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QUALITY MANAGEMENT SYSTEM IN CONSTRUCTION

Abstract. The article describes the advantages of a construction company that has implemented a quality management System that allows you to streamline the activities of companies in the construction industry, which is one of the most complex in terms of the number of participants and stakeholders (customers, developers, contractors, subcontractors, credit organizations, authorities and supervisors, operators, the population, etc.), as well as in terms of existing technologies, regulatory documentation, and constantly changing legislation.

Keywords: construction, quality, system, management, company, consumers, customers, contractors.

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Аннотация. В статье описаны преимущества строительной компании, внедрившей систему менеджмента качества, позволяющую оптимизировать деятельность предприятий строительной отрасли, которая является одной из наиболее сложных с точки зрения количества участников и заинтересованных сторон (заказчиков, застройщиков, подрядчиков, субподрядчиков, кредитных организаций, органов власти и надзора, операторов, населения и др.), а также с точки зрения существующих технологий, нормативной документации и постоянно меняющегося законодательства.

Ключевые слова: строительство, качество, система, управление, компания, потребители, заказчики, подрядчики.

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Түйіндеме. Мақалада қатысушылар мен мүдделі тараптар (тапсырыс берушілер, құрылыс салушылар, мердігерлер, қосалқы мердігерлер, кредиттік ұйымдар, билік және қадағалау органдары, операторлар, халық және т.б.) саны тұрғысынан, сондай-ақ қолданыстағы технологиялар, нормативтік құжаттама және үнемі өзгеріп отыратын заңнама тұрғысынан ең күрделілерінің бірі болып табылатын құрылыс саласы кәсіпорындарының қызметін оңтайландыруға мүмкіндік беретін сапа менеджменті жүйесін енгізген құрылыс компаниясының артықшылықтары сипатталған.

Түйінді сөздер: құрылыс, сапа, жүйе, басқару, компания, тұтынушылар, тапсырыс берушілер, мердігерлер.

Introduction. The quality management system (QMS) is an integral part of the overall enterprise management system, which must ensure the stability of the products quality or services and increase customer

satisfaction. What is quality? Modern management specialists consider the concept of quality in four aspects, which reflect the evolution of the definition of the concept of quality with the development of not only production technologies, but also management science. Half a century ago, the civilized world considered a product to be of high quality if it meets the standards. Over time, it turned out that this was not enough. Then they expanded the definition of quality, now the product must correspond to consumption, i.e. if the product meets the standards, but is not demanded by consumers, it is not of high quality. Then, in the 1980s, they came to the conclusion that a product cannot be called quality if it cannot be used. The quality must be appropriate for the application. And, finally, these days a product is called a quality product if, in addition to all of the above, it meets the expected needs of the consumer.

Currently, in Kazakhstan, construction companies increasingly face the problem of effective personnel management to solve the assigned tasks. The problem is that there is no clear relationship between company management systems and systems approaches. The work of a construction organization depends on a number of external and internal factors that affect its activities. Successful management and prevention of negative impact on the activities of a construction organization from the market and internal economic and economic factors is possible with the help of effective company management mechanisms, one of which is the quality management system (QMS). The QMS provides stable and successful management, as well as the activities of the company. The QMS is aimed at ensuring the effectiveness of the organization's performance, by focusing not only production, but also managerial and organizational processes to meet customer requirements, which in turn leads to a decrease in non-productive costs and an improvement in the quality of products and services provided.

Material and method. Certification of quality management systems indicates that the company strictly adheres to the requirements of international quality standards. The quality management system of a construction organization is a kind of declaration on the control and rejection of defects in products or services. The company has a certificate of the quality management system of a construction organization, which was created based on ISO 9000 standard, acts as a guarantor of product quality and shows a high level of production. Such companies are the most competitive [1].

To help achieve quality goals, eight management principles have been defined: customer orientation; Leadership of the leader; Involvement

of workers; Process approach; Systematic approach; Continuous improvement; Making decisions based on facts; Mutually beneficial supplier relationships.

Consumer (customer) orientation. Quality is the fulfillment of customer requirements. Organizations depend on their customers and therefore they must understand their present and future needs, meet customer requirements and strive to exceed their expectations. Leadership. Leaders determine the unity of purpose, direction, and internal spirit of the organization.. They create an environment in which people become fully involved in achieving the organization's stated goals. Setting goals and analyzing their implementation by management should be a constant element of the activities of the head of the organization.

The role of senior management in the QMS:

- 1) developing and maintaining the organization's quality policy and objectives;
- 2) promoting the quality policy and objectives throughout the organization to increase awareness, motivation and employee engagement;
- 3) ensuring customer orientation throughout the organization;
- 4) ensuring that processes are implemented to meet customer and other interested party requirements and quality objectives;
- 5) ensuring the development, implementation and maintenance of an effective (and efficient) QMS;
- 6) provision of the necessary resources;
- 7) conducting periodic analysis of the QMS;
- 8) making decisions regarding the quality policy and objectives;
- 9) making decisions on measures to improve the QMS.

The main responsibility of the head of the organization is to create a profitable business, attract and increase the number of consumers. Activities to take into account the interests of consumers, to ensure product quality, to reduce the cost and duration of work is directly related to the quality system and should be led by the head of the organization. The CEO should distribute quality issues among subordinates and create a quality management system in which employees interact with each other without direct management intervention. The head of the organization is a system leader who is engaged in improving the quality management system, since most problems with product quality arise at the junctions between departments, processes and sub-processes of product creation. The CEO is responsible for restoring the integrity of

each specific process, coordinates the entire system of processes and sub-processes to create products or providing services [2].

The head of the organization should lead the work on the creation of the quality system, analyze how it works, plan measures to improve it, but not intervene in the elimination of specific product defects. To create the system, the CEO appoints a management representative responsible for the operation of the system and creates a system performance review team (internal audit team). Involvement of workers. Employees at all levels of the organization are at the heart of the organization, and only their full involvement makes it possible to use their abilities to the maximum benefit for the organization.

Ways to achieve the implementation of the QMS:

teamwork;

using the project as an organizational form;

delegation of authority, providing all team members with a real opportunity to participate in management;

transformation of employees into employees.

Process approach. The desired result is achieved more efficiently if the necessary resources and actions are managed as a single process. A process is any action that takes input elements and transforms them into outputs. The process must have a master (owner). Requirements for a quality management system orient an organization towards adopting a process approach when developing, implementing and improving the effectiveness of a quality management system in order to increase customer satisfaction by fulfilling its requirements. In order for an organization to function effectively, it must identify a set of interrelated processes and manage it. The application of a system of processes within the organization of a building complex together with the identification (definition) of these processes, their interaction and management of these processes can be called a "process approach". The advantage of the process approach is the ability to carry out day-to-day management through communication between individual processes within the process system, as well as through their association and interaction.

Conclusions. Business processes are characterized by the fact that they have a specific consumer willing to pay for their results. They create a result (a completed building or structure, a separate type of construction and installation work, design and estimate documentation, service for installing windows, etc.), which is valuable for the organization itself,

the customer or the consumer [3]. The quality management system in construction is a product of our time. This is a modern tool for ensuring high-quality execution of construction work, eliminating all kinds of risks that threaten the safe operation of the constructed facilities. Construction is traditionally one of the largest sectors of the country's economy, solving many tasks of a state nature - GDP growth, and a social nature - civil construction and housing repair. Therefore, it is very important for this industry to function effectively, including through a process such as the implementation of a quality management system. The quality management system in construction allows to overcome the negative effect of factors that limit the business activity of construction organizations in various areas of manifestation [4].

In a construction organization, the following external processes can be defined: performance of subcontracted works; management of mechanization; maintenance of the building, computer and office equipment; purchases; staffing; accounting activities; marketing research; staff development; legal and security services [5-10]. What does the QMS give to the consumer? First of all, the confidence that the manufacturer is focused on continuous quality improvement and satisfaction of his needs and expectations. The formal confirmation that the company has really implemented a quality management system and it complies with international standards is a certificate for the management system issued by an independent certification body.

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