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Research paper



Business Processes Outsourcing in Building Enterprises

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Abstract

The article explores the role and importance of outsourcing for managing business processes at enterprises of the construction industry. Since the main purpose of managing construction enterprises is to achieve high technical and economic indicators, compliance with the terms of construction of objects and their construction, ensuring an increase in profitability and profitability of operations in the long-term perspective. This is possible with the use of outsourcing, which, unlike subcontracting, is aimed at providing profitability by concentrating on the performance of priority activities for which the construction company has the highest level of competence. Also, outsourcing involves taking risks and responsibilities of an outsourcing company for the quality of running business processes. This is a significant difference from the subcontract works and allows forming the long-term competitive advantages of the construction enterprise.

Keywords: *business process, competitive advantages, construction company, construction, outsourcing, profitability, subcontracting*.

1. Introduction

In today's globalized trade, the internationalization of economic processes, the rapid development of information technology and scientific and technological progress, the management of modern enterprises is substantially transformed. There is a need for a constant transformation of the basic management processes that could not only ensure profitability of activities, but also sustainable development in the long term. At the same time, strategic processes are played by key processes that shape competitiveness and development. Especially, this is important for construction.

Construction is one of the strategically important sectors of the economy, which creates businesses, institutions, homes, motorways and other infrastructure facilities that are important for people's livelihoods. The construction industry is an indicator of the society life quality and socio-economic development. In addition, the construction sector of the national economy contributes to the revitalization of the real sector, as it stimulates the work of metallurgical, machine-building plants, the agro-industrial sector, the country's transport, and light industry [1]. At this stage, over the past year, there has been a gradual increase in the performance of enterprises in this industry. In 2017, Ukrainian enterprises completed construction works in the amount of UAH 101.1 billion. The index of construction products in 2017 compared with 2016 was 120, 9%, incl. construction of buildings - 166.1%, engineering buildings - 126.3%. New construction, reconstruction and technical re-equipment amounted to 73.2 of the total volume of completed construction works, capital and overhaul - 17.1% and 9.7%, respectively [5]. The result of the construction companies work is the area of objects commissioned.

In 2017, Ukraine has commissioned 10,206 thousand m2: 58.1% - in houses with two or more apartments, 41.5% - in single-family houses, 0.4% - at hostels. Thus, the total area taken into operation housing in 2017 compared with 2016 increased by 9%. Despite the positive results of the construction companies work, at the present stage they are guided by quantitative indicators, not qualitative ones, which reduce their competitiveness. This is especially true of energy efficiency issues, as in Ukraine over the past year there has been a significant increase in the cost of utilities, where the payment for heat is 85%. Therefore, it is necessary to explore the possibilities of forming competitive advantages at the level of the main business processes that provide not only profitability, but also the possibility of socio-economic development in the long term.

Accelerating the development pace of scientific and technological progress, which led to the change and development of new technologies, new materials and concepts in the construction of modern buildings, taking into account energy efficiency and environmental standards - all this creates the need for structural changes in the management system.

2. Main Body

The majority of Ukrainian construction companies have the following typical problems in the management process: duplication of information, errors in design documentation and reports, data loss, poor quality of finishing works, failure to meet the deadlines for putting the object into operation and others. Therefore, it became necessary to study the possibility of identifying business processes and determining their importance for the formation of a value chain and competitiveness.

The concept of a "business process" we propose to use what is defined in the ISO 9000 standard, where the process is treated as a "set of interrelated and interacting operations (actions) that convert inputs to outputs" [7].

This approach allows creating business processes in such a way that each process: first, had value for stakeholders; the second in the identification of the business process eliminated excessive activity; thirdly, it was possible to determine the minimum possible recruitment required for its implementation. This is necessary

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in order to reduce the cost of goods or services (exit of the business process). Thus, the business process is a set of actions, activities and information flows that provide the process of transforming resources into a product (service) and form a value for the client. Important roles in this case have the types of business processes that will need to be allocated. So, according to the scientific papers of Repin V.V. and Eliferov V.G. business processes are distinguished according to the following criteria:

By attitude to consumers (customers) - internal and external;

By attitude to the receipt of value added: basic and auxiliary [9, p.12].

A. Björn cites three classifications of business processes [10, p. 25-26]: developed by researchers at the University of Plymouth (USA) and representing a hierarchy of business processes, which includes three main groups: "production", "support" and "management";

As a result of the implementation of the Norwegian TORR project on comparative benchmarking, dividing business processes into primary ones-the main value-creating organizations that penetrate the entire organization, from consumers to suppliers, supporting (auxiliary) processes, not directly adding value, but necessary for maintenance of the basic processes and development processes, allowing to create a value chain basically and in auxiliary processes at a new level will show indicators;

The business processes named primary in the TORR project were renamed into the actual business processes and divided into four subgroups of the main business processes: product development, customer requirements, order fulfilment, customer service. Therefore, we will dwell in more detail on the activities of the construction company. Business processes of the company are initiated from the receipt moment of the client's application for construction works. Then the manager calculates the approximate value of the order. It determines the need for building materials, equipment, the approximate duration of the work, the number and specialization of workers to fulfil the order. The designer is developing a design project for the premises. Further, in accordance with the estimate, construction materials are purchased. This process includes the selection of suppliers of raw materials and materials, ordering materials and settlements with suppliers, resulting in obtaining all the necessary documents for materials, as well as the materials themselves. The next process is the shipment of materials to the warehouse. The result of this process is the supply of materials for workers to perform construction work. After this, the workers' brigade proceeds to fulfil the order. The duration of work directly depends on their volume and complexity. After the work is completed, a full settlement with the client is made and reporting is generated.

It is necessary to supplement this classification with the classification of business processes, which leads Vandina O.V. [8] and considers 4 groups:

basic business processes that form the company's revenues (form the profile of the enterprise and have a strategic importance);

supplying (supporting) support the infrastructure of the organization (processes that are necessary for the enterprise, the client is not ready to pay for them);

business accounting processes (necessary for making managerial decisions);

business development processes.

In the conditions of social and economic crisis in the Ukrainian economy and the stagnation of the construction industry, the main business processes play an important role, which form the strategic profile of the construction enterprise. They include: the creation of a project and estimates for the order of the client; purchase of building materials; storage of building materials; execution of construction works; formation and storage of reports. For their description, it is intended to use models that will allow them to be described in detail and visually demonstrated which will improve the efficiency of operational control. These are the main processes that determine the income of the construction company, the business profile and its key competitive advantages. These processes the construction company must be able to perform better than all other enterprises in the industry, which will allow it to compete. The peculiarity of business processes is that, despite the fact that they are divided into main and auxiliary and information space, they are interrelated and ensure the success of their implementation. It is the formation of feedback that is necessary to create added value.

Therefore, there is a need to study the models of business processes that are used at the present stage.

Basic Flowchart - the most simple and intuitive. The process, built in Basic Flowchart notation, is a system of subprocesses (procedures, operations), the order of which is indicated by arrows. "Rounded block" denotes the beginning and end of the process, as well as a link to another related process. "Square blocks" are operations. The Basic Flowchart model allows to display not only rectilinear processes, but also cycles and conditional transitions. To indicate the conditions of transition from one operation to another, the "diamond" icon is used. Inside the rhombic, a logical expression is written, on the value of which depends which output from the rhombus is activated.

Cross-functional Flowchart (CFFC) is obtained by adding "swimming tracks of performers" to Basic Flowchart. It is used when Basic Flowchart describes a process in which a large number of employees, departments, units and areas of activity are involved, and it becomes difficult to determine the responsibility of participants for specific actions. Then a useful extension of Basic Flowchart, allowing you to track the transfer of actions and actions of participants in their areas of responsibility, is the separation of Basic Flowchart diagrams from the "swimming tracks of performers", in each of which the actions of only one performer are reflected.

Process-driven CFFC - is a variation of CFFC, in which the decomposition is not by performers, but by processes. Each swimming track is responsible for one of the top-level processes, and there are processes in it that are the decomposition of this process to a lower level. Using such a scheme, it is convenient to track how transitions occur within the company between top-level processes. Thus, a detailed description of the processes will allow to determine the "bottlenecks" in the management of construction enterprises. And most importantly, when implementing management on the basis of business processes, the effectiveness of innovation and financial activities is enhanced. At the same time, an important role is played by the process of not only allocation, but also management. Thus, an important component of the business process management process is information support, which allows forming the business process, analyzing, managing and optimizing it.

Therefore, we propose to use the achievements of reengineering as a management methodology. The most authoritative is the monograph by M. Hammer and J. Champi "Reengineering of corporations: a revolution in business", published in 1993 [6]. The authors give the following definition: "Reengineering of business processes is a fundamental rethinking and radical redesign of business processes to achieve sharp, spasmodic improvements in decisive, modern performance of the company, such as cost, quality, service, etc." [6, p. 24].

Reengineering, unlike the usual restructuring, allows for changes to be made with a clear objective, where the mandatory condition is:

the allocation of basic and auxiliary business processes,

formation of key success factors and conditions for increasing the effectiveness of activities;

focus on clients (internal and external);

orientation not on the work of ready and regulated business processes, but on the creation of new ones.

The process of reengineering the main business processes of a construction enterprise consists of the following stages (Fig. 1).

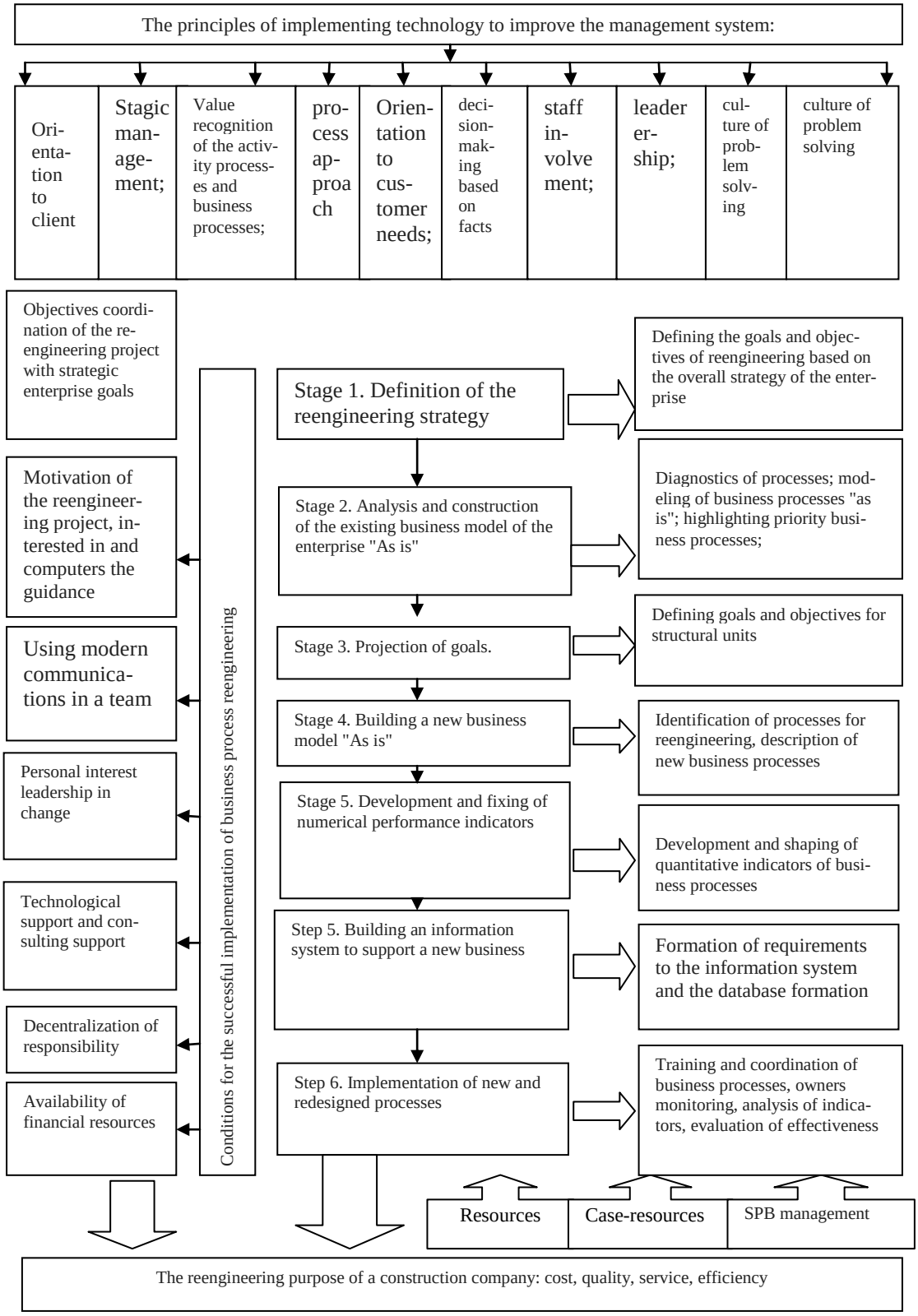


Fig. 1. Reengineering model of a construction company (generalized by the authors)

Also re-engineering excludes not only unproductive expenses, but also work that does not create value: a significant part of checks, reconciliations, and expectations of existing organizations within the organization. Thus, people will spend more time on real work. After reengineering work brings more satisfaction, as employees feel that they have achieved the best result and that they have completed something. They perform work (process or subprocesses) and get a result that is important for each person. At the same time, their efforts are aimed at satisfying the needs of clients [14].

In most Ukrainian construction organizations, modern business processes exist fragmentarily; there is no clear regulation of "business processes" from the position of documents; blurred "inputs and outputs", their main suppliers, and customers responsible for execution. Unlike usual types of activities, the "business process" has not only "exits and entrances", but also the owner, who has the opportunity to analyze the effectiveness of performing individual jobs for different time intervals and adjust performance results. This approach allows not only increasing the level of interest of

employees, but also the responsibility for the results. And in the context of optimization, restructuring, ensure the implementation of the main processes.

Applying the practice of using "business processes" in Ukrainian construction companies, it is possible to provide the following results:

the transparency, controllability and manageability of the business;

the ability to form and implement strategies for the development and maintenance of business;

the building an effective and flexible organizational structure;

to improve the effectiveness of personnel management and reduce personal dependence;

due to the regulation, the release of time from managers;

financial optimization;

to increase the investment component of the business;

to create prerequisites for standardizing processes with respect to ISO standards;

work optimization of the enterprise due to lower costs, execution time of individual works and risks from non-performance.

These advantages, which form the "business processes" in the construction organization at this stage, are strategically important for Ukrainian business practices. As they allow us to reduce the number of weaknesses of Ukrainian construction organizations (low culture of building and assembly works) and transform them into a competitive advantage.

To increase the efficiency of operating activities, building organizations often resort to the practice of using "outsourcing".

Outsourcing is the management technology of a construction enterprise that consists in the transfer of individual functions or types of production activities (basic, auxiliary or servicing processes) performed outside the company, or in the implementation by a "third party" of entire business processes that are part of a common system [2] . Thus, at various stages of the production system of the construction enterprises, the transfer of individual processes, functions (justification of the technical task of the construction project, procurement of components, logistics system, justification for placing orders for construction, decoration, design, etc.) allows to reduce total costs, avoid scarcity of resources and the ability to attract highly qualified personnel.

The volume of capital in the world economy connected with outsourcing has increased four and a half times in the past 10 years (from $ 100 to $ 448.6 billion. The outsourcing market in Ukraine can reach $ 10 billion. Today, this market is growing by an average of 18% in year, according to the information provided by Pro Capital Group in the investment holding company. The stable growth of the outsourcing market can be explained by the fact that the economic recession forces enterprises to look for opportunities to reduce costs Outsourcing of HR records and salary calculation allows to save about 18% from Experience of developed countries testifies to the increased scientific and practical importance of outsourcing in enterprise management Successful application of outsourcing allows solving many corporate tasks, first of all to reduce production and marketing costs. [1] In Ukrainian practice, it is also necessary to take into account that Outsourcing is often identified with subcontracting, so we will perform a comparative analysis of these concepts (Table 1).

Table 1. Comparative analysis of the "outsourcing" and "subcontracting" concepts

Outsourcing	Subcontracting
Goal	
Increase the efficiency of the construction company through the implementation of core activities.	Reduction of costs when fulfilling the conditions of the order
Object	
A certain business process for a certain period of time (depending on the contract line)	A certain volume of work.
Control	
Implement outsourcer-executor.	The building company is the customer.
Costs	
Material, warehouse, logistics costs are the outsourcing partner	Material, warehousing, logistics (for the most part) costs are borne by the construction enterprise - the customer.
Partnership and cooperation	
It is carried out within a certain period of time, which is indicated in the contract	It is carried out within a certain period of time, which is indicated in the contract
Risks	
For the consequences and the possibility of occurrence of risks, the outsourcer	For the consequences and the possibility of risks arise, the outsourcing construction company

A distinctive feature of outsourcing, unlike subcontracting, which is often used in Uranium, is the formation of partnership, long-term relationships in the process of creating value and managing risks.

Outsourcing has a number of advantages for companies using it:

allows to get components or services of higher quality and (or) cheaper;

improves the company's innovative capabilities through interaction and partnership with world-class suppliers that have great intellectual potential and rich innovative experience;

provides greater flexibility for the company in the event of a sudden change in the market situation or consumer preferences: it is easier and cheaper to find new suppliers with the necessary capabilities and resources than to rebuild the company's internal operations, eliminating some capacities and resources and creating new ones;

accelerates the acquisition of resources and skills [3].

At the present stage, it is possible for the construction companies to use internal, external, full or partial outsourcing.

Internal outsourcing at construction enterprises is expressed in the redistribution of functions within the business system in order to maintain control over the quality of their implementation. It assumes the possibility of creating a joint venture with a view to maintaining financial control, the possibility of diversification and maintaining a presence in the market.

External outsourcing involves performing separate or interrelated functions that are transferred to an external outsourcer. It allows you to form partnerships and minimize taxes. At the same time, business processes are outsourced to those that do not involve the use of innovations and do not form strategic advantages in the future. Advantages of external outsourcing are saving of own resources, obtaining high-quality services; increase the image of the construction company when using the services of a well-known supplier.

Partial outsourcing, in contrast to other types, involves the partial use of outsourcer resources and the establishment of responsibility for: the performance of certain types or parts of work, the reduction of risks, the possibility of introducing innovations and know-how, the development of personnel and the involvement of highly skilled personnel. This type of outsourcing is useful in the development of new products or the implementation of infrastructure projects. It allows you to pay considerable attention to the individual requests of the contracting authority or the end user, to find specific solutions that meet the specific conditions of the activity.

Full outsourcing involves all types of work execution at the expense of the outsourcer, who is responsible not only for the performance of work, but also draws on his resources to solve the tasks. At the same time, the motivation for using this type of outsourcing is to reduce the cost of services and reduce management levels. The goal of full outsourcing is to reduce management levels, simplify internal planning processes, disaggregate, reduce costs.

When deciding on the appropriateness of using outsourcing for a specific enterprise, management needs to implement the following activities:

1. Identify business processes that can be outsourced. However, the justification of the transfer is determined by the ability to reduce the overhead costs of the following units:

with incomplete or seasonal loading;

producing products or services that can be bought on the market at a comparable price;
units, which require 100% modernization of expensive specialized equipment, provided that there are companies on the market already having such an established business. This makes it possible to combine funds and direct them to the development of the main production.

2. Perform the calculation of the services cost planned for transfer to outsourcing units and compare it with the offers of outsourcing companies.

3. Arrange and describe the organization of business processes that are outsourced, so that in the event of a contract with an outsourcing company, it is necessary to detail in it mutual expectations and agreements on the performance of services.

4. Identify the department responsible for maintaining regular contacts and the implementation of quality control and the timing of the services provision by an outsourcing company [13].

Therefore, to determine which business processes in a construction organization are outsourced, we propose to use the criteria "level - quality of competences" (Fig. 2). [16].

The first group is represented by business processes, which can be transferred without limits from the construction organization. These are primarily servicing and support processes. Since the development of these business processes will not bring the construction organization strategic advantages in the future.

The second group consists of business processes, the development of which in the future is capable of bringing the construction organization competitive advantages, but they do not currently have much importance for the core business and do not form the main value for customers.

The third group is business processes that represent unique competitive advantages and the involvement of a third party can lead to significant risks for competitiveness.

The fourth group consists of mature business processes, further development of their own competencies in this direction can not bring the construction organization new strategic advantages. And with the transfer of these business processes, a construction company can achieve significant cost reductions.

3. Conclusions

Therefore, the authors propose to use the international standard ISO 37500: 2014 "Guidelines for outsourcing" [12], which was developed for enterprises and organizations regardless of the form of ownership and activities. It is aimed at ensuring mutually beneficial cooperation relations between all participants of outsourcing; can be used before, during and after making the decision to outsource; has a detailed guide to the processes and their results. A distinctive feature of this standard is that in the standard, outsourcing is aimed at maximizing the use of the enterprise resource base and minimizing risks.

For the Ukrainian management practice of construction enterprises, the use of outsourcing is a strategic task that will not only solve the quality problems, the cost of construction services, but will also increase their competitiveness. As it is the outsourcing of business processes that is aimed at the allocation of strategic business zones, revenue centers, expenditure centers, investment centers and responsibility centers. Unlike sub-orders, it is outsourcing that has prospects and opportunities for the development of the construction industry based on the achievements of scientific and technological progress and the creation of prerequisites for increasing profitability.

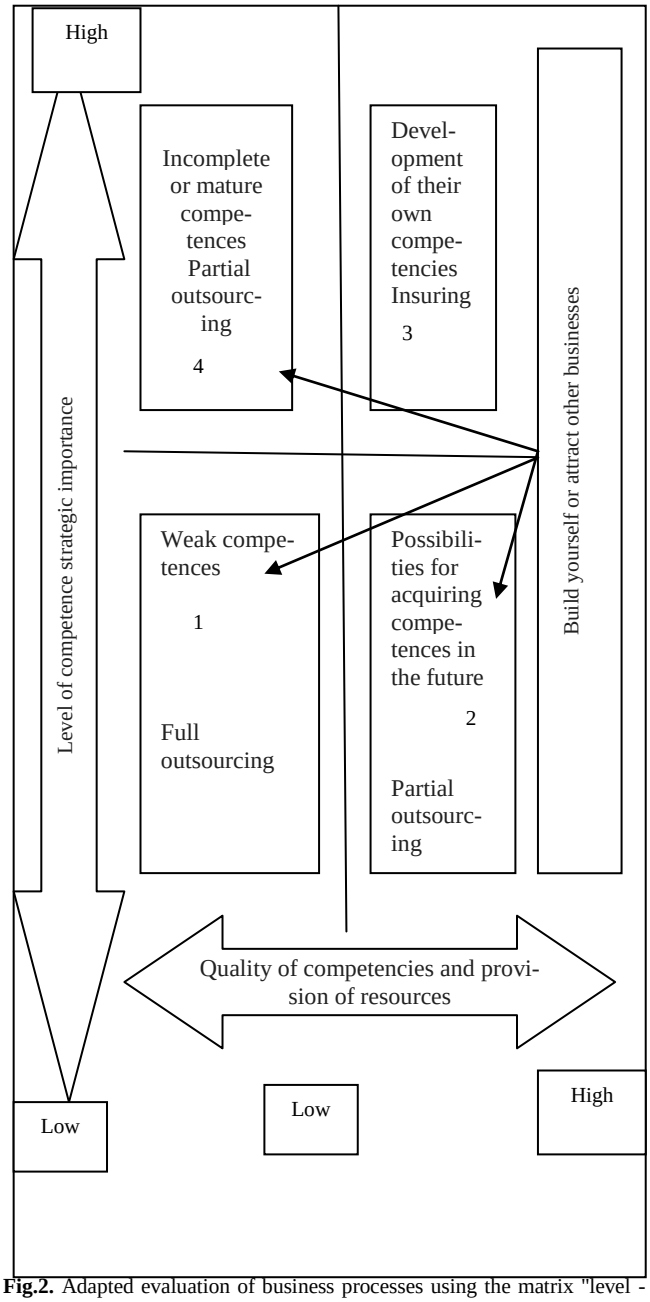


Fig.2. Adapted evaluation of business processes using the matrix "level - quality of competencies" to the construction company [based on 2]

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