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Business Risk Assessment and ways to Reduce IT

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Abstract: This article analyzes the conditions for the emergence of risks arising in the entrepreneurial activity of small enterprises, grouped on the basis of their characteristics, systematized and proposed an improved method for assessing the degree of their significance in the activities of business entities. At the same time, the ways to reduce the level of exposure to risks were improved, a forecasting model for the coming period was developed. With the help of this model and based on the data of a specific economic entity, a forecast was made.

Keywords: risk, expert assessment method, force majeure, organizational, resource, investment, credit, innovation, statistical, dynamic, natural-climatic risks, political risks, economic risks, embargo, moratorium, correlation analysis, linear correlation, average squared error, reliability coefficient, regression equation.

Introduction

Whether it is in entrepreneurial activity, whether it is production or service, it is natural that it faces risks of varying degrees. In other words, risks should be considered as an integral part of the activities of business entities. Denial of this condition hinders the development of their activities. Hence it is necessary that the entrepreneur make an effort to conduct his activities strictly by calculations and defining a clear strategy. This is the most reliable process by which they determine the success of their activities, which requires the use of various methods. Although in the economic literature, a number of methods of risk analysis, assessment and mitigation of the degree of their impact are cited, these methods do not give an opportunity to draw attention to the conditions of the risks in the body, the some way that affects them. In this regard, the need to investigate and assess the impact of risks on the performance of business entities will determine the relevance of the study.

Analysis of the relevant literature. Risks ensure the development of society. Innovative activity leads to scientific and technical development.Such development occurs along with the success of some and the failure of others.Second, the one who does not take risks does not win, that is, in order to get economic benefits, the entrepreneur must consciously make a risky decision.In such a case, it would be expedient to classify the risks according to their characteristics and thus to assess and reduce the level of impact in order to facilitate the analysis of risks.While in our previous studies[1] we focused on risk assessment methods, further development of our research, we found it necessary to

[1]Бектемиров А.А.Тадбиркорлик рискларини баҳолаш ва уни пасайтириш йўллари (1-мақола)// Сервис. – Самарканд. – 2021. - №1

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conduct an analysis of opinions and suggestions aimed primarily at risk classification in the economic literature.

The economic literature suggests ways to classify risks into different groups and mitigate them.We will focus on the most important of them.

In the research of Russian economists Firsova O.A[2] and Sokolova I.A[3] divided the risks in the activities of service enterprises into external and internal groups.At the same time, the group of external risks includes economic, political, social, legal, financial, currency, inflation, force majeure, natural, changes in market conditions, the decline in consumer solvency.The internal risk group was divided into strategic, tactical and operational risk groups.There are some uncertainties in his work.E.M.Khitrova[4] divided the risks into pure and speculative risks according to the economic results.

E.M.Khitrova divided the risks into pure and speculative risks according to the economic results.Although the study focuses on these groups of risks, it does not fully cover aspects of the occurrence of risks.

In her research, N.V.Kuznetsova[5] divided the risks arising in the financial and economic activities of enterprises into territorial, natural-climatic, political, legal, organizational, personal risks.Credit, currency, financial, manufacturing, marketing, accounting, property and transportation risks.Such classification without risk grouping makes it difficult to analyze and evaluate them.

In the researches of A.R.Samoxvalova[6] business risks are risks depending on the scope of their business activity, period of exposure to risk, frequency of occurrence of risk situations, area of risk occurrence, area of solution, description of consequences of risky situations, level of impact on business activity, type of business activity. divided into species.While this helps to identify the conditions under which risks occur, it does not fully cover the types of risks.

G.A.Akhtamova[7] research reveals the features of risk factors.The risks studied in the author's research cannot be said to be fully classified.

The research of A.T.Romanova and E.V.Smolyakova[8] describes the types of risks inherent in any production and economic structures, as well as common sources of risks in the international transport system, the choice of methods of risk assessment, analysis and management.These methods of risk management have the ability to be used in specific transport systems.

[2] Фирсова О.А. Управление рисками организаций. Учебное пособие Орел: МАБИВ, 2014.-100с.
[3]Соколова И.А. Управление предпринимательскими рисками на предприятиях сферы услуг. Автореферат диссертации на соискание ученой стпени к.э.н., Тольятти-2005.

[4]Хитрова Е.М.Основы управления рисками. Учебное пособие.Иркутск. Издательство БГУ. – 2016.
[5]Кузнецова Н.В. Управление рисками. Учебное пособие. Издательства Дальневосточного университета, 2004.
[6]Самохвалова А.Р. Управление предпринимательскими рисками. Автореферат диссертации на соискание к.э.н.,Москва -2004.
[7]Ахтамова Г.А. Управление предпринимтельскими рисками в сфере услуг. Автореферат диссертации на соискание к.э.н.,Москва -2004.
[8]Романова А.Т., Смолякова Е.В. Управление рисками в международнқх транспортнқх системах. Учебное пособие.- М.:РУТ (МИИТ), 2019. – 133 с.

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L.A.Zirchenko's[9] research seeks to systematize the factors that create the most common economic risks in business, while clarifying the concept of business risks, the target functions of risk management by adjusting the level of risk impact in shaping the results of business activities.

In the research of I.A.Kiseleva and N.E.Simonovich[10], along with the study of strategic, compliance, operational, financial and reputation-oriented risks in the activities of business entities, the duration of risks (short-term, long-term), statistical and dynamic , studied as a group of insured and uninsured risks.These studies have been shown to minimize their impact.

Research methodology. The research used methods of scientific abstraction, analysis and synthesis, historical and logical, induction and deduction.

Analysis and results. From the analysis of the economic literature on the classification of risks, it is clear that in our opinion, the generalized data on the classification of risks on the Internet https://www.grandars.ru allow a complete classification of risks.According to him, the risks are divided into three major groups depending on the factors of origin, namely: natural-climatic risks; political risks; economic risks.

Table 1: Risks and conditions of their occurrence

Risks belonging to the risk group		Conditions for the occurrence of risks
1-group	Risks in earthquakes	It arises suddenly (spontaneously) as a result of events that are not subject to human will
	Flood risks	
	Risks in storms	
	Risks in epidemics	
2-group	Risk associated with loss of ability to conduct business	The emergence of martial law is the result of revolutions and the aggravation of the domestic political situation in the country.
	Risk in privatization of enterprises	
	Risk of confiscation of enterprises or goods	
	Risk of imposing an embargo, ie banning the import or export of goods and currencies by the state	
	The risk that the new government will deny the obligations of the previous government	
	Risk of moratorium (suspension) of external payments for a certain period due to an emergency	
	The risk of a change in tax policy by the state	
3-group	Risk of accidental loss of property	Accidents, fires, thefts, violations of storage regulations and vandalism occur as a result
	Risk of non-performance of contractual obligations	The failure of business partners to work in good faith is the result of their failure to fulfill their obligations or their loss of solvency.
	Economic risk	An enterprise is formed as a result of disruption of the process of economic activity and non-fulfillment of planned economic indicators (for example, sales of goods or profits). This is due to changes in the market situation, as well as miscalculations by business managers.
	Price risk	One of the most dangerous risks is associated with a decrease in business income and profits. It occurs as a result of rising prices for producers, wholesalers, intermediaries, and other service providers.
	Marketing risks	Occurs as a result of incorrect choice of strategy of movement in the market (wrong direction to the consumer, errors in the range)
	Currency risk	Relating to commercial transactions in foreign economic activity, it occurs in the loss of currency as a result of changes in exchange rates.
	Interest rate risk	The loan provided by the bank to the enterprise is formed as a result of changes in interest rates.
	Inflation risk	The enterprise arises as a result of the depreciation of monetary income in the face

[9]Зирченко Л.А. Совершенствование системқ управления рисками в процессе развития предпринимательских структур. Диссертация на сосикание ученой степени к.э.н.,Санк Петербург – 2019.

[10]Киселева И.А.,Н.Е.Симонович Оценка рисков в бизнесе: предпринимательские риски//Финансовая аналитика: проблемы и решения, 2017,т.10, вып.3.,стр.244-257.

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		of rising inflation.
	Investment risk	It arises as a result of unexpected financial losses in the investment activities of the enterprise.
	Risk of insolvency	Corona's cash inflows and outflows are the result of mis-planning over time.
	Transportation risk	This occurs as a result of the breakdown of goods during transportation.

The structure of risks pertaining to each group and the conditions under which they occur are given in the following table (Table 1).Such a classification of risks is convenient for their assessment.

This classification system is conditional due to the nature of the services market and depends primarily on the socio-economic relations that occur in the services market.Based on these classified risks, it is possible to assess the degree of their impact on business entities in a particular space and time.

The proposed method of risk assessment. The complexity of risk assessment is determined by the lack or incompleteness of information about them.In many cases, their unforeseen occurrence makes it necessary to predict events and situations that may occur in different situations.To do this, it is advisable to first study their level of impact.Based on the above risk classification, we determine the extent of their impact using expert assessments.

Table 2: The results of an expert survey conducted according to the degree of exposure to risks

Risk group	Risks	Number of experts	Expert assessment				
			1	2	3	4	5
Economic risks (group 3)	Risk of accidental loss of property	105 people	45	30	15	0	15
	Risk of non-performance of contractual obligations		0	10	24	36	35
	Economic risk		0	0	9	51	45
	Pricerisk		0	15	15	60	15
	Marketing risks		2	13	40	23	27
	Currency risk		0	15	30	15	45
	Interest rate risk		15	14	30	15	31
	Inflation risk		0	0	15	50	40
	Investment risk		15	31	14	30	15
	Risk of insolvency		2	8	50	21	24
	Transportation risk		45	45	15	0	0

Given the absolute ambiguity of the origins of the first and second group risks, we will try to assess the degree of impact of the risks included in the third group, i.e. the economic risk group.We perform this process using Table 2 below. According to the table, the assessment of the level of impact of risks is from 1 to 5, and its impact assessment is assessed by each expert.In this case, the evaluation indicators:1 Risks with a very low level of exposure, 2 Risks of weak impact,3- Risks with moderate impact,4-5 indicates a strong effect.First of all, we pour the experts' assessment of each risk, which reflects the degree of impact on the business (profit or income) of the business entity and summarize the assessment given by all experts, ie how many 1, 2, 3, 4 and 5 assessments of each risk by each expert as we add to the table.The number of experts participating in the study is 105.Using the data in the table, we determine the level of significance of the risks.This is determined by dividing the number of assessments made by the experts for each risk (see Table 2) by the number of experts.In this case, it is expedient to divide the level of exposure of risks into 4 categories, ie risks with a very low level;risks where the level of impact is weak;risks with moderate exposure;strong impact risks.We enter the results in Table 3.

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Table 3: Risk significance determination table

Risk group	Risks	Significance of risks (%)				
		A conditional sign of risk	The level of exposure is very low risks	The level of impact is weak risks	The level of exposure is moderate risks	The level of impact is strong risks
Economic risks	Risk of accidental loss of property	α_1	43	29	14	14
	Risk of non-performance of contractual obligations	α_2	0	9	23	**68**
	Economic risk	α_3	0	0	9	**91**
	Pricerisk	α_4	0	14	14	**72**
	Marketing risks	α_5	2	12	38	48
	Currency risk	α_6	0	14	29	57
	Interest rate risk	α_7	14	13	29	44
	Inflation risk	α_8	0	0	14	40
	Investment risk	α_9	14	30	13	43
	Risk of insolvency	α_{10}	2	8	47	43
	Transportation risk	α_{11}	43	43	14	0

As a result of assessing the level of impact of risks on the activities of business entities, it is possible to draw a plan for the implementation of a number of measures to reduce the impact of these risks, which of them should be given more attention.As a result of the calculations, the scope of risks can be grouped as follows:
possible (“possible”) - is always present during the activity and it does not cause much damage.Its value is in the range$0<\alpha_i<45$ чегарада бўлади;

- Acute ("serious") - can lead to a critical situation.Its value $45<\alpha_i<60$;
- catastrophic ("catastrophic") - loss of solvency of the business entity and leads to bankruptcy.Its value is in the range of $60<\alpha_i<100$.

This allows you to select measures that have a large impact on the business and take measures to reduce its impact.The data of Table 2, compiled as a result of the expert's conclusions, show that the economic, price and non-fulfillment of contractual risks, which are part of economic risks, have the highest level of impact.This, in turn, requires the entrepreneur to take certain measures to reduce the level of exposure to these risks.

The proposed method for reducing the level of exposure to risks. Although risks have an objective character as an economic phenomenon, the indicator of its assessment is subjective.Its reliability is based on factors such as the reliability and completeness of various databases, the qualifications and experience of the management staff.Continuing our research in an integrated manner, we will look at a way to reduce the level of negative impact of economic risks that have a major impact on business performance. Economic risks arise as a result of non-achievement of planned economic indicators in the activities of business entities.One such indicator is labor productivity.It is known that the higher the productivity of any enterprise and firm, the lower the cost of its products and the higher the profit.In this regard, we will consider the issue of increasing the productivity of the enterprise by studying labor productivity and the factors influencing it on the example of the limited liability company "Me’morUtkirChokva" located in Samarkand.“Me’mor Utkir Chovka” LLC is mainly engaged in the construction industry. In determining the solution of the above problem, we use the indicators of production and economic activity of the enterprisefor 2018-2020 (Tables 4-6).

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Table 4: Preliminary indicators for determining the quantitative indicators of factors affecting the productivity of "Memor Utkir Chovka" LLC, located in Samarkand

№	Nameofindicators	Unitofmeasurement	Conditionalsymbol	Indicators for the months of 2018											
				I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1.	Labor productivity	In a thousandsoums	M_y	36988,6	37065,7	37169,3	37191,4	37254,3	37434,3	37632,1	37767,1	37882,9	38231,4	38327,1	38513,6
2.	Volume of construction and installation works (CIW) performed under the general contract	millionsoums	$V_{бп}$	555,34	556,28	557,52	557,81	558,63	560,75	563,35	565,38	566,88	571,32	571,51	574,11
3.	The volume of CIW performed on its own strength	millionsoums	$V_{ўк}$	517,84	518,92	520,37	520,68	521,56	524,08	526,85	528,74	530,36	535,24	536,58	539,19
4.	CIW volume performed with progressive technology	millionsoums	$V_{прг}$	444,29	447,97	448,34	449,31	452,84	458,77	472,1	473,54	474,06	480,95	485,16	486,41
5.	The volume of CIW performed in a mechanized manner	millionsoums	$V_{мек}$	385,25	388,31	391,06	393,63	397,29	403,35	406,1	410,1	412,9	415,78	418,51	421,21
6.	The amount of work performed on the brigade contract	millionsoums	$V_{брп}$	468,7	469,9	471,8	472,7	474	478,6	478,9	480	486	489,2	491,1	493,6
7.	Mode working time fund	Workinghours	$T_{рф}$	2985	2985	2985	2985	2985	2985	2985	2985	2985	2985	2985	2985
8.	Spending of working time fund	Workinghours	$T_{иф}$	2855	2855	2856	2856	2856	2857	2858	2859	2859	2860	2860	2861
9.	Number of employees on the list	people	Np	14	14	14	14	14	14	14	14	14	14	14	14
10.	Qualification level of workers	averagedischarge	N_r	6,5	6,5	6,5	6,5	6,5	6,5	6,5	6,5	6,5	6,5	6,5	6,5
11.	Monthly wages of workers	In a thousandsoums	$S_{их}$	1250	1250	1250	1300	1300	1300	1300	1300	1300	1350	1350	1350

Table 5: Preliminary indicators for determining the quantitative indicators of factors affecting the productivity of "Memor Utkir Chovka" LLC, located in Samarkand

№	Nameofindicators	Unitofmeasurement	Conditionalsymbol	Indicators for the months of 2019											
				I	II	III	IV	V	VI	VII	VII	IX	X	XI	XII
1.	Labor productivity	In a thousandsoums	M_y	46791,2	47366,5	47828,2	48340	48542,9	48769,4	49065,3	49266,2	49275,3	49428,2	49712,6	49950
2.	Volume of construction and installation works (CIW) performed under the general contract	millionsoums	$V_{бп}$	1693,8	1712,29	1726,5	1743,57	1749,24	1754,36	1763,59	1768,32	1765,61	1768,66	1778,54	1783,9
3.	The volume of CIW performed on its own strength	millionsoums	$V_{ўк}$	1590,9	1610,46	1626,16	1643,56	1650,46	1658,16	1668,22	1675,05	1675,36	1680,56	1690,23	1698,3
4.	CIW volume performed with progressive technology	millionsoums	$V_{прг}$	1494,76	1528,52	1550,52	1576,52	1595,52	1615,52	1626,52	1638,22	1641,52	1650,52	1663,52	1676,52
5.	The volume of CIW performed in a mechanized manner	millionsoums	$V_{мек}$	1260,76	1322,52	1342,52	1371,52	1382,52	1393,52	1403,52	1415,22	1420,52	1428,52	1438,72	1448,52
6.	The amount of work performed on the brigade contract	millionsoums	$V_{брп}$	1474,76	1512,52	1530,52	1556,52	1577,52	1588,52	1602,52	1617,22	1622,52	1631,52	1642,52	1656,52
7.	Mode working	Workinghours	$T_{рф}$	7249	7249	7249	7249	7249	7249	7249	7249	7249	7249	7249	7249

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	time fund														
8.	Spending of working time fund	Workinghours	$T_{иф}$	6954	6954	6955	6955	6955	6956	6956	6956	6956	6957	6957	6957
9.	Number of employees on the list	people	Np	34	34	34	34	34	34	34	34	34	34	34	34
10.	Qualification level of workers	averagedischarge	N_r	7	7	7	7	7	7	7	7	7	7	7	7
11.	Monthly wages of workers	In a thousandsoums	$S_{их}$	1350	1350	1445	1450	1540	1540	1540	1545	1560	1560	1560	1560

Table 6: Preliminary indicators for determining the quantitative indicators of factors affecting the productivity of "Memor Utkir Chovka" LLC, located in Samarkand

№	Nameofindicators	Unitofmeasurement	Conditionalsymbol	Indicators for the months of 2020											
				I	II	III	IV	V	VI	VII	VII	IX	X	XI	XII
1.	Labor productivity	In a thousandsoums	M_y	49941,2	49941,8	49944,1	20720	20616,9	20287,6	20500,4	20970,6	20437,2	21664,1	21675,1	22026
2.	Volume of construction and installation works (CIW) performed under the general contract	millionsoums	$V_{бп}$	1780,93	1778,22	1775,71	1995,13	1990,30	1963,36	1975,87	2010,48	1955,72	2060,70	2065,72	2075,43
3.	The volume of CIW performed on its own strength	millionsoums	$V_{ўк}$	1698,00	1698,02	1698,10	1761,20	1752,44	1724,45	1742,53	1782,50	1737,16	1841,45	1842,38	1872,21
4.	CIW volume performed with progressive technology	millionsoums	$V_{прг}$	1675,27	1678,61	1680,1	1466,74	1456,74	1396,74	1466,74	1526,74	1470,86	1604,33	1610,52	1705,16
5.	The volume of CIW performed in a mechanized manner	millionsoums	$V_{мех}$	1456,11	1460,17	1461,97	1295,06	1301,16	1310,06	1342,06	1395,06	1350,06	1455,26	1460,06	1495,06
6.	The amount of work performed on the brigade contract	millionsoums	$V_{брп}$	1530,43	1532,63	1535,83	1487,12	1478,12	1452,12	1474,77	1510,54	1514,53	1595,66	1635,86	1676,09
7.	Mode working time fund	Workinghours	$T_{рф}$	7249	7249	7249	18122	18122	18122	18122	18122	18122	18122	18122	18122
8.	Spending of working time fund	Workinghours	$T_{инс}$	6925	6926	6927	17273	17272	17271	17273	17275	17274	17279	17282	17283
9.	Number of employees on the list	people	Np	34	34	34	85	85	85	85	85	85	85	85	85
10.	Qualification level of workers	averagedischarge	N_r	7,5	7,5	7,5	7	7	7	7	7	7	7	7	7
11.	Monthly wages of workers	In a thousandsoums	$S_{их}$		2060	2050	1830	1830	1830	1830	1830	1830	1880	1880	1890

According to the annual production and economic activity of "Me'mor Utkir Chovka" LLC, the company has fulfilled the plan for the years under review.But in 2018-2020, when the work was considered a rhythm, it was not in a rhythm.The volume of construction and installation work varies over the years.Accordingly, the level of utilization of the enterprise's labor resources has declined sharply in the last 2020 compared to other years (Figure 1).

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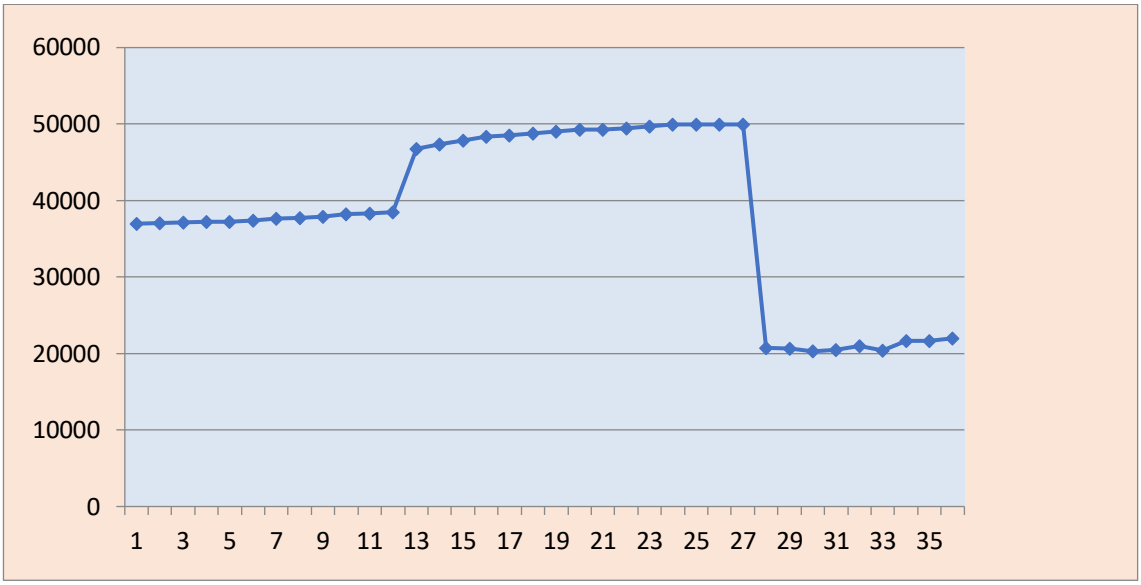

Figure 1. Status of labor productivity indicators of "Me'mor Utkir Chovka" LLC for 2018-2020

To determine the main reason for this, it is necessary to identify the factors that affect the performance of labor in the enterprise and analyze their scope.To do this, we select the factors that affect the performance of labor in order to ensure the rhythm of production in the enterprise.In our view, such factors include:

1. Level of specialization of the organization (X_1).
2. Level of progressiveness of production technology (X_2).
3. The degree of mechanization of production in the enterprise (X_3).
4. Introduction of Brigade Contract (X_4).
5. Rate of use of working time fund (X_5).
6. Qualification level of workers (X_6).
7. Monthly wages of workers (X_7).

It is not possible to determine the degree of correlation between the identified factors and labor productivity using the simple statistical method.Therefore, we use correlation analysis to determine the extent to which these factors affect enterprise productivity.In the analysis, using the data of "Memor Utkir Chovka" LLC for 2018-2020 (Tables 4-6), we use the calculation formulas given in Table 7 below to quantify the factors affecting the productivity of the enterprise and summarize the calculation results for 2018-2020. - Let's write in the table.

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Table 7: Formulas for calculating quantitative indicators of factors affecting labor productivity of "Me'mor Utkir Chovka" LLC

№	Namingoffactors	Unitofmeasurement	Symbol and calculation formulas
1.	Level of specialization of the organization **(X_1)**	Coefficient	$K_u = \frac{V_{ўк}}{V_{бп}}$
2.	Level of progressiveness of production technology **(X_2)**	Coefficient	$K_{прт} = \frac{V_{ПРТ}}{V_{ўк}}$
3.	The degree of mechanization of production in the enterprise **(X_3)**	Coefficient	$K_{мех} = \frac{V_{мех}}{V_{ўк}}$
4.	Introduction of Brigade Contract **(X_4)**	Coefficient	$K_{брп} = \frac{V_{брп}}{V_{ўк}}$
5.	Rate of use of working time fund **(X_5)**	Coefficient	$K_{ивф} = \frac{T_{ифс}}{T_{риф}}$
6.	Qualification level of workers **(X_6)**	Coefficient	$K_{мал} = \frac{\sum_{i=1}^{n} R_i}{N_r}$
7.	Monthly wages of workers **(X_7)**	Miln. soums	$S_{их}$

We analyze the correlations using the quantitative indicators identified in Table 8.To do this, we first determine the type of relationship between factors and labor productivity using the Excel software package, the dynamics of change of each factor in the periods under consideration, depending on the location of their quantitative indicators on the coordinate axis (approximation method).

Table 8: Quantitative indicators of factors affecting labor productivity of "Me'mor Utkir Chovka" LLC

№	Labor productivity indicators for 2018-202	Quantitative indicators of factors affecting labor productivity for 2018-2020						
		X_1	X_2	X_3	X_4	X_5	X_6	X_7
For the months of 2018-2020								
1.	**36988,6**	**0,93247**	**0,858**	**0,744**	**0,905**	**0,9564**	**6,5**	**1250**
2.	**37065,7**	**0,93284**	**0,863**	**0,748**	**0,906**	**0,9564**	**6,5**	**1250**
3.	**37169,3**	**0,93337**	**0,862**	**0,752**	**0,907**	**0,9568**	**6,5**	**1250**
4.	**37191,4**	**0,93344**	**0,863**	**0,756**	**0,908**	**0,9568**	**6,5**	**1300**
5.	**37254,3**	**0,93364**	**0,868**	**0,762**	**0,909**	**0,9568**	**6,5**	**1300**
6.	**37434,3**	**0,93461**	**0,875**	**0,770**	**0,912**	**0,9571**	**6,5**	**1300**
7.	**37632,1**	**0,93521**	**0,896**	**0,771**	**0,909**	**0,9575**	**6,5**	**1300**
8.	**37767,1**	**0,93519**	**0,896**	**0,776**	**0,909**	**0,9578**	**6,5**	**1300**
9.	**37882,9**	**0,93558**	**0,894**	**0,779**	**0,916**	**0,9578**	**6,5**	**1300**
10.	**38231,4**	**0,93685**	**0,899**	**0,777**	**0,914**	**0,9581**	**6,5**	**1350**
11.	**38327,1**	**0,93888**	**0,904**	**0,780**	**0,915**	**0,9581**	**6,5**	**1350**
12.	**38513,6**	**0,93918**	**0,902**	**0,781**	**0,916**	**0,9585**	**6,5**	**1350**
13.	**46791,2**	**0,9392**	**0,940**	**0,792**	**0,927**	**0,9593**	**7,5**	**1350**
14.	**47366,5**	**0,9405**	**0,949**	**0,821**	**0,939**	**0,9593**	**7,5**	**1350**
15.	**47828,2**	**0,9419**	**0,953**	**0,826**	**0,941**	**0,9595**	**7,5**	**1445**
16.	**48340,0**	**0,9426**	**0,959**	**0,834**	**0,947**	**0,9595**	**7,5**	**1450**

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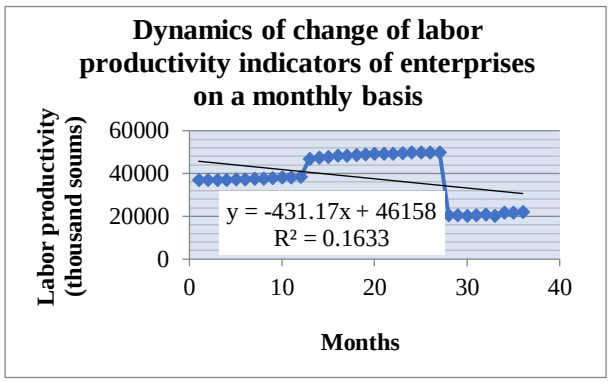
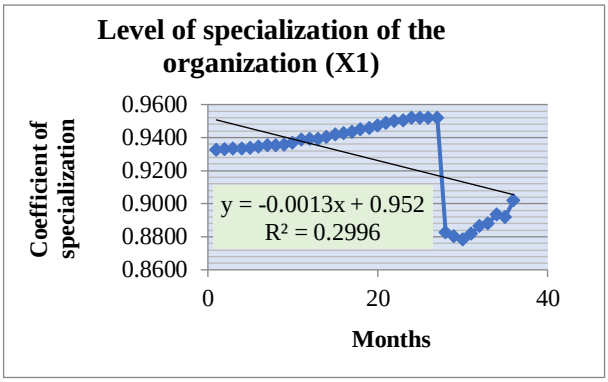
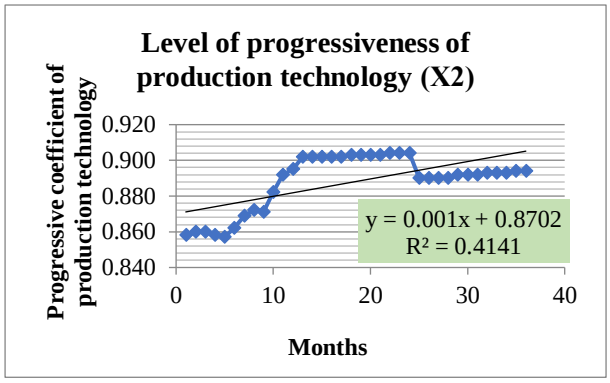
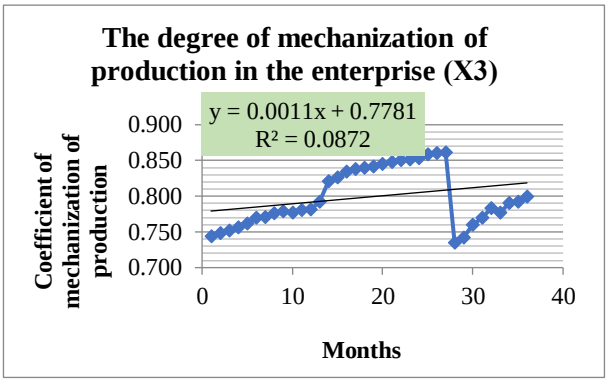
17.	**48542,9**	**0,9435**	**0,967**	**0,838**	**0,956**	**0,9595**	**7,5**	**1540**
18.	**48769,4**	**0,9452**	**0,974**	**0,840**	**0,958**	**0,9596**	**7,5**	**1540**
19.	**49065,3**	**0,9459**	**0,975**	**0,841**	**0,961**	**0,9596**	**7,5**	**1540**
20.	**49266,2**	**0,9473**	**0,978**	**0,845**	**0,965**	**0,9596**	**7,5**	**1545**
21.	**49275,3**	**0,9489**	**0,980**	**0,848**	**0,968**	**0,9596**	**7,5**	**1560**
22.	**49428,2**	**0,9502**	**0,982**	**0,850**	**0,971**	**0,9597**	**7,5**	**1560**
23.	**49712,6**	**0,9503**	**0,984**	**0,851**	**0,972**	**0,9597**	**7,5**	**1560**
24.	**49950,0**	**0,9520**	**0,987**	**0,853**	**0,975**	**0,9597**	**7,5**	**1560**
25.	**49941,2**	**0,9534**	**0,987**	**0,858**	**0,901**	**0,9553**	**7,5**	**2060**
26.	**49941,8**	**0,9549**	**0,989**	**0,860**	**0,903**	**0,9554**	**7,5**	**2060**
27.	**49944,1**	**0,9563**	**0,989**	**0,861**	**0,904**	**0,9556**	**7,5**	**2050**
28.	**20720,0**	**0,8827**	**0,833**	**0,735**	**0,844**	**0,9532**	**6,5**	**1830**
29.	**20616,9**	**0,8805**	**0,831**	**0,742**	**0,843**	**0,9531**	**6,5**	**1830**
30.	**20287,6**	**0,8783**	**0,810**	**0,760**	**0,842**	**0,953**	**6,5**	**1830**
31.	**20500,4**	**0,8819**	**0,842**	**0,770**	**0,846**	**0,9532**	**6,5**	**1830**
32.	**20970,6**	**0,8866**	**0,857**	**0,783**	**0,847**	**0,9533**	**6,5**	**1830**
33.	**20437,2**	**0,8882**	**0,847**	**0,777**	**0,872**	**0,9532**	**6,5**	**1830**
34.	**21664,1**	**0,8936**	**0,871**	**0,790**	**0,867**	**0,9535**	**6,5**	**1880**
35.	**21675,1**	**0,8919**	**0,874**	**0,792**	**0,888**	**0,9536**	**6,5**	**1880**
36	**22026,0**	**0,9021**	**0,911**	**0,799**	**0,895**	**0,9537**	**6,5**	**1890**

If we analyze the empirical location of the quantitative indicators of the factors, we see that they have the nature of a linear relationship (Fig. 1).









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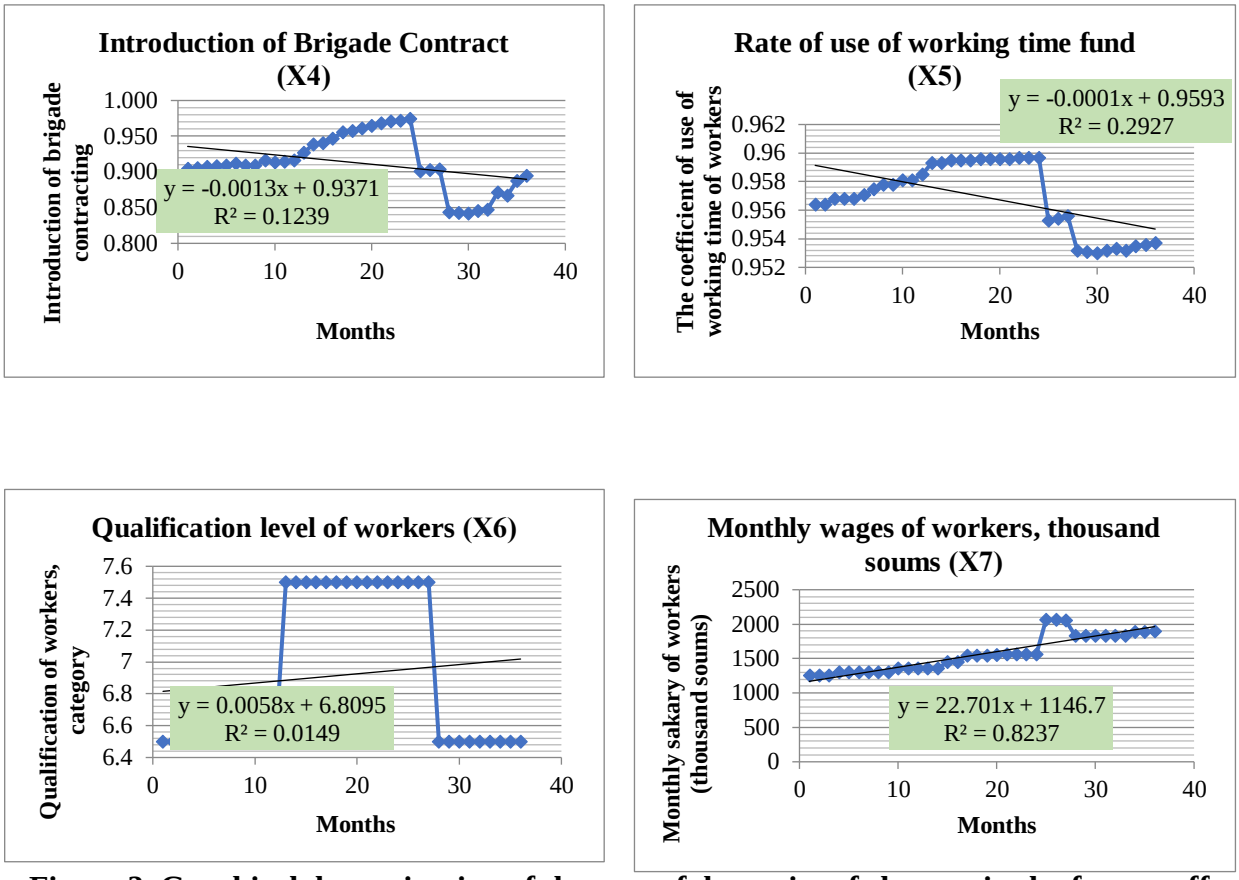

Figure 3. Graphical determination of the type of dynamics of changes in the factors affecting the productivity of "Memor Utkir Chovka" LLC

We therefore perform a linear pair correlation analysis on these dependencies.We use the Excel software package to perform the analysis.Its results are presented in Table 9 below.As can be seen from the table data, we determine the degree of influence of the factors influencing the selected labor productivity by means of correlation coefficients.Correlation coefficients**0,033305714** < $\mathbf{R_i}$ < **0,961310345** varies in quantities in the range.This indicates that the degree of correlation of these factors with labor productivity is large. To further confirm this, we calculate the mean square error of the correlation coefficient(σ) and the reliability coefficients(μ) (Table 10).If the value of the correlation coefficient (r) is greater than 0.25 and the value of the reliability coefficient$\mu$is greater than 0.2, then the degree of influence of the factors is strong.You can be sure of this from the calculations in the table.This shows that the factors affecting the productivity of the enterprise are chosen correctly.

The next task is to study the combined effect of factors affecting the productivity of the enterprise and to formulate a regression equation and forecast the indicators of labor productivity of the enterprise for the next period.To do this, we perform a regression analysis using 8 table indicators as well as the Excel software package.From the results obtained (Table 11), it can be seen that the multiplicity correlation coefficient is r = **0,99916124**, and the combination of factors has a very strong impact on the labor productivity of the enterprise.Using this, we construct the regression equation and determine the forecast indicators of labor productivity for the next period.Given that the

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effect of factors on labor productivity is linear, the regression equation in general has the following form:

$$\bar{Y} = a_0 + a_1x_1 + a_2x_2 + a_3x_3 + a_4x_4 + a_5x_5 + a_6x_6 + a_7x_7,$$

in this,

a_0 –озод хад;

$a_1, \ldots, a_7$ – regression coefficients;

$x_1, \ldots, x_7$ – factors.

In particular, the regression equation for forecasting labor productivity of "Memor Utkir Chovka" LLC will have the following form:

$$\bar{Y}_t = a_0 + a_1x_1 + a_2x_2 + a_3x_3 + a_4x_4 + a_5x_5 + a_6x_6 + a_7x_7 = -1900279{,}584 + 267823{,}198x_1 - 92195{,}526x_2 - 15674{,}786x_3 - 52997{,}316x_4 + 1835498{,}566x_5 + 9699{,}420x_6 + 5{,}859x_7$$

Table 9: Results of linear double correlation analysis of "Me'mor Utkir Chovka" LLC

	Column1	Column2	Column3	Column4	Column5	Column6	Column7	Column8
Column1	1							
Column2	0,961310345	1						
Column3	0,230996426	0,033305714	1					
Column4	0,733605789	0,614349553	0,670408101	1				
Column5	0,875138543	0,857420194	0,312499519	0,680444014	1			
Column6	0,862439903	0,852308603	0,230702176	0,511118559	0,936673349	1		
Column7	0,820769629	0,648963624	0,652978938	0,900744519	0,721474819	0,627391893	1	
Column8	-0,305785219	-0,430295442	0,453162785	0,316454568	-0,43335059	-0,627407874	0,145278260	1
		r_1 =	0,961310345					
		r_2 =	0,033305714					
		r_3 =	0,670408101					
		r_4 =	0,680444014					
		r_5 =	0,936673349					
		r_6 =	0,627391893					
		r_7 =	0,145278260					

Table 10: Reliability calculation table in the correlation analysis of factors affecting labor productivity in "Memor Utkir Chovka" LLC

№	Name the factors that affect labor productivity	Correlationcoefficient*(r)*	Mean square error of the correlation coefficient $\sigma_r = \frac{1-r^2}{\sqrt{n}}$	Reliability coefficient $\mu = \frac{r}{\sigma_r}$
1.	The degree of specialization of the enterprise(X_1)	0,961310345	0,012647070	76,01051765
2.	The degree of progressiveness of production technology(X_2)	0,033305714	0,166481788	0,20005620
3.	The degree of mechanization of production in the enterprise(X_3)	0,670408101	0,091758830	7,30619716
4.	Level of brigade contract implementation(X_4)	0,680444014	0,089499324	7,60278384
5.	The rate of use of the working time fund(X_5)	0,936673349	0,020440506	45,82437144
6.	Qualification level of workers(X_6)	0,627391893	0,101063235	6,20791419
7.	Monthly wages of workers(X_7)	0,14527826	0,163149038	0,89046348

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Table 11: Results of regression analysis of labor productivity in "Me'mor Utkir Chovka" LLC

Regressionstatistics								
Multiple R	0,998951809							
R-quadrate	0,997904716							
Normalized R-quadrate	0,997380895							
Standarderror	575,2367511							
Observations	36							
Dispersiveanalysis								
	df	*SS*	*MS*	*F*	*Significanceof F*			
Regression	7	4412629240	630375605,8	1905,048992	9,24575E-36			
Theremainder	28	9265124,956	330897,3199					
Total	35	4421894365						
	Coefficients	*Standarderror*	*t-statistics*	*P-value*	*Bottom 95%*	*Top 95%*	*Bottom 95.0%*	*Upper 95.0%*
Y-intersection	**-1900279,584**	331826,264	-5,727	3,82736E-06	-2579994,864	-1220564,303	-2579994,864	-1220564,303
Variable X 1	**267823,198**	17456,910	15,342	3,70969E-15	232064,3387	303582,058	232064,339	303582,058
Variable X 2	**-92195,526**	22609,053	-4,078	0,000340958	-138508,071	-45882,981	-138508,071	-45882,981
Variable X 3	**-15674,786**	12478,450	-1,256	0,219442425	-41235,731	9886,159	-41235,731	9886,159
Variable X 4	**-52997,316**	10550,605	-5,023	2,60321E-05	-74609,251	-31385,381	-74609,251	-31385,381
Variable X 5	**1835498,566**	378195,360	4,853	4,14188E-05	1060800,499	2610196,633	1060800,499	2610196,633
Variable X 6	**9699,420**	556,347	17,434	1,43723E-16	8559,794	10839,046	8559,794	10839,046
Variable X 7	**5,859**	2,483	2,360	0,025480504	0,773	10,944	0,773	10,944

Table 12: Forecast indicators of labor productivity of "Memor Utkir Chovka" LLC

Months	The real indicators of labor productivity of the enterprise for 2018-2020	Labor productivity indicators adjusted using the regression equation	Changes in labor productivity indicators when factors increase by 1%	Forecast of labor productivity for the next period (36 months)
1	**36988,6**	**36569,8**	**56319,0**	**40378,0**
2	**37065,7**	**36368,8**	**56126,0**	**40177,0**
3	**37169,3**	**37129,2**	**56862,8**	**40937,5**
4	**37191,4**	**37509,6**	**57251,2**	**41024,9**
5	**37254,3**	**37508,3**	**57249,9**	**41023,6**
6	**37434,3**	**37573,4**	**57323,0**	**41088,7**
7	**37632,1**	**37966,2**	**57715,9**	**41481,6**
8	**37767,1**	**38156,6**	**57884,8**	**41671,9**
9	**37882,9**	**37935,2**	**57666,1**	**41450,5**
10	**38231,4**	**38242,1**	**57986,9**	**41464,5**
11	**38327,1**	**37763,8**	**57527,4**	**42553,5**
12	**38513,6**	**38233,1**	**57996,6**	**43760,4**
13	**46791,2**	**48005,5**	**67763,7**	**46042,1**
14	**47366,5**	**47263,2**	**67021,3**	**46221,7**
15	**47828,2**	**48377,5**	**68135,6**	**46779,4**
16	**48340,0**	**48150,8**	**67914,9**	**46523,5**
17	**48542,9**	**48379,5**	**68090,5**	**46224,9**
18	**48769,4**	**48788,8**	**68526,6**	**46634,2**
19	**49065,3**	**48801,6**	**68539,4**	**46647,0**
20	**49266,2**	**48931,2**	**68669,0**	**46747,2**
21	**49275,3**	**49241,6**	**68985,2**	**46969,7**
22	**49428,2**	**49490,7**	**69218,7**	**47218,9**
23	**49712,6**	**49448,9**	**69176,8**	**47177,0**
24	**49950,0**	**49713,8**	**69441,8**	**47442,0**
25	**49941,2**	**49728,0**	**69538,3**	**49962,4**
26	**49941,8**	**49801,0**	**69611,3**	**50035,3**
27	**49944,1**	**50040,8**	**69851,1**	**50333,8**
28	**20720,0**	**21188,4**	**40694,4**	**51378,0**
29	**20616,9**	**20174,5**	**39680,5**	**50310,6**
30	**20287,6**	**19172,6**	**38663,0**	**49281,9**
31	**20500,4**	**20135,1**	**34566,0**	**50324,8**
32	**20970,6**	**21228,5**	**35437,8**	**51498,5**
33	**20437,2**	**20242,6**	**35923,7**	**50566,1**
34	**21664,1**	**22593,6**	**37094,9**	**52731,4**
35	**21675,1**	**21085,4**	**35896,8**	**51196,3**
36	**22026,0**	**23578,6**	**37346,0**	**53845,2**

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Using the given regression equation (forecast equation) allows you to forecast the productivity of LLC "Architect Sharp Chovka" for the next 36 months (Table 12).It is expedient to pay special attention to the indicators of the last 2, 3 and 4 quarters of 2020.It was in these quarters that labor productivity declined sharply.This is due to the loss of working hours of workers due to problems with the organization of construction work, difficulties in getting new employees to the workplace, the rhythm of construction machinery and equipment.In the future, taking into account the elimination of these organizational issues, the use of advanced technologies and innovations, we will determine the forecast indicators of labor productivity for the next period (36 months).First of all, when we examine the increase in the value of factors by 1%, we see that labor productivity increased by an average of 51.6% over the period under review (36 months) (Table 11).Therefore, in order to ensure uniformity of production for the next 36 months at LLC "Memor Utkir Chovka", we increase the value of the factors influencing it beyond the capabilities of the enterprise.At the same time, it is expedient to take into account the fact that the enterprise is operating smoothly and its performance is growing steadily.

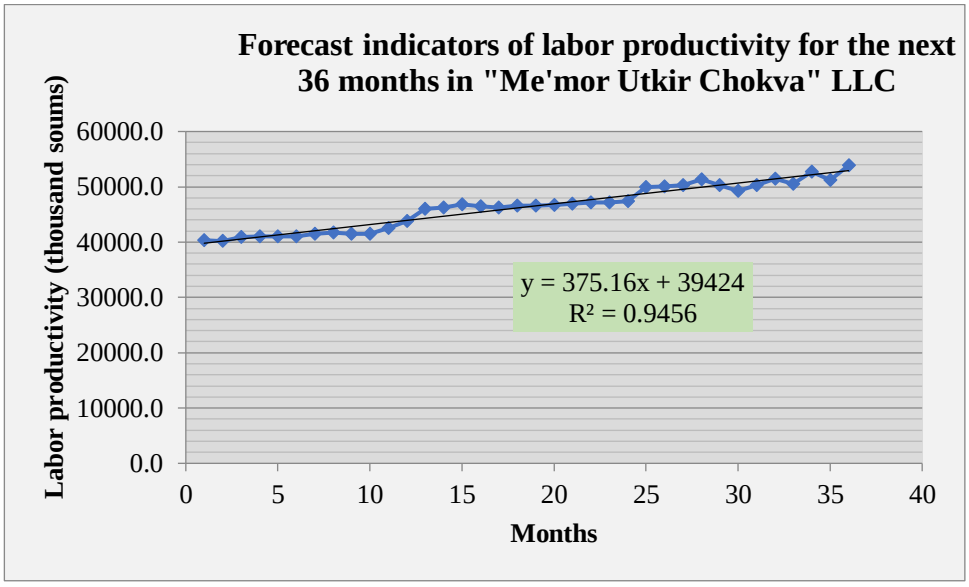

Figure 3. Schedule of labor productivity indicators for the next 36 months of "Me'mor Utkir Chovka" LLC.

According to the results of several calculations, the increase in the value of the factor of specialization (X_1) of the enterprise from 28 to 36 months by 8%, the increase in the level of skills of employees (factor - X_6) by an average of 6.5 It was found expedient to increase salaries (factor - X_7).

As a result of these changes, using the regression equation (forecast equation), the forecast indicators of labor productivity of the enterprise for the coming 2022-2024 were determined (Table 11).Forecasts show that labor productivity will increase steadily over the next 36 months at Memor Utkir Chovka LLC (Figure 3).

Conclusions and suggestions. In conclusion, the proposed method allows to select "serious" (critical) and catastrophic ("catastrophic") risks on the basis of determining the degree of impact of risks on the results of business activities, as well as to create measures to reduce their impact.The method of analyzing the factors affecting the productivity of the enterprise, which is part of the above-

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mentioned economic risks, and determining its forecast values for the next period, to some extent, provides the icon to reduce such economic risks.The described method allows to reduce not only labor productivity indicators, but also other types of risks that are part of economic risks.It is enough to determine only the factors and their quantitative values.

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