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IMPROVEMENT OF THE BUSINESS MODEL OF A MANAGEMENT COMPANY VIA OPTIMIZATION OF BUSINESS PROCESSES

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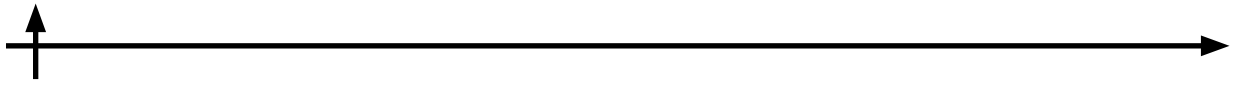
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Abstract. This study is devoted to the analysis and improvement of the business model of a management company based on the optimization of business processes. In the course of the research, we analyzed the features of the business modeling system in terms of management, main and supporting processes of management companies, as well as considered the business processes of the company's core activities and key resources of the company. As a result of the study the main shortcomings in the work of enterprises and a number of measures to improve the business processes of problem areas of the company's business model were identified.

Keywords: business model, management company, business process, business process model

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СОВЕРШЕНСТВОВАНИЕ БИЗНЕС-МОДЕЛИ УПРАВЛЯЮЩЕЙ КОМПАНИИ НА ОСНОВЕ ОПТИМИЗАЦИИ БИЗНЕС-ПРОЦЕССОВ

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Аннотация. Данное исследование посвящено анализу и совершенствованию бизнес-модели управляющей компании на основе оптимизации бизнес-процессов. В ходе работы были проанализированы особенности системы бизнес-моделирования с точки зрения управляющих, основных и обеспечивающих процессов управляющей компании, а также рассмотрены бизнес-процессы основной деятельности компании, а также ключевых ресурсов. В результате исследования были выявлены основные недочеты в работе предприятий и ряд мероприятий по совершенствованию бизнес-процессов проблемных зон бизнес-модели компании.

Ключевые слова: бизнес-модель, управляющая компания, бизнес-процесс, модель бизнес-процесса

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Introduction

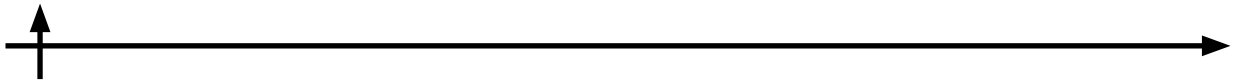
Nowadays, when cities are growing and countries are continuously developing, one of the key sectors of the economy of many countries is considered to be construction. It is this sphere that provides for the creation of new infrastructure, housing and commercial real estate. On the territory of modern Russia there are more than 20 thousand construction companies.

The successful functioning of any company, including construction companies, depends on many factors, among which an effective business model is of particular importance.

Nowadays, the construction industry has a large and serious competition in the market and in the absence of an established business model and business processes, the company loses its position relative to other construction colleagues. Today, a company that does not have a developed business model tends to inevitably lose profits due to the lack of an established system in operation.

In order to identify or smooth out "irregularities" in the company's work, it is necessary to have an idea of the business processes formed earlier and implemented in the company. It is at the level of business process that it is possible to identify the causes of problems faced by the company on its development path.

In a constantly changing market, improving the business model of the construction company is simply necessary. This is the relevance of the optimization of business processes of the company. Since the business model directly depends on the work of business processes, which in turn may have flaws in its structure, which directly affects the work of the company as a whole. And improving and analyzing the existing business processes in the company is a direct path to



success and achievement of the company's goals.

The purpose of this study is to improve the business model of the construction company by analyzing the main business processes of the company and developing measures to improve the performance of business processes, as well as improving performance in general. "Lenstroytrest" will be considered as a case study in this paper.

A business model is a visual format for the operation of a company's business processes with the definition of important areas for the company. For example, one of the most popular in use types of business model is recognized to be the business model of A. Osterwalder and I. Penier. This model is one of the most basic and understandable when setting the task of forming a business model of the company.

The business model of A. Osterwalder and I. Penier is not infrequently referred to as a strategic management tool. The model consists of nine key elements describing the company's business processes and is used to identify points of growth, analyze competitors and determine the best options for business development.



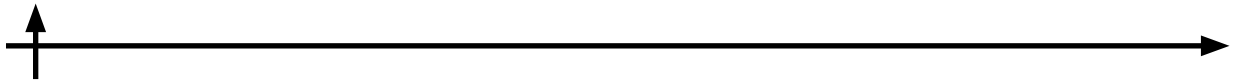
Fig. 1. Key elements of the business model of A. Osterwalder and I. Penier

In general, it is worth noting that business process modeling is an effective tool for identifying weaknesses in the work of an enterprise and eliminating them. It includes a detailed description of the company's activities, dividing it into separate operations and analyzing the interrelationships between them. The main purpose of business modeling is to improve the efficiency of the company's operations, increase profitability and profit accordingly

Materials and Methods

The key methods of this study include: collection and analysis of information, comparison, description, classification and generalization, as well as modeling.

In order to collect information regarding the peculiarities of the analyzed company and the



mechanism of its work, a detailed survey of employees involved in the performance of the processes under study was conducted.

The theoretical basis of the study was provided by scientific works on business model formation - A. Osterwalder and I. Peca, V. Repin, V. Eliferov. Also, educational literature, scientific articles, federal laws and other Internet resources were used as sources for the study.

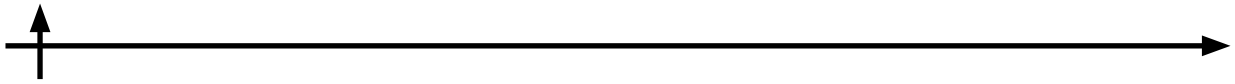
Results and Discussion

In this study, Lenstroytrest, one of the oldest real estate developers in modern St. Petersburg, was selected as a case study. This company implements projects of various scales in residential real estate segments (Ilin, 2022). For the long period of its work the company has realized more than 20 objects and now continues the construction of 4 main objects.

To analyze the problematic processes of the company, let's consider the business model "as is".

Key partners	<ul style="list-style-type: none"> •ECN Trend; •St. Petersburg Real Estate; •GUP TEK of St. Petersburg; •GUP Vodokanal; •JSC St. Petersburg Sales Company; •PJSC SBERBANK; •PJSC VTB.
Core activities	<ul style="list-style-type: none"> •Sale of facilities; •Construction of facilities; •Facility maintenance.
Distribution channels	<ul style="list-style-type: none"> •Social media groups and channels; •Real estate agencies; •Resident's personal account
Core resources	<ul style="list-style-type: none"> •Staff •Construction materials •Contractors •Life Support Resources
Key values	<ul style="list-style-type: none"> •Life organization •Individual approach •Total Design •World architecture •Communication after moving in •Professional skills of employees •Quality management
Customer relations	<ul style="list-style-type: none"> •Annual sports and entertainment events with shareholders and employees; •Trips and tours for shareholders; •Seminars on agenda.
Revenue flows	<ul style="list-style-type: none"> •MCD Management; •Real estate sales; •Sale of building materials; •Additional services for real estate documentation.
Structure of costs	<ul style="list-style-type: none"> •Wages; •Taxes; •Purchase of repair and construction equipment; •Contractual payments to real estate agencies; •Purchase of resources and maintenance of ICD.
Consumer segment	<ul style="list-style-type: none"> •Non-family status; •Family of newlyweds; •Family with young children and teenagers; •Mature children and the family at a late stage of "development".

Fig. 2. Elements of the business model of Lenstroytrest (designed by the author)



According to the business model of A. Osterwalder and I. Pinier of the construction company "Lenstroytrest", we can see that in general the company has a developed understanding of its value proposition, as well as a good analysis of the target audience. To understand the work of the company one business model is not enough so let's turn to the reference model. In order to figure out the main directions of the company's work, let's consider the reference model of the company (Kopp, 2020).

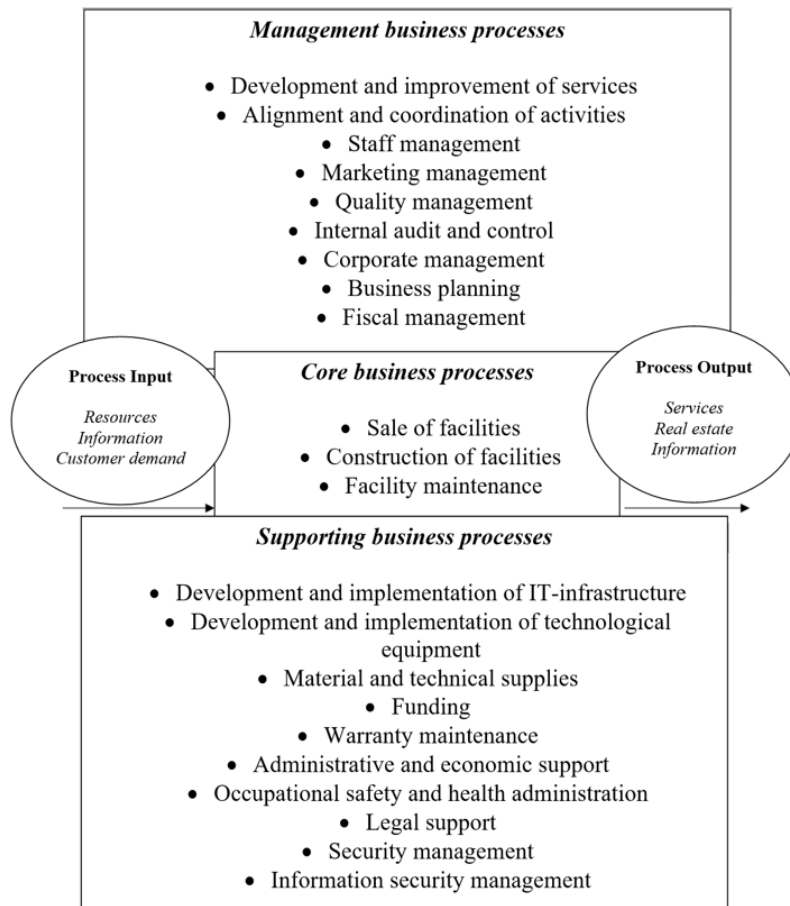
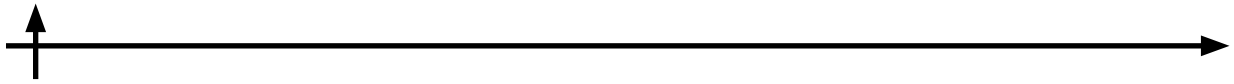


Fig. 3. Reference model of top-level business processes of "Lenstroytrest" (designed by the author)

Summarizing all the main processes of the top level, the following scheme can be created. Reference model can be called a type of model more understandable for perception and understanding of the company's development. In the case of the construction company JSC "Lenstroytrest".

This reference functional model contains a set of functions of the construction company, optimal for this type of enterprises. The mentioned functions allow to reduce the process of model building to a rather quick process of questioning and subsequent removal of unused functions from the reference model. All the mentioned business processes are debugged, but since the work of the company is connected with people who have nothing to do with these processes, sometimes various emergency situations can occur. Since this model is built taking into account the occurrence of such emergencies, you cannot worry about the stable functioning of the construction company (Barbera, 2012).

The business model refers to a comprehensive view of how a company selects its customers, how it defines and differentiates its value proposition, through which channels it communicates this proposition to its target customers, which business processes are key and which can be



outsourced, what resources the company uses, including partnerships and finally how it makes profits for the owners (Kulchytskiy, 2019).

Let's turn to the company's problem areas and look at the processes that may have flaws in their operation.

The following problem areas exist in the company's business model:

- Key resources;
- Sales channels;
- Key activities.

Let's consider ways to improve the business process of the construction company for each module.

Improving the business process of a construction company - Key Resources module.

The company regularly receives a lot of requests related to malfunctions or breakdowns of warranty nature. At the same time, the actual values of the number of requests to the warranty department are in the critical zone. This is too much work for the warranty department. It is because of such an influx of appeals that the time of their processing and elimination increases accordingly, which in turn causes resentment and bad impression of shareholders (Artamonov, 2019).

After reviewing the processing and problem-solving process, it was found that there are no irregularities in the process. In this case, it is worth paying attention to the reason for the occurrence of such a large number of appeals of warranty nature. More specifically, look directly at the quality of the building contractor's services, the quality of the materials, and possibly the quality of the home acceptance process by the company's construction subcontractors (Ilyin, Shirokova, Lyovina, Rostova, 2022).

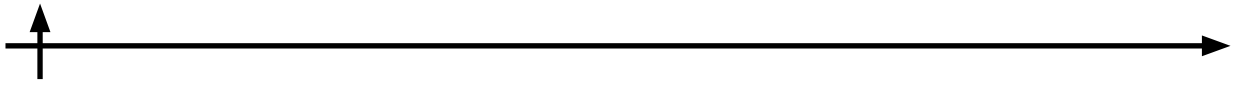
In order to improve the quality of construction, it is necessary to review the specific areas where warranty issues occur. Most often, warranty failures occur with equipment or materials that were purchased from third-party manufacturers. Such as windows, elevators, mirrors, sanitary ware. These resources are purchased through tenders (Li, 2024).

In order to stabilize the work of the Warranty Department and reduce the number of warranty claims while preserving the company's cash flow, it is proposed to consider an alternative model of the process of acceptance of services rendered by a subcontractor.

Let's consider the planned performance of the Warranty Department due to the introduction and work according to the alternative model of the business process of acceptance of completed work from subcontractors.

Table 1. Planned performance indicators of the warranty department (designed by the author)

Indicator	Recommended value	Actual value
Number of processed telephone inquiries received	50-60	70
Number of processed applications received from management companies	85-100	150
Number of requests from the personal account of the shareholder	3-5	7
Number of warranty problems eliminated	55-75	56
Timeframe for elimination (days)	Not more than 60	40
Repeated request for problem elimination	Not more than 15	17
Color Specifications:		
<ul style="list-style-type: none"> – Below standard – Standard – A little more than standard – More than standard – Significantly more than standard 		



According to the data in Table 1, we can see that some items are close to the recommended indicators, and some items are completely within the recommended range. Thus, the Warranty Department has an even flow of requests for troubleshooting. This flow allows processing and elimination of warranty requests within the regulated period of time, in compliance with all regulations, including a high level of work quality.

Improving the business process of a construction company - Sales Channels module

The process of selling an object is one of the fundamental processes of the company. Let's consider the process of attracting customers through sales channels, which is currently established in the company.

Initially, the marketing department receives a request from the sales department to build a customer base and attract customers to a new facility, or to a facility that has low sales. Then the marketing department is engaged in choosing the type of advertising, based on the previously conducted analysis of the target audience. After determining the type of advertising must understand what contractor will work with the company to get the best results (Abeynayake, 2021). Then there is an analysis of the availability of the contract with this or that contractor, which is responsible for providing services for the selected type of advertising. After determining the marketing department proceeds to the formation of a request for a contractor. If the contractor has not previously cooperated, then the legal, financial, sales and marketing departments are responsible for the formation of contracts and their signing, for further cooperation (Kifokeris, 2020).

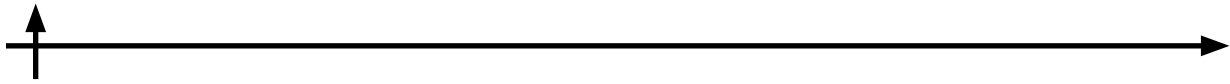
The next step on the part of the marketing department is to receive the service to attract clients. Upon receipt of the service, the results are seriously analyzed together with the sales department. According to the results of the analysis, the marketing department can choose 2 ways to complete the process of customer acquisition: to continue cooperation with contractors, if the results of their work have improved the conversion rate of the sales funnel. And accordingly, on the contrary, to terminate cooperation or to revise the terms of cooperation, and in the future to request repeated provision of services based on the results of the earlier analysis (Treptow, Kneipp, 2022).

At the moment, the main types of advertising within the advertising campaign used by the company are:

- Website;
- Calling people who have left requests on the website and other services;
- Communication in the chat room;
- Radio advertising;
- Agency contracts with partners;
- Merch and printed materials.

It should be noted that in order to attract the target audience of younger age category it is worth paying attention to the development of contextual advertising, due to which interest will be formed even before the initial consultation (Rovinska, 2023).

Let's consider the proposed process of attracting customers through the sales channel. This process consists of two stages of implementation. The first stage begins with the Marketing Department receiving a request from the Sales Department for a certain type of target audience for a particular object that needs to be realized (Wanxin, 2023). The Marketing Department in turn selects a certain type of advertising that will be similar to the previously done analysis of the target audience of the object. After selecting one of the seven types of advertising department turns to the procedure for finding contractors, or rather analyze the availability of contractors with whom the contract for the selected type of advertising has already been concluded. If there is no such, then the contract is concluded and then on the basis of the terms of the contract and



the application from the sales department Marketing Department forms a request for services (Carpinetti, 2003).

The second stage is the evaluation and control of the work performed. After receiving the results, the Marketing Department together with the sales department analyze the results obtained and evaluate the indicators of the sales funnel. If the indicators have increased, the application from the sales department is closed, and it also means that cooperation with the contractor was fruitful and will continue in the future (Ibrahim, 2019).

If the sales funnel indicators have not changed or on the contrary have fallen, in this case, the question of resolving the situation is raised through the repeated provision of services with a change in the terms - the terms of reference and re-analysis of the target audience.

Let's consider the planned changes in the conversion rates of the sales funnel and KPI of the sales process, which directly depends on the work of the sales funnel, due to the work with a new type of advertising within the Advertising Campaign as a sales channel.

Table 2. Planned conversion rates of the sales funnel after the introduction of contextual advertising (designed by the author)

Indicator	Coverage	Input	Conversion
Make a statement	60 000	35 000	58.33%
Get familiar with the offer	25 000	20 000	80.00%
Create interest	17 000	10000	58.82%
Influence the choice	7000	5000	71.43%
Make a deal	4000	3000	75.00%
Second appeal	2500	1500	60.00%
Loyalty	900	700	77.78%

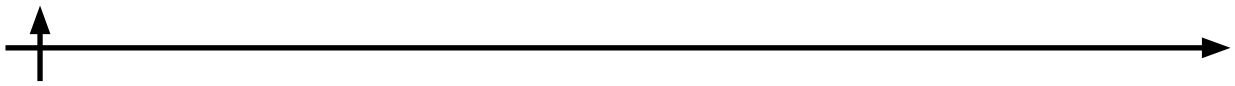
According to the data in Table 15, we can conclude that the planned indicators have positive changes. And these indicators will also positively affect the sales statistics. It should be noted that the conversion rate of "Make a statement" is still one of the lowest. In this case, it is worth re-analyzing the target audience, which is aimed at contextual advertising and possibly resort to alternative options for external advertising. That is, consider not only billboards, but also pay attention to advertising signs in public transportation. To raise the level of recognition thereby attracting more people willing to familiarize themselves with and subsequently purchase the provided "product".

Improvement of the business process of the construction company - modules Key activities

Let's consider another type of the company's core activity - management. According to the data received on a regular basis by the Customer Service Directorate. Residents of residential complexes have some dissatisfaction with the fact of rendering services by the management company.

Dissatisfaction of quite different nature from the lack of awareness of the general meeting of owners, to the failure to provide reports on the works carried out on the territory of the complex on the improvement of the adjacent territory. As stated earlier in the processes there are shortcomings and perhaps because of them come complaints of this nature.

In this case, it is proposed to establish a process between the management company and the construction company. In order to respond in a timely manner to the issue of utility arrears. This process will establish internal communication between the holding companies and reduce the number of calls to the call center, sales department and dissatisfaction of tenants in general.



The process works at level 1:

1. A request is received from the developer to generate documents for debt repayment.
2. The management company generates a document on the basis of the collected data for the riser of the recently handed over house or for the whole house.
3. After that, on the basis of the collected data, a document with debt calculations is formed.
4. There is a check, after which the calculations are repeated or sent to the developer.
5. The developer's documents are checked again and if there are any questions about the amounts in the documents, the process returns to the stage of debt calculation.
6. If the developer's accounting department has no questions, the debt is settled and the application is closed.

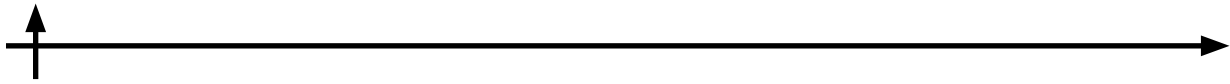
The process does not have complex schemes, as speed and accuracy are important in its implementation. By having simple and clear elements, this process will be much easier to adapt in companies, thus simplifying the work of several departments. And preserve the image of the company in front of customers who will no longer face such problems.

Through the six proposed processes it is possible to improve the work of management companies and reduce the level of criticism from tenants towards the quality of work of the holding companies. Thus, it is possible to establish positive relations with the residents of the neighborhoods and possibly increase the number of repeat sales calls.

Based on the analysis of the company's business processes, as well as practical observations, options for improving business processes have been proposed. In this regard, it is necessary to consider the planned dynamics of the main economic indicators of economic activity of the construction company.

Table 3. Planned dynamics of the main economic indicators of economic activity of the construction company "Lenstroytrest" (designed by the author)

Indicator	Report year	Plan year	Absolute deviation, th. rub.	Growth rate, %
Revenue, th. rub.	287536000	288973680	-1 437 680	100.50%
Cost of sales	291177000	297000540	-5 823 540	102.00%
Gross profit (loss)				
Th. Rub.	3641000	3626436	14 564	99.60%
- as % of revenue	1.266%	1.255%		
Selling and administrative costs				
- Th. Rub.	96 122 000	91556205	4 565 795	95.25%
- as % of revenue	33.430%	31.683%		
Profit from operating activities				
- Th. Rub.	99 763 000	101259445	-1 496 445	101.50%
- as % of revenue	34.696%	35.041%		
Other income, th. rub.	331 880 000	333539400	-1 659 400	100.50%
Other expenses, th. rub.	70 306 000	71360590	-1 054 590	101.50%
Profit from financial and economic activities				
- Th. Rub.	4788000	4859820	-71 820	101.50%
- as % of revenue	1.665%	1.682%		
Income tax, th. rub.	734000	722990	11 010	98.50%
Net profit				
- Th. Rub.	4 054 000	4136830	-82 830	102.04%
- as % of revenue	1.410%	1.432%		
- as a % of equity capital	0.110%	0.112%		



According to the table, with the introduction of new processes and improvement of existing ones, the planned indicators of profit and revenue will increase by about 1.5% relative to the reporting year. These indicators are not significant, but they confirm the correctness of the direction of the company's earlier analysis and the selected problem areas.

Conclusion

Real estate companies are a complex mechanism, the work of which is based on the relationship between the elements, as between the gears. And if the connection between the elements is broken or there are deficiencies in some element, the whole mechanism is in danger of stagnation and difficulties in work. For this reason, when problems arise in a company, it is necessary to refer to the concepts of business processes and business models.

In addition to looking at the business model, this study also modeled problematic business processes, the analysis of which revealed the perceived deficiencies that were causing the poor performance. In addition, process improvement options were considered, which subsequently became specific process improvement activities.

To improve the Key Resources module, it is proposed to make changes to the process of control and acceptance of completed work from subcontractors. By specifying the steps of the process, it was possible to simplify its system and minimize the occurrence of warranty failures, which had a positive impact on the performance of the Warranty Department.

As for the improvement of the Sales process, it was suggested to consider working with contextual advertising to attract customers. By making adjustments to the business process, according to the planned indicators, the conversion of the sales funnel will have data within the limits of acceptable for regular closing of the sales plan.

In order to optimize the management/service process, 4 process improvement activities are proposed:

- The process of holding the General Meeting of Owners;
- Process of processing applications and appeals;
- The process of control of work performance;
- Process of submitting a report on completed works.

It is necessary to note the importance of forming a business model of the company and analyzing business processes. The business model of the company has its own peculiarities of formation, which can point to specific deficiencies, and business processes in turn can help to understand the cause of deficiencies in the work.

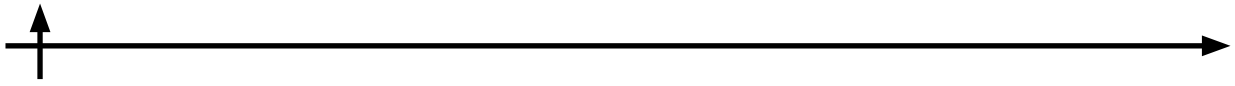
This study is a clear example of the need to refer to the business model and business processes to identify bottlenecks in the company's work. As well as improving or identifying solutions when deficiencies occur in order to eliminate them.

All the developments and results presented in this article have practical value and can be used by the management of the construction company "Lenstroytrest", in particular, and real estate industry companies in general, to analyze the state of the company at the moment and possible improvement of processes.

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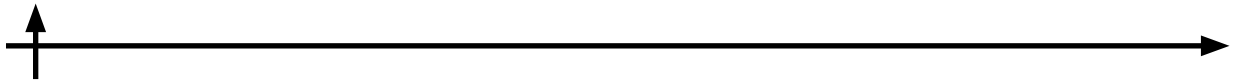
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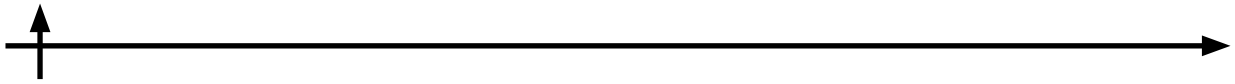
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