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FEATURES OF DEVELOPING A STRATEGY FOR THE DEVELOPMENT OF MANUFACTURE OF PRODUCTS THAT HAVE PRIORITY AND PREFERENCES FROM CONSUMERS OF THE SOUTH AND NCFD REGIONS

Abstract: In the article, the authors consider the role of quality as a tool for promoting the philosophy of quality in the production of competitive and in-demand products at light industry enterprises located in the regions of the Southern Federal District and the North Caucasus Federal District. At the same time, the authors absolutely reasonably confirm the possibility of such an implementation if innovative centers are implemented, saturated with universal and multifunctional equipment, creating prerequisites for the production of the entire range of footwear, namely: men's, women's and, most importantly, children's shoes, the demand for which in regions of the Southern Federal District and the North Caucasus Federal District is quite high. And the use of software will provoke a significant reduction in the cost of its production and provide it with a steady demand in domestic markets with unstable demand.

Key words: quality, import substitution, demand, competitiveness, market, profit, demand, buyer, manufacturer, financial stability, sustainable TEP, attractiveness, assortment, assortment policy, demand, sales. paradigm, economic policy, economic analysis, team, success.

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Introduction

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The transition to a market economy in Russia posed a number of problems for light industry enterprises, the main of which are adaptation to

unusual conditions for them of increasing competition, a reduction in the sales market due to high prices for manufactured products and the problem of non-payments, the difficulty of finding suppliers of raw materials, materials and limited financial resources. At the same time, in order to ensure the survival of an enterprise, modern production facilities must have a number of special qualities: great flexibility, the ability to quickly change the assortment.

Production, unable to readjust, adapt to the demands of real conditions, often small groups of consumers, is doomed to bankruptcy; technology becomes so complicated that it requires the introduction of new forms of control, organization and division of labor. The current planning based on the principle "from what has been achieved" is unacceptable, since a sharp increase in the competitiveness of products is necessary; the structure of the cost of production changes, while due to difficulties with suppliers of raw materials, materials, the share of material costs associated with the sale increases; a big problem is to increase the efficiency of the enterprise marketing products. Particular attention should be paid to accelerating the turnover of working capital, reducing excess stocks, and selling products as quickly as possible.

The Russian economy should be able to develop dynamically on the basis of its own internal resources. For such a restructuring of Russian industry, investments are needed, which are currently sorely lacking. One of the most common ways to raise additional funds is to obtain a bank loan. However, this form is not the only one. Leasing is one of the alternative financing options.

Leasing is a form of investment on a return basis, i.e. provision for a certain period of funds that the lessor receives back at a specified time. At the same time, the lessor receives remuneration in the form of a commission for his service.

The lessor provides the lessee with a financial service by acquiring property from the manufacturer (seller) for the full cost of ownership, and the lessee reimburses this cost with periodic installments with interest on the loan.

Leasing is a loan that differs from a traditional bank loan in that it is provided by the lessor to the lessee in the form of property transferred for use, i.e. a kind of trade credit.

In this regard, below is a comparative analysis of the acquisition of equipment at the expense of a loan or by leasing it.

The bank begins the procedure for obtaining a loan by reviewing the application, and most banks will definitely require the property already owned by the enterprise as collateral. The amount of the loan will depend on the value of the property. The bank evaluates the property of the enterprise not at market value, but at the one for which it will be possible to sell the pledge in the shortest possible time. Accordingly, the value of collateral will be greatly underestimated.

In leasing, the lessee receives the equipment it needs and begins to operate it, but at the same time it remains the property of the leasing company. At the same time, the lessee undertakes the obligation to gradually buy out new property from the company, i.e. like renting equipment. That is why, in the case of leasing, no collateral or excellent credit reputation is required - the equipment acquired under leasing remains the property of the lessor until the lessee pays for it in full.

In addition, unlike banks that issue loans (especially to small businesses) for a period of about five years, leasing companies can significantly increase the repayment period. Depending on the purchase, companies allow themselves to expand the scope up to 10 years.

Leasing provides the lessee with the opportunity to use the property in the implementation of entrepreneurial activities and subsequently acquire ownership of it. Leasing agreements may provide for the accounting of property both on the balance sheet of the lessor and the lessee.

Main part

The buyer of equipment on credit has the opportunity to transfer the value of the property to the cost price through depreciation, however, interest on the loan accrued after the capitalization of the property is not included in the cost of the property, therefore, cannot be transferred to the cost price. Lessees, in the case of accounting for property on the balance sheet of the lessor, have the opportunity to include leasing payments in the cost price, which ensures the transfer of the cost of property to the cost price in a much shorter time compared to the purchase of equipment at the expense of borrowed funds. This option, unlike the purchase, also allows you to include in the cost of interest on borrowed funds, which are included in the amount of the lease payment.

The leasing option, taking into account the property on the balance sheet of the lessee, also allows you to transfer the cost of equipment to the cost price through depreciation in a shorter period of time due to the use of a multiplying coefficient to the depreciation rate, as well as to include the cost of interest on attracted funds in the cost price.

The costs of construction and installation works for any method of acquiring equipment could be transferred to the cost, however, in the case of leasing, this could be done in a shorter time (in the case of accounting for property on the balance sheet of the lessor - during the leasing period, when accounting on the balance sheet of the lessee - during the depreciation period of equipment, taking into account the multiplying factor).The costs of construction and installation works in the event of the acquisition of

property at the expense of a loan are subject to inclusion in the cost of fixed assets and are transferred to the cost through depreciation. However, similar costs in the case of leasing, most likely, cannot be taken into account in determining profit.

In terms of value added tax, there is no fundamental difference between the options under consideration, since the tax paid both in the case of leasing and in the case of purchasing equipment is deductible. However, leasing provides an opportunity for a fairly even deduction of VAT paid as part of the lease payment, while when acquiring fixed assets under a supply agreement, the entire amount of tax paid is deductible at the time the property is entered on the balance sheet of the buyer.

The obligation to pay property tax rests with the person on whose balance sheet the property is located. Thus, the tax on the value of the property is paid by the buyer after the transfer of ownership to it, as well as by the lessee, who takes into account the property in accordance with the terms of the leasing agreement on his balance sheet. With leasing, a flexible payment schedule is possible in accordance with production cycles and cash flows. When calculating leasing payments, the leasing company usually takes into account the financial condition of the lessee. If it is a small or newly formed enterprise, or it takes a long time to put the equipment into operation, then the parties to the leasing transaction are likely to set payments in increasing amounts. That is, the amount of individual payments under the leasing agreement will increase over time,

Another advantage of leasing is that if the leasing company is a wholesale buyer of equipment (which is almost always the case), it receives a corresponding discount. And since the price is lower, the payments for leasing this equipment are also lower. Naturally, a firm or enterprise that buys equipment only once cannot receive such discounts. In addition, the lessor is interested in finding the right equipment at the lowest possible price, as this will give him an advantage over competitors.

Distinctive features of the use of credit and leasing mechanisms by the manufacturer are shown in Table 1.

Table 1- Distinctive features of the use of credit and lease payments

Credit	Leasing
Investments are directed to any entrepreneurial activity	Investments are directed to the activation of production activities, the development and modernization of capacities
Control over the intended use of funds is difficult due to the lack of effective tools	Guaranteed control over the intended use of funds, as specifically specified property is leased
100% guarantee of loan repayment and interest for its use is required	The amount of guarantees is reduced by the value of the leased property, which itself is a guarantee
Acquired property is reflected in the balance sheet of the enterprise, depreciation is charged on it	The property is reflected on the balance sheet of the lessor or the lessee; accrued accelerated depreciation
The loan fee is covered by the income received by the company, on which all prescribed taxes are charged	Leasing payments (included in the cost of production) reduce the tax base and stimulate the development of production

Thus, in a state where many enterprises are not able to invest large financial resources in the technical renovation and intensification of production, leasing is the most appropriate way to organize their activities.

A large number of leasing companies or branches of leasing companies operate on the territory of the Southern Federal District and the North Caucasus Federal District (Table 2).

Table 2 - List of operating leasing organizations in the Southern Federal District and the North Caucasus Federal District

Company name	Volume of new business in million rubles without VAT	Quantity lessees
LLC "Gaztechleasing"	2452.21	6
LK URALSIB LLC	3791.92449	87
Europlan	2279.00	1011
CARCADE Leasing	1481.22	1376
Element Leasing LLC	1147.41	466
OOO Raiffeisen-Leasing	1046.68	9

JSC "GLAVLEASING"	1006.13	27
Interleasing LLC	789.90	89
OOO Scania Leasing	740.00	n.a.
GK "KAMAZ-LEASING"	728.59	42
RMB-LEASING LLC	626.16	19
ZAO Leasing Company Medved	421.05	32
CJSC "Client Leasing Company"	367.89	29
UniCredit Leasing LLC	350.52	15
OOO FB-LEASING	309.72	84
GC "NOMOS-leasing"	296.38	81
JSC "GRUZOMOBIL-LEASING"	223.08	48
JSC "Halyk-Leasing"	204.10	1
Leasing-maximum LLC	202.53	47
OOO LK Volzhanin	188.75	10
GC "Absolute"	163.34	24
OOO Globus-Leasing	153.67	19
LC ONZA (ZAO Atlant-M Leasing)	108.85	45
CJSC United Leasing Company CENTER-CAPITAL	106.00	10
GC "Northern Venice"	63.54	2
ZAO RG Leasing	58.37	5
ZAO DeltaLeasing	56.75	16
ZAO INVEST-SVYAZ-HOLDING	55.00	3
RB Leasing LLC	47.73	3
CJSC Capital Leasing	38.67	13
GC "TransCreditLeasing"	38.19	3
LLC "BusinessCarLeasing"	37.51	5

The main volume of leasing transactions is accounted for by CARCADE Leasing, located in Volgograd, and Europlan. Representative offices of this company are located in Krasnodar, Rostov-on-Don, Stavropol.

In general, in the territory of the Southern Federal District and the North Caucasus Federal District, there should be no significant difficulties for shoe industry enterprises in attracting leasing financing for the development of their production.

For the production of women's shoes, while implementing the development strategy for the production of competitive leather goods in the Southern Federal District and the North Caucasus Federal District, the enterprise needs to purchase new, high-performance equipment that meets the latest requirements. The equipment will be purchased on lease. The list of equipment is presented in table 3.

Table 3- Equipment purchased under leasing

Name of equipment, office equipment	Performance	Manufacturer of equipment, office equipment	Installed capacity of equipment, kW	Quantity	Price per piece of equipment, rub.	Equipment cost, rub.
1	2	3	4	5	6	7
Sewing single-needle machine with a flat platform 441 cl.	-	pfaff, Germany	0.27	7	75000	525000
Sewing single-needle core machine 591–900 class.	-	pfaff, Germany	0.27	6	79400	476400

Two-needle sewing machine with a flat platform for stitching with a two-row seam 244 class. Pfaff	-	pfaff, Germany	0.27		4	78100	312400
Sewing two-needle core machine 574–900 cells. Pfaff	-	pfaff, Germany	0.27		3	79600	238800
630 DG	150 pairs/h	"Shen" Germany		4.5	1	341000	341000
640C	250 pairs/h	"Shen" Germany		3.25	1	362100	362100
333E	250 pairs/h	"Shen" Germany		13.0	1	87000	87000
RS2400	120 pairs/h	IROX FOX Italy		7.0	1	29000	29000
755PC	100 pairs/h	"Sigma" Italy	2.2		1	520000	520000
FR4500	150 pairs/h	IROX FOX Italy	7.5		1	42500	42500
173226/P1	-	"Svit" Czech	1.1		1	125000	125000
Total					27		3059200

Condition of the leasing agreement between the enterprise and the leasing company:

1) the cost of technological equipment - the subject of leasing - 3,059,200 rubles;

2) the interest rate on the loan used by the lessor to purchase equipment (accrued on the balance of the loan at the beginning of the year) is 15% per annum. Leasing period 5 years;

3) depreciation rate of technological equipment supplied on lease with a useful life of 10 years - 10% per annum;

4) increasing factor to depreciation - 3;

5) loan repayment evenly. Annually 611,840 rubles;

6) commission fee to the lessor for technological equipment provided under the leasing agreement - 12% of the total expenses of the lessor;

7) additional services (installation of equipment, training of personnel in the use of equipment) (50,000 rubles) are distributed evenly during the leasing period (10,000 for 5 years);

8) VAT rate - 18%.

The leasing payment is determined by the following formula:

$$LP = AM+NI+PC+PDU+CV+VAT, \quad (1)$$

where AM - property depreciation; NI - property tax (2.2%); PC - loan fee; PDU - payment for additional services; KV - commission; VAT - rate 18%.

1. The amount of depreciation deductions as part of lease payments is calculated by the formula:

$$AM = \frac{Ц_{им} \cdot N_{ам} \cdot К_{п}}{100}, \quad (2)$$

where is tsim– the price of the subject of leasing;
N_{am}- depreciation rate;
Kp- increasing factor.

$$1годAM = \frac{3\,059\,200 \cdot 10 \cdot 3}{100} = 917\,760^{\text{rub.}}$$

$2годAM = 917760$ rub.

$3годAM = 917760$ rub.

$4годAM = 3059200 - 2753280 = 305920$ rub.

$5годAM = нет$.

2. Calculate the property tax:

$$НИ = \frac{Ц_{ост} \cdot СН_{им}}{100}, \quad (3)$$

where is Tsost- the residual value of the leased asset;
SNim - property tax rate.

$$1годНИ = \frac{(3059200 - 917760) \cdot 2,2}{100} = 47111,68^{\text{rub.}}$$

$$2годНИ = \frac{(3059200 - 917760 \cdot 2) \cdot 2,2}{100} = 26920,96^{\text{rub.}}$$

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$$3\text{годНИ} = \frac{(3059200 - 917760 \cdot 3) \cdot 2{,}2}{100} = 6730{,}24\,\text{rub.}$$

$$4\text{годНИ} = \text{нет.}$$
$$5\text{годНИ} = \text{нет.}$$

3. The loan fee is determined as follows:

$$\text{ПК} = \frac{S_{\text{ok}} \cdot K_{\text{кр}}}{100} \text{ , (4)}$$

where S_{ok} - the balance of the loan;
TO_{kr} - Interest on the loan.

The results of calculating the loan fee are presented in Table 4.

Table 4- Loan fee by year

Year	Repayment of a credit	Balance at the beginning of the year	Fee for credit resources at a rate of 15%	Total payments to the bank, rub.
1	611840	3059200	458 880	1070720
2	611840	2447360	367104	978944
3	611840	1835520	275328	887168
4	611840	1223680	183552	795392
5	611840	611840	91776	703616
Total:	3059200	-	1376640	4435840

We will also present the calculation of the final lease payment in tabular form (Table 5).

Table 5- Calculation of leasing payment by years

Year	Depreciation, rub.	Property tax, rub.	Pay per loan, rub.	Pay for additional services, rub.	Komis. remuneration	Leasing-your payment without VAT	VAT	Leasing payment with VAT
1	917760	47111.68	458880	10000	172050.2	1605801.882	289044.3	1894846.2
2	917760	26920.96	367104	10000	158614.2	1480399.155	26471.8	1746871.0
3	917760	6730.24	275328	10000	145178.2	1354996.429	243899.4	1598895.8
4	305920	-	183552	10000	59936.6	559408.64	100693.6	660102.2
5	-	-	91776	10000	12213.1	113989.12	20518.04	134507.2
Total	3059200	80762.88	1376640	50000	547992.4	5114595.226	920627.1	6035222.4

Thus, for 5 years the company will pay the leasing company 6,035,222.4 rubles. These payments will be included in the cost of manufactured products and reduce the tax base. The financial well-being and stability of the enterprise largely depends on the inflow of funds to cover its obligations. The absence of the minimum required cash reserve may indicate financial difficulties. In turn, an excess of cash can be a sign that the company is suffering losses. The reason for these losses can be related both to inflation and the depreciation of money, and to the missed opportunity for their profitable placement and additional income. In any case, it is the analysis of cash flows that will allow you to establish the real financial condition of the enterprise.

Cash flow is the difference between the amounts of cash inflows and outflows of a company over a given period of time. It characterizes the degree of self-financing of the enterprise, its financial strength, financial potential, profitability.

Cash flow is characterized by:

− an inflow equal to the amount of cash receipts (or results in value terms) at this step;

− an outflow equal to payments at this step;

− balance equal to the difference between inflow and outflow.

Cash flow usually consists of partial flows from individual activities:

− cash flow from the investment activity of the enterprise;

− cash flow from operating activities;

− cash flow from financing activities.

Effective cash flow management increases the degree of financial and operational flexibility of the company, as it leads to:

− to improve operational management, especially in terms of balancing receipts and expenditures of funds;

− increasing sales volumes and optimizing costs due to greater opportunities for maneuvering the company's resources;

− improving the efficiency of managing debt obligations and the cost of servicing them, improving the terms of negotiations with creditors and suppliers;

− creation of a reliable base for evaluating the performance of each of the company's divisions, its financial condition as a whole;

− increase the liquidity of the enterprise.

All three types of activity take place in every enterprise.

The cash flow from investing activities includes as an outflow, first of all, the costs distributed over the steps of the billing period for the creation and commissioning of new fixed assets and the liquidation, replacement or compensation of retired fixed assets. In addition, cash flow from investing activities includes changes in working capital (an increase is treated as an outflow of cash, a decrease is treated as an inflow). The outflow also includes own funds invested in the deposit, as well as the costs of purchasing securities of other economic entities intended to finance the project.

As an inflow, cash flow from investing activities includes income from the sale of assets being disposed of (sale of shoes or sale of obsolete equipment). Cash flows from operating activities take into account all types of income and expenses at the corresponding calculation step related to the production of products, and taxes paid on these incomes. The main inflows at the same time are income from the sale of products and other income. Production volumes should be indicated in physical and cost terms. The initial information for determining the proceeds from the sale of products is given by calculation steps for each type of product.

In addition to the proceeds from sales, inflows and outflows of real money, it is necessary to take into account income and expenses from non-sales operations that are not directly related to the production of products. These include, in particular:

− income from property rental or leasing;

− receipt of funds upon closing of deposit accounts and on purchased securities;

− return of loans granted to other participants.

Cash flows from operating activities are generated from the cost of production and distribution of products, which usually consist of production costs and taxes.

Financial activities include operations with funds external to the investment project, i.e. coming not at the expense of the project. They consist of own (share) capital and borrowed funds.

Cash flows from financial activities as inflows include investments of equity capital and borrowed funds: subsidies and subsidies, borrowed funds, including through the issue of the company's own debt securities; as outflows - the costs of repayment and servicing of loans and debt securities issued by the enterprise, as well as, if necessary, the payment of dividends on the shares of the enterprise.

Cash flows from financial activities are formed to a large extent in the development of a financing scheme and in the process of calculating the effectiveness of an investment project.

If the shoes produced are not fully sold, the company loses part of the profit, which is necessary for the further development of production. To reduce losses, the manufacturer must have daily information about the sale of products and make decisions on timely price changes for specific shoe models.

A basis has been prepared for the development of a software product that allows calculating cash receipts from operating activities. This program will become a tool for a sales manager or marketer who controls the sales process of a particular model being produced. As a result of the proposed calculation, we obtain a net inflow from operating activities. A decrease in sales results in a decrease in cash flow and requires a decrease in the selling price of the product in order to increase sales. If such an event does not lead to an increase in cash flow, then the question arises of the advisability of further production of this model.

1. Sales volume (data are entered manually and depend on the model being produced);
2. Product unit price (data entered manually);
3. Revenue = 1· 2;
4. Algorithm for calculating variable costs:

4.1. Raw materials and basic materials $= \sum_{i=1}^{n}$ Consumption rate of the i-th base material·Price of the i-th material;

4.2.1. Ktr - coefficient taking into account transportation costs (data are entered manually (0.15));

4.2. Raw materials and basic materials, including transportation costs = 4.1·4.2.1 + 4.1;

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4.3. Auxiliary materials = $\sum\limits_{i=1}^{n}$ Consumption rate of the i-th auxiliary material·Price of the i-th material;

4.4. Auxiliary materials including transport costs = 4.3·4.2.1 + 4.3;

4.5.1. The total capacity of the installed equipment (data is entered manually);

4.5.2. Equipment load factor (data entered manually);

4.5.3. Tsm – shift duration (data are entered manually (Tsm = 8));

4.5.4. Dr – the number of working days per year (data are entered manually (Dr = 249));

4.5.5. Energy losses during transmission (data entered manually (0.85));

4.5. Annual amount of electricity consumed for technological purposes = $\dfrac{4.5.1 \cdot 4.5.2 \cdot 4.5.3 \cdot 4.5.4}{4.5.5}$;

4.6.1. Price 1 kW (data are entered manually);

4.6. Fuel and energy costs = 4.5·4.6.1;

4.7.1. The number of working days during which the i-th model is produced (data are entered manually);

4.7.2. Release of products per shift (data are entered manually);

4.7. Issue per year = 4.7.1·4.7.2;

4.8.1. The coefficient of labor intensity, taking into account the output (data are entered manually);

4.8. Fuel and energy costs per cost unit = $\dfrac{4.6 \cdot 100 \cdot 4.8.1}{4.7}$;

5. Payroll;

5.1. Hourly rate of the first category of pieceworkers (data entered manually);

5.2. Average tariff coefficient of piecework workers (data entered manually);

5.3. Production program in labor hours, calculated for a year (data are entered manually);

5.4. Direct wage bill for pieceworkers = 5.1·5.2·5.3;

5.5.1. Number of main time workers of the i-th category (data are entered manually);

5.5.2. Number of auxiliary workers of the i-th category (data are entered manually);

5.5.3. Hourly rate of the main time workers of the i-th category (data are entered manually);

5.5.4. Hourly wage rate for auxiliary time workers of the i-th category (data are entered manually);

5.5.5. Tariff wage fund of the main temporary workers = $\sum\limits_{i=1}^{n}$ 5.5.1 ·5.5.3·4.5.3;

5.5.6. Tariff fund of wages of auxiliary time workers = $\sum\limits_{i=1}^{n}$ 5.5.2 ·5.5.4·4.5.3;

5.6. Number of reserve workers (data entered manually);

5.7. Average tariff coefficient of reserve workers (data entered manually);

5.8.1. Percentage of additional payments to reserve workers (data entered manually);

5.8.2. Daily tariff rate of piecework workers of the first category (data are entered manually);

5.8. Bonuses for reserve workers for qualifications = $\dfrac{5.8.1}{100} \cdot 5.8.2 \cdot 5.7 \cdot 5.6$;

5.9. Additional payments to reserve workers for performing work on operations=
= 5.8.2·(5.7 - 5.2)·5.6;

5.10. Hourly wage bill for pieceworkers = = 5.4 + (5.8+5.9)·4.5.4;

5.11.1. Percentage of surcharges to daily costs for hours not worked within the working day (data entered manually (0.25));

5.11. Daily wage bill for pieceworkers = $5.10 + \dfrac{5.10 \cdot 5.11.1}{100}$;

5.12. Daily payroll for time workers = $5.5.5 + \dfrac{5.5.5 \cdot 5.11.1}{100}$;

5.22. Daily wage bill for support workers = $5.5.6 + \dfrac{5.5.6 \cdot 5.11.1}{100}$;

5.13.1. Percentage of additional payments to the monthly fund (data are entered manually (9.64));

5.13. Monthly payroll of pieceworkers = $5.11 + \dfrac{5.11 \cdot 5.13.1}{100}$;

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5.14. Monthly payroll of time workers $= \underline{5.12} + \dfrac{\underline{5.12} \cdot \underline{5.13.1}}{100}$;

5.23. Auxiliary workers monthly payroll $= \underline{5.22} + \dfrac{\underline{5.22} \cdot \underline{5.13.1}}{100}$;

5.20. Annual wage bill for pieceworkers = 5.13;

5.21. Annual wage bill for time workers = 5.14·4.5.4;

5.24. Auxiliary workers annual payroll = 5.23·4.5.4;

5.15. Basic wage of production workers = 5.10 + 5.5.5·4.5.4;

5.16. Additional wages of production workers = (5.13 + 5.14·4.5.4) - 5.15;

5.17.1. Single social tax rate (data are entered manually (UST = 0.26));

5.17. The amount of contributions to the UST = (5.15 + 5.16)·5.17.1;

5.18. The cost of basic and additional wages per calculation unit, including deductions for UST =

$= \dfrac{\underline{5.15} + \underline{5.16} + \underline{5.17}}{\underline{4.7.1} \cdot \underline{4.7.2}} \cdot 100 \cdot \underline{4.8.1}$;

5.19. Basic payroll cost per cost unit $= \dfrac{\underline{5.15}}{\underline{4.7.1} \cdot \underline{4.7.2}} \cdot 100 \cdot \underline{4.8.1}$;

5.20. Variable costs = 4.2 + 4.4 + 4.8 + 5.18;

Algorithm for calculating fixed costs:

6.1. Coefficient taking into account the costs of preparing and mastering production (data are entered manually);

6. Costs for preparation and development of production = 5.19·6.1;

7. Calculation of expenses for the maintenance and operation of equipment:

7.1. Basic and additional wages of auxiliary workers $= \underline{5.24} + \dfrac{\underline{5.24} \cdot \underline{5.17.1}}{100}$;

7.2.1. Process equipment cost $= \displaystyle\sum_{i=1}^{n}$ Number of i-th technological equipment·Price of the i-th equipment;

7.2.2.1. Coefficient taking into account installation costs (data entered manually (0.1));

7.2.2. The cost of technological equipment, taking into account installation costs = 7.2.1·7.2.2.1 + 7.2.1;

7.2.3. Cost of other equipment = 7.2.2·7.2.2.1;

7.2.4. Total equipment costs = 7.2.2 + 7.2.3;

7.2.5. Percentage of deductions for the repair fund (data are entered manually (8%));

7.2. Equipment repair fund costs = 7.2.4·7.2.5;

7.3.1. Depreciation rate of technological equipment (data are entered manually (10%));

7.3.2. Depreciation rate for other equipment (data entered manually (7.7%));

7.3. Depreciation deductions for the repair fund = 7.2.2·7.3.1+ + 7.2.3·7.3.2;

7.4.1.1. Percentage of deductions for low-value and high-wear tools (data are entered manually (0.05));

7.4.1. Cost of low value and wear tools = 7.2.2·7.4.1.1;

7.4.2.1. Percentage of deductions for the restoration of low-value and high-wear tools (data are entered manually (20%));

7.4.2. The cost of restoring low-value and high-wear tools = 7.4.1·7.4.2.1;

7.4. Costs for low-value and high-wear tools = 7.4.1 + 7.4.2;

7.5.1. The cost of the product of the i-th model (data are entered manually);

7.5.2. Annual output $= \displaystyle\sum_{i=1}^{n} \underline{7.5.1} \cdot 4.7$;

7.5.3. Percentage of deductions for intra-production transfer (data are entered manually (0.82%));

7.5. Intra-production transfer costs = 7.5.2·7.5.3;

7.6. Equipment maintenance and operation costs = 7.1 + + 7.2 + 7.3 + 7.4 + 7.5;

7.7.1. Percentage of deductions for other expenses (data are entered manually (10%));

7.7. Other expenses = 7.6·7.7.1;

7.8. Total costs for the maintenance and operation of equipment = 7.6 + 7.7;

7. The cost of maintaining and operating equipment per calculation unit $= \dfrac{7.8 \cdot 100}{\underline{4.7.1} \cdot \underline{4.7.2}} \cdot \underline{4.8.1}$;

8. Calculation of overhead costs:

8.1.1. Number of managers, specialists, employees of the i-th position (data are entered manually);

8.1.2. Monthly salary of the i-th position (data entered manually);

8.1.3. Annual payroll of managers, specialists, employees $= \sum_{i=1}^{n} (8.1.1 \cdot 8.1.2) \cdot 12$, where 12 is the number of months in a year;

8.1. Basic and additional wages of managers, specialists, employees $= 8.1.3 + \dfrac{8.1.3 \cdot 5.17.1}{100}$;

8.2.1. Price per 1 m2 of the building (data are entered manually);

8.2.2. Production area of the building (data are entered manually);

8.2.3. Capital investment per building = 8.2.1·8.2.2;

8.2. Depreciation of buildings and structures for full restoration = 8.2.3·0.012, where 1.2 is the depreciation rate of buildings and structures for full restoration;

8.3.3.1. Conditional coefficient characterizing fuel consumption in kg for heating 1 m^2 per day with a temperature difference of one degree (data are entered manually (0.02));

8.3.3.2. The volume of the production building (data are entered manually);

8.3.3.3. Duration of the heating period, days (data are entered manually (186));

8.3.3.4. Indoor temperature (data entered manually (18));

8.3.3.5. The outside air temperature is average for the heating period (data are entered manually (6));

8.3.3.6. Price per unit of fuel (data entered manually);

8.3.3. Heating costs $= \dfrac{8.3.3.1 \cdot 8.3.3.2 \cdot 8.3.3.3 \cdot (8.3.3.4 + 8.3.3.5) \cdot 8.3.3.6}{1000}$;

8.3.4. Number of fixtures (data entered manually);

8.3.5. Price for 1 kW·h (data entered manually);

8.3.6.1. Luminaire power (data entered manually (75));

8.3.6. Local lighting costs $= = \dfrac{8.3.6.1 \cdot 8.3.4 \cdot 4.5.4 \cdot 4.5.3 \cdot 8.3.5}{1000}$;

8.3.7. Illumination rate 1 m2 of production area (data are entered manually);

8.3.8. General lighting costs $= \dfrac{8.3.7 \cdot 8.2.2 \cdot 4.5.3 \cdot 4.5.4 \cdot 8.3.5}{1000}$;

8.3.9. Total lighting costs = 8.3.6 + 8.3.8;

8.3. Building maintenance costs = 8.3.3 + 8.3.9;

8.4.1. Percentage of deductions for the repair fund of the building (data are entered manually (3%));

8.4. Costs for the repair fund of buildings and structures = 8.2.3·8.4.1;

8.5. Labor protection costs = 8.5.1·(8.5.3 + 8.5.4);

8.6. General production costs = 8.1 + 8.2 + 8.3 + 8.4 + 8.5;

8.7. Other expenses = 8.6·0.1;

8.8. Total overhead costs = 8.6 + 8.7;

8. Cost of overhead costs per calculation unit $= \dfrac{8.8 \cdot 100}{4.7.1 \cdot 4.7.2} \cdot 4.8.1$;

9.1. Percentage of deductions for general business expenses (data are entered manually (290%));

9. General expenses = 5.19·9.1;

10. Fixed costs = 6 + 7 + 8 + 9;

11. Production cost = 4 + 10;

12.1. Percentage of deductions for commercial expenses (data are entered manually (1%));

12. Selling expenses = 11·12.1;

13. Full cost = 11 + 12;

14. Interest on loans included in the cost (data entered manually);

15. Profit before taxes = 3 - 4 - 10 - 8.2 - 7.3 - 14;

16.1. Income tax rate (data entered manually (20%));

16. Taxes and fees = 15·16.1;

17. Net income = 15 - 16;

18. Depreciation = 8.2 + 7.3;

19. Net inflow from operating activities = 17 + 18.

This algorithm can be implemented using the Microsoft Excel software product installed at the workplace of almost any specialist.

For this calculation, it is important to differentiate the data involved in the calculation. To calculate the cost of a particular manufactured model, the initial data are fixed and variable costs that depend

on production equipment, the composition of the main and auxiliary materials, the number of employees, etc. In the Excel spreadsheet, the cells in which these data are entered are highlighted in blue. In the process of monitoring the sales of a particular model, this data remains unchanged. For another model, the data is corrected.

The calculation also contains data that does not depend on the model and is entered into the calculation table once. They are highlighted in green. Calculation formulas in the table are highlighted in

yellow, they are recalculated automatically when the source data changes. The main input data used in the monitoring process are the selling price of a unit of production and sales volume.

Thus, the calculation can be performed daily or in a selected time range, while setting only the sales volume and unit price for a certain period, we will receive an increment in cash flow for this period. The algorithm for calculating cash receipts from operating activities is presented in Table 7.

Table 7- Algorithm for calculating cash receipts from operating activities

Continued table 7

Microsoft Excel - алгоритм

Файл Правка Вид Вставка Формат Сервис Данные Окно Справка

D9   =D13+D16+D29+D61

	A	B	C	
62		Затраты на основную заработную плату на калькуляционную единицу	руб.	=D57/(
63				
64		Расчет постоянных затрат		=D67+
65				
66		Коэффициент учитывающий затраты на подготовку и освоение производства	%	0,02
67		Затраты на подготовку и освоение производства	руб.	=D62*
68		Расчет расходов на содержание и эксплуатацию оборудования		
69		Основная и дополнительная заработная плата вспомогательных рабочих	руб.	=D56+
70		Стоимость технологического оборудования	руб.	377290
71		Коэффициент, учитывающий затраты на монтаж	%	0,1
72		Стоимость технологического оборудования с учетом затрат на монтаж	руб.	=D70*
73		Стоимость прочего оборудования	руб.	=D72*
74		Итого затрат на оборудование	руб.	=D72+
75		Процент отчислений на ремонтный фонд	%	0,08
76		Затраты на ремонтный фонд оборудования	руб.	=D74*
77		Норма амортизации технологического оборудования	%	0,1
78		Норма амортизации прочего оборудования	%	0,077
79		Амортизационные отчисления на ремонтный фонд	руб.	=D72*
80		Процент отчислений на малоценные и быстроизнашивающиеся инструменты	%	0,05
81		Стоимость малоценных и быстроизнашивающихся инструментов	руб.	=D72*
82		% отчислений на восстановление малоценных и быстроиз-ся инструментов	%	0,2
83		Расходы на восстановление малоценных и быстроизнашивающихся инструментов	руб.	=D81*
84		Расходы на малоценные и быстроизнашивающиеся инструменты	руб.	=D81+
85		Стоимость изделия	руб.	=G81
86		Годовой объем выпуска	руб.	=G86
87		Процент отчислений на внутрипроизводственное перемещение	%	0,0082
88		Затраты на внутрипроизводственное перемещение	руб.	=D86*
89		Расходы на содержание и эксплуатацию оборудования	руб.	=D69+
90		Процент отчислений на прочие расходы	%	0,1
91		Прочие расходы	руб.	=D89*
92		Всего затрат на содержание и эксплуатацию оборудования	руб.	=D89+

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Готово

Table 7 continued

	A	B	C	D	E
92		Всего затрат на содержание и эксплуатацию оборудования	руб.	=D89+D91	
93		Затраты на содержание и эксплуатацию оборудования на калькуляционную единицу	руб.	=(D92*100)/(D25*D26)*D28	
94					
95		Расчет общепроизводственных расходов			
96					
97		Годовой фонд заработной платы руководителей, специалистов, служащих	руб.	=Годовой фонд ЗП!C22	
98		Основная и дополнительная заработная плата руководителей, специалистов, служащих	руб.	=D97+(D97*D59)	
99		Цена за 1 м² здания	руб.	1800	
100		Производственная площадь здания	м2	861,72	
101		Капитальные вложения на здание	руб.	=D99*D100	
102		Норма амортизации зданий и сооружений на полное восстановление	%	0,012	
103		Амортизация зданий и сооружений на полное восстановление	руб.	=D101*D102	
104		Условный коэффициент, характеризующий расход топлива в кг на отопление 1 м² в сутки при разности температур в один градус		0,02	
105		Объем производственного здания, занимаемого производственными потоками	м3	2757,504	
106		Длительность отопительного периода	дни	186	
107		Температура внутри помещения	градусы	18	
108		Температура наружного воздуха средняя за отопительный период	градусы	6	
109		Цена за единицу топлива	руб.	595	
110		Затраты на отопление	руб.	=D104*D105*D106*(D107+D108)*D109/1000	
111		Количество светильников	шт.	70	
112		Цена за 1 кВт * ч.	руб.	3,6	
113		Мощность светильников	Вт	75	
114		Затраты на местное освещение	руб.	=(D113*D111*D19*D20*D112)/1000	
115		Норма освещенности 1 м2 производственной площади	Вт	13	
116		Затраты на общее освещение	руб.	=(D115*D100*D19*D20*D112)/1000	
117		Итого затрат на освещение	руб.	=D114+D116	
118		Затраты на содержание здания	руб.	=D110+D117	

Table 7 continued

	A	B	C	D	E
116		Затраты на общее освещение	руб.	=(D115*D100*D19*D20*D112)/1000	
117		Итого затрат на освещение	руб.	=D114+D116	
118		Затраты на содержание здания	руб.	=D110+D117	
119		Процент отчислений на ремонтный фонд здания	%	0,03	
120		Затраты на ремонтный фонд зданий и сооружений	руб.	=D101*D119	
121		Затраты по охране труда	руб.	31500	
122		Общепроизводственные расходы	руб.	=D98+D103+D118+D120+D121	
123		Процент отчислений на ремонтный фонд	%	0,1	
124		Прочие расходы	руб.	=D122*D123	
125		Всего затраты на общепроизводственные расходы	руб.	=D122+D124	
126		Затраты на общепроизводственные расходы на калькуляционную единицу	руб.	=(D125*100)/(D25*D26)*D28	
127		Процент отчислений на общехозяйственные расходы	%	2,9	
128		Общехозяйственные расходы	руб.	=D62*D127	
129		Производственная себестоимость	руб.	=D9+D64	
130		Процент отчислений на коммерческие расходы	%	0,01	
131		Коммерческие расходы	руб.	=D129*D130	
132		Полная себестоимость	руб.	=D129+D131	
133		Проценты по кредитам, включаемые в себестоимость	руб.		
134		Прибыль до вычета налогов	руб.	=D7-D9-D64-D103-D79-D133	
135		Ставка налога на прибыль	%	0,2	
136		Налоги и сборы	руб.	=D134*D135	
137		Чистый доход	руб.	=D134-D136	
138		Амортизация	руб.	=D103+D79	
139		Чистый приток от операционной деятельности	руб.	=D137+D138	

Clarivate Analytics indexed

Table 8- Calculation of the annual payroll of managers, specialists, employees

	A	B	C	D	E
1					
2		Расчет годового фонда заработной платы руководителей, специалистов, служащих			
3					
4		Должность	Количество, чел.	Оклад в месяц, руб.	
5		Начальник цеха	1	24200	
6		Зам. Начальника цеха	1	22000	
7		Мастер раскройно-вырубочного участка и участка сборки заготовки верха обуви	1	19500	
8		Мастер участка сборки, отделки и упаковки обуви	1	19500	
9		Кладовщик	1	16000	
10		Уборщицы	2	8000	
11					
12					
...					
22		Годовой фонд заработной платы руководителей, специалистов, служащих	=СУММПРОИЗВ(C5:C20;D5:D20)*12		

Selected cell C5, formula bar: 1. Сумма=109207

Table9 - Calculation of average tariff coefficients and tariff wage funds

Selected cell E12, formula: =СУММПРОИЗВ(C6:C11;D6:D11)/СУММ(C6:C11)

	B	C	D	E	F	G	H	I	J	K
5	Кол-во осн рабочих-сдельщиков		Тарифный коэффициент				Количество резервных рабочих		Тарифный коэффициен	
6	1 разряда						1 разряда			
7	2 разряда	24	1,096				2 разряда			
8	3 разряда	18	1,212				3 разряда			
9	4 разряда	18	1,346				4 разряда	7	1,346	
10	5 разряда	4	1,558				5 разряда	2	1,558	
11	6 разряда	12	1,808				6 разряда	2	1,808	
12	Среднетарифный коэф-т рабочих-сдельщиков			=СУММПРОИЗВ(C6:C11;D6:D11)/СУММ(C6:C11)			Среднетарифный коэф-т резервных рабочих:		=СУММПРОИЗВ(I6:I11;	
13							Количество резервных рабочих		=СУММ(I6:I11)	
15	Кол-во осн. рабочих-повременщиков		Тарифный коэффициент	Часовая тарифная ставка	Дневная тарифная ставка					
16	1 разряда				=E16*8					
17	2 разряда				=E17*8					
18	3 разряда				=E18*8					
19	4 разряда				=E19*8					
20	5 разряда	1	1,531	70,55	=E20*8					
21	6 разряда				=E21*8					
22	Тарифный фонд ЗП основных рабочих-повременщиков				=СУММПРОИЗВ(C16:C21;F16:F21)					
25	Количество вспомогательных рабочих	Тарифный коэффициент		Часовая тарифная ставка	Дневная тарифная ставка					
26	1 разряда				=D26*8					
27	2 разряда				=D27*8					
28	3 разряда				=D28*8					
29	4 разряда				=D29*8					
30	5 разряда				=D30*8					
31	6 разряда	2	83,33	1,736	=D31*8					
32	Тарифный фонд ЗП вспомогательных рабочих				=СУММПРОИЗВ(C26:C31;F26:F31)					

Table10 - Algorithm for calculating the receipt of cash from operating activities

Name of indicator	Unit measurements	Indicator value
1	2	3
Volume of sales	steam	12656
Unit price	rub.	974.58
Revenue	rub.	=D5 D6
Calculation of variable costs		=D13+D16+D29+D61
Raw materials and basic materials	rub.	42224
Coefficient taking into account transportation costs	%	0.15
Raw materials and basic materials, including transportation costs	rub.	=D11 D12+D11
Auxiliary materials	rub.	3594.37
Coefficient taking into account transportation costs	%	0.1
Auxiliary materials including transport costs	rub.	=D14 D15+D14
Total capacity of installed equipment	kW	76.27
Equipment load factor		0.89
Shift duration	hour	8
Number of working days per year	days	249
Transmission energy loss		0.85
Annual amount of electricity consumed for technological purposes	kWh	=(D17 D18 D19 D20)/D21
Price 1 kW	rub.	3.6
Fuel and energy costs	rub.	=D22 D23
The number of working days during which the model is released	days	56
Release of products in shift	steam	678
Output per year	steam	=D25 D26
The coefficient of labor intensity, taking into account the output		0.224
Fuel and energy costs per cost unit	rub.	=(D24 100 D28)/D27
Payroll preparation		
Hourly tariff rate of the 1st category of pieceworkers	rub.	50
Average tariff coefficient of pieceworkers		='Average tar.coefficients and Tar. fund ZP'!E12
Production program in labor hours, calculated for a year	hour	153339.19

Direct payroll for pieceworkers	rub.	=D33 D34 D35
Tariff fund of wages of the main time workers	rub.	='Average tar.coefficients and Tar. fund ZP'!F22
Tariff fund of wages of auxiliary time workers	rub.	='Average tar.coefficients and Tar. fund ZP'!F32
Number of reserve workers	people	eleven
Average rate of reserve workers		1.469
Percentage of additional payments to reserve workers	%	0.15
Daily wage rate for pieceworkers of the first category	rub.	400
Bonuses for reserve workers for qualifications	rub.	=D41 D42 D39 D40
Additional payments to reserve workers for performing work on operations	rub.	=D42 (D40-D34) D39
Hourly payroll for pieceworkers	rub.	=D36+(D43+D44)*D20
Percentage of additional payments to daily costs for hours not worked within the working day	%	0.25
Daily payroll for pieceworkers	rub.	=D45+(D45 D46)/100
Daily payroll for time workers	rub.	=D37+(D37 D46)/100
Auxiliary workers' daily wage bill	rub.	=D38+(D38 D46)/100
Percentage of additional payments to the monthly fund	%	9.64
Monthly payroll for pieceworkers	rub.	=D47+(D47 D50)/100
Monthly payroll for time workers	rub.	=D48+(D48 D50)/100
Auxiliary workers monthly payroll	rub.	=D49+(D49 D50)/100
Annual payroll for pieceworkers	rub.	=D51
Annual payroll for time workers	rub.	=D52 D20
Ancillary workers annual wage bill	rub.	=D53 D20
Basic salary of production workers	rub.	=D45+D37 D20
Additional wages for production workers	rub.	=(D51+D52 D20)-D57
Single social tax rate	%	0.26
The amount of contributions to the UST	rub.	=(D57+D58) D59
Costs for the main and additional wages per calculation unit, including deductions for the UST	rub.	=(D57+D58+D60)/(D25 D26) 100 D28

Basic payroll costs per cost unit	rub.	=D57/(D25 D26) 100 D28
Calculation of fixed costs		=D67+D93+D126+D128
Coefficient taking into account the costs of preparation and development of production	%	0.02
Costs for preparation and development of production	rub.	=D62 D66
Calculation of expenses for the maintenance and operation of equipment		
Basic and additional wages of auxiliary workers	rub.	=D56+D56 D59
The cost of technological equipment	rub.	3772900
Installation cost factor	%	0.1
The cost of technological equipment, taking into account the cost of installation	rub.	=D70 D71+D70
Cost of other equipment	rub.	=D72 D71
Total equipment costs	rub.	=D72+D73
Percentage of deductions for the repair fund	%	0.08
Equipment repair fund costs	rub.	=D74 D75
Depreciation rate of technological equipment	%	0.1
Depreciation rate for other equipment	%	0.077
Depreciation deductions for the repair fund	rub.	=D72 D77+D73 D78
Percentage of deductions for low-value and high-wear tools	%	0.05
The cost of low-value and high-wear tools	rub.	=D72 D80
% deductions for the restoration of low-value and high-wear tools	%	0.2
Costs for the restoration of low-value and high-wear tools	rub.	=D81 D82
Costs for low-value and high-wear tools	rub.	=D81+D83
Product cost	rub.	=G81
Annual output	rub.	=G86
Percentage of deductions for intra-production transfer	%	0.0082
Intra-production transfer costs	rub.	=D86 D87

Costs for the maintenance and operation of equipment	rub.	=D69+D76+D79+D84+D88
Percentage of deductions for other expenses	%	0.1
other expenses	rub.	=D89 D90
Total costs for the maintenance and operation of equipment	rub.	=D89+D91
Equipment maintenance and operation costs per cost unit	rub.	=(D92 100)/(D25 D26) D28
Calculation of overhead costs		
Annual payroll for managers, specialists, employees	rub.	='Annual RFP Fund'!C22
Basic and additional wages of managers, specialists, employees	rub.	=D97+(D97 D59)
Price per 1 m2 of the building	rub.	1800
Production area of the building	m2	861.72
Capital investment per building	rub.	=D99 D100
Depreciation rate of buildings and structures for full restoration	%	0.012
Depreciation of buildings and structures for full restoration	rub.	=D101 D102
The volume of the production building occupied by production flows	m3	2757.504
Duration of the heating period	days	186
Indoor temperature	degrees	18
Outside air temperature average for the heating period	degrees	6
Price per unit of fuel	rub.	595
heating costs	rub.	=D104 D105 D106 (D107+D108) D109/1000
Number of fixtures	PC.	70
Price for 1 kWh	rub.	3.6
Luminaire power	Tue	75
Local lighting costs	rub.	=(D113 D111 D19 D20 D112)/1000
Illumination rate 1 m2 of production area	Tue	13
General lighting costs	rub.	=(D115 D100 D19 D20 D112)/1000
Total lighting costs	rub.	=D114+D116
Building maintenance costs	rub.	=D110+D117
Percentage of deductions for the repair fund of the building	%	0.03
Expenses for the repair fund of buildings and structures	rub.	=D101 D119
Labor protection costs	rub.	31500
overhead costs	rub.	=D98+D103+D118+D120+D121

Percentage of deductions for the repair fund	%	0.1
other expenses	rub.	=D122 D123
Total general production costs	rub.	=D122+D124
General production costs per cost unit	rub.	=(D125 100)/(D25 D26) D28
Percentage of deductions for general business expenses	%	2.9
General running costs	rub.	=D62 D127
Production cost	rub.	=D9+D64
Selling expenses	rub.	=D129 D130
Full cost	rub.	=D129+D131
Interest on loans included in the cost	rub.	
Profit before taxes	rub.	=D7-D9-D64-D103-D79-D133
Income tax rate	%	0.2
Taxes and fees	rub.	=D134 D135
net income	rub.	=D134-D136
Depreciation	rub.	=D103+D79
Net inflow from operating activities	rub.	=D137+D138

Of great importance in the management of output is the assessment of the actual output and sales within the limits of production capacity, i.e. within the limits of "minimum - maximum" volume of production. Comparison with a minimum, break-even volume allows you to determine the degree, or zone, of the "security" of the organization and, with a negative value of "security", withdraw certain types of products from production, change production conditions and thereby reduce costs or stop production.

Comparison of the achieved output with the maximum volume determined by the production potential of the organization allows you to assess the possibility of increasing profits with an increase in production volumes if demand or market share of the organization increases.

For a shoe company seeking a strong market position, pricing is key to the success of the chosen strategy. The price is a tool to stimulate demand and at the same time is the main factor in long-term profitability.

Getting the maximum profit is possible with the optimal combination of sales volume and prices for products. However, it is not possible to sell an unlimited number of units of shoes at the same price. An increase in sales leads to market saturation and a drop in effective demand for products. At some point in time, in order to sell a large number of shoes, it will be necessary to reduce the price.

When developing a pricing strategy, goals related to both profit and sales volume and competition are considered. The price determines the profitability of all activities, not only setting the level of profit, but also fixing through the volume of sales the conditions under which the payback of all costs is achieved (break-even point). The price charged for a commodity directly determines the level of demand and, consequently, the volume of sales under elastic demand. The shoe industry is a material-intensive industry, so the relative value of fixed costs in the total cost of footwear will be small, therefore, the price elasticity of demand is high. This means that a decrease in price must be accompanied by a significant increase in demand for shoes. Too high or low price can undermine the success of the product.

In this regard, it is necessary to carry out a break-even analysis.

The break-even point is the volume of production at the sale of which the sales proceeds cover the total costs. At this point, the revenue does not allow the company to make a profit, but there are no losses either.

Consider the various ratios of sales volumes and prices for manufactured products. Price reduction occurs when a company uses a discount system to increase sales. This event leads to an increase in sales proceeds and additional profit. However, the area of income is not unlimited - when a certain volume of production is reached, its further expansion becomes economically unprofitable. At some point, the positive

effect of an increase in sales is lower than the negative effect of a price reduction.

The formula for determining the break-even point is:

$$B_{\text{кр}} = \frac{3_{\text{пост}}}{\text{Ц} - 3_{\text{пер}}^{1\text{щу}}}, \qquad (5)$$

where Zpost- total fixed costs;
C- the selling price of a unit of production;

$3_{\text{пер}}^{1\text{щу}}$ - variable costs per unit of output.

Table11 - Initial data for building a break-even point

Price products, rub.	Revenue from sales, rub.	Fixed costs, rub.	Variable costs, rub.	Fixed costs per unit of production, rub.	Variable costs per unit of production, rub.
1150	5821300	2868860	3116100	226.67	615.586
1145	6520775	2868860	3505840	226.67	615.599
1140	7213920	2868860	3895390	226.67	615.579
1135	7900735	2868860	4284920	226.67	615.560
1125	8543250	2868860	4674710	226.67	615.579
1115	9171990	2868860	5064010	226.67	615.61
1100	9744900	2868860	5453546	226.67	615.59
1090	10346280	2868860	5843090	226.67	615.58
1075	10884 375	2868860	6232750	226.67	615.58
1060	11403480	2868860	6622160	226.67	615.56
1040	11845600	2868860	7011700	226.67	615.60
1010	12143230	2868860	7401240	226.67	615.59
975	12326944	2868860	7790780	226.67	615.579
950	12624550	2868860	8180340	226.67	615.572
790	10998380	2868860	8569840	226.67	615.56

Table12 - Analysis of the break-even conditions of a shoe company

Monthly sales volume, pairs	Product price, rub.	General costs, rub.	Profit Loss) from product sales, rub.	Dot break even
5062	1150	5984960	-163200	5368.4
5695	1145	6374700	146075	5419.07
6328	1140	6764250	449670	5470.53
6961	1135	7153780	746955	5522.98
7594	1125	7543570	999680	5631.6
8226	1115	7932870	1239120	5744.6
8859	1100	8322406	1422494	5922.38
9492	1090	8711950	1634330	6047.1
10125	1075	9101610	1782765	6244.5
10758	1060	9491020	1912460	6454.9
11390	1040	9880560	1965040	6759.8
12023	1010	10270100	1873130	7273.8
12656	975	10659640	1667304	8004.2
13289	950	11049200	1575350	8578.4
13922	790	11438700	-440320	16446.1

The graph in Figure 1 shows the behavior of variable and fixed costs, as well as sales proceeds at various prices and sales volumes for the given initial data.
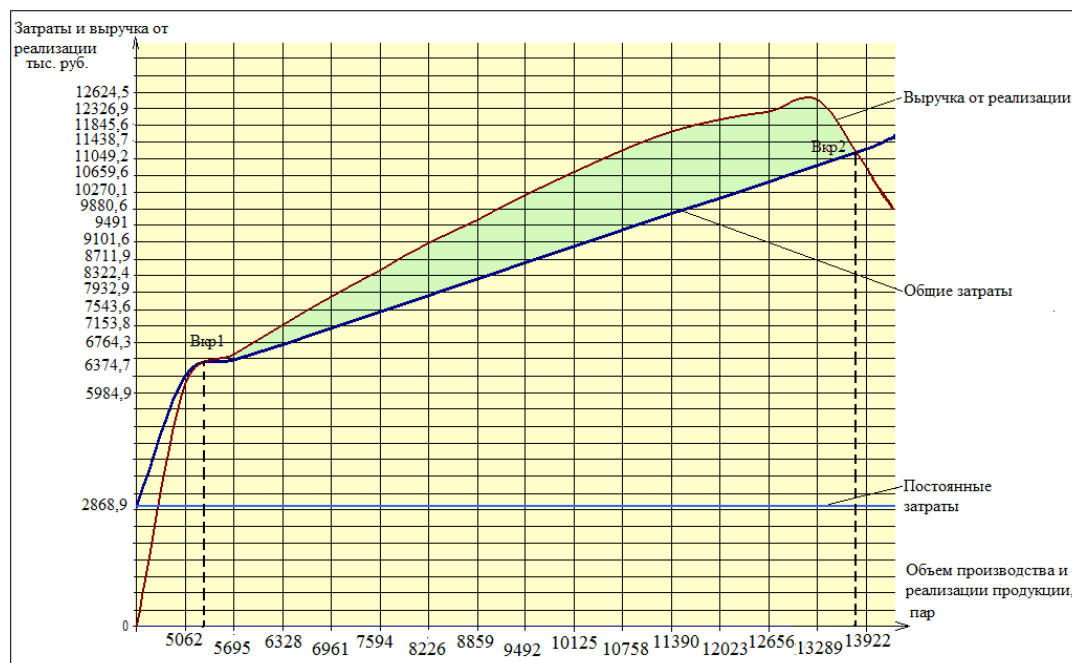
Figure 1- Breakeven Chart

As you can see from Figure 1, the revenue line intersects the total cost line at two points. This means that there are two levels of output and sales of products, at which the total costs are equal to the proceeds from the sale, i.e. two breakeven points. The behavior of total costs is most strongly influenced by variable costs, which change in accordance with changes in the volume of production and sales of products.

The growth in production and sales is accompanied by a constant price reduction. The minimum allowable price per unit of production, providing coverage of total costs, will correspond to the second break-even point; the maximum allowable - the first breakeven point. Calculations show that the transition from unprofitable to profitable production takes place with a production volume of women's summer shoes of 5368.4 units - this is the first break-even point, the second break-even point occurs with a production and sales volume of 16446.1 units. On the field between the two break-even points, there is an area within which the optimal ratios of volume, selling price and, accordingly, profit are achieved. The maximum profit will be received when selling products at a price of 1040 rubles,

For the break-even operation of the enterprise, the selling price should not be less than the cost of a pair of shoes, which in this case is 842.26 rubles. At a price of 790 rubles. the cost price does not overlap, and immediately there are losses. When evaluating the consequences of a price reduction on a change in the break-even point, it is necessary to additionally evaluate the effect of a price reduction on an increase in sales volumes. In other words, an increase in prices can affect the decrease in sales in such a way that the additional profit per unit received as a result of the impact of the price factor will be offset by the amount of losses from the decrease in sales. And vice versa,

Thus, the calculated threshold values of production set the area of production volume and sales of products, within which the break-even activity of the enterprise is ensured. To assess the effectiveness of the production activities of a shoe enterprise, it is necessary to analyze the annual results of the enterprise's work on the production of men's and women's footwear assortment.

Table 13 presents the results of the shoe enterprise for the production of a summer range of shoes.

Table13 - Generalized results of the work of a shoe company for the production of a summer assortment of shoes

Indicators	The value of the indicator for different sales volumes per month, %			
	100	80	60	40
Sales volume, pairs	28168	22534	16901	11266
Sales proceeds, thousand rubles	24033.9	19226.86	14420.58	9612.56
Unit cost of production, rub.	726.7	726.7	726.7	726.7

Full cost, thousand rubles	20373.34	17265.01	14156.57	11047.32
Including raw materials and basic materials, thousand rubles.	12628.89	10102.96	7577.45	4402.8
Profit from sales, thousand rubles	3660.56	1961.85	264.01	-1434.8
Income tax, thousand rubles	732.112	392.37	52.802	-
Net profit, thousand rubles	2928.448	1569.48	211.208	-
Product profitability, %	15.2	10.2	1.8	-

From the analysis of table 13, it can be seen that in the event of a decline in sales and sales of shoes, less than 60% of the production volume brings losses to the enterprise.

Table 14 presents the results of the shoe enterprise for the production of the autumn range of shoes.

Table14 - Generalized results of the work of the shoe enterprise for the production of the autumn assortment of shoes

Indicators	The value of the indicator for different sales volumes per month, %			
	100	80	60	40
Sales volume, pairs	25358	20286.4	15214.8	10143.2
Sales proceeds, thousand rubles	30640.47	24512.37	18384.27	12256.19
Unit cost of production, rub.	1024.58	1024.58	1024.58	1024.58
Full cost, thousand rubles	25747.78	21683.33	17618.45	13554.44
Vincluding raw materials and basic materials, thousand rubles	17105.57	13661.88	10263.34	6842.22
Profit from sales, thousand rubles	4892.69	2829.04	765.82	-1298.25
Income tax, thousand rubles	978.5	565.8	153.16	-
Net profit, thousand rubles	3914.19	2263.23	612.66	-
Product profitability, %	15.9	11.5	4.2	-

Table 15 presents the results of the work of a shoe company for the production of a winter range of footwear.

Table15 - Generalized results of the work of a shoe company for the production of a winter assortment of shoes

Indicators	The value of the indicator for different sales volumes per month, %			
	100	80	60	40
Sales volume, pairs	26114	20891	15668	10445
Sales proceeds, thousand rubles	45032.84	36025.56	27019.46	18012.69
Unit cost of production, rub.	1435.54	1435.54	1435.54	1435.54
Full cost, thousand rubles	37487.78	31183.45	24878.18	18573.85
Including raw materials and basic materials, thousand rubles	28072.03	22457.8	16842.75	11228.5
Profit from sales, thousand rubles	7545.06	4842.11	2141.28	-561.16
Income tax, thousand rubles	1509	968.42	428.26	-
Net profit, thousand rubles	6036	3873.69	1713	-
Product profitability, %	16.8	13.4	7.9	-

Table 16 shows the results of the work of a shoe company for the production of a spring assortment of shoes.

Table16 - Generalized results of the work of a shoe company for the production of a spring assortment of shoes

Indicators	The value of the indicator for different sales volumes per month, %		
	100	80	60
Sales volume, pairs	29661	23728.8	17796.6
Sales proceeds, thousand rubles	31026.82	24821.45	18616.09
Unit cost of production, rub.	890.2	890.2	890.2
Full cost, thousand rubles	26405.04	21576.03	18400.86
Vincluding raw materials and basic materials, thousand rubles	17648.54	14118.8	10589.1
Profit from sales, thousand rubles	4621.78	3245.42	215.23
Income tax, thousand rubles	924.36	649.1	43
Net profit, thousand rubles	3697.4	2596.3	172.23
Product profitability, %	14.9	13	1.1

These calculations indicate that with 100% of the sale of men's and women's shoes in the specified period of time, not only the costs of production and sale of products are covered, but there is also a profit in the amount of 3697.4 thousand rubles. This indicates the effective operation of the enterprise, as well as the correct marketing and assortment policy. Product profitability is 14.9%.

With the implementation of 60% of shoes, the activity of the enterprise brings insignificant income. Basically, this income is achieved through the sale of men's shoes, since losses are observed in the women's assortment with these volumes. A further decrease in sales volumes will lead to an increase in losses. To solve this problem, the conditions for the sale of shoes within a specified period of time, as well as the sales volume of at least 50%, are necessary. If such a situation arises, it is necessary to attract borrowed funds to cover the costs and subsequent output.

Table 17 presents the annual results of the shoe enterprise for the production of men's and women's footwear assortment.

Table17- Annual results of the shoe enterprise for the production of men's and women's shoes

Indicators	Jan.	Feb.	March	Apr.	May	June	July	Aug.	Sen.	Oct.	Nov.	Dec.
1	2	3	4	5	6	7	8	9	10	11	12	13
Sales volume, pairs	26114	26114	29661	29661	29661	28168	28168	28168	25358	25358	25358	26114
Sales proceeds, thousand rubles	45032.84	45032.84	31026.82	31026.82	31026.82	24033.9	24033.9	24033.9	30640.47	30640.47	30640.47	45032.84
Unit cost of production, rub.	1435.54	1435.54	890.2	890.2	890.2	726.7	726.7	726.7	1024.58	1024.58	1024.58	1435.54
Full cost, thousand rubles	37487.78	37487.78	26405.04	26405.04	26405.04	20373.34	20373.34	20373.34	25747.78	25747.78	25747.78	37487.78
Profit from sales,	7545.06	7545.06	4621.78	4621.78	4621.78	3660.56	3660.56	3660.56	4892.69	4892.69	4892.69	7545.06

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thousand rubles												
Income tax, thousand rubles	1509	1509	924.36	924.36	924.36	732.112	732.112	732.112	978.5	978.5	978.5	1509
Net profit, thousand rubles	6036	6036	3697.4	3697.4	3697.4	2928.448	2928.448	2928.448	3914.19	3914.19	3914.19	6036
Product profitability, %	16.8	16.8	14.9	14.9	14.9	15.2	15.2	15.2	15.9	15.9	15.9	16.8

Most often, an enterprise sells shoes through stores with payment after sale, concluding contracts with trade, indicating the timing of receipt of funds to the manufacturer's accounts. In this case, if the footwear is in demand and is sold in full, then the company receives money on time, which is also needed to pay salaries, purchase working capital and other expenses to ensure the development of production.

During the year, the company produces 327,903 pairs of shoes. With 100% sales of these products, the company will receive revenue in the amount of 392202.1 thousand rubles. However, this situation is not always the case.

For example, with the sale of autumn low shoes in the amount of 80% of the production volume, the profit is reduced by 43.15% and amounts to only 1178 thousand rubles, while the sale of shoes less than 47.4% of the production volume brings losses to the enterprise. Due to the lack of funds, it is necessary to reduce the volume of production, delay the payment of wages to workers, for which at present the heads of the enterprise are liable, sometimes even criminally. If such a situation arises, it is necessary to attract borrowed funds to cover costs and organize subsequent production, which is currently associated with certain difficulties: the interest on the loan has been significantly increased (up to 18%), the loan repayment period has been reduced, etc., leading to an even greater increase in production costs.

In market conditions of management, an effective management system requires a rational organization of marketing activities, which largely determines the level of use of the means of production at the enterprise, the growth of labor productivity, the reduction of production costs, the increase in profits and profitability. This is due to the fact that marketing activity is not only the sale of finished shoes, but also the orientation of production to meet the effective demand of buyers and active work in the market to maintain and form demand for the company's products, and the organization of effective channels for the distribution and promotion of goods.

In a dynamically changing market environment, the performance of an enterprise, including a shoe one, largely depends on the effective results of the production, sales, financial and marketing policies of the enterprise itself, which creates the basis for bankruptcy protection and a stable position in the domestic market.

Thus, shoe companies should focus on both external (consumer enterprises, competition, market conditions, etc.) and internal factors, such as sales volume, profitability, covering basic costs, etc. However, it is impossible to take into account and foresee all situations that may arise during the sale of shoes, i.e. some shoe models are not in demand at a certain stage. In this case, another, usually not advertised, side of marketing should appear: if shoes, even without taking into account market requirements, have already been produced, then they must be sold. For this purpose, in order to respond to lower prices of competitors, it is necessary to reduce too large stocks, get rid of damaged, defective shoes, liquidate leftovers, attract a large number of consumers, stimulate shoe consumption, using discounts. There are about twenty types of discounts, but for shoes the most common are those types of discounts that are used at various levels of the enterprise, sales organizations, and trade. In addition to using discounts, an enterprise can go for an initiative price reduction in case of underutilization of production capacities, a reduction in market share under the pressure of competition from competing enterprises, etc. In this case, the enterprise takes care of its costs, developing measures to reduce them by improving equipment and technology, introducing new types of materials into production, and constantly improving the quality of products. And all this requires large financial costs from enterprises, but, nevertheless, helps to increase the competitiveness of certain types of leather products and the enterprise as a whole. In addition, the greater the number of footwear products produced, the more production costs are reduced, which leads to lower prices, and most importantly, creates such conditions for the functioning of the market that would not allow other competing enterprises to enter it and would cause a positive reaction from consumers. .

With the transition to a new economy, improving the quality and competitiveness of leather products has become a strategic task for all leather and footwear

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enterprises in the country and the region as a whole, it becomes necessary to take into account the laws and market requirements, master a new type of economic behavior, and adapt all aspects of their activities to a changing situation. , changes in consumer demand should be taken into account with defending the interests of consumers before industry. The fulfillment of these tasks is possible only on the basis of an in-depth study by manufacturers of domestic footwear products, the needs of hotel groups (consumer segments), methods for examining the quality and competitiveness of footwear. The current situation in the shoe industry of the Southern Federal District and the North Caucasus Federal District is not least the result of the inability of many managers of shoe enterprises in the Southern Federal District and the North Caucasian Federal District to quickly adapt to the new requirements put forward by the market, to the competition that has arisen from Russian and foreign manufacturers. Therefore, the current situation led to the development of a development strategy for the production of competitive leather goods in the Southern Federal District and the North Caucasus Federal District.

In our work, issues related to the development of domestic shoe production in the Southern Federal District and the North Caucasus Federal District were considered. As a result of the work carried out, favorable conditions for the implementation of the strategy were identified:

− a large concentration of skilled labor;
− coordinated specialization of producers;
− long-term traditions of shoe craft;
− a small number of local suppliers of high-quality raw materials, component materials;
− high demand in the Southern Federal District and the North Caucasus Federal District for high-quality footwear.

We believe that for the development of domestic manufacturers of competitive products it is necessary:

− increasing the investment attractiveness of the industry;
− creation of conditions conducive to improving the provision of the industry with material and raw materials;
− protection of the internal market from illegal circulation of goods;
− export promotion;
− legalization of preferential taxation of producers;
− development of an interconnected system of supply and marketing, production, technology and innovation, pricing, financial, personnel policy and personnel management;
− improving the quality and design of products;
− uniting the efforts of all manufacturers to promote the footwear of the region;

− development of a set of measures of regional significance aimed at improving the socio-economic situation by creating new jobs;
− studying the life cycle of products and the use of advertising and media;
− strengthening control and introduction of modern ISO quality management systems, development of a dealer and distribution network;
− concessional lending under targeted federal and regional programs ("Family", "Children", "Maternity");
− expanding the practice of leasing schemes;
− with increased commercial risk and in conditions of uncertainty, it is advisable to use outsourcing.

In the technological part, a competitive assortment of men's, women's and children's shoes has been developed, taking into account factors affecting consumer demand: compliance with the main fashion trends, economic, social and climatic features of the regions of the Southern Federal District and the North Caucasus Federal District. Within the framework of the developed strategy, the production of competitive products will be organized using modern mechanized innovative technical processes, as well as to meet the demand of an elite consumer, using manual labor.

Innovative technological processes have been developed for the production of men's, women's and children's shoes using modern technological equipment with advanced nanotechnologies, which form the basis for reducing the cost of footwear and, thereby, increasing its competitiveness, in comparison with those produced by the leading companies in the world, with the possibility of a wide range of products. production of shoes not only by type, but also by fastening methods. The layout of technological equipment is proposed, on the basis of which it is possible to form a technological process for the production of men's and women's, as well as children's shoes with optimal power, regardless of the production area and the form of production organization.

In the economic part, an algorithm for calculating the receipt of funds from the operating activities of shoe enterprises is given. The calculations were carried out on the basis of assessing the degree of implementation and dynamics of production and sales of products, determining the influence of factors on the change in the value of these indicators, identifying on-farm reserves and developing measures for their development, which should be aimed at accelerating the turnover of products and reducing losses, which will achieve a significant economic effect.

Models for the sale of shoes within a month at 100%, 80%, 50% are proposed. As a result, calculations show that with 100% of the sale of shoes, compensation is provided not only for the production

and sale of shoes, but also a net profit of 1900.54 thousand rubles remains, which indicates the effective operation of the enterprise, as well as the correct marketing assortment policy of the enterprise. We also make a profit when selling 80% of men's, women's and children's shoes.

When selling 50% of shoes from the volume of production, the enterprise incurs losses. To solve this problem, the conditions for the sale of shoes within a specified period of time and the volume of sales of at least 50% are necessary. If such a situation arises, it is necessary to attract borrowed funds to cover costs and organize subsequent production through the use of a bank loan, factoring, and leasing.

Based on the current situation in the economy of our country, in our opinion, an equally significant problem in the development of the regional consumer market is the lack of a full-fledged regulatory framework that ensures the functioning of the mechanism of state regulation of the consumer market in the regions. Based on this, it is the state and regional intervention that should correct the situation on the domestic footwear market in the region, and, thus, there will be an opportunity for the development of competitive leather goods production.

From the analysis made, we single out the following trends in the development of shoe production in the Southern Federal District and the North Caucasus Federal District:

1. Due to the high level of migration of the able-bodied population of the Southern and North Caucasian Federal Districts to developing industries, the footwear industry of our districts can rightfully be called developing.

2. In the Southern and North Caucasian federal districts, close attention is justified to the issues of high-quality provision of the industry with qualified specialists employed in the field of leather and footwear (a large number of specialized educational institutions for training personnel). An important factor is the increase in the investment attractiveness of the industry, especially from the side of regional authorities, and the creation of conditions for increasing its competitiveness. It is necessary to impose high duties on imported imported finished footwear and low duties on imported basic and auxiliary materials and equipment, and it is also necessary to regulate the level of prices and tariffs that would guarantee the manufacturer and trade as a whole the reimbursement of costs and the accumulation of funds for the improvement and further development of production.

Thus, the prerequisites for the development of competitive production in our region are significant and relevant.

In conclusion, we propose a set of the following measures:

1. Creation of a regional program for the development and support of domestic shoe manufacturers in the Southern Federal District and the North Caucasus Federal District (loans, investments, leasing, outsourcing).

2. Development of a modern raw material base of the domestic industry.

3. Stimulation of the tax system for the modernization and reconstruction of existing footwear production and the creation of new competitive production.

4. Improvement of financial condition and re-equipment of 50% of fixed assets.

5. Taking measures to reduce the import of imported shoes into the region and improve the quality of products with bringing exports up to 35%, which will ensure the suppression of the trade in smuggled shoes.

6. Recognition from the Government of the Russian Federation of light industry as a priority among other industries and the adoption of a program for the "breakthrough" development of the industry for the period 2016–2020. and until 2025

7. To ensure doubling by 2025 of industrial production and the production of footwear to 115 million pairs.

8. Competent development of a marketing policy for regional shoe industries to better promote domestic footwear products in local markets and intensify media work at the federal and regional levels to raise the image of Russian footwear.

The implementation of the planned measures will lead to covering the deficit for all types of footwear, increase labor mobility in the Southern Federal District and the North Caucasus Federal District and reduce negative processes in the labor market, as well as a stable balance of interests of workers, employers and regional and state authorities.

In our opinion, for the successful implementation of all of the above measures, the interest of regional authorities in the development of leather goods production, lower prices for components and energy costs, and, most importantly, convenient transportation are most necessary. Thus, all this together will provide our recommendations with a bright future and stable positions both in the domestic and in the markets of near and far abroad. All that is needed is the coherence and interest of all the participants in these regions.

The quality of "it is written for generations" to be at the epicenter of both scientific and amateurish reflections at all times. The problem of ensuring the quality of activities is not just universal, relevant, it is strategic.

The domestic light industry is not going through the best of times, and the consumer is offered products of dubious quality that have entered our markets in counterfeit and other illegal ways, that is, they do not have guarantees for buyers to exercise their rights to protect themselves from unscrupulous manufacturers and suppliers.

To revive the role and importance of a quality-oriented strategy, since only in this case, business leaders will subjectively and objectively be forced to improve their production using nanotechnologies, innovative processes and digital production so that competitive and import-substituting materials and products fully meet the needs of domestic consumers. At the same time, our assertion is substantiated that the consumption of domestic materials and products is regulated by the market. In this case, the requirements of the market should shape the role of the state and consumers in the production of sustainable demand for domestic materials and products, namely:

maintain the range of goods, regulating it with federal, regional and municipal orders;

encourage price stability; increase consumer ability and gradually improve their quality. The implementation of these tasks will create a basis for the consumer to realize the need to pay for the benefits of quality materials and products, and the manufacturer to realize that improving the quality of materials and products cannot be associated only with rising prices, but also through technical innovations in digital production aimed at on the application of new technological and engineering solutions.

Today, and even more so tomorrow, the implementation of one of the defining principles of production efficiency is important - the manufacturer produces exactly what is needed not only for domestic, but also for foreign consumers.

It is equally important to understand the role and significance of quality activity, that is, to what extent leaders have penetrated into the essence of things, learned to manage things, change their properties (range), form, forcing them to serve a person without significant damage to nature, for the benefit and in the name of a person.

Both political leaders and the government have recently begun to talk about the need for a competent industrial policy. However, if we carefully consider the normative, methodological documents on the structural restructuring of industry, then the thought arises whether we are stepping on the same rake that has been stepped on all the years of reforms.

What is the essence of economic reforms and the significance of industrial policy in them, which are theoretically substantiated and tested in practice by a number of developed countries?

This is the fight against inflation, the strengthening of the national currency and financial stabilization. This is a change in the forms of ownership in various sectors of the economy through the process of privatization. This is a structural restructuring of the economy under the conditions of market relations.

At the same time, structural adjustment must be placed at the basis of all these fundamental processes of economic reform. Both financial stabilization and privatization should be subject to a process of structural adjustment, since it is structural restructuring that determines the final result of reforms and the effectiveness of adapting various forms of production to civilized market relations.

The final result should also be taken as the basis for the structural restructuring of the economy. And these are products, services - their competitiveness in the domestic and world markets.

What happened in the Russian reforms? All three basic processes (financial stabilization, privatization and structural adjustments) proceeded on their own, without any interconnection between them. Therefore, the methods used by the government and the Central Bank to combat inflation and other economic indicators often ran counter to the objectives of structural adjustment.

As for the process of structural adjustment, the position of the government is expressed by the following statement: "the market itself will put everything in its place." With such a position towards structural adjustment, it is not surprising that in the national economic policy at that time there was no place for the words quality, competitiveness, import substitution

This is, unfortunately, the reality of the reforms carried out today. In this regard, I would like to refer to well-known world experience.

A world-famous quality specialist E. Deming, who at one time was a scientific consultant to the Japanese government and led Japan out of the economic crisis, in his book "Out of the Crisis" says: "... managing paper money, not a long-term strategy for digital production - the path to the abyss.

Regarding whether the state should pursue an industrial policy, one can cite the statement of the outstanding economist of the past, Adam Smith, who 200 years ago laid the foundations for the scientific analysis of the market economy. About the role of the state, he said: "... only it can, in the interests of the nation, limit the greed of monopolists, the adventurism of bankers and the egoism of merchants." It's like today is about us and our situation in the economy.

What are the results of economic activity today, what are the achievements in this area? The growth of gold and foreign exchange reserves, the decline in inflation, the budget surplus and other financial and economic achievements. And what, is this the end result of public administration? And not the quantity and quality of goods and services sold in the domestic and foreign markets, and not the solvency of the population to purchase these goods and services? And, ultimately, not the quality of life of the population of the country???

Therefore, it is quite natural today that the task is set for all levels of the executive and legislative authorities - to improve the quality of life of Russian citizens.

Let us carry out an enlarged factorial analysis of the problem of "quality of life". The quality of life of citizens depends on the quality of goods and services consumed in the full range - from birth to ritual services, as well as on the solvency of citizens, which allows them to purchase quality goods and services. These two factors (quality and solvency) depend on the state of the country's economy, which in turn depends on the efficiency of enterprises in various sectors of the economy, including light industry. The effectiveness of the work of enterprises depends on the state of management, on the level of application of modern management methods.

The existing world practice of wide application of modern methods is based on standardization and certification. Standardization makes it possible to generalize best practices, formalize them in an accessible and understandable form, and make them available to everyone who wants to apply these best practices. Certification makes it possible to assess the level of implementation of the requirements of the standards into practice and provide an appropriate guarantee for the consumer. At present, no more efficient mechanism has been devised to disseminate advanced experience in solving various problems, and the corresponding international structures for standardization and certification have been created in the world.

An analysis of existing international standards that are aimed at improving the level of enterprise management shows the following areas of their action:

– quality management systems (a series of international standards ISO 9000 and industry supplements);

– environmental management systems (a series of international standards ISO 14000);

– safety and labor protection systems (OHSAS 18001);

– social responsibility systems (SA 8000)

The structure of the problem "quality of life" and a set of international standards aimed at its solution.

At the same time, international standards on quality management have the most significant and global character. The use of modern methods in them allows us to solve not only the problem of improving quality, but also the problem of economy and productivity. That is, today the concept of "quality management" is moving into the concept of "quality management".

Conclusion

Thus, solving the problem of increasing the efficiency and competitiveness of the economy, and, ultimately, the quality of life, is impossible without the implementation of a well-thought-out and competent industrial policy, in which innovation based on digital production and quality should become priority areas of the state economic policy.
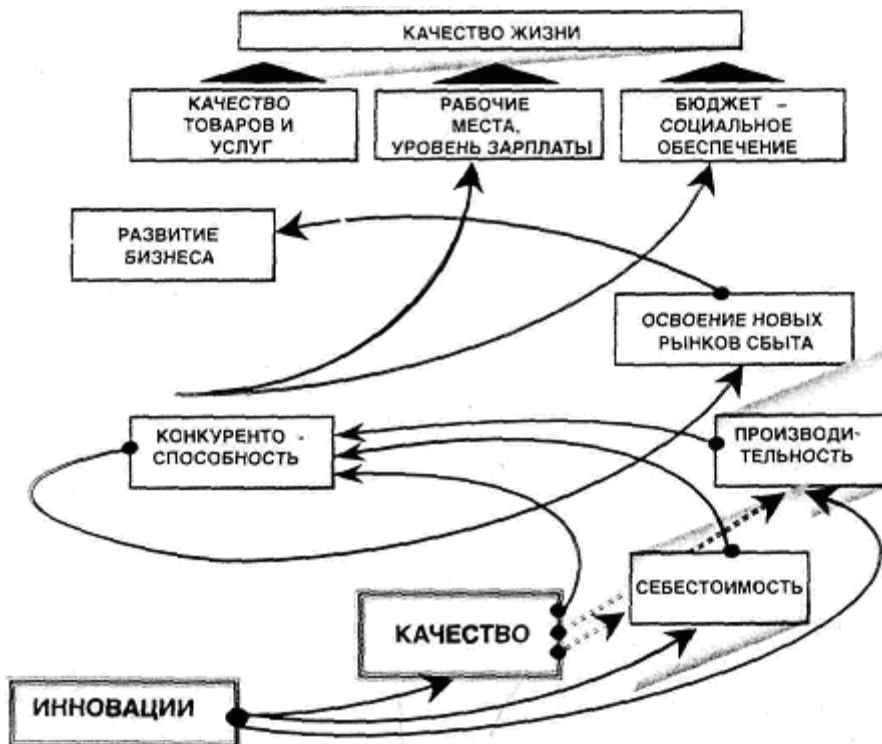
Drawing Innovation and quality - the way to high living standards

The problems of improving the quality, competitiveness of materials and products at the present stage of development of the Russian economy are becoming increasingly important. As the experience of advanced countries, which at one time came out of such crises (the United States in the 30s, Japan, Germany - in the post-war period, later - South Korea and some other countries) shows, in all cases, the basis for industrial policy and the rise economy was put a strategy to improve the quality, competitiveness of products that would be able to win both domestic and foreign markets. All other components of the reform - economic, financial and credit, administrative were subordinated to this main goal.

The developed software for the formation of the technological process for the production of import-substituting products and the determination of specific reduced costs, which are the sum of current costs (cost) and capital investments, measured using the standard efficiency coefficient, taking into account the production program, allows you to calculate the static parameters of the technological process for the production of import-substituting products with various forms of organization of production.The developed software for calculating cash receipts from the operating activities of light industry enterprises based on assessing the degree of implementation and dynamics of production and sales of products, determining the influence of factors on the change in the value of these indicators, identifying on-farm reserves and developing measures for their development, which are aimed at accelerating turnover products and reduce losses, which guarantees light industry enterprises to obtain stable TEP and prevents them from bankruptcy.

Models for the sale of products within a month at 100%, 80%, 50% are proposed. Calculations show that with 100% of the sale of footwear, compensation is provided not only for the production and sale of footwear, but also a net profit of 1900.54 thousand rubles remains, which indicates the effective operation of the enterprise, as well as the correct marketing assortment enterprise policy. It also provides a profit when selling 80% of men's, women's and children's shoes. When selling less than 50% of shoes from the volume of production, the company will incur losses. To solve this problem, the conditions for the sale of shoes within a specified period of time and the volume of sales of at least 50% are necessary.

Based on the current situation in the economy of our country, in our opinion, an equally significant problem in the development of the regional consumer market is the lack of a full-fledged legal framework that ensures the functioning of the mechanism of state regulation of the consumer market in the regions. Based on this, it is the state and regional intervention that should correct the situation on the market for domestic products of light industry enterprises in the

regions, and thus there will be an opportunity for the development of competitive and import-substituting products.

The implementation of the planned measures will lead to covering the deficit for all types of products, increase labor mobility in the Southern Federal District and the North Caucasian Federal District and reduce negative processes in the labor market, as well as a stable balance of interests of consumers, employers and municipal, regional and federal branches of government. For the successful implementation of all of the above activities, the interest of regional authorities in the development of production of competitive and import-substituting products, lower prices for components and energy costs, and benefits for transportation produced by enterprises of the regions of the Southern Federal District and the North Caucasus Federal District are most necessary for the regional authorities.

Therefore, only the emphasis on innovation, quality, competitiveness of products and services should be the basis of the industrial policy pursued at all levels yesterday, today and, even more so, tomorrow.

ABOUTthe economic effect of the results of work is limited, which consists in increasing labor productivity, the level of mechanization of production, lowering work in progress and the cost of digital production. An accessible tool for digital production technologists to rationalize the design of technological processes is proposed, which allows the enterprise to form a competitive assortment and predict the maximum income from the production of import-substituting products.

An assortment policy has been developed for the formation of competitive products, taking into account factors affecting consumer demand: compliance with the main fashion trends, taking into account the economic, social and climatic characteristics of the regions of the Southern Federal District and the North Caucasus Federal District, the production of which using modern innovative technical processes, as well as to meet the demand of an elite consumer, with the use of manual labor create the basis for meeting the demand for shoes for buyers in these regions.

Innovative technological processes have been developed for the production of import-substituting products using modern technological equipment with advanced nanotechnologies, which form the basis for reducing the cost of import-substituting products and providing them with increased competitiveness with the products of leading foreign companies, with the possibility of a wide range of products not only by type, but also by sex and age. groups, which guarantees its demand in full.

Layouts of technological equipment are proposed, on the basis of which it is possible to form a technological process for the production of import-substituting products with an optimal output volume,

taking into account the production area and the form of organization of digital production.

Software has been developed for calculating cash receipts from the operating activities of light industry enterprises based on assessing the degree of implementation and dynamics of production and sales of products, determining the influence of factors on the change in the value of these indicators, identifying on-farm reserves and developing measures for their development, which are aimed at accelerating turnover. products and reduce losses, which guarantees enterprises a stable TEP and prevents them from bankruptcy.

Software has been developed to form the technological process of digital production and determine the cost of production of import-substituting products. A computer simulation model has been implemented that describes the dynamics of the process of production of import-substituting products. The proposed methodology and the software implemented on this basis make it possible to reduce the duration of the technological preparation of production and increase, thanks to the rationalization of the technological process, the specific consumer effect of import-substituting products.

Complex indicators of the effectiveness of innovative technological processes for the manufacture of footwear, similar to other types of import-substituting products, have been calculated. Taking into account the production program, promising options for technology and equipment have been formed, the most effective one has been selected; the possibilities of streamlining the flow were identified, allowing to eliminate bottlenecks, to minimize equipment downtime, which is one of the conditions for designing innovative technological processes. The reliability of the calculations carried

out to assess the effectiveness of technological processes using targeted programming methods for various technological and organizational solutions is confirmed by calculations of economic efficiency indicators: cost, profit and profitability and other indicators.

The proposed technique allows to reduce the duration of technological preparation of digital production and reduce the time for expert work while maintaining the required depth and validity of engineering conclusions. The economic effect of the conducted research is expressed in the intellectualization of the work of a technologist with a reduction in time spent on developing a range of manufactured import-substituting products and evaluating the effectiveness of technological processes in comparison with a typical economic calculation of the full cost of manufacturing such products.

The analysis of the influence of forms of organization of digital production and manufacturing technology on the cost of import-substituting products is carried out using the example of the technological process of manufacturing children's, women's and men's shoes, taking into account the shift program. Theoretical dependencies are obtained to assess the influence of the factor "organization of production" on individual costing items in general and other technical and economic indicators in order to prevent enterprises from bankruptcy.

Thus, all this together will provide light industry enterprises of the regions of the Southern Federal District and the North Caucasus Federal District with a stable position both in the domestic and in the markets of near and far abroad. All that is needed is the good will and interest of all participants in this process.

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