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Issue Article

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DEVELOPMENT OF THEORETICAL FOUNDATIONS OF EFFECTIVE INNOVATIVE TECHNOLOGICAL SOLUTIONS FOR THE PRODUCTION OF PRIORITY AND DEMANDED PRODUCTS

Abstract: *The article considers the possibilities of producing competitive and in-demand products, which are possible only if there are managers who are professionally trained and motivated for the results of their activities. The authors believe that the motivated responsibility of the leaders of light industry enterprises is the highest measure of expression of their professionalism. But if they do not fulfill their promises and statements, this is evidence either of their inability to engage in economic policy, or the use of economic management is carried out by them in interests alien to the interests of society, provoking the impoverishment of the people, characterizing the immorality of leaders, which, of course, is unacceptable. And it is understandable that the authors conducted the results of studies of objective reasons that would justify the decline in production in the light industry, therefore, the results of economic policy evaluation must be either beneficial or harmful - this should always be an axiom. If this does not happen, then something in this very economic policy is not a professional decision, actions are harmful to society and timely adjustments are needed. The authors recommend that the market reconsider the concept of forming it with demanded and import-substituting goods, taking into account their availability to consumers of products in the domestic and international markets. Such a concept will fully correspond to the desire of the consumer to satisfy his desire and desire to make a purchase, taking into account his social status, providing manufacturers with the full sale of their products and guaranteeing them sustainable TEP from the results of their activities.*

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

Language: *English*

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Introduction

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The authors confirmed that the interaction of the assortment policy with innovative technological processes, formed on the basis of the use of universal and multifunctional equipment, will allow the heads of light industry enterprises to form a price niche that guarantees them the replacement of imported products in the sales markets in the regions of the Southern Federal District and the North Caucasus Federal District, and the population of these regions - workers places and social protection from the economic crisis.

In addition, the authors analyzed the possibilities of the policy and objectives of the enterprise in the field of quality within the framework of the QMS in order to fight for defect-free production, for the reduction of defects and to guarantee consumers the high quality of manufactured products. The use of software for assessing the validity of the choice of innovative technological solutions for the production of import-substituting products by domestic enterprises creates the prerequisites for its demand and competitiveness not only in the domestic market, but, most importantly, in its export. The need to improve the quality management system at domestic enterprises is due to the following important reasons:

firstly, it is an increase in the confidence of potential consumers in the products that will be produced by domestic enterprises;

secondly, it is an opportunity to significantly strengthen one's position in existing markets, as well as significantly expand spheres of influence by entering new domestic and foreign markets;

and thirdly, this is a significant increase in labor productivity of any industrial enterprise, which is expected to introduce a QMS using participatory management.

The choice of light industry enterprises as an object for assessing the effectiveness of the socio-psychological factor in the implementation of the QMS is due to the fact that these enterprises are characterized by the presence of highly qualified workers and specialists. Thus, the Policy of goals and objectives of the QMS will be implemented much more professionally and at a lower cost due to three main aspects: employee involvement, process approach and systematic approach. In addition, the personnel of light industry enterprises are more effectively able to realize the goals and objectives of the QMS also because control activities are more professionally provided for the implementation of the following situations: persuasion, execution of delegated powers, creation of conditions for increasing productivity and effective use of the business qualities of employees.

The authors of most studies justifiably paid attention to solving the problem of combining state and market mechanisms for managing competitiveness.because it becomes a strategic resource for the economy of these regions. Today, and even more so tomorrow, in the global economy, the place of price competitiveness will be taken by the competitiveness of quality levels, which has widely increased its importance in connection with Russia's entry into the WTO and the need to use the ISO 9000 series, in this regard, the increase in the quality factor of the results of the domestic light industry in the strategy competition in world markets is a long-term trend. The task of increasing competitiveness is especially urgent for those enterprises that, due to external factors (increased competition due to globalization, the global financial crisis) and internal (inefficient management), have lost their competitive positions in the domestic and foreign markets.

Main part

The reasons for the de-actualization of interest in quality lie in plain sight, namely:

- The achievements of the quality management policy of the Soviet period were associated with the features of the socialist type of planning, built on the principle of directiveness, in which, unlike indicative planning, economic incentives were directly subordinated to political goals. When the administrative-command practice of enterprise management became unnecessary, the practice of quality management went down in history along with it;
- they tried not to integrate the Russian economy into world production, but to attach it in the interests of the existing architecture. We were given the place of producers and suppliers of raw materials, mainly of natural origin. The quality of such products is not due to production. The quality of production depends on the amount of added value - the lower the costs, the greater the difference between price and cost, the higher the profit. The production of a barrel of oil in Qatar and Saudi Arabia costs significantly less than in Russia. By refusing to control the market, the state has consistently freed itself from the obligation to control the production process. And this happened despite the fact that the bureaucratic apparatus and the costs of its maintenance increased by an order of magnitude. The very concept of "quality management" was lowered to the level of "quality control", after which each manufacturer could manage the quality himself. In the end, quality was simplified to technical regulation;
- the quality of production and the product of production are functionally related to the quality of the market, while the quality of the market, in turn, depends on the willingness to purchase products marked with a quality mark. A high-quality product is in demand under two mandatory conditions: the effective demand of the mass buyer and the seller's conscientiousness. Neither one nor the other is available on the domestic market. Even in boutiques

and elite stores, the buyer does not feel guaranteed to be protected from counterfeit products and the manufacturer's deceiver.

The market is an integral part of society. The order in the market reflects the state of society, and the manufacturer focuses on the state of the market. For him, the barometer is not the national interest - the possibilities of the market. The market is the driving force behind production. If the culture of the market were really ahead of the culture of production, then the objections to the consumer approach to production would be reduced to a minimum. In fact, the culture of the market in Russia was not laid down by manufacturers, much less consumers with their skinny wallets. From the very beginning, intermediaries and speculators dominate our market. Legislation is also built under them, allowing a lot of different interpretations of actions and the same number of opportunities to avoid criminal liability. Quality management in such a situation has turned into the manipulation of quality in the interests of the market owners.

The manufacturer is currently not interested in producing a quality product, the costs are high, the cost of products will increase, the real price will be significantly increased by the intermediary and the seller. As a result, the market for such a product will not “digest” and the manufacturer will be struck by the deadly disease No. 1 according to E. Deming. On a limited scale, clearly scanty for Russia, quality things are guaranteed to be made, manufactured, but this practice has nothing to do with the situation in production, it is exclusive. Attempts by the executive branch in the 2000s to activate interest in TQM were again a local and temporary success. In Soviet times, orders from above looked logical and forced to reckon with them. Reality, which had changed from socialist to capitalist, reacted sluggishly to these initiatives, without any enthusiasm, one might say, purely educational, but not practical. Not surprisingly, defective rockets were added to the peeled off soles of the shoes, unable to rise into space.

To the above causal factors, let's add an old disease inherited by Russian management from the socialist period. “The creation of a quality system in Russia stumbles upon another problem typical of our country,” writes B.S. Aleshin with co-authors. It consists in the fact that instructions are written for someone, and not for a specific employee. Therefore, the common situation has become a simple violation of instructions. This is fundamentally unacceptable at enterprises using a quality management system. Not trusting top management to solve this problem, B.S. Aleshin is looking for support at the corporate level - "...when preparing and creating a quality system in Russia, it is useful to expand the scope of the problem and consider creating a system of corporate standards that supports the quality system."

B.S. Aleshin is a well-known specialist in the field of management, he held the highest positions in the Russian government and knew the business from the inside. He should be familiar with the history of the problem of training managers, which is rooted in Soviet times. A.G. tried to solve it. Aganbegyan when he was the director of the Institute in the system of SOAN of the USSR. He did this very seriously, initiating the creation of the Board of Directors of the largest enterprises in Siberia. Outwardly, the question looked simple: an economist-manager (then the overseas “manager” was not used) is a “free artist”, or his professional training should be built as a superstructure on a production-oriented foundation, i.e. first career-oriented training, only then economic education.

A discussion with A.G. Aganbegyan ended as expected - the majority considered it expedient to associate economic preparation with production specifics. Only in this way can it be given the necessary level of specificity. The reforms of the 1990s canceled the developed scheme, brought the training of managers in our country in line with the procedure established by them, whose economy was defined as a benchmark. The illogicality of economic policy was not concealed; on the contrary, it was extolled. Absolutization in science is not allowed as a brake on scientific creativity. Nevertheless, recognizing the need for a transitional stage, the economists who came to power took as teachers those who, from history textbooks, knew what to do during the transition. They wanted to be in the post-industrial economy at the expense of "one-two", bypassing the developed industrialization. With all the defects of socialist industrialization, it became an objective historical fact in two five-year plans, and in five “five-year plans” even re-industrialization was not carried out. As a result, we returned to the previous logic of development. The military-industrial complex and Roskosmos made the locomotives of industrial progress, hoping that they would pull the development of the rest of the industry with them. But, not being confident in the ability of the rest to cope with new tasks, because they do not fulfill the old ones either, the government called on the military-industrial complex to expand the production of an assortment of mass consumer goods in order to meet the household needs of the population. The military-industrial complex and Roskosmos made the locomotives of industrial progress, hoping that they would pull the development of the rest of the industry with them. But, not being confident in the ability of the rest to cope with new tasks, because they do not fulfill the old ones either, the government called on the military-industrial complex to expand the production of an assortment of mass consumer goods in order to meet the household needs of the population. The military-industrial complex and Roskosmos made the locomotives of industrial progress, hoping that they

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One of the main rules of quality management experts consider the return to the original position, if the process has not started. Therefore, the restoration of the past model of economic recovery should be recorded as an asset of the authorities. The principle of consistency in the implementation of the socialist imperative about the unity of theory and practice should also be applied to this. Soviet VIPs from the Politburo did not develop a solution. They agreed and accepted them. Draft solutions were prepared by professionals, consultants, "subcontractors" and "initiators", they had scientists from the Academy of Sciences of the USSR and the most successful production managers. A random person could get into the industrial departments of the regional party committees, the Central Committee of the CPSU, only by being Stirlitz. Party and people's control was established. Naturally not perfect, but effective. The decomposition started when, with the advent of M. Gorbachev, his proteges declared themselves both scientists, and experienced production workers, and prophets, having lost their critical ability. Dialectics in management gave way to the desire to find an existing example, which gave rise to the rebirth of dialectical thinking, built on the basis of the historical concreteness of true knowledge, into the primitive eclecticism of E. Gaidar and Co. On the natural desire of A. Aganbegyan and his associates to combine scientific knowledge of the economy with common sense and practically verified experience, the liberal abstract fantasy washed away. The criterion for the level of subject-oriented knowledge is the quality of management of the corresponding area of subject reality. Dialectics in management gave way to the desire to find an existing example, which gave rise to the rebirth of dialectical thinking, built on the basis of the historical concreteness of true knowledge, into the primitive eclecticism of E. Gaidar and Co. On the natural desire of A. Aganbegyan and his associates to combine scientific knowledge of the economy with common sense and practically verified experience, the liberal abstract fantasy washed away. The criterion for the level of subject-oriented knowledge is the quality of management of the corresponding area of subject reality. Dialectics in management gave way to the desire to find an existing example, which gave rise to the rebirth of dialectical thinking, built on the basis of the historical concreteness of true knowledge, into the primitive eclecticism of E. Gaidar and Co. On the natural desire of A. Aganbegyan and his associates to combine scientific knowledge of the economy with common sense and practically verified experience, the liberal abstract fantasy washed away. The criterion for the level of subject-oriented knowledge is the quality of management of the corresponding area of subject reality. washed away by liberal abstract fantasy. The criterion for the level of subject-oriented knowledge is the quality of management of the corresponding area of subject reality. washed away by liberal abstract fantasy. The criterion for the level of subject-oriented knowledge is the quality of management of the corresponding area of subject reality.

The paradox of economic management lies in the specifics of the movement of social production. In order to manage competently, we need theoretical, therefore, general scientific knowledge produced by economic science, but almost always it is necessary to manage a single enterprise that closes the economic chain. In this sense, economic management already acts as an art, it is akin to medicine, the principle of which is also superficially simple: we define the disease, but we treat the patient, so the algorithms are good in the process of theoretical training of the doctor, but they are limitedly applicable in the treatment of the patient. Something close to economic management and fashion. High fashion determines the style, color preference, the specifics of the shape of the product, the nature of its combination with decoration and accessories, the type of material. As for the individual product, then its specificity is approved by the customer, based on the constitution and financial capabilities. It is usually believed that fashion enslaves, we do not agree with this. Fashion provides just enough freedom of action in the given parameters. It experiences the cultural development of the consumer's personality. The manager of an enterprise also has freedom, including in determining the attitude to product quality. The manager's dream is to get quality by reducing costs, the dream is understandable, because otherwise the selling price will have to be raised, which is wrong from the point of view of quality management theory. The authoritative Japanese management specialist I. Ishikawa has repeatedly said that it is immoral to talk about raising the price while improving the quality of products, since the improvement in quality is associated with the stabilization of production, a decrease in defectiveness, costs, and consequently, with a decrease in cost and price. According to I. Ishikawa, it is justified to judge a price increase only when the consumer receives a product of a new technical level.

Given the poor organization of the transition period to a modern high-tech economy, aggravated by a global recession and the Western policy of sanctions against Russia, it is hardly realistic to count on the professional responsibility of a particular manufacturer for the quality of its products. Morality was born before commodity production, but then economic development put morality under its control,

securing a new relationship ideologically. Moral development only in novels is controlled by the internal forces of the characters. In economics, morality exists like a precious stone in the vise of a ring clamp. Why do ISO standards emphasize three points of application of forces - the responsibility of the manager, cost reduction and personnel policy? There are three "golden truths" of quality policy in quality management:

- ignorance - the root cause of all troubles in management, in the economy, above all;

- quality is a source of income, as it is associated with a reduction in production losses, in addition, it guarantees economic stability, improves the image;

– a careful policy towards professionally trained personnel, such people are the main wealth of any production.

The rules are valid when there is no reason not to comply with them - each violation is more expensive for yourself. In our country, in conditions of selective control over the rules, rare manufacturers follow the rules, they act much more according to concepts, that is, under the guise of imperfect rules and agreements with officials. And here we can formulate the essence of the political moment, as the leaders liked to say not very long ago. So what do we have?

First, it is no coincidence that economic theory was unhooked from politics, political economy was neutralized in economic science. Gaidar and the oligarchs really liked American economic liberalism, and they reflected it in a specific way. The freedom of enterprise was accepted with a bang, and they forgot to tell the people about the American draconian measures for violating the rules of economic activity. It was not profitable. They began to remember only after everything was divided, and the question arose of redistributing the products of privatization. In an effort to purify economic theory from the political burden, a practical, managerial component was hidden. Economic management was separated from the subject specifics of production, so that it would be like in theoretical mechanics, physics, and chemistry.

Second, the abolition of political economy and the priority in the management of production of its subject orientation has become the ascension of economic management as a universal factor.

Economic managers have become legislators of order in the development of production. Many economic advisers and consultants came to Russia in the 1990s, and almost the main financial speculator Soros became more active. The question is, why was all this necessary and who benefits? The answer is not so complicated - these changes provided a cover for the transition from a policy of managing the quality of production to a policy of manipulating quality. Quality parameters began to be determined by economic managers, naturally, based on managerial interests. K. Marx pointedly called the attempt of the economist Proudhon to understand the philosophical foundations of poverty "the poverty of philosophy." Liberal economists stepped on the same "economic" rake as their French predecessor. The result was the same. Removing subject specificity, economists - managers - restored the scholastic philosophy of the "realists". Instead of moving towards the concreteness of true knowledge, they absolutized the abstraction of general ideas. Economics is called upon to reconstruct an objective, objectively defined reality, and not to be a producer of knowledge that is convenient for calculation. This is how the functions of science and philosophy were interpreted by theologians in the Middle Ages. However, apparently, there is a special interest in such a status of science, otherwise how can one explain the departure from the objectification of the criteria for scientific assessments. “Quality” is a philosophical category that, together with “quantity”, forms a dialectical pair, that is, they are interdependent. In one of our publications, we identified three fundamental features of "quality": Instead of moving towards the concreteness of true knowledge, they absolutized the abstraction of general ideas. Economics is called upon to reconstruct an objective, objectively defined reality, and not to be a producer of knowledge that is convenient for calculation. This is how the functions of science and philosophy were interpreted by theologians in the Middle Ages. However, apparently, there is a special interest in such a status of science, otherwise how can one explain the departure from the objectification of the criteria for scientific assessments. “Quality” is a philosophical category that, together with “quantity”, forms a dialectical pair, that is, they are interdependent. In one of our publications, we identified three fundamental features of "quality": Instead of moving towards the concreteness of true knowledge, they absolutized the abstraction of general ideas. Economics is called upon to reconstruct an objective, objectively defined reality, and not to be a producer of knowledge that is convenient for calculation. This is how the functions of science and philosophy were interpreted by theologians in the Middle Ages. However, apparently, there is a special interest in such a status of science, otherwise how can one explain the departure from the objectification of the criteria for scientific assessments. “Quality” is a philosophical category that, together with “quantity”, forms a dialectical pair, that is, they are interdependent. In one of our publications, we identified three fundamental features of "quality": This is how the functions of science and philosophy were interpreted by theologians in the Middle Ages. However, apparently, there is a special interest in such a status of science, otherwise how can one explain the departure from the objectification of the criteria for scientific assessments. “Quality” is a philosophical category that, together with “quantity”, forms a dialectical pair, that is, they are interdependent. In one

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- "quality" is a system of defining properties of a phenomenon;
- in the definition of "quality" quantity is always implied in one of its manifestations - wholeness, intensity;
- reflecting the subject diversity of the world, the quality reproduces in itself the objectivity of the difference of phenomena, it is structured.

"Quality management" is a concept of political economy, it allows for the variability of development, but within the limits of the objectivity of quality characteristics. Manipulation of quality is a definition of quality attributes free from actual characteristics in general, - theoretical and particular, - practical scales. In economic theory, until the 1950s, there was no specific procedure for estimating the cost of quality. The "traditional approach to determining the "optimal" cost of quality" dominated. 100% compliance of the product with the specifications was considered unattainable, so the price of quality was put into the after-purchase perspective. It was believed that the costs of the consumer for the operation of the goods are inversely proportional to the quality of the goods. They decrease as the quality of the goods, tending to zero. The concept of “optimum quality level” has appeared. It corresponded to the minimum cost of quality for the supplier and the consumer. The total costs were defined as the sum of the costs of the producer and the consumer.

A new economic reality emerged in the 1970s under the direct influence of the scientific and technological revolution. The technical complexity of the product has increased, the warranty period has increased. The changes that have taken place forced us to abandon the simplified model for determining the cost of quality. The concept of the cost of quality was born, based on reducing the cost of quality through more rational financing and reducing the overall cost of producing a product. They tried to make the economy economical. The emphasis in quality management has shifted towards solving common problems of production development and its standardization. G. Taguchi generally called its cost a measure of quality and gave the following calculations: one wash of a shirt costs 250 yen, usually a shirt is washed 80 times during the service. Laundry costs are 20,000 yen. If they can sew a shirt, wrinkled and polluted twice as slowly, the consumer's savings reach 10,000 yen. Suppose a new shirt costs the manufacturer 1,000 yen more, and sales increase by 2,000 yen, the manufacturer will receive 1,000 yen in revenue, and the consumer will benefit 8,000 yen. Society will save 9,000 yen plus reduced environmental spending because there will be less laundry waste. We are not against quality manipulation. Within certain limits, this is a forced measure, indicating the limitations of cognitive and other possibilities. The theory need not be conservative, but quality manipulation is a tactical level of management as opposed to the strategic value and significance of quality management. Manipulation is one of the tools of government, and it must remain private,

The second thing to keep in mind when analyzing the perspective of private self-quality control. Private initiative is conditioned by the general political and economic situation. Socialism could be built in a single country, but it turned out to be impossible at this historical time to ensure the competitiveness of socialism. Capitalism is still strong. The same situation awaits private producers. He delivers a quality product. Will he be able to work sustainably in an environment that is not ripe for such a practice.

The considered method for assessing the competence of experts with their participation in the work of expert commissions of various organizations can be used if there is sufficient argument about the reliability of the results of their work. If there is a need for the head of the organization that forms these expert commissions to personally assess the competence of each participant, in this case it is proposed to use a new method, the essence of which involves a personal assessment of the competence of each expert using the developed software product.

The authors have managed to develop software that will make such a search justified and efficient and will allow finding the best solution to ensure the efficient operation of enterprises.

At the same time, as criteria for a reasonable choice of the optimal power in the formation of the algorithm, it was justified to choose those criteria that have the greatest impact on the cost of finished products, namely:

- *percentage of workload of workers,%;*
- *labor productivity of one worker, a pair;*
- *wage losses per unit of output, rub.;*
- *specific reduced costs per 100 pairs of shoes, rub.;*
- *production of shoes, 1 m2;*
- *cost of equipment per unit flow task (C)*
- *total price (Stotal);*
- *margin of financial strength (Zfp);*
- *break-even point (Tb.y);*
- *unit profit (Ex.);*
- *product profitability (R);*

– *costs for 1 rub. marketable products (Z1r etc.);*

– *conditionally variable costs (Zusl. per.unit);*

– *conditionally fixed costs (Zusl. pos.ed).*

From the above criteria, in our opinion, the manufacturer can give preference to those that, from his point of view, would guarantee him the production of competitive and popular products, namely:

– *labor productivity of 1 worker is the most important labor indicator. To some extent, all the main indicators of production efficiency and all labor indicators depend on the level and dynamics of labor productivity: production, number of employees, wages, wages, etc., to increase labor productivity, the introduction of a new techniques and technologies, extensive mechanization of labor-intensive work, automation of production processes, advanced training of workers and employees, especially when introducing innovative technological processes based on universal and multifunctional equipment;*

– *specific reduced costs - an indicator of the comparative economic efficiency of capital investments, used when choosing the best option for solving technological problems;*

– *reduced costs - the sum of current costs, taken into account in the cost of production, and one-time capital investments, the comparability of which with current costs is achieved by multiplying them by the standard coefficient of efficiency of capital investments;*

– *the margin of financial strength (Zfp) shows how many percent the company can reduce the volume of sales without incurring losses;*

– *the break-even point allows (Tb.y) to determine the minimum required volume of product sales, at which the enterprise covers its expenses and operates break-even, without making a profit, but also does not suffer losses, that is, this is the minimum size of output at which equality of income from sales and production costs;*

– *profit (loss) from the sale of products (Pr) is determined as the difference between the proceeds from the sale of products in the current prices of VAT and excises and the costs of its production and sale;*

– *product profitability (R) reflects the relationship between the profit from the sale of a unit of production and its cost;*

– *semi-fixed costs (total fixed costs of production of a unit of output) (Cusl.cons.unit), which change in proportion or almost in proportion to the change in the volume of production (1st - costs for raw materials and materials; 2st - costs for auxiliary materials; 3st - fuel costs and energy for technological needs; 4st - the cost of additional and basic wages of production workers with insurance premiums to off-budget funds);*

– *conditionally variable costs (total variable costs of production of a unit of output) (Cusl. per.unit), which do not depend or almost do not depend on changes in the volume of production (5st - costs for the preparation and development of production; 6 st - costs for expenses for the maintenance and operation of equipment; 7st - costs for general production needs; 8st - costs for general business expenses, they, together with conditionally fixed costs, constitute the production cost; 9th article - costs for commercial expenses. All these articles are forming conditional variables and expenses and conditionally fixed costs make up the full cost, that is, conditionally variable costs can be defined as the full cost - conditionally fixed costs, and vice versa,conditionally fixed costs can be defined as the full cost - conditionally variable costs);*

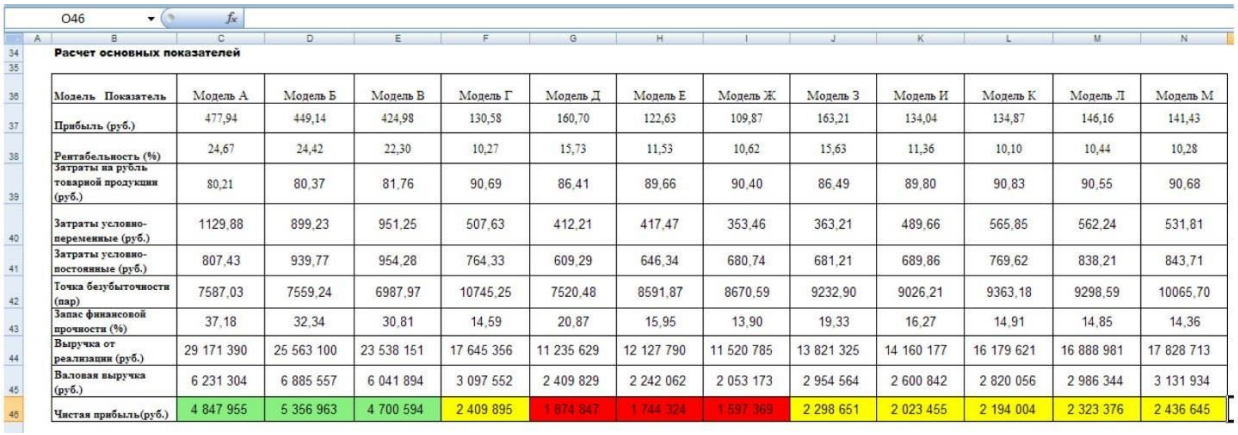
– *costs for 1 rub. marketable products show the relative amount of profit for each ruble of current expenses, that is, this is the ratio of the cost of a unit of production to the wholesale price, which characterizes the effectiveness of the measures taken to increase the competitiveness and demand for products in demand markets.*

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.

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 4,739.6 thousand rubles. This indicates the effective operation of the enterprise, as well as the correct marketing and assortment policy. Product profitability is 13.2%.

As proof of their proposals, the authors confirmed the results of the calculation of technical and economic indicators using the software developed by them, which allowed them to choose production volumes that would guarantee the manufacturer an economic effect, in which the complex indicator of efficiency (Kef) estimating it would tend to its maximum value, and namely, to unity.

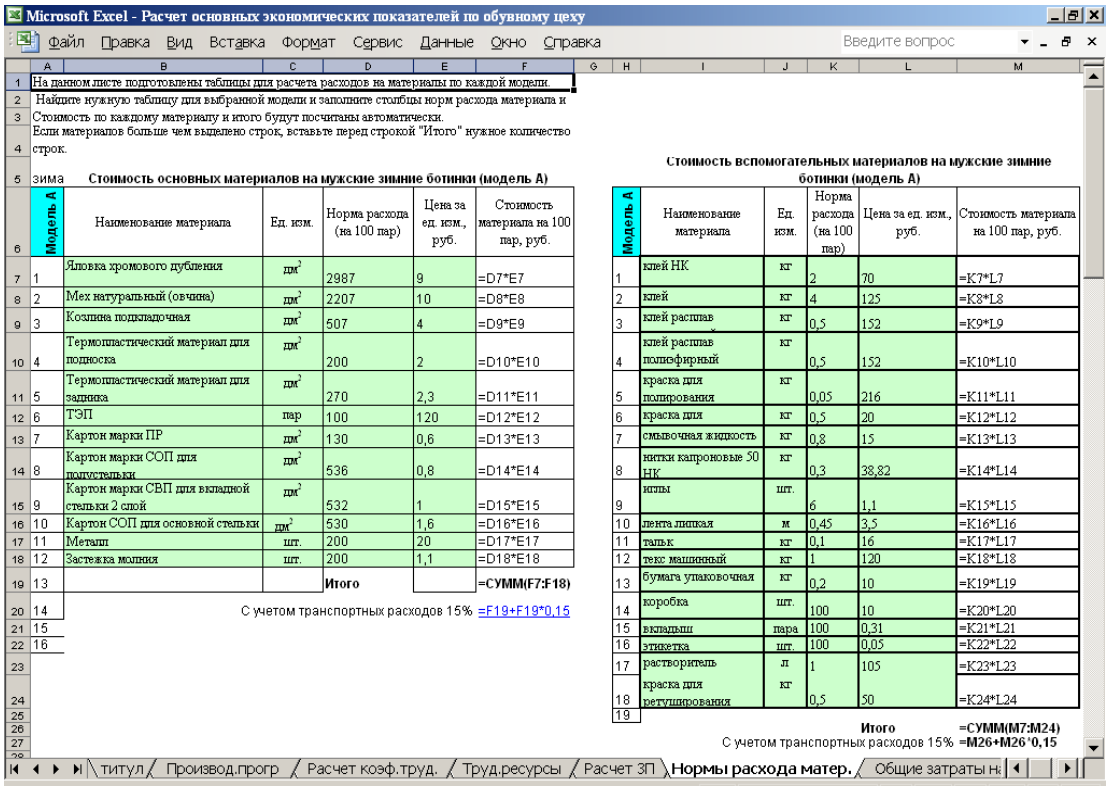
Table 1. Calculation of the main costs for the assortment range for 12 shoe models (on the example of women's shoes)



Расчет основных показателей

Модель Показатель	Модель А	Модель Б	Модель В	Модель Г	Модель Д	Модель Е	Модель Ж	Модель З	Модель И	Модель К	Модель Л	Модель М
Прибыль (руб.)	477,94	449,14	424,98	130,58	160,70	122,63	109,87	163,21	134,04	134,87	146,16	141,43
Рентабельность (%)	24,67	24,42	22,30	10,27	15,73	11,53	10,62	15,63	11,36	10,10	10,44	10,28
Затраты на рубль товарной продукции (руб.)	80,21	80,37	81,76	90,69	86,41	89,66	90,40	86,49	89,80	90,83	90,55	90,68
Затраты условно-переменные (руб.)	1129,88	899,23	951,25	507,63	412,21	417,47	353,46	363,21	489,66	565,85	562,24	531,81
Затраты условно-постоянные (руб.)	807,43	939,77	954,28	764,33	609,29	646,34	680,74	681,21	689,86	769,62	838,21	843,71
Точка безубыточности (пар)	7587,03	7559,24	6987,97	10745,25	7520,48	8591,87	8670,59	9232,90	9026,21	9363,18	9298,59	10065,70
Запас финансовой прочности (%)	37,18	32,34	30,81	14,59	20,87	15,95	13,90	19,33	16,27	14,91	14,85	14,36
Выручка от реализации (руб.)	29 171 390	25 563 100	23 538 151	17 645 356	11 235 629	12 127 790	11 520 785	13 821 325	14 160 177	16 179 621	16 888 981	17 828 713
Валовая выручка (руб.)	6 231 304	6 885 557	6 041 894	3 097 552	2 409 829	2 242 062	2 053 173	2 954 564	2 600 842	2 820 056	2 986 344	3 131 934
Чистая прибыль(руб.)	4 847 955	5 356 963	4 700 594	2 409 895	1 874 847	1 744 324	1 597 369	2 298 651	2 023 455	2 194 004	2 323 376	2 436 645

Table 2. Calculation of the cost of basic and auxiliary materials by models (model A)



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На данном листе подготовлены таблицы для расчета расходов на материалы по каждой модели.
Найдите нужную таблицу для выбранной модели и заполните столбцы норм расхода материала и
Стоимость по каждому материалу и итого будут посчитаны автоматически.
Если материалов больше чем выделено строк, вставьте перед строкой "Итого" нужное количество строк.

зима **Стоимость основных материалов на мужские зимние ботинки (модель А)**

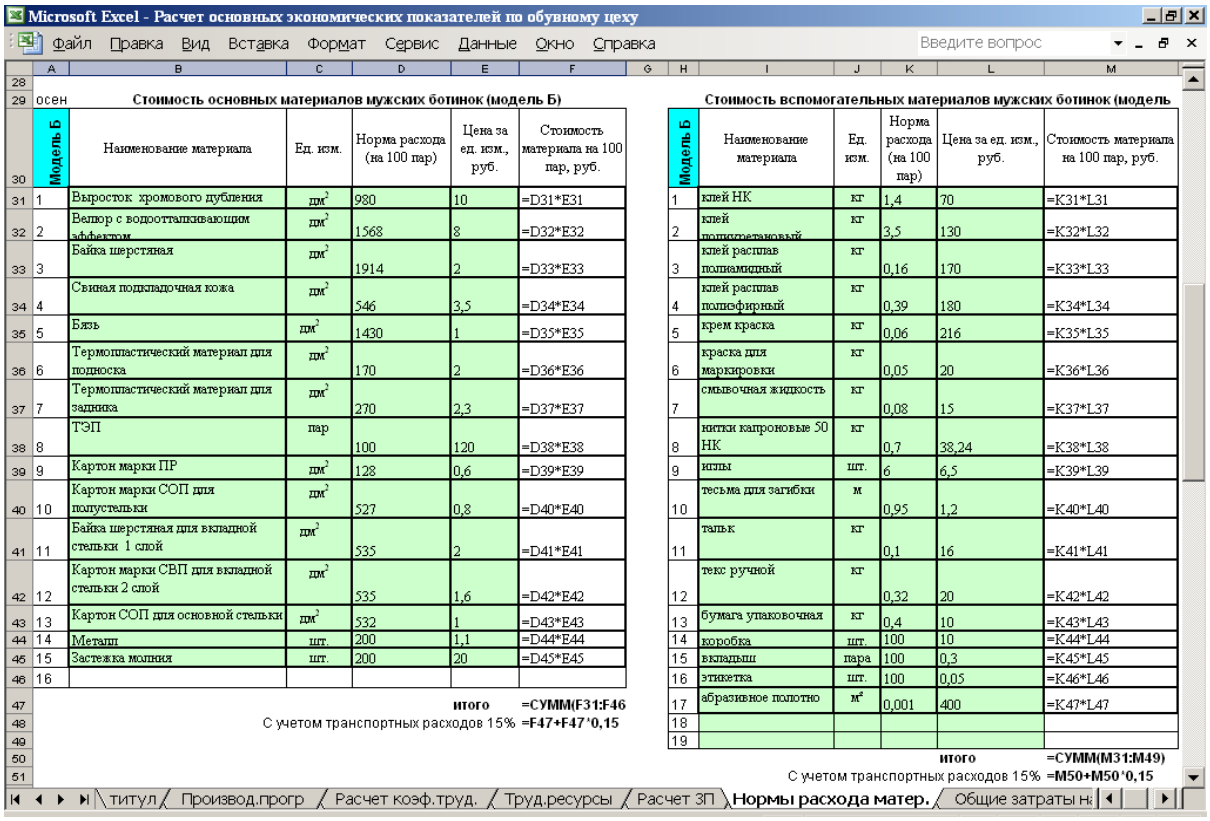
Модель А	Наименование материала	Ед. изм.	Норма расхода (на 100 пар)	Цена за ед. изм., руб.	Стоимость материала на 100 пар, руб.
1	Яловка хромового дубления	дм²	2987	9	=D7*E7
2	Мех натуральный (овчина)	дм²	2207	10	=D8*E8
3	Кожлина подкладочная	дм²	507	4	=D9*E9
4	Термопластический материал для подноска	дм²	200	2	=D10*E10
5	Термопластический материал для задника	дм²	270	2,3	=D11*E11
6	ТЭП	пар	100	120	=D12*E12
7	Картон марки ПР	дм²	130	0,6	=D13*E13
8	Картон марки СОП для полустельки	дм²	536	0,8	=D14*E14
9	Картон марки СВП для вкладной стельки 2 слой	дм²	532	1	=D15*E15
10	Картон СОП для основной стельки	дм²	530	1,6	=D16*E16
11	Металл	шт.	200	20	=D17*E17
12	Застежка молния	шт.	200	1,1	=D18*E18
13			Итого		=СУММ(F7:F18)
14			С учетом транспортных расходов 15%		=F19+F19*0,15
15					
16					

Стоимость вспомогательных материалов на мужские зимние ботинки (модель А)

Модель А	Наименование материала	Ед. изм.	Норма расхода (на 100 пар)	Цена за ед. изм., руб.	Стоимость материала на 100 пар, руб.
1	клей НК	кг	2	70	=K7*L7
2	клей	кг	4	125	=K8*L8
3	клей расплав	кг	0,5	152	=K9*L9
4	клей расплав полиэфирный	кг	0,5	152	=K10*L10
5	краска для полирования	кг	0,05	216	=K11*L11
6	краска для	кг	0,5	20	=K12*L12
7	смывочная жидкость	кг	0,8	15	=K13*L13
8	нитки капроновые 50 НК	кг	0,3	38,82	=K14*L14
9	нитки	шт.	6	1,1	=K15*L15
10	лента липкая	м	0,45	3,5	=K16*L16
11	тальк	кг	0,1	16	=K17*L17
12	текс машинный	кг	1	120	=K18*L18
13	бумага упаковочная	кг	0,2	10	=K19*L19
14	коробка	шт.	100	10	=K20*L20
15	вкладыш	пара	100	0,31	=K21*L21
16	этикетка	шт.	100	0,05	=K22*L22
17	растворитель	л	1	105	=K23*L23
18	краска для ретуширования	кг	0,5	50	=K24*L24
19					
			Итого		=СУММ(M7:M24)
			С учетом транспортных расходов 15%		=M26+M26*0,15

Листы: титул | Производ.прогр | Расчет коэф.труд. | Труд.ресурсы | Расчет ЗП | Нормы расхода матер. | Общие затраты на

Table 3. Calculation of the cost of basic and auxiliary materials by models (model B)



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осен — Стоимость основных материалов мужских ботинок (модель Б)

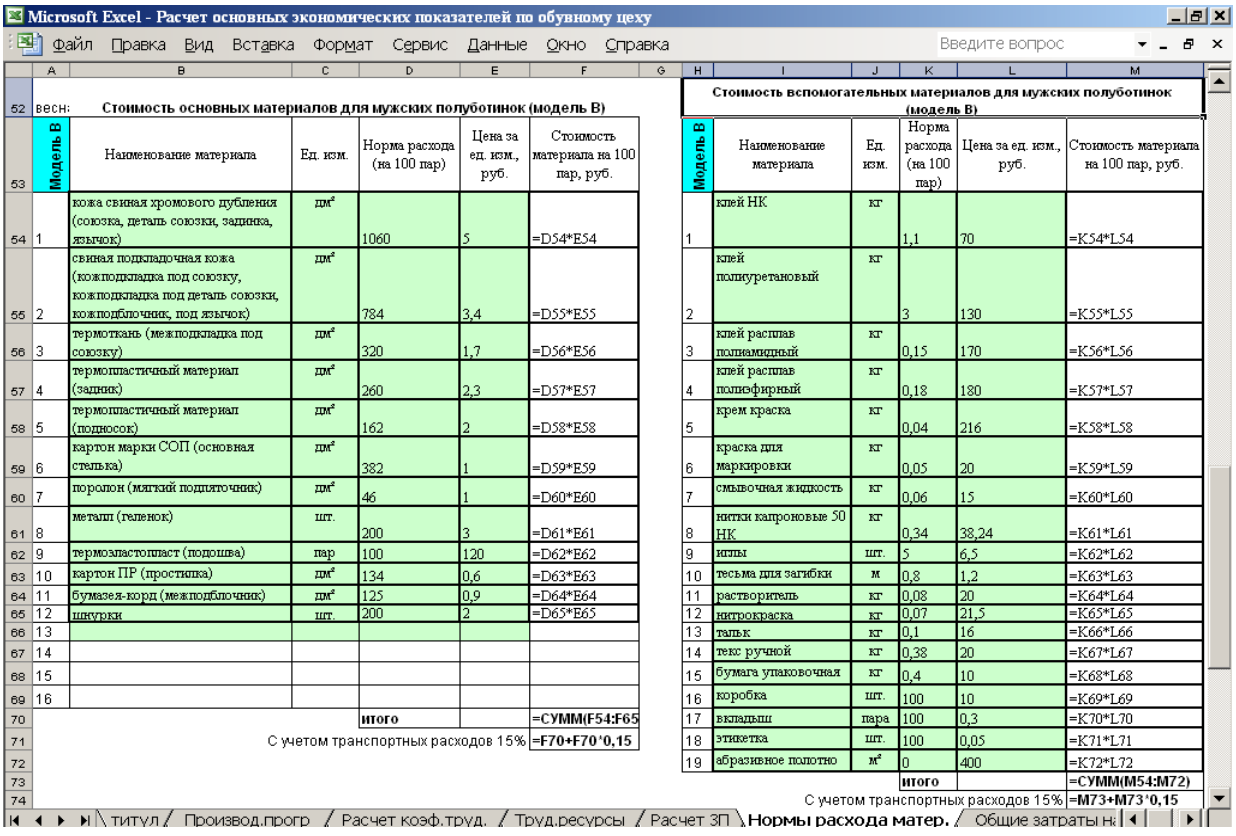
Модель Б	Наименование материала	Ед. изм.	Норма расхода (на 100 пар)	Цена за ед. изм., руб.	Стоимость материала на 100 пар, руб.
1	Выросток хромового дубления	дм²	980	10	=D31*E31
2	Велюр с водоотталкивающим эффектом	дм²	1568	8	=D32*E32
3	Байка шерстяная	дм²	1914	2	=D33*E33
4	Свиная подкладочная кожа	дм²	546	3,5	=D34*E34
5	Бязь	дм²	1430	1	=D35*E35
6	Термопластический материал для подноска	дм²	170	2	=D36*E36
7	Термопластический материал для задника	дм²	270	2,3	=D37*E37
8	ТЭП	пар	100	120	=D38*E38
9	Картон марки ПР	дм²	128	0,6	=D39*E39
10	Картон марки СОП для полустельки	дм²	527	0,8	=D40*E40
11	Байка шерстяная для вкладной стельки 1 слой	дм²	535	2	=D41*E41
12	Картон марки СВП для вкладной стельки 2 слой	дм²	535	1,6	=D42*E42
13	Картон СОП для основной стельки	дм²	532	1	=D43*E43
14	Металл	шт.	200	1,1	=D44*E44
15	Застежка молния	шт.	200	20	=D45*E45
16					
			итого		=СУММ(F31:F46
			С учетом транспортных расходов 15%		=F47+F47*0,15

Стоимость вспомогательных материалов мужских ботинок (модель

Модель Б	Наименование материала	Ед. изм.	Норма расхода (на 100 пар)	Цена за ед. изм., руб.	Стоимость материала на 100 пар, руб.
1	клей НК	кг	1,4	70	=K31*L31
2	клей полиуретановый	кг	3,5	130	=K32*L32
3	клей расплав полиамидный	кг	0,16	170	=K33*L33
4	клей расплав полиэфирный	кг	0,39	180	=K34*L34
5	крем краска	кг	0,06	216	=K35*L35
6	краска для маркировки	кг	0,05	20	=K36*L36
7	смывочная жидкость	кг	0,08	15	=K37*L37
8	нитки капроновые 50 НК	кг	0,7	38,24	=K38*L38
9	иглы	шт.	6	6,5	=K39*L39
10	тесьма для загибки	м	0,95	1,2	=K40*L40
11	тальк	кг	0,1	16	=K41*L41
12	текс ручной	кг	0,32	20	=K42*L42
13	бумага упаковочная	кг	0,4	10	=K43*L43
14	коробка	шт.	100	10	=K44*L44
15	вкладыш	пара	100	0,3	=K45*L45
16	этикетка	шт.	100	0,05	=K46*L46
17	абразивное полотно	м²	0,001	400	=K47*L47
18					
19					
			итого		=СУММ(M31:M49)
			С учетом транспортных расходов 15%		=M50+M50*0,15

титул | Производ.прогр | Расчет коэф.труд. | Труд.ресурсы | Расчет ЗП | Нормы расхода матер. | Общие затраты на

Table 4. Calculation of the cost of basic and auxiliary materials by models (model B)



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весн: — Стоимость основных материалов для мужских полуботинок (модель В)

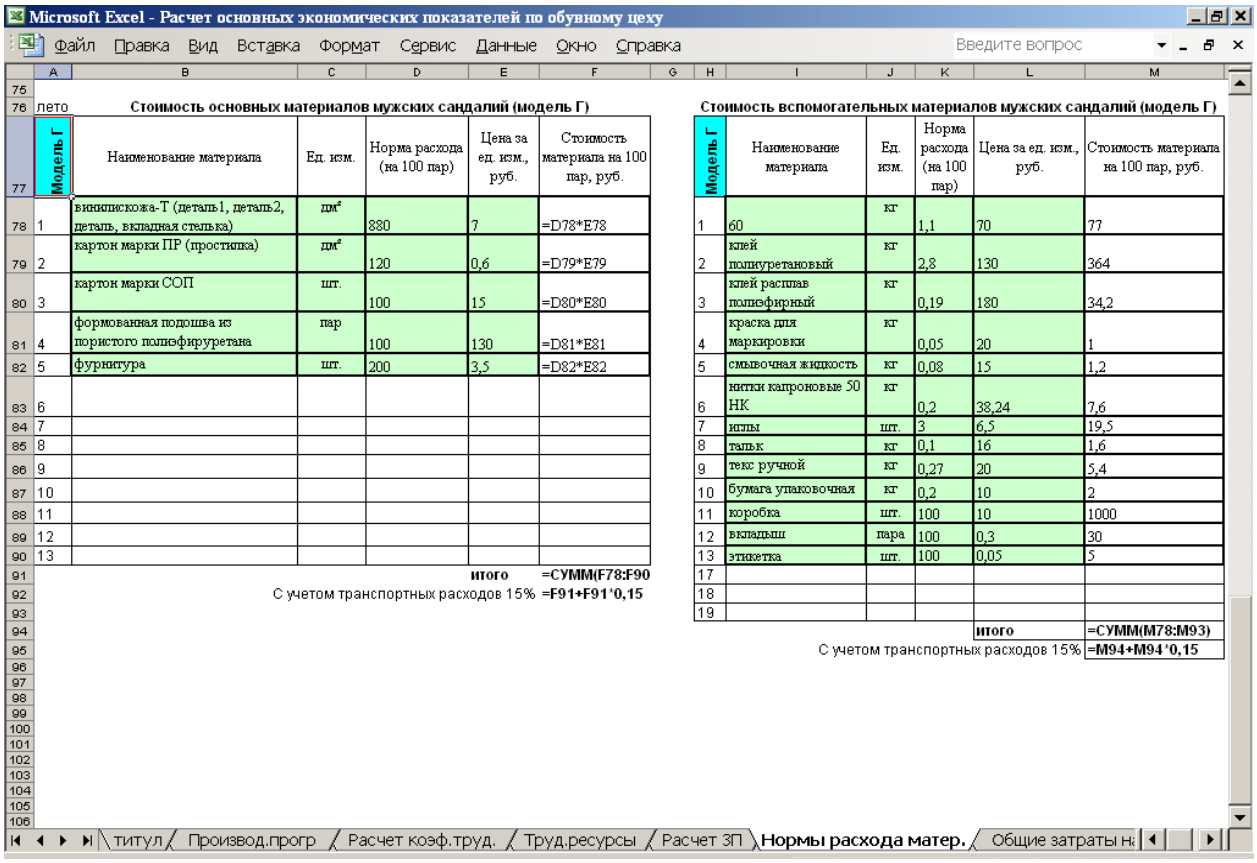
Модель В	Наименование материала	Ед. изм.	Норма расхода (на 100 пар)	Цена за ед. изм., руб.	Стоимость материала на 100 пар, руб.
1	кожа свиная хромового дубления (союзка, деталь союзки, задинка, язычок)	дм²	1060	5	=D54*E54
2	свиная подкладочная кожа (кожподкладка под союзку, кожподкладка под деталь союзки, кожподблочник, под язычок)	дм²	784	3,4	=D55*E55
3	термоткань (межподкладка под союзку)	дм²	320	1,7	=D56*E56
4	термопластичный материал (задник)	дм²	260	2,3	=D57*E57
5	термопластичный материал (подносок)	дм²	162	2	=D58*E58
6	картон марки СОП (основная стелька)	дм²	382	1	=D59*E59
7	поролон (мягкий подпяточник)	дм²	46	1	=D60*E60
8	металл (геленок)	шт.	200	3	=D61*E61
9	термоэластопласт (подошва)	пар	100	120	=D62*E62
10	картон ПР (простилка)	дм²	134	0,6	=D63*E63
11	бумазея-корд (межподблочник)	дм²	125	0,9	=D64*E64
12	шнурки	шт.	200	2	=D65*E65
13					
14					
15					
16					
			итого		=СУММ(F54:F65
			С учетом транспортных расходов 15%		=F70+F70*0,15

Стоимость вспомогательных материалов для мужских полуботинок (модель В)

Модель В	Наименование материала	Ед. изм.	Норма расхода (на 100 пар)	Цена за ед. изм., руб.	Стоимость материала на 100 пар, руб.
1	клей НК	кг	1,1	70	=K54*L54
2	клей полиуретановый	кг	3	130	=K55*L55
3	клей расплав полиамидный	кг	0,15	170	=K56*L56
4	клей расплав полиэфирный	кг	0,18	180	=K57*L57
5	крем краска	кг	0,04	216	=K58*L58
6	краска для маркировки	кг	0,05	20	=K59*L59
7	смывочная жидкость	кг	0,06	15	=K60*L60
8	нитки капроновые 50 НК	кг	0,34	38,24	=K61*L61
9	иглы	шт.	5	6,5	=K62*L62
10	тесьма для загибки	м	0,8	1,2	=K63*L63
11	растворитель	кг	0,08	20	=K64*L64
12	нитрокраска	кг	0,07	21,5	=K65*L65
13	тальк	кг	0,1	16	=K66*L66
14	текс ручной	кг	0,38	20	=K67*L67
15	бумага упаковочная	кг	0,4	10	=K68*L68
16	коробка	шт.	100	10	=K69*L69
17	вкладыш	пара	100	0,3	=K70*L70
18	этикетка	шт.	100	0,05	=K71*L71
19	абразивное полотно	м²	0	400	=K72*L72
		итого			=СУММ(M54:M72)
		С учетом транспортных расходов 15%			=M73+M73*0,15

титул | Производ.прогр | Расчет коэф.труд. | Труд.ресурсы | Расчет ЗП | Нормы расхода матер. | Общие затраты на

Table 5. Calculation of the cost of basic and auxiliary materials by models (model D)



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Файл Правка Вид Вставка Формат Сервис Данные Окно Справка

лето

Стоимость основных материалов мужских сандалий (модель Г)

Модель Г	Наименование материала	Ед. изм.	Норма расхода (на 100 пар)	Цена за ед. изм., руб.	Стоимость материала на 100 пар, руб.
1	винилискожа-Т (деталь1, деталь2, деталь, вкладная стелька)	дм²	880	7	=D78*E78
2	картон марки ПР (простилка)	дм²	120	0,6	=D79*E79
3	картон марки СОП	шт.	100	15	=D80*E80
4	формованная подошва из пористого полиэфируретана	пар	100	130	=D81*E81
5	фурнитура	шт.	200	3,5	=D82*E82
6					
7					
8					
9					
10					
11					
12					
13					
				итого	=СУММ(F78:F90
				С учетом транспортных расходов 15%	=F91+F91*0,15

Стоимость вспомогательных материалов мужских сандалий (модель Г)

Модель Г	Наименование материала	Ед. изм.	Норма расхода (на 100 пар)	Цена за ед. изм., руб.	Стоимость материала на 100 пар, руб.
1	60	кг	1,1	70	77
2	клей полиуретановый	кг	2,8	130	364
3	клей расплав полиэфирный	кг	0,19	180	34,2
4	краска для маркировки	кг	0,05	20	1
5	смывочная жидкость	кг	0,08	15	1,2
6	нитки капроновые 50 НК	кг	0,2	38,24	7,6
7	иглы	шт.	3	6,5	19,5
8	тальк	кг	0,1	16	1,6
9	текс ручной	кг	0,27	20	5,4
10	бумага упаковочная	кг	0,2	10	2
11	коробка	шт.	100	10	1000
12	вкладыш	пара	100	0,3	30
13	этикетка	шт.	100	0,05	5
17					
18					
19					
				итого	=СУММ(M78:M93)
				С учетом транспортных расходов 15%	=M94+M94*0,15

титул | Производ.прогр | Расчет коэф.труд. | Труд.ресурсы | Расчет ЗП | Нормы расхода матер. | Общие затраты на

Table 6. Annual results of the shoe enterprise for the production of the entire range of footwear

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, thousand rubles	7545.06	7545.06	4621.78	4621.78	4621.78	3660.56	3660.56	3660.56	4892.69	4892.69	4892.69	7545.06

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

The formation of the assortment is the problem of specific goods, their individual series, determining the relationship between "old" and "new" goods, goods of single and serial production, "high-tech" and "ordinary" goods, embodied goods, or licenses and know-how. When forming the assortment, there are problems of prices, quality, guarantees, service, whether the manufacturer is going to play the role of a leader in the creation of fundamentally new types of products or is forced to follow other manufacturers

The formation of the assortment is preceded by the development of an assortment concept by the enterprise. It is a directed construction of an optimal assortment structure, a product offer, while taking as a basis, on the one hand, the consumer requirements of certain groups (market segments), and on the other hand, the need to ensure the most efficient use of raw materials, technological, financial and other resources by the enterprise. to produce products at low cost.

The assortment concept is expressed as a system of indicators characterizing the possibilities for the optimal development of the production assortment of a given type of goods. These indicators include: a variety of types and varieties of goods (taking into account the typology of consumers); the level and frequency of updating the assortment; the level and ratio of prices for goods of this type, etc.

The assortment formation system includes the following main points:

- determination of current and future needs of buyers, analysis of ways to use shoes and features of consumer behavior in the relevant market;
- assessment of existing analogues of competitors;
- critical assessment of products manufactured by the enterprise in the same assortment as in p.p. 1 and 2, but from the position of the buyer;
- deciding which products should be added to the assortment and which should be excluded from it due to changes in the level of competitiveness; whether it is necessary to diversify products at the expense of other areas of production of the enterprise that go beyond its established profile.
- consideration of proposals for the creation of new models of footwear, improvement of existing ones;
- development of specifications for new or improved models in accordance with customer requirements;
- exploring the possibilities of producing new or improved models, including issues of price, cost and profitability;
- conducting tests (testing) of shoes, taking into account potential consumers in order to determine their acceptability in terms of the main indicators;
- development of special recommendations for the production departments of the enterprise regarding quality, style, price, name, packaging, service, etc. in accordance with the results of the tests carried out, confirming the acceptability of the characteristics of the product or predetermining the need to change them;
- assessment and revision of the entire range.

Planning and assortment management is an integral part of marketing. Even well-thought-out sales and advertising plans will not be able to neutralize the consequences of mistakes made earlier in assortment planning.

The optimal assortment structure should ensure maximum profitability, on the one hand, and sufficient stability of economic and marketing indicators (in particular, sales volume), on the other hand.

Achieving the highest possible profitability is ensured through constant monitoring of economic indicators and timely decision-making to adjust the range.

The stability of marketing indicators is ensured, first of all, by constantly monitoring the situation on the market and promptly responding to changes, and even better, taking proactive actions.

In addition, it is important that there are not too many product names. For the majority of Russian enterprises, the main reserve for optimizing the assortment is still based on a significant reduction in the assortment range. Too large assortment has a bad effect on economic indicators - there are many positions that, in terms of sales, cannot even break even. As a result, the overall profitability falls sharply. Only the exclusion of unprofitable and low-profit items from the assortment can give the company an increase in overall profitability by 20-30%.

In addition, a large assortment disperses the strength of the company, makes it difficult to competently offer goods to customers (even sales

department employees are not always able to explain the difference between one or another position or name), and disperses the attention of end consumers.

It is generally accepted that the buyer needs a wide range. This widest range is often referred to even as a competitive advantage. But in reality, it turns out that for a manufacturer, a wide range of products is hundreds of product items, and for a consumer, 7 items are already more than enough.

Thus, the consumer does not need a wide assortment at all, but the variety necessary for him.

Of particular importance in such a situation is the role played by certain positions of the assortment. For this, products can be classified into the following groups:

A - the main group of goods (which bring the main profit and are in the growth stage);

B - supporting group of goods (products that stabilize sales revenue and are in the stage of maturity);

B - a strategic group of goods (goods designed to ensure the future profits of the company);

D - tactical group of goods (products designed to stimulate sales of the main product group and are in the stage of growth and maturity);

D - a group of goods being developed (products that are not present on the market, but ready to enter the market);

E - goods leaving the market (which do not make a profit and must be removed from production, withdrawn from the market).

After that, it is necessary to determine the share of each group in the total volume of production. For a stable position of the company in the assortment structure: the group of goods A and B must be at least 70%.

Thus, this makes it possible to evaluate the existing assortment set in the company and, correlating it with the profit received, to assess the correctness of the assortment planning, its balance.

In addition, an increase in the volume of goods of groups that bring the main income will not always contribute to an increase in the company's profit. Here it is important to pay attention to the balance of unsold goods (what increase it will give and the possibility of its further sale).

Production volume planning is one of the important problems of assortment policy. In the economy, forecasting of future expenses and incomes is widely used on the basis of calculating the cost of production at variable costs. The essence of this method lies in the fact that the costs of the enterprise are divided into fixed and variable, depending on the degree of their response to changes in the scale of production.

The basis of fixed costs is the costs associated with the use of fixed assets (fixed capital). These include the cost of depreciation of fixed assets, rent of industrial premises, as well as salaries of management personnel, deductions for social needs of these personnel. The basis of variable costs is the costs associated with the use of working capital (working capital). These include the cost of raw materials, materials, fuel, wages of production workers and deductions for their social needs.

It should be emphasized that the total fixed costs, being a constant value and not depending on the volume of production, can change under the influence of other factors. For example, if prices rise, total fixed costs also rise.

The method of calculation by the amount of coverage provides for the calculation of only variable costs associated with the production and sale of a unit of output. It is based on the calculation of the average variable costs and the average coverage, which represents the gross profit and can be calculated as the difference between the price of the product and the sum of the variable costs. Limiting the cost of production only to variable costs simplifies the rationing, planning, and control due to the sharply reduced number of cost items. The advantage of this method of accounting and costing is also a significant reduction in the complexity of accounting and its simplification.

When applying the calculation method by the amount of coverage, it is advisable to use such indicators as the amount of coverage (marginal income) and the coverage ratio.

The coverage amount (marginal income) is the difference between the sales proceeds and the total amount of variable costs. The amount of coverage can be calculated in another way - as the sum of fixed costs and profits. The calculation of the amount of coverage allows you to determine the funds of the enterprise received by it in the sale of its products in order to recover fixed costs and make a profit. Thus, the amount of coverage shows the overall level of profitability, both for the entire production and for individual products: the higher the difference between the selling price of the product and the sum of variable costs, the higher the amount of its coverage and the level of profitability.

The coverage ratio is the share of the coverage amount in the sales proceeds or the share of the average coverage in the price of the goods.

It is also important to determine at what volume of sales the gross costs of the enterprise will pay off. To do this, it is necessary to calculate the break-even point, at which revenue or production volume is accepted that provides coverage of all costs and zero profit. Those. the minimum amount of proceeds from the sale of products is revealed, at which the level of profitability will be more than 0.00%. If a business earns more than the breakeven point, then it is profitable. By comparing these two values of revenue, one can estimate the allowable decrease in revenue (sales volume) without the danger of being at a loss. The revenue corresponding to the break-even point is

called the threshold revenue. The volume of production (sales) at the break-even point is called the threshold volume of production (sales).

In order to assess how much actual revenue exceeds the break-even revenue, it is necessary to calculate the margin of safety (percentage deviation of actual revenue from the threshold). To determine the impact of a change in revenue on a change in profit, the indicator of production leverage is calculated. The higher the effect of production leverage, the more risky in terms of profit reduction is the position of the enterprise.

To separate the total costs into fixed and variable, we use the method of the highest and lowest points, which involves the following algorithm:

- among the data on the production volumes of various types of footwear and the costs of its production, the maximum and minimum values are selected;
- the differences between the maximum and minimum values of production volume and costs are found;
- the rate of variable costs per product is determined by referring the difference in cost levels for a period to the difference in production levels for the same period;
- the total value of variable costs for the maximum and minimum volume of production is determined by multiplying the rate of variable costs by the corresponding volume of production;
- the total value of fixed costs is determined as the difference between all costs and the value of variable costs.

In a market economy, in order to survive in a constantly changing economic environment, shoe companies need to focus on the target audience:

– an increase in the amount of profit as a result of a company in the volume of sales of products, a decrease in its cost and an increase in product quality.

In order to get the desired profit in an environment where prices for shoes and production volumes are dictated by the market, the company always faces a choice of what products and how much to produce in terms of production costs and taking into account the solvency of potential buyers.

The presence of high-quality, competitive footwear is a necessary prerequisite for the highly efficient functioning of a shoe enterprise.

An important criterion for the competitiveness of footwear in the market is its cost with its corresponding quality and the purchasing power of the population.

The main criterion for the viability and profitability of an enterprise is profit; in order to increase losses, it is first necessary to reduce the cost of footwear.

Changes in the total cost, which includes all costs for the production and sale of footwear, depend on the ratio of cost changes for each costing item.

An important factor influencing the level of costs for the production of footwear is the change in the assortment and the technological process.

Choosing a technology that can effectively achieve unlabeled goals in the face of fierce competition will ensure that the developed range of shoes will be chosen by the buyer and allow the enterprise to maximize profits.

To solve this problem, it is necessary to use the injection method most widely, which ensures the manufacture (production) of the entire range of high-quality footwear with different profitability of individual types of footwear to meet the demand of various population groups.

In the cost of footwear production, the largest share is the cost of raw materials and basic materials, and then wages and depreciation.

This is possible only if the heads of enterprises implement modern technological solutions based on the use of multifunctional and universal equipment, and at the same time it is necessary to remember that the innovative technological solution itself should not be expensive, that is, on the one hand, provide the enterprise with sustainable technical and economic indicators and guarantee them demand not only in the sales markets of the regions of the Southern Federal District and the North Caucasus Federal District, but in the regions of other districts of Russia and be attractive to foreign consumers. But on the other hand, consumers should have the choice to compare the price niche for the proposed products with analogues of foreign firms, and always have priority. This will be possible with the formation of production based on the use of innovations and innovative activities with the involvement of nanotechnologies and nanomaterials, creating the opportunity for manufacturers to use progressive methods for the manufacture of the entire range of footwear.

The wider use of such methods will allow enterprises in market conditions to receive such an amount of profit that will allow them not only to firmly maintain their positions in the sales market for their shoes, but also to ensure the dynamic development of its production in a competitive environment, this is especially important in the manufacture of the entire product range children's shoes.

Conclusion

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 that at one time emerged from such crises (the United States in the 1930s, 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.

Other 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 gender 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 to obtain 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 have been identified, which allow eliminating bottlenecks, minimizing 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 an assortment 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 desire of the heads of enterprises.

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