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Article



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ON THE BENEFITS OF USING FLEXIBLE MANUFACTURING PROCESSES BY MANUFACTURERS TO PRODUCE HIGH-QUALITY AND COMPETITIVE PRODUCTS

Abstract: In the article, the authors confirm that the implementation of all the benefits of flexible technological processes only if regional and municipal branches of government actively participate in their implementation, so that, by creating new jobs in small and medium-sized cities, they guarantee their population all the social benefits for a decent life, ensuring their financing, including the work of preschool and school organizations, medical and cultural institutions, distracting young people from the street and other undesirable phenomena, and the appearance on the markets of demand for in-demand products with a price niche acceptable to the majority of consumers in these regions will reduce the migration of the population from these regions, namely, due to the financing of all socially significant programs for the regions of the Southern and North Caucasian Federal Districts.

Key words: quality, import substitution, consumers, producers, profit, sales, demand, relevance, competitiveness, sustainable energy efficiency, economic policy, financial condition, innovation, flexible process, digital production, efficiency, market, implementation.

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Introduction

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The 21st century has sharpened scientific, philosophical and practical interest in competition. The scale, content, forms and significance of competition have placed it in a series of global problems of human development with one important clarification: it is not so much humanity itself that benefits from achievements in competitive struggle, but rather individual subjects of human activity, starting with the personality of the performer and manager, and up to those states in whose interests they work. Therefore, the organization of effective participation in competition should be considered as a leading indicator of professional competence, spiritual maturity and political consciousness, bearing in mind, naturally, economic policy.

A special place in this struggle, there is no other way to call it, is occupied by the attitude of self-awareness, the system-forming factor of which is professional culture. If human capital determines the growth of production, then the quality of education lays the foundation for human capital. Competencies are not effective in themselves, they have power when they are formed as the needs of a person, developed in a comprehensive manner and in harmony with their own, national and universal human interests.

The formula for the harmony of interests of an individual is extremely simple. It was discovered 2500 years ago by Confucius and refined by I. Kant, giving a rational form to "another person should not be a means for you." Summarizing the thoughts of our great ancestors, we will say: the only reliable effective means of sustainable development of all manifestations of human life will be the achievement of mutually interested coexistence of people. With regard to production in general and consumer goods in particular, the conclusion is further simplified to the creation of technical, economic and humanitarian (sociocultural and psychological) conditions in a specific production aimed at a high-quality, popular and affordable product. The organization of production can be considered reasonable only if it is subordinated to a single goal - the satisfaction of consumer needs. Unfortunately, our modern organization of the economy opposes the producer and the consumer, turning them into opponents, instead of stimulating action in a single team.

Where are the reasons for such anomalies, in what? Is it connected with objective factors, the resistance of whose forces we have not yet been given to overcome, or are the braking forces of an inertial nature, inherited by us, introduced in the course of modernization, and we are able to fight them, and not the consumer in the market? What are our reserves? The answers to the questions posed should be sought in a system analysis, which requires an appeal to scientific and philosophical theory. One should not be

afraid of the tension of thought-creation. The famous naturalist D. Dan, analyzing the meaning of competition following C. Darwin, came to the conclusion that competition in the struggle for existence is not limited to greater and better adaptation to circumstances, it strengthens the nervous system and develops the brain. So let's start with philosophical reflection.

In economics and politics, there are many phenomena that contradict the nature and functions of these spheres of social life. Practical development does not always coincide with historical logic. History, in spite of its rational basis, the history of the implementation of the activities of Homo sapiens, often drives the reflection of reason into a dead end. In this connection, a problem arises: if the history of the socio-cultural activity of "Homo sapiens" should be, at a minimum, no less reasonable and logical than the individual reason of a person, subject to chance to an incomparably greater extent than the socialized reason of humanity, then how can the presence of social anomalies, a kind of "jams" be explained?

They are historical dead ends from which we must regularly get out, or a product of the costs of underdevelopment of the organization of social relations and management, including limited knowledge of historical patterns. In other words, we are faced with a riddle of history and we must determine where to look for the keys to its solution - in consciousness or in objective reality? What exactly should we focus on? We do not have an answer that could be argued to a sufficient degree. Moreover, it seems to us that it would be more legitimate to study the nature of this problem in parallel - both in social being and in social consciousness.

The rationality of the history of human activity could not but lay down a logically expressed pattern, but the absence of non-logical processes in real history would look as if the scenario of history had been written by someone in advance and the one who came up with it continues to conduct the course of historical movement. N. G. Chernyshevsky compared history to Nevsky Prospect, laid out along a ruler. He did this to emphasize that historical logic requires specific awareness. History is comparable to the order of movement in the physical space of existence, but it is located in it non-linearly.

There are no straight lines in nature - they are conditional and exist as intervals-segments of movement. The same is in the development of society, it is reasonable to the extent of historical concreteness. And each historical concreteness carries in itself both something new and unresolved or limitedly resolved problems, left as a legacy to the passing generations. Historical logic runs into the imperfection of historical concreteness and will be better understood as a sequence of concrete-historical rationalities, built from the contradictions of the rationality of human activity, in essence, the relative logic of that historical

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concreteness that accompanies the historical ascent of the socialized Homo sapiens.

The 20th century confirmed the idea of historical materialism in its Marxist interpretation. The development of social life is based on the movement of material production, the connecting element of which was initially the rational-active man. Human history grew out of labor, but the modern state of labor became possible only at the stage of homo sapiens, which means the following: production serves as the basis for social progress when it finds its expression in human rationality. In order to be a real force, production must correspond to the needs of people, needs must manifest themselves in thoughts, thoughts must capture feelings, become convictions.

Improvement of production is conditioned by the transformation of science into a direct productive force, technical progress, however, productivity and quality of productive activity depend no less on the moral factor – a person's attitude to work. In this light, the Japanese mentality, developed by an original economic policy that connects the interests of owners and hired workers, is indicative. Its core is the national tradition, which goes back to the history of Confucianism. Confucius taught: "When governing a state, constant attention to business and sincerity in relation to people, moderation in expenses and love for the people are necessary. And it is no less important to encourage the people to work."

In Japan, China and other Eastern countries, examples of moral disorder can be found, but they do not so much testify to socio-cultural reorientation in a national format, as to the historical costs of developing a national culture. There, the overwhelming majority of the population continues to listen to the words and reasoning of teachers. "Wealth and nobility, Confucius explained, are the subject of human desires, but a noble man does not use them if they were obtained illegally." How can a noble man bear such a high name if he has lost his love for humanity? A noble man never parts with humanity for an hour, it is always with him: in trouble and in worldly vanity."

In order to maintain the prestige of a company in Japan, the basic phenomenon of the social form of life is actively used – the family, family traditions, accumulating the power of morality. The family serves the company. Each member of the family, traditionally connected with the history of production, perceives the company and his work through the prism of family tradition, removing the burden of alienation of labor, inevitable in the conditions of exploitation. Exploitation itself is draped in the form of social partnership. The essential contradictions of bourgeois production remain, but the form of their perception by consciousness changes. In modern Russia, the term "exploitation" is not used to characterize production, which is not surprising given the existing practical attitude to national culture, especially to education,

officially aimed by policy at developing competencies needed by the employer in the first place.

Main part

The quality of production and the quality of the product depend on technical conditions – technology, technical means, organization of production, professional qualifications of organizers and performers and attitude to work. The last two components form the content of the concept of "subjective factor" or "human capital". Based on the achievements of the scientific and technological revolution, entrepreneurs try to minimize the participation of the "subjective factor" due to its volatility. Without advertising, the "subjective factor" is attributed to the conditions of uncertainty and risk.

The problem here is that all attempts to limit the presence of the subjective factor in production and, mainly, in its technological component, inevitably lead to the absolutization of the technical component. It becomes a total means of increasing labor productivity, production safety and profitability. Thus, the management of the organization of production development is delegated to artificial intelligence, built on the laws and rules of formal logic, expressing one of the sides of development - conservatism.

The initial law, and, in essence, the principle of this logic is the law of identity. The object and the subject, their connection are recognized as immutable. Movement is reduced to its relative moment - rest. Rest replaces movement and, together with it, change as the essence of any movement.

C. Darwin said: nature does not like leaps and explained, because all of them consist. J. Cuvier, on the contrary, tried to understand the variability of species as a result of earthly cataclysms. The life of nature tells us that we should be afraid of logical linearity in thinking. It is effective when something needs to be brought to perfection in its traditional manifestation. For example, in the case of improving the existing range, achieving a rational ratio of consumer requirements for a well-known attractive product, its quality and price. But everything comes to an end, improvement is no exception, therefore, it is necessary to look for interesting promising development options for the product line in advance, to think not about what already exists in principle, to improve what is available, but to try to fantasize systematically, to get ahead of demand with innovations. Otherwise, today it is irrational to manage the needs of buyers.

Our thinking in that part of it which is called creative, inventive, is quite spacious for innovative actions. It is only important to understand that beyond the horizon of the known Aristotelian logic suffers its heuristic potential. Prospective thinking is thinking which tries to "grasp" the direction of changes in commodity production. Here the possibility of

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anticipatory reflection of reality dominates in thinking – the property discovered by P. Anokhin. There are physiological grounds to foresee changes, mental prerequisites in the form of will, need, emotions are also natural. It remains to look for logical tools. The arrow of movement should be transferred from Aristotelian formal logic to Hegelian dialectical logic, based on the principle of development of the content of concepts and change of the concepts themselves. Presenting the peculiarity of dialectical logic, its fundamental difference from Aristotle's logic, G. Hegel wrote: "In rational logic, a concept is usually considered as a simple form of thinking and, to be more precise, as a general idea, as if a concept as such is something dead, empty, abstract." And he clarified: "Of course, the concept should be considered as a form, but as an infinite, creative form."

It is no coincidence that K. Marx's associates noted that the founder of the universal understanding of dialectics did not leave a textbook for his heirs, since it was supposed to be the logic of the analysis of the movement of production in "Capital". K. Marx showed how the logical limitations of the thinking of production managers reduces the process to capital management and brings production not only to a crisis provoked by overproduction, but also to socio-political tension. The development of political economy after K. Marx was expected, subordinated to the historical rehabilitation of capitalism. Intellectual and political forces concentrated on identifying the perfection of commodity production with its bourgeois form of organization.

Here the peculiarities of Aristotelian logic, aimed at the immutability of the conditions of inference, came in handy. If commodity production is the only universal reality of the objective historical process in the conditions of a developed society, then history itself is destined to implement it worthily exclusively in the form of a bourgeois organization. Thus, the consumer's thinking, also generally tuned to the formal-logical type of action, leads to the final conclusion: the period preceding capitalism was prehistoric, just a formation. The true history of commodity production is created in a bourgeois form. Objective reality was embodied in an absolute, that is, ahistorical form. Further history can only be understood as the ascent of capitalism to the highest and absolute achievements and the all-round protection of the stability of the bourgeois system - optimal for a commodity economy.

The power of logic is in the ability to construct an internally consistent theory, but the truth of any theory is not tested by its consistency alone. Here, the correspondence of the consequences of the theory to life's realities is of particular importance. Economic theory is tested en masse, because its results directly concern everyone. People may or may not be producers, but everyone consumes the products of production, and everyone wants to make consumption

consistently high-quality and in line with their ability to pay.

Beginning with artisan labor and the workshop form of its organization, the quality of the goods pushed all other signs of production into the background. While the division of labor had a workshop form, and within the workshop everyone produced goods up to the final commodity form and fully guaranteed the quality with his own brand, the quality of production and the quality of the goods were in a unity of existence, and the problem of the quality of the goods was simplified, reduced to compliance with the technological standard of production. Production was a way of supporting the life of the producer, therefore the relevance of the quality of the goods was removed by the specificity of his attitude to production.

The goods on the market were of high quality, and the only thing to be wary of was counterfeiting, which did not have the current scale and was resolutely suppressed by both the state and self-regulation of trade. For mass production, which was the main consequence of the industrial revolution, the problem of the producer's interest in the quality of goods among socially significant ones was not noted. It undoubtedly existed, but the nature of production did not allow it to leave the sphere of private consciousness and materialize in the product range.

Potentially, this problem appeared even before commodity production, however, at that time it had the form of an abstract possibility, because the reality was the actuality of the quantity of the produced product. Production was only gaining strength as a source of human viability. At first, the problem of quantity arose, the increase in quantity raised the question of quality, since it became possible to compare the produced product, specialization of production was outlined depending on the uniqueness of the natural environment.

The developing market required a variety of goods. Goods were needed within the framework of differences in consumer purchasing power. Factory and plant production, based on a technical base, opened up the prospect of varying the quality of goods. The strict production restrictions that distinguished workshop activity retreated. Goods of different quality appeared on the market. In the British philosophy of the Enlightenment, the very concept of quality was actively discussed. J. Locke proposed a version of a combination in determining the quality of objective properties of objects and their subjective perception by consciousness.

The division of quality attributes into "primary" and "secondary" had a rational basis, related to the specificity of the "second nature" - things transformed from their natural state by human labor. "Primary" qualities of a product or its raw materials are determined by natural reality and are completely independent of man. "Secondary" attributes, on the

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contrary, depend on human labor. It is labor that reveals or creates them, therefore the quality of objects transformed by labor should be determined with human assessment. The inclusion of man as a factor in the production of product quality increases the influence of the subject of labor on the quality of production and the quality of the manufactured goods. In this connection, the burden on the management process increases.

Management is subordinated to the solution of the problem of sustainable production of a quality product. As in any problem, here it is necessary:

- clearly define what "quality" is?
- understand what is specific to the quality of the product?
- to understand how the "quality" of commodity production and its mass production are connected, to trace the mechanism of interaction between qualitative changes and quantitative ones.
- reveal the systemic position of the problemquality of mass production in the context of a developing economy.

Only by receiving answers to the above questions can we productively examine the problem: "How realistic is our desire to impart to the mass producer the need for quality of the product result", in other words, "is it possible to sufficiently motivate the production of a quality product from within mass production?" Unfortunately, quality management is currently carried out by introducing into production ideas developed not in it, but in "pure" management theory.

Such a quality management mechanism elevates the importance of scientific analysis, defining the role of subsidiary, experimental farming in the self-movement of production towards quality. A retrospective look at the history of understanding how to manage production quality in general clearly demonstrates that this history is very similar to the movement of thought by the principle of "trial and error". Each subsequent "theory" after S. Colt (1870s), G. Lalande, G. Ford, A. Fayol, M. Weber, F. Taylor, W. Schuchert, E. Deming, I. Ishikawa, I. Juran, F. Crosby, A. Feigenbaum invariably resembled a way out of the impasse into which its predecessor led, until eventually the key concept of QS was replaced by QMS - "Quality Management System".

Comparison of QMS with SC allows us to consider the trend of the movement – the desire, by developing a new approach to quality management, to overcome the narrow technological view of quality as a certain standard limited by the production process outside the conditions of consumption.

The interpretation of product quality that has developed under the influence of economic rationality does not reflect the socio-cultural status of the product, at least of consumer goods. It is advisable to look for the qualitative characteristics of a product intended for mass consumption at the junction of its

production, household, and socio-cultural merits. Moreover, it is desirable that the product not only satisfy existing needs, but also stimulate their cultural development, serve as a tool for the development of the consumer's personality. Human capital participates in the creation of the product of production, and production is called upon to promote the improvement of the personality. There is no other way to overcome alienation in the context of the absolutization of private property and its disproportionate distribution to labor. Only by imparting creativity to labor and a reward corresponding to creativity can one "remove", in terms of Hegelian philosophy, the tension of alienation. Product quality in a broad sense can be considered as a factor of social progress and as a test of the socio-cultural achievements of social development.

In defining quality, the most common shortcoming is the lack of consistency. Quality is defined as a set of essential properties. The usual method of selecting such properties is the pyramidal arrangement of the properties of an object. Important, but not defining, properties remain at the base, and as we ascend to the top, a hierarchy of the remaining properties is formed. At the top, we get the sum of the main properties, which are included in the definition of the quality of an object. G. Hegel once wittily defined quality by contradiction - "quality is that, having lost something, the object ceases to be itself."

Following the example of the great thinker, let us define "footwear" as "clothing for the feet." How accurate is this definition? For shoes, probably yes. For the quality of shoes, it is unlikely. If we deprive shoes of the ability to be "clothing for the feet," then they really will not be shoes. If we retain only the ability inherent in shoes, then the required quality of the product will be uncertain. "Clothing for the feet" can be dangerous due to the toxicity of the material, fastening means, and an inconvenient design for movement. A formally constructed requirement for an item does not coincide with the quality of the item. It is significant as a prerequisite for the qualitative certainty of the product. To determine the quality of a product, we must proceed from its functional purpose. The functional purpose should be considered as a state of relations between the property that formally defines the item and the specifics of the use of the item, its commercial purpose, contained in the consumer value of the product.

Legs, for which clothes are sewn in the form of shoes, are a part of a living organism. These are not the lasts or limbs of a corpse, also intended for certain clothes. Clothes for legs will not be shoes until sufficient evidence of their safety is obtained - hygienic, ergonomic, industrial, household. Quality is not a set of essential properties of a product, it is their system, the system-forming feature of which is indeed the ability to perform some formally most significant

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function. It is laid in the basis of determining the quality of a product, then "growing" the system itself, as a pearl in a shell is grown from a random grain of sand or the Periodic Table of chemical elements from atomic weight.

G. Hegel was right in his definition of quality, it is always better to start with what is "in sight" in order to build up the definition later. There is an electron shell around the nucleus of an atom and together they give the definition of an atom. We put quality into the definition, revealing it later in the totality of concretizing properties.

From a philosophical point of view, the quality of an object, reflecting the diversity of the world, reproduces in itself this objectively existing subject distinction. The quality of a product, especially one for mass direct human consumption, requires additional clarification related to the manufacturer's responsibility for the safety of the product's use. The quality of "consumer goods" is more complexly structured. Its definition includes the systemic arrangement of the main competencies of technical and humanitarian significance.

Footwear, by its quality, by definition, must ensure the interaction of two fundamental competencies - safety and comfort during use. The aesthetic properties of footwear are subordinated to them and are packed in them. With their help, the manufacturer "lures" the consumer like flowers of plants that call insects, which perform pollination work through consumption.

It is a mistake to simplify the cultural assessment of a product to the level of the aesthetic value of the product. The cultural status of a product synthesizes both the culture of execution and the culture of consciousness of the manufacturer, who decides what materials to use, in whose interests to act - the profitability of production or the needs of the consumer who trusts the manufacturer. Ascending, we can easily rise to the very top - the culture of public consciousness. In some countries they do not steal, they consider deception to be meanness, and in others everything is built on these vices, they are legalized, because they have grown into the national mentality.

The substitution of the philosophical understanding of the quality of goods with an economic one is natural for an economy aimed primarily at making a profit, building up capital for private interests. The economic dominant in the description of quality has an ideological basis. In the same context, one should consider the desire to separate the economy from socio-cultural development. The idea that economic movement should be absolutely independent of political supervision and humanitarian functions, everything non-economic is provided by taxes from the economy, is gaining strength, and most importantly, it is supported by the authorities.

Attempts to oppose this logic with the common sense of social development as the progress of the individual and interpersonal relations within the framework of the social organization of the historical process are ineffective. They are assigned the role of local public opinion, which has never been distinguished by particular solidarity. Philosophical systemic analysis of the quality and defects of its interpretation remains the lot of professional reflection.

It would seem that we are faced with a purely theoretical problem: what should we call the actual quality of a product and what does the system of quality properties in the characteristics of a product look like? In reality, with practical application, it grows into an ideological problem: how is it permissible to see the quality of a product in the contemporary concrete historical circumstances of social cultural development.

Simplifying the understanding of the quality of a product by reducing it to its properties that ensure the profitability of production makes production, and not the consumer, the system-forming factor in obtaining the "quality" of a product, which contradicts the quality of the developed economy of the "post-industrial", "new industrial" and even "industrial" society. At the dawn of mankind, the consumer was happy with everything that could be produced. Production was the determining factor in relations with the consumer. Today, the market is considered the driving force behind the development of production. In the market, the initiative belongs to the buyer. The transition to the principle: "The buyer is always right!" assumes that the quality of the product is determined by its consumer.

The economic dominant in the characteristics of the quality of goods is clearly not modern in the philosophical sense, but it expresses the essence of the bourgeois basis of the existing economy, therefore, it will be defended both politically and ideologically. Moreover, in a certain sense it is interesting, in particular for solving the problem of mobilizing production potential to obtain a demanded product in significant volumes, although the quality of such a product itself will be conditional, "economic". The concept of "economy class" has received official recognition in the development of the concept of "produced for sale in Russia".

We have already emphasized that for 130 years, bourgeois economists have been creating models of efficient production of quality goods demanded by the market, focusing on the economic content of quality. Having driven the movement of production into a dead end with economic models of quality, top managers, together with theoreticians - economists who have separated the profile of their scientific interest from the socio-cultural goals of production of material goods, were forced to recognize the

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consumer not as a market anti-subject, but as a partner, an accomplice in the production process.

Recognizing the consumer as a comrade is equivalent to including him in the team for developing production policy, although formally, since he remains in the same position as a counterparty. In order to change the understanding of quality, it is necessary to start improving production with the interests of the consumer, reflect them in the properties of the product, and then think about how to optimize the organization of its mass production.

Ultimately, a compromise solution is acceptable at first, based on the possibilities of production and the need to move by expanding these possibilities. Now the buyer fundamentally remains a serf under the producer - the master and the political protectorate of the interests of large capital. The interests of the mass consumer are promoted by the gait of Japanese women, while the dominance of the interests of companies in production is moved by the ceremonial step of the winners. The pace of movement is not comparable, there is no noticeable advantage in promoting the interests of the consumer and none is expected for now.

The consumer with his interest as a product is not theoretically excluded from the development of strategy, tactics and advertising. Let us refer to B.S. Aleshin and co-authors: "For the quality strategy to be successful, both the internal and external consumer must not only be satisfied and involved in the process that ensures this satisfaction, but also take direct part in the continuous improvement of the quality of this process" for this purpose, the Kaizyo system was improved; replacing it with a new edition of Kaizen. Changes in the organization of quality management revealed the advantages of those countries where the mass consumer - he is also a production worker feels more comfortable, feels his participation in the development of production. In the second half of the 1980s, Japanese companies received 40 times (!) more proposals for improving the production process from their employees than US companies (40 million versus 1 million). It is also indicative that over 90 percent of the proposals were used in one way or another.

The ideology of quality is being rebuilt to a new – consumer orientation extremely reluctantly and half-heartedly. The ISO 9000 quality management system (in the Russian Federation – GOST R ISO 9000-2011) was introduced into world practice 30 years ago. Its initial position (No. 1): "Product quality is a characteristic controlled object", sets the general direction in understanding quality. Quality is a product of production. In paragraph No. 2, the places of participants influencing the quality of the goods are specified: "the goal of quality management is to create products of such a quality level that meets certain established requirements and needs". To make it clear whose requirements and needs are being discussed, at

the end of the paragraph we read through a comma – "consumer requests".

Consumer interests are taken into account, but on a residual basis. They are remembered last, "if production reserves allow." In scientific and popular sources, one can find an explanation for this alignment of interests - technically complex goods and their improvement are the lot of specialists. It seems that specialists are not consumers.

In ISO 9000 – 2015, the consumer appears at the very top of the list for the first time. The first principle of the QMS states: "Customer focus". It is the consumer who declares the properties of quality. The status of the enterprise depends on how much the quality of the offered goods satisfies the quality requirements of buyers. The enterprise must understand their current and future needs, meet their requirements and strive to exceed their expectations.

But one should not rush to rejoice at the changes that have taken place. The quality management mechanism is still set up to develop the quality of production technology, and not to obtain a quality product. The quality of the enterprise's activities, as before, is tested for the purpose of maintaining the quality of the production organization. The interests of the consumer are left "for later". All leading international quality management registrars are represented in the Russian Federation: Veritas, the British Standards Institution, Lloyd's Registrar, supervision societies (TUV). In addition to them, numerous home-grown and joint companies related to the certification of the quality of production and products offer their services on the quality management market. The problem is not in finding the desired organization, but in the fact that they are all "focused" on production or a product outside the context of the interests of consumers, which are quite specific and do not entirely coincide with the views of manufacturers on quality.

The dialectic of the market that unites the producer and the consumer is simple - they are opposites that exist only in unity, so it is necessary to seek a balance of interests of both subjects in order to give the production of quality goods a sustainable character, serving as protection against recessions and crises. Overproduction crises - classic for capitalism of the 19th and first half of the 20th centuries - have become history. They have been replaced by financial systemic shocks. Experts are looking for a panacea in a high-quality, smart, thrifty, gentle (lean production) economy. "Historical experience shows that with increased attention to quality, many countries began to emerge from crisis situations. With the help of state policy aimed at improving quality, large-scale crises in Japan and Germany in the late 40s were overcome. The crisis situations in the US and European markets that arose in the late 80s and early 90s forced not only individual corporations, but entire countries – Sweden, Great Britain, the US – to pay attention to

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improving quality as the only means of helping the national economy withstand the onslaught of competitors.”

In solidarity with the above analysis of the economic history of the second half of the 20th – first two decades of the 21st century, we express our surprise at how it happened that when defining the latest social development through quality, the approach to understanding quality itself has not been radically modernized. The totality of the meaning of quality presupposes a revision of the content of the concept of “quality” and a new look at the factors that ensure the actual quality of activity and its product. The system-forming position of the quality factor in social progress also determines a new political attitude to quality. It is necessary to orient production development toward internal – not imported – premises.

Quality management should come from need. It is in it, and not in rewarding quality work in the form of incentives, that the true beginning of the new economic policy lies. Naturally, no one is going to cancel incentives; they are swapped with motivation. Today, incentives encourage the required quality of action; tomorrow, the culture of a professional attitude to work will be completed by incentives. Movement is most productive in the form of self-movement. External incentives are less effective. Remuneration must correspond to the quality of work and steadily motivate work.

The change of the qualitative strategy of economic policy from the incentive to qualitative production to the formation of the need for a qualitative product is not another attempt to revive economic romanticism and not communist nostalgia for the need of a cultured person for work, as it may seem to those specialists who have switched from political economy to economics, reducing dialectical analysis to statistical, adapted to the volatility of modern production. We are talking about solving the system-forming problem of history - about the relationship of the individual to society and society to the individual, who is more impressed by which side of this contradiction, but in principle this is just a double helix of social progress. A developed society is tested as a condition for the development of the individual. In turn, a developed society is itself a product of the cultural activity of the individual.

The formal-logical conclusion from the interdependence of the individual and society is obvious: their relationship must be built in harmony, based on the awareness of mutual interest, bringing interests to the level of a naturally necessary need (according to Epicurus' classification) for each other. Now we are going through a historical stage of formal-abstract awareness by the individual and the subjects determining policy, of the basic contradiction of development. The individual and society are sort of rubbing in motion, looking for points of mutual

growth. Partly successfully, there are many examples - mass production, freedom of access to education, sources of cultural development, political democracy, promotion of the culture of nature management, solidarity in the fight against extremist aspirations, joint use of scientific and technical achievements, strengthening the authority of the idea of tolerance.

A special place in this list should be occupied by the desire for a quality economy. The essence here is the following: opposites, by definition, are mutually alienated. Dialectical opposites, to which the individual and society belong, differ advantageously in that the unity in their relations is inherent at their emergence. It only needs to be brought to a general position by ascending from the formally necessary stage to the absolutely necessary, loading the process with real content, objectively demonstrating the advantages of interaction. There is no other way to overcome the alienation objectively inherent in the relations of opposites of the individual and society. Through the quality of activity - to the quality of social improvement. It is unnatural to alienate what serves as a real condition for your development. Under the conditions of classical capitalism, alienation was a prerequisite for achieving the power of capital, and the political organization of society itself openly adapted to ensuring the bourgeois state. Democracy was adapted to the bourgeois social structure.

The 1917 revolutions in Russia and the subsequent history of the USSR should be assessed not so much as national achievements, but as a turning point in the history of classical capitalism, a transition to post-classical capitalism. The dominance of private property and the advantages of capital remained intact, but significant changes took place in the social superstructure. Class antagonism gave way to social partnership. Access to capital led to the emergence of various forms of associative use of it in production. Cultural progress was accompanied by an interest in the quality of life, a change in this very concept. World cataclysms, undoubtedly, did not simply frighten the peoples of Europe and Asia. They moved consciousness away from the abyss of extreme interests in resolving contradictions.

The alienation of the individual in labor has not been overcome, but development has been carried out objectively (society) and subjectively (individual) through mutual movement. Certain conditions for the removal of alienation have developed. And the new approach to quality - consumer-production - is a milestone on the path to bringing together the main subjects of social life. It will force adjustments to be made to economic policy, will return a systemic understanding of society, limiting the desire to put social life "on the shelves".

A high-quality vector of economic development will, of course, require additional expenses, but that is what the state and its economic instruments are for, to try to compensate for them. And the market will

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certainly react positively to a high-quality product with its activity.

In our view, the existence of private property in itself in the diversity of its forms of implementation is not a sufficient basis for alienation in the labor of the individual. K. Marx, developing the idea of alienation of G. Hegel, apparently had in mind a certain way of organizing labor associated with the absolutization of the dominance of private property. Private property serves as a potential economic basis for exploitation. But exploitation is not an immanent feature of it. Private property alone is clearly not enough for exploitation. As for the opposite private property, public (national), which is managed by the state and serves as the real subject of property, it also does not contain economic guarantees for overcoming alienation, which is easy to verify from the experience of the activities of domestic state monopolists.

One gets the impression that the economic foundations of alienation should be sought not in property but in distribution. Economic contradictions are insurmountable, but they allow for management, the task of which is to control the nature of the contradictions, to keep them within the limits of insignificant, acceptable differences that do not test the existing unity of production for historical expediency.

It is appropriate to recall another observation by G. Hegel, recognized by F. Engels as the most important in understanding the dialectic of development: "Everything reasonable is real, everything real is rational." G. Hegel was able to discover the basis for the necessity of systemic transformations of social relations, including economic ones.

In development, there are two states that are perceived in the form of existence, but differ within the general status of their manifestation - "real existence" - "reality" and "actual existence" - "reality". These forms of existence differ fundamentally in their basis. "Really existing" is based on the need to be its form, it represents a developing reality. "Really existing" has passed the stage of its necessity, has ceased to be a factor in development, has lost its relevance. It slows down the process of development. Since G. Hegel understood the development of thinking and society as a movement toward absolute rationality, he identified the necessity of the real with reality.

Of course, you can squeeze every last ruble out of the developed range and established production technology. The question is: should you do this? Time moves forward in a certain mode, "in its own way", an objectively tailored "schedule". If you don't get into the rhythm, you'll lag behind, you'll stop meeting the changed requirements. The art of management - production management is no exception - consists in the ability not to "fall out" of modernity, then you will always do it in accordance with reasonableness.

Reason will protect you from most problems. E. Deming's "seven deadly diseases" will fit into one - not to fall out of the time cycle with the definition of goods and the organization of production.

Only those who are able to mobilize human capital, correctly concentrate financial and technical resources on solving this problem are capable of doing this. Without the ability to control the "pulse" of time - to understand the specific economic and socio-cultural situation, the state of consumer interests, real production capabilities, to gain stability in the conditions of increasing competition in the market, there is no chance. Let's make one more addition - on the qualitative orientation of production development and the general conclusion will become clear: the path of economic rationality lies through the creation of real conditions for the formation of the need for quality products. This need should be tested by responsibility to the consumer as to oneself. The ancient wisdom of Confucius: Treat others as you would like them to treat you, is not outdated, on the contrary, following it provided advantages in economic progress to the countries of Asia.

So, what should be considered as necessary conditions for achieving a radical change in the attitude towards the quality of production of a truly high-quality product - the transition from the stage of external audit to the stage of internal guarantee, formed through the formation of the need to create a product of the required quality by the consumer:

- the presence of competition in the market of high-quality professional labor, so that there is a clear understanding of the need to work in accordance with the needs of the commodity market. Otherwise, the market will not allow you to take a stable place in it;

- a significant increase in purchasing power. Achieving the level that allows one to choose the desired product. A quality product cannot by definition be cheap, but it can and should be made accessible through market mechanisms;

- a high level of professional training of producers, ensured on the basis of the formation of professional culture and national self-awareness. The main thing should be the education of the attitude to work as a matter of which one has dedicated one's life. Comprehensive education of consumers, their perception as subjects of a common cause;

- overcoming the feeling of conscious and unconscious alienation of the individual's ability in work and its products with the help of the following tools;

- a) achieving symmetry between the quality of work and remuneration;

- b) reduction to a reasonable ratio of the differences in the amounts of remuneration of managers and performers, clarity of the grounds for such proportionality;

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c) dependence of remuneration on the dynamics of advanced training and on participation in improving the production process;

d) the full use of socio-cultural mechanisms to stimulate individuals to participate in corporate movement and to join team forms of movement.

d) sustainability of corporate activities;

e) priority of relations of the type: "One for all, all for one". Active promotion of the team form of responsibility for work results;

g) organization of systematic competition in the quality of work;

c) striving for national and international recognition of the quality and range of manufactured products;

i) formation of labor dynasties, participation in the distribution of profits;

k) understanding the quality of goods as a comprehensive assessment of the product;

l) awareness of the fact that it is the "little things" that reveal the perfection of quality,

Therefore, small details should be treated as quality building materials.

Conclusion

The problems of improving the quality and competitiveness of materials and products at the current stage of development of the Russian economy are becoming increasingly important. As the experience of advanced countries that at one time emerged from similar crises (the USA in the 1930s, Japan, Germany in the post-war period, later - South Korea and some other countries) shows, in all cases the strategy for improving the quality and competitiveness of products that would be able to conquer both domestic and foreign markets was the basis for conducting industrial policy and economic recovery. 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 of production of priority products and determination of specific reduced costs, which are the sum of current costs (cost price) and capital investments, measured using the standard efficiency coefficient taking into account the production program, allows for calculations of static parameters of the technological process of production of priority products under various forms of production organization. Developed software for calculating cash receipts from operating activities of light industry enterprises based on an assessment of the degree of performance and dynamics of production and sales of products, determining the influence of factors on changes in the value of these indicators, identifying internal reserves and developing measures for their development, which are aimed at accelerating product turnover and reducing losses, which guarantees light

industry enterprises stable TEP and prevents them from bankruptcy.

Models of product sales during the month at 100%, 80%, 50% are proposed. Calculations show that with 100% of footwear sales, not only the costs of production and sales of footwear are compensated, 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. Profit is also ensured when selling 80% of men's, women's and children's footwear. When selling less than 50% of footwear from the production volume, the enterprise will incur losses. To solve this problem, conditions for the sale of footwear in a specified period of time and a sales volume of at least 50% are necessary. If such a situation arises, it is necessary to attract borrowed funds to cover costs and organize subsequent release of products through the use of a bank loan, factoring, 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 state and regional intervention that should correct the situation in the market of domestic products of light industry enterprises in the regions, and thus there will be an opportunity for the development of competitive and priority products.

The implementation of the planned measures will lead to covering the deficit for all types of products, will ensure increased mobility of the workforce in the Southern and North Caucasian Federal Districts and a reduction in negative processes in the labor market, as well as a stable balance of interests of consumers, employers and municipal, regional and federal authorities. For the successful implementation of all the above measures, the interest of regional authorities in the development of competitive and priority product production, reduction of prices for components and energy costs and benefits for transportation of products manufactured by enterprises of the Southern and North Caucasian Federal Districts is most necessary.

Therefore, only the focus on innovation, quality, and competitiveness of products and services should be the basis of the industrial policy being conducted at all levels yesterday, today, and, especially, tomorrow.

ABOUTThe economic effect of the results of the work is limited, consisting in increasing labor productivity, the level of mechanization of production, reducing the indicators of unfinished production and costs of digital production. An accessible tool for digital production technologists for rationalizing the design of technological processes is proposed, allowing the enterprise to form a

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competitive assortment and predict the amount of maximum income from the production of priority products.

An assortment policy has been developed to form competitive products taking into account factors influencing consumer demand: compliance with the main fashion trends, taking into account the economic, social and climatic characteristics of the regions of the Southern and North Caucasian Federal Districts, the production of which using modern innovative technological processes, as well as to meet the demand of the elite consumer, using manual labor create the basis for meeting the demand for footwear for buyers in these regions.

Innovative technological processes have been developed for the production of priority products using modern technological equipment with advanced nanotechnologies, forming the basis for reducing costs for priority products and ensuring their increased competitiveness with the products of leading foreign companies, with the possibility of a wide range of production not only by type, but also by age and gender groups, which guarantees their full demand.

The proposed layouts of technological equipment make it 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 to calculate cash receipts from operating activities of light industry enterprises based on an assessment of the degree of performance and dynamics of production and sales of products, determining the influence of factors on changes in the value of these indicators, identifying internal reserves and developing measures for their development, which are aimed at accelerating product turnover and reducing losses, which guarantees enterprises the receipt of 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 priority products. A computer simulation model has been implemented that describes the dynamics of the process of production of priority products. The proposed methodology and the software implemented on this basis make it possible to reduce the duration of technological preparation of production and increase,

due to the rationalization of the technological process, the specific consumer effect of priority products.

Complex indicators of the efficiency of innovative technological processes of footwear manufacturing, similar to other types of priority products, have been calculated. Taking into account the production program, promising options of technology and equipment have been formed, the most efficient one has been selected; possibilities for streamlining the flow have been identified, allowing to eliminate "bottlenecks", minimize equipment downtime, which is one of the conditions for designing innovative technological processes. The reliability of the calculations carried out to assess the efficiency of technological processes using target programming methods for various technological and organizational solutions is confirmed by calculations of economic efficiency indicators: cost price, profit and profitability, and other indicators.

The proposed methodology allows to reduce the duration of technological preparation of digital production and reduce the time of 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 technologist's work with a reduction in time costs for the development of the range of priority products manufactured and the assessment of the efficiency of technological processes in comparison with the typical economic calculation of the full cost of manufacturing such products.

The analysis of the influence of digital production organization forms and manufacturing technology on the cost price of priority 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 "production organization" factor on individual costing items as a whole and other technical and economic indicators in order to prevent enterprises from bankruptcy.

Thus, all this taken together will provide light industry enterprises of the regions of the Southern and North Caucasian Federal Districts with a stable position both in the domestic and in the markets of near and far abroad. All that is needed is good will and desire.

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