preservation of composite and aesthetic features of the historical city environment. Town-planning reconstruction is a purposeful activity on change before the generated town-planning structure, caused by requirements of development and perfection. The concept reconstruction of cities has double sense. On the first, it reflects development of the occupied places, improvement of their spatial organisation, proceeding long time. On the second, it is material result, a building condition at present. Only having understood these parties of reconstruction in their interrelation, it is possible to approach correctly to an estimation of problems and to establish methods of a reorganization of cities. Reconstruction - the continuous process which is passing in each city differently depending on the previous growth and modern requirements. It predetermines value of a city as historical phenomenon in which various epoch intertwine. And in a modern city organism its components [5] continuously change.

As leading sign expediency application coordination principles of management the generality the economic purposes and the problems, demanding industrial cooperation acts.

From positions methodology management CSTC T-PPR is the economic object the new class which has received the name integration. Its specificity follows from its integrated approach that assumes.

High level coincidence interests of the basic industrial organizations entering in CSTC T-PPR at preservation a branch accessory and its corresponding inclusiveness in branch systems of planning, financing, logistics and management.

The interrelation of economic activities defining them dependence in achievement both own, and branch purposes, forming the given complex.

Territorially caused social and economic unity, impossible without realization the coordinated economic policy, free from administrative restrictions.

Such are the most general features, testifying that at the organisation management CSTC T-PPR it is impossible to adapt only an operating economic mechanism, search of new forms and methods is necessary. In effect, the main problem is today a maintenance coordination in activity of the controls concerning various links and levels building branch. Suggest them to unite "under the general roof" more often. But such structures are too bulky, unhandy, and are not always realized in practice, especially in building. It is necessary to organize thus participants CSTC T-PPR that they, realizing own purposes, would reach also the general results - we will tell, with partners in building of those or other building objects or with accessory manufacturers, though and not participating directly in works, but providing them, etc. Such mechanism is a coordination. Integrity CSTC T-PPR is given by not so much spatial organisation, how many that end result - a product of manufacture of reconstruction which and is created by builders. Now, when the emphasis becomes on economic control levers, neglect lessons coordination management in relation to primary economic cells are necessary for considering.

Line methods the organisation works can be calculated in the different ways, therefore they have received names of methods calculation the organisation works. We will consider a method of continuous development fronts works (M-CDF).

For a conclusion of the basic settlement formulas the size carrying the name of the period expansion which defines a difference between the beginning the subsequent work on private front I and the beginning of previous work on the same front − $T^p_{j, j+1}$ is entered into consideration. Clearly, that the work first in a technological order is not preceded by any other work and, hence, its beginning is accepted by the zero. Thus, having defined the beginning the first work and the corresponding period of expansion the second work, it is possible to calculate the beginning its manufacture on private front I etc. (on an induction) before definition the beginning last kind of work.

Having calculated the beginning of last work taking into account restriction on a continuity performance of works, it is possible to define general duration of all complex works under the formula (1):

$$T = \sum_{j=1}^{n-1} T^p_{j, j+1} + \sum_{i=1}^{m} t_{n,i} ,$$ (1)

Where $T^p_{j, j+1}$ – the period expansion the subsequent front of work concerning previous; m – the general number kinds of works (a current serial index, i); n – the general number fronts of works (a current serial index, j); $t_{n, i}$ – duration i works on last private front.

For definition of values the periods expansion the subsequent fronts of works we will take advantage a condition (2) at which prior to the beginning any simple work, work the same kind previous on front should be executed:

$$T_{j,j+1}^{p} = \max_{i=1,m} \sum_{k=1}^{i} \left(t_{j,k} - t_{j+1,k-1} \right)$$

, (2)

Where $t_{j+1,0}$ – the operation time a zero kind equal to zero.

For M-CDF restrictions forbid negativity of resource communications.

Let's take advantage the previous formula (2) and we will define the periods expansion works II, III and IV, shown by following formulas (3):

$$T_{II}^{p} = \max \begin{cases} 7-0=7 \\ 7+2-0-9=0 \\ 7+2+13-0-9-3=10 \\ 7+2+13+5-0-9-3-17=-2 \end{cases} = 10;$$

$$T_{III}^{p} = \max \begin{cases} 9-0=9 \\ 9+3-0-6=6 \\ 9+3+17-0-6-2=21 \\ 9+3+17+8-0-6-2-11=18 \end{cases} = 21;$$

$$T_{IV}^{p} = \max \begin{cases} 6-0=6 \\ 6+2-0-8=0 \\ 6+2+11-0-8-3=8 \\ 6+2+11+4-0-8-3-15=-3 \end{cases} = 8.$$

(3)

Conclusions:

1. It is offered to create in the city Odessa "the Corporate scientific and technical complex town-planning power reconstruction "CSTC T-PPR", as the innovative organizational structure using in practice the saved up scientific and technical potential for reconstruction buildings historical building of Odessa under standards power efficiency.

2. Formation of streams (in the matrix form) on a method of continuous development of fronts of works (M-CDF), as line method calculation the planned schedule performance internal painting and decorating of the Corporate scientific and technical complex town-planning power reconstruction "CSTC T-PPR" is executed. The considered method calculation a building stream effectively to apply in need delivery in operation building objects in limiting deadlines.

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