

Strategic directions of personnel potential forming of a building complex

Marina Simonova^{1,*}, Natalia Shekhova¹, and Sergei Kolesnikov¹

¹Samara State Technical University, Institute of Architecture and Civil Engineering, Molodogvardeyskaya str. 194, 443001 Samara, Russia

Abstract. The analysis of directions of strategic approach forming of labor potential management of a building complex is carried out in this paper. On the basis of this analysis the system of actions for strategy forming divided into consecutive stages is offered. The development of the personnel forecast is a strategic planning basis. One of personnel forecast variants is the correlation of needs estimates in personnel of a building complex with available allowances. On the basis of the personnel forecast strategic analysis it is possible to compose working programs for the stated goals of implementation. Operational assessment of personnel requirements of a building complex is proved to be combined with strategic objectives. Some assessment approaches to qualitative and quantitative need for specialists of a building complex are offered. The fact that high-quality labor power supply system of a building complex with should be based on industry development forecast and increase in construction products competitiveness is revealed in the article. Strategic management priority will allow to react immediately to the current situation changes, to introduce amendments both into tactical, and operational management.

1 Introduction

Construction industry crisis solution is confirmed by increase in amounts of housing constructions taken into use in 2014-2015 [1] and increase in demand for a wide range of specialists and professions and, first of all, highly qualified workers in case of significantly smaller labor power offer, especially of a required qualification. The tasks set by the Government of the Russian Federation for construction industry assume the growth of housing construction volumes to 100 000 000 m² annually that requires the corresponding supply of the all branches of industry including staffing. However, professional education has been suffering for several years some consequences of demographic recession of the 1990s and in several years it is necessary to be ready to essential offers reducing in the labor market. Such aspects as low level of labor migration, some peculiarities of emigration and immigration processes, training duration of qualified specialist and many others should be taken into account. Short-term programs of the labor market regulation do not always give necessary effect that leads to demand contraction and unemployment growth [2].

* Corresponding author: m.simonova@mail.ru

Perspective programs allow to perform alternative demand and supply scenarios of labor power, employment structure according to gender and age [3]. It is necessary to estimate current personnel demand as well as a long-term perspective to accomplish stated plans, determine forthcoming tasks and their timely solutions increases and that assumes determination of the main objective of such planning and its decomposition.

2 Main Part

The main objective is to provide necessary amounts of construction and quality of the construction objects being built. Such a broad objective definition requires formulation of sub goals and is true for a number of tasks having various nature, resources and solution sequence.

According to the objective set it is possible to formulate top sub goals that help to determine the directions of subsequent solutions and actions:

- Regulation of professional education structure and content: order forming for specialists training of all the levels of professional education according to quantity and quality. The order initiators can be: the state; self-regulatory organizations; target orders from organizations; population (for-profit education).

- Regulation of professional labor market: reconciling demand and supply taking into account innovative production development, automation, work mechanization that can result in occupational skill structure change in terms of professional groups and specialties.

- Reasoning opportunities for implementation of investment and construction projects on certain territories: assessment of the existing personnel and human resources, cost and time assessment to hire labor power attraction of required quality and quantity.

- Reasons for planification, site and territory development: formulation of top solutions development directions of certain resettlement and industrial project zones based on the planned construction amount.

- Providing interrelation of economic, social planning with implementation of investment and construction objects: calculation of needs for social, medical, educational services depending on the changing resettlement density.

- Regulation of labor migration, emigration and immigration processes: forecasting the need for labor migrants of various territorial entities of the Russian Federation, involvement of qualified personnel, target training and national processes management.

- Professional orientation for the population of all age groups.

- Ensuring the continuity of generations of builders, designers, researchers.

Taking into account strategic personnel goals, it is possible to develop operational and tactical plans to provide investment construction programs with human resources. Both operational and strategic assessments of personnel requirements of a building complex are necessary since operational forecasting is not sufficient for the majority of stated sub goals and all the objectives can't be achieved without strategic planning [4].

There are essential distinctions in staffing needs planning on the near and longer time lag thus only confirming the urgent need in both types of planning.

Features of human resources planning for a period of 1 up to 3 years:

- Relative calculations accuracy owing to the available data on the objects being built and planned to construction, financing sources, applied technologies, approved wage rate in the estimated project cost, a personnel situation in the region.

- Discrepancy of planning terms and investment building cycle volume.

Features of advanced and strategic human resources planning for a period of 3 up to 10 years and more:

- Compliance of planning terms and investment building cycle volume.

- Difficulty in forecasting the structure of qualification groups, specialties owing to technological mode change, acceleration of innovative process, scientific technical progress.

- Difficulty of accounting demographic and migration factors on personnel resources of regions.

- Educational system lag effect, long period of training and adoption of continuous education system during life.

- Approximation of calculations owing to a large number of unknown factors and expert evaluations prevalence.

- Dependence of predicting assessment accuracy on political and economic situation in the country and in the world.

It is possible to offer several approaches to the assessment of qualitative and quantitative need for specialists of building complex:

- The forecast "from achieved" can be conducted on the basis of data correlation of the construction amount being carried out currently and the number of personnel. These data can be obtained from self-regulatory organizations and construction organizations building low-rise buildings and constructions. These data should be correlated to sociological polls data, statistical service, employment service, recruitment agencies for reliability assessment of personnel situation in construction organizations. If human resources available today cope with implementation of the declared amount of construction works, so it is possible to estimate how many specialists in qualification groups and categories are necessary to accomplishing the set construction amounts. However, services, trade organizations, operational structures in the system of housing and public utilities and other accompanying systems are not considered here. The forecast based on work payment share of the square meter cost of housing, industrial and civil engineering planned to construction. In case of known and predicted ratio of qualification groups, positions and professions, work payment "range" it is possible to estimate quantitative limits of personnel which can be attracted to create of finished construction product that has consumer cost. It is necessary to consider not only quantitative aspect, but also a ratio of the required labor power quality and the amount of work payment for which in case of the limited range influences a ratio of quantitative and qualitative personnel structure. This approach allows to take into account staff costs of all building complex, including project cost, engineering survey and construction materials production, except the government employees and professional education workers having budget financing.

- The forecast for labor input of building objects planned to be constructed. In case of known technological schemes and set labor productivity level it is possible to calculate the required number of various qualification workers and hence, technical, functional and administrative personnel. Such method is more suitable for operational planning.

The offered variants are conceptual and show the possible directions of personnel requirements assessment which don't exclude, but supplement each other. These data can be used to form an order to professional education of major training programs, the number of state funded places created both from public funds, and by means of self-regulatory organizations. The personnel forecasts need is usually based on the assumption that the discrepancy between demand and supply doesn't lead to reorganization in the labor market [5]. It is necessary to take into account that the number of students obtaining professional education should prevail the number of required specialists of a building complex received according to the calculations based on the following essential factors:

- Approximation of personnel requirement calculations on strategic prospect which should consider training period.

- Students excluding from training process because of family, personal circumstances.

- The absence of graduates distribution system doesn't oblige the young specialist to work according to the specialization even if training was state funded.
- Citizen rights to get desired profession which should not be limited by the availability of state funded places.
- Implementation of the competitive environment in the professional labor market allowing to redistribute specialists with the identical education level according to capabilities and business qualities.
- Availability in structure of economy of workplaces which are directly not connected with construction production but which assume professional education. These are the government, municipal institutions, elected structures, higher-education teaching personnel, self-regulatory organizations, the intermediary, trade organizations and other structures connected with a construction complex not participating directly in construction production.

Correlation of calculated need rates for construction complex personnel with the available labor reserve shows personnel potential development of a construction complex on basis of which it is possible to elaborate working programs for implementation of the specified purposes [6]. Economic science operates with various methods of calculation of required quantity of labor power which need to be adapted for the construction specifics connected with seasonality of the performed works, a wide range of the built construction objects, and mobility of production structures depending on construction nature.

Taking into account development tendencies of construction complex management in our country it is necessary to mind who should take care of the need for strategic providing of a construction complex with personnel potential. We should not deny significant influence of the industry on different social processes being within the sphere of state interests. It is necessary to remember, however, that there is relatively small number of the construction organizations of the state-owned legal entity which basically provide strategic objects construction. The rest commercial organizations are self-government now.

Innovative construction complex development process should be ahead the appropriate level labor power training. The construction complex supply system with a high-quality labor power should base on industry development forecast as well as on competitiveness increase of construction products. Use of a forecasting model with use of the IBS models which is based on the analysis of balances of key sectors of economy [7] is of great interest. It is also necessary to mention the model which includes the demand equations, training period and labor market variables; the equations for forecasting labor market variables which influence demand; and procedures for calculation of statistically confidential intervals in the forecast registration [8].

Special attention should be paid to the qualified professionals capable of carrying out a research and experiments, the industry managers capable to analyze the market, to choose the priority investment directions, the technologies providing level increase, to organize the specified work, be able to get profits from materials and constructions.

This professional category also includes research and educational personnel of the industry capable to train specialists and managers able to adopt to the varying conditions of equipment and technologies evolution. Industry progress is impossible without information technology and database specialists capable to provide reliable information development.

Basic elements of the organizational and financial mechanism of system functioning of training of high-quality specialists are oriented to a long-term outlook, system management process being included into the category of the complex economic challenges requiring serious scientific basis. A number of state and public organizations as well as business structures are included into management system. Public organizations and commercial enterprises of the construction materials industry act as the expert bodies of the system

responsible for plans and programs corrections. These organizations are labor power consumers interested in its quality increase.

In case of elaboration of long-term development programs of a construction complex it is reasonable to allocate several stages allowing to choose forms and methods of quality regulation to timely estimate effectiveness of each stage and to introduce necessary amendments (figure 1). Tendency assessment and development directions of a regional construction complex become an important factor in case of organizational and economic allowances implementation of labor power quality improvement.

The analysis will allow to determine necessary labor power quality regulation methods involved in production and planned for perspective use. The most significant methods are the use of organizational managerial and standard and legislative regulation in case of economic incentives impact. At the following stage it is necessary to exercise operational, tactical and strategic control of labor power quality development by means of the chosen forms and methods. The priority of strategic management will allow to react quickly to the current changes, to introduce amendments both in tactical and in operational management. Managerial actions should be followed by the periodic assessment of economic result allowing to control efficiency of the made actions. In case of efficiency decrease it is necessary to provide a possibility of adjustment of process from the first stage, depending on complexity of the arisen situation. Ensuring high level efficiency it is possible to increase planning horizons and move to longer strategic plans development. Effective implementation of all stages of organizational and economic process of labor power quality improvement will allow to increase skilled labor force inflow to the construction complex, raising thereby the general labor power quality level of the industry, promoting products quality improvement and production profitability.

The current trends in the labor market are determined by the increasing influence on the market of such negative factors as "...structure subjects deformation of the labor market; marginalization of a labor power; low wage rate; cheap labor power demand; "brain drain"; inflow low skilled labor force; work capital replacement; secondary employment development and working hours duration increase; increase of "shadow" sector scales; "revival" of discrimination, forced labor, human trafficking; transformation from labor-excessive to labor-deficit" [9].

3 Conclusion

Standard and legislative providing completely depends on government institutions and national associations of self-regulatory organizations. There should a rational system of legal acts stimulating the enterprises to labor power quality improvement in the country since now capital investment in advanced training and education is economically unprofitable and there is no system of professional standards and the principles of determination of professional competences uniform throughout the country.

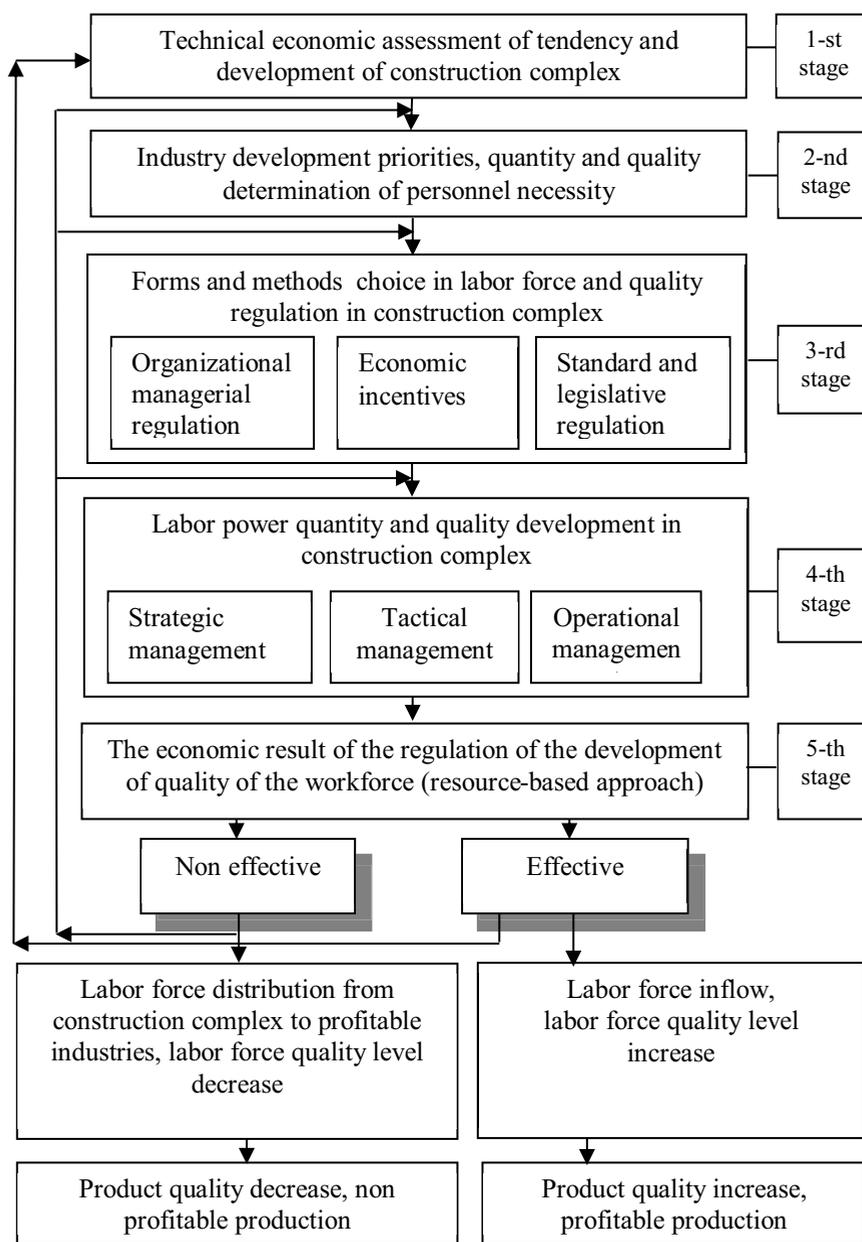


Fig. 1. Stages development and implementations of the strategic plan forming of construction industry personnel potential.

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