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Article



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ABOUT THE EXPERIENCE OF USING DIGITAL MANAGEMENT OF PRODUCTION OF COMPETITIVE AND DEMANDED PRODUCTS BY CONSUMERS OF RUSSIAN REGIONS

Abstract: In the article, the authors assess the strategy of producing competitive and popular products, which is possible only with the presence of managers who are professionally trained and politically responsible for the results of their activities. In addition, the authors reasonably believe that the political responsibility of the heads of light industry enterprises is the highest measure of expression of their professionalism. But at the same time, I would like to note that their failure to fulfill political promises and statements is evidence of either their inability to engage in economic policy, or the use of political management is carried out by them in their personal interests, alien to the interests of society, provoking the impoverishment of the people, characterizing the immorality of leaders, which, of course, is unacceptable. The authors recommend that the market reconsider the concept of forming it with popular and import-substituting goods, taking into account their attractiveness. 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, ensuring that manufacturers sell their products in full and guaranteeing enterprises sustainable TEP of their activities.

Key words: quality management, the meaning of the standard, congruence, demand, assortment policy, footwear, assortment, light industry, import substitution, product priority, sustainability of the TEP from the enterprise's activities.

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Introduction

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There is no enterprise that does not have an external environment and is not in a state of constant interaction with it. To ensure its viability, any enterprise must regularly receive raw materials from the external environment. At the same time, each enterprise must give something to the external environment as compensation for its existence. As soon as the links with the external environment are broken, the company dies. In recent years, due to the intensification and complexity of competition, as well as the sharp acceleration of the processes of change in the external environment, enterprises are increasingly forced to pay attention to issues of interaction with the environment, as well as increasingly develop the ability to adapt to changes in the external environment. Management, especially at the highest level, plays a key role in the development and implementation of the company's policy of interaction with the environment. Issues of long-term strategy of interaction between the enterprise and the environment become the main focus of all management processes. Management is no longer concerned only with internal issues of the company. In the same way, and perhaps even more, its gaze is directed beyond the "Enterprise". Management tries to build an effective interaction of the enterprise with the environment not only by influencing the processes occurring at the enterprise, but also by influencing the environment. Strategic management, solving these problems, comes to the forefront in the complex of enterprise management processes. The external environment of the enterprise, the state of interaction with which is mainly determined by the quality of its management, can be represented in the form of two spheres. The first area is the general external environment of the enterprise. This external environment reflects the state of society, its economy, natural environment and has no direct relation to a specific enterprise. The general external environment is more or less the same for the vast majority of enterprises. The second area is the so-called direct Business environment of the enterprise. This environment is formed by such environmental entities that are directly related to the activities of this specific enterprise or directly influence it. At the same time, it is important to emphasize that the company, in turn, can directly influence them. The general external environment is formed under the influence of political, legal, socio-cultural, economic, technological, national and international processes, as well as nature management processes. The immediate business environment of an enterprise is created by customers, suppliers, competitors, business partners,

as well as regulatory services and organizations, such as administrative bodies, business associations, trade unions, etc. In managing the processes of interaction between the enterprise and the environment, management faces a number of serious problems caused by uncertainty in the state of the environment. In this regard, one of the most difficult tasks facing management is to reduce the uncertainty of the company's position in the environment. This is achieved by developing its adaptability to the external environment and establishing broad links with the environment, allowing the enterprise to fit organically into the environment. The most famous teachings of this group include: scientific management, behavioral teachings and organizational theories. The founder and main developer of the ideas of scientific management is Frederick Taylor. Taylor was an engineer, so it was completely natural for him (within the paradigm of his time) to consider human management as machine management. Based on the mechanistic understanding of the nature of human labor, its place in the enterprise, Taylor saw the solution to the problem of enterprise success in the rationalization of labor operations. Therefore, his initial task was to study this problem. At the same time, he believed that workers are lazy by nature and can work well, at best, with economic incentives. Therefore, managers must think, and employees must work. The main principles of Taylor's scientific management are as follows:

- development of optimal methods and techniques for performing work based on a scientific study of the time spent on individual operations;
- * absolute compliance with scientifically based standards and norms;
- selection, training and placement of employees in those jobs and tasks where they, realizing their abilities, can give the greatest return;
- * remuneration based on work results (the greater the specific result, the higher the payment);
- use of functional administrators who exercise regulatory control in specialized areas;
- * maintaining friendly relations between workers and managers in order to implement scientific management. Without losing attention to the scientific organization of labor, in the 20-30s of the last century, attention was drawn to the fact that labor productivity significantly depends on the social conditions at the enterprise and can be significantly increased if work groups in the process of joint activities create special relationships - with signs of collectivism. Shifting the center of gravity in management from tasks to people led to the development of various behavioral theories of management. Situational theories give recommendations on how to manage specific

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situations. In this case, it is recommended to use a step-by-step algorithm for solving problems:

Firstly, it is necessary to carefully analyze the specific situation, identifying what requirements the situation places on the enterprise and what is characteristic of this situation;

secondly, an appropriate approach to implementing control must be chosen;

thirdly, management must create the potential in the enterprise and the necessary flexibility to move to a new management style that is appropriate to the current situation;

Fourth, the department must make appropriate changes to adapt to the current situation.

One of the most popular systemic management concepts is the "7" theory, developed in the 80s (USA). It was noted that an effective enterprise is usually formed on the basis of seven interrelated components, the change of each of which necessarily requires a corresponding change in the other six. These key components are as follows:

- * strategy - plans and directions of action that determine the distribution of resources, setting out the conditions for the implementation of certain actions over time to achieve set goals;

- * structure - the internal composition of an enterprise, reflecting the mutual position of organizational units, the hierarchical subordination of these units and the distribution of powers between them.;

- * systems - procedures and routine processes occurring at the enterprise;

- * personnel - key groups of personnel existing at the enterprise and characterized by age, gender, education, etc.;

- * style - how managers run the enterprise, including organizational culture;

- * qualifications - distinctive abilities of key employees of the company;

- * common values – the meaning and content of the main types of activities that the company communicates to its members.

This means that we must regularly and consistently develop them in the most reasonable and balanced way. Spending time on self-renewal requires initiative. Effective skills are well-learned principles and behavior patterns. To turn something in your life into a skill, you need three components: knowledge, skill, and desire. Knowledge is a theoretical paradigm that determines what to do and why. Skill determines how to do it. And desire is motivation - I want to do this in order to ensure the effectiveness of the company's employees in the production of import-substituting products. Nowadays, companies pay great attention to employee motivation, since depending on how motivated the employee is, the results of his or her activities will be visible. The main task of managers is their full involvement in the work of the entire potential of employees. Moreover,

managers understand that financial incentives do not increase loyalty and purposefulness of the company, but participatory management solves this problem. The essence of such management is that the company's employees are involved in the management process, participate in the company's activities, and make decisions on a number of issues. Moreover, if an employee of the company has the right to vote, participates in the company's activities, receiving remuneration for this, then he will work more effectively and efficiently. An employee whose opinion is taken into account and whose ideas are implemented will have a better attitude towards his place of work and work with full dedication. With joint management, employees can discuss with the manager the goals and tasks that they will need to complete. The company's employees can form working groups from those employees with whom they would be happy and ready to work. In addition, the company's employees can put forward their ideas and suggestions for improving the work of the enterprise as a whole. In addition, there should be a reward for putting forward ideas. Participatory management has a number of advantages. Employee participation in management leads to an increase in the quality of decisions made, since employees may have information that is unknown to the manager. With this type of management, employees can fully express themselves, demonstrate their knowledge and skills, feel their importance in the enterprise, thereby increasing motivation. Motivation is usually based not only on the personal achievements of the employee, but also on the overall result of the company's work. Uniting employees into working groups can best reflect on the corporate spirit of the enterprise. Having considered the features of participatory management, we can conclude that such management is not a salvation for business development, but it allows you to see the problems of the enterprise from the inside and try to solve them; they are created not by the efforts of one person, but by a group of people, where everyone can prove themselves for the benefit of the enterprise. Despite the fact that, that the participatory method of personnel management of the enterprise is gaining more and more approval every year in most countries with developed and developing economies, Russian enterprises are not yet ready to implement and fully realize the advantages of this method. All this happens because HR departments prefer to work according to the established traditional scheme. Not all HR managers can achieve and skillfully use the consistency of their goals with the capabilities of the enterprise and the interests of employees. Another very important factor that does not allow the full adoption of the participatory method of personnel management at Russian enterprises is the influence of the national culture of Russia on this department, since it is this influence that determines the choice of human resource management strategy in the practical

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activities of the enterprise. Self-regulation in this case is most effectively carried out through the development and establishment of non-governmental industry rules and standards, as well as control over their observance by all enterprises specializing in this market area. A conceptual apparatus should be formed on the basis of a new methodological approach. The matrix of anti-crisis management - a scheme for determining the most important aspects (parameters of activity quality) that can be used to improve the efficiency of managing such organizational and managerial partnerships - is presented in Table 1. The

first dimension (horizontal) of this matrix defines the variables that characterize the enterprise as a whole: objects; functions; processes; resources; environment. The first dimension (horizontal) of this matrix defines the variables that characterize the enterprise as a whole: objects; functions; processes; resources; environment. The first dimension (horizontal) of this matrix defines the variables that characterize the enterprise as a whole: objects; functions; processes; resources; environment.

Table 1. Matrix of anti-crisis management of the enterprise.

	Functions	Objects	Wednesdays	Processing	Resources
Income	+				+
Profit		+		+	
Profitability	+		+	+	+
Market share	+	+	+		+
Volume of own funds services	+			+	
Capitalization	+	+	+	+	+
Assets	+	+		+	
Anti-crisis strategy	+	+	+	+	+

And the second dimension (vertical) defines the indicators characterizing the integrated management system: Revenue; profit; profitability; market share; equity; capitalization; assets; anti-crisis strategy. The main advantage of such a partnership is the opportunity to form a cluster of enterprises around an advanced technology of a new class, where it will be implemented. The main difficulty in building such partnerships lies in the complex system of coordination of scientific and technical, financial and organizational and production and manufacturing decisions. The history of the market developed as an interrelation between two movements. One of them caused the expansion of the market, the other - its development. Both acted in the same direction - they gave stability to the market, ensuring production progress through market stability. Market growth was the result of the division of labor and increased productivity, which led to a decrease in costs, prices and opened access to goods for consumers. Market development was due to the quality of the manufactured products and ultimately found its continuation in the policy of quality management of production through improvement of organization and standardization.

After saving capitalism, economic science abandoned its political function, reduced its methodological and anthological base and tried to get out of it by activating the mathematical apparatus; the fundamental concepts supporting scientific knowledge ended up in the economic archive.

The modern history of economics began in the minds of famous thinkers of the philosophical type.

Classical political economy was developed not so much by economists as by philosophers: Sismondi, Smith, Ricardo, Hume, Marx, Mill. They adhered to different philosophical concepts, but were united in the understanding that the birth of science and the quality of scientific knowledge are determined primarily by methodology - general scientific and specific to each science due to its anthological uniqueness.

The rejection of the political component in economic theory is explained by the need to achieve genuine freedom in knowledge, independence of scientific thinking. The truth is that through political analysis and only in this way can economic analysis be given a systemic-historical character. History shows that social progress has been carried out on an economic basis, thanks to a natural change in production methods.

When the time came for the bourgeois method to replace the feudal method, and for the permanent market to replace seasonal fairs and make them its own form, freedom fighters began to glorify democracy and prove the historical legitimacy of the arrival of a new economic, social and political order. Now the natural process of changing economic orders is unanimously hushed up. On the contrary, attempts are being made to turn the historicism of development back to the past, presenting the recognition of its truth as limited in time, valid only until the period of the formation of capitalism. The reserves of capitalism are quite sufficient to overcome the time frame.

In order to perpetuate capitalism, it was divided into a special basis - the industrial form of production.

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Even under capitalism, history is part of the post-industrial formation, which will remain forever, and all other manipulations with its definitions will not go beyond the post-industrial stage of history, no matter what you call it - technotronic society, information society, general welfare, digital society.

We have specifically focused on the analysis of bourgeois philosophical thought, designed to identify the history of the future with the history of bourgeois society, in order to identify the nature of the substitution of statistical probability calculations by the methodology of economic analysis, the economic science of financial analysis, and to show what this substitution leads to. Private scientific methodology is the most important component of scientific knowledge and creativity, but its significance is revealed in a more general context developed by epistemology. Scientific and technical creativity is subordinated to the system of philosophical knowledge and design. This is the concretization of the ascent of knowledge from the abstract to the concrete, the process of filling the movement of thought with content reflecting the subject specificity of scientific and engineering thinking. This type of thinking is associated with the concept of quality.

The development of production, improvement of the market, organization of distribution and utilization - all this is subordinated to the solution of the quality problem. Entering the world market in the 1970-80s and striving to win a worthy place there for the next ascent, Japanese scientists and engineers rely on the general system value of quality. They considered quality as a system of the most essential properties of production, requiring the mobilization of the national potential of spirituality: education, upbringing, civic consciousness, concentration of scientific and engineering thought. Quality became a symbol of Japan's return to the community of world powers. The Japanese did not look for symbols among historical figures, monuments, nature or creative achievements, they were not tormented by the search for a national idea. They closed their future on quality and won over the course of a decade and a half, squeezing the most technologically complex sectors of the market - automobile, electronic and, partly, textile. Japanese managers understood quality in two ways: firstly, as the quality of production of goods, and secondly, as a high-quality organization of their implementation, including the functional provision of durable goods. In Japan, in pursuit of competitors, the end of the two millennium was associated with a national movement for the quality of everything created in the country.

Correctly understanding that the problem of quality is least technical, therefore it is necessary to start with the philosophy of quality, steadily moving to the scientific development of the concept of quality, then to its technical Express, and then to the consumption and use of a quality product, Japanese scientists won the competition from world giants.

Standardization and technical regulation in Japan were defined not instead of or next to quality, but after quality as products of the development of the doctrine of quality of production and the importance of a quality economy for improving the structure of national consumption and achieving the authority of Japanese manufacturers in the world.

"Quality", as well as "quantity", "measure", are universal philosophical categories for characterizing the objective world, its cognition by science and transformation in the practice of industrial, scientific, technical and social creativity. All other concepts used are derivatives of the understanding of the above-mentioned categories developed in philosophy. It is incorrect to identify them with the original concepts or to present them as equivalent. They are a product of their concretization, therefore all derivative concepts must meet certain requirements. There are two main ones: to be developed in the context of philosophical doctrine and to be concrete-subject-specific - in relation to basic concepts. Special concepts derived from such philosophical categories as "standard", "regulation", "technical measure", "technical assignment", etc., are appropriate as a necessary simplification of universal concepts, "tying" them to practical specifics. Their essential importance for the organization of production policy should not be in doubt. From the point of view of solving problems arising directly in the workplace, they are the most effective tools. This is taught, in particular, by the domestic experience - successful and not so - of import substitution. However, one should always keep in mind the requirement of a systemic approach: individual problems are successfully solved in the light of the general context. There is no need to rely on the general as on God, and it is impossible to replace the general with specific experience. The texts of the Bible are indicative. They are written, first of all, not as an edification and an indication of a single solution, but as information for reflection in a certain direction. This standard should be a quality standard. In the East, there is a popular saying: "No matter how much you hide your donkey's ears, they will still come out." Its meaning perfectly characterizes economic science. All attempts to separate economic theory from politics and replace political economy with "pure" economic theory are designed for a simple-minded citizen who is satisfied with his achievements and confident in his future. Academic economists, acting out of conviction or in accordance with political tendencies, are concerned with one thing: over time, the number of people satisfied with their recommendations decreases, while the mass of critical attitudes increases. There is nothing non-political in economic theory; there is only something indirectly connected with politics and openly serving politics. Even the course of economic thought itself is built in a political direction.

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Let's take, for example, such a topical and seemingly completely neutral problem as quality management. Everyone is interested in its optimal solution, with one invariant correction - everyone pulls "the blanket over himself", hoping to get the maximum. Therefore, in the foreseeable future, this problem will remain, and its relevance will only increase with the emergence of quality products. All real forces involved in production are concentrated in the quality of the product, and it was and will remain a "bone of contention", as well as the new "standardization of quality" promised by economists. The most impressive thing is that it is unfair to blame political regulators for the current situation, unless, of course, they act with an obvious stable shift in someone's direction, that is, unprofessionally. The goal of production is a product that brings in profit. Without profit, scientists and politicians teach, production cannot be a stable, developing reproduction. And this is really so. Only those who teach and manage with varying degrees of skill hide the quantitative certainty of quality. As a rule, qualitative certainty is obtained in the values of a given range of quantities. And this measure already begins to work. Knowledge of measure, a sense of measure is the most important condition for effective management. There is also a certain freedom of variation within the measure, i.e. the possibility of a certain expenditure of funds depending on the financial contribution.

Technical standardization, OST, GOST, ISO and all other systems born of the desire to take control of the quality of goods already raise questions about their diversity. The effect is calculated on the effect of the name, it is intended to inspire respect, especially when the name contains the authority of the industry, the state, international organizations of specialists who are protected by the interests of consumers. The history of improving the methods of quality control of products is analyzed and advertised. Unfortunately, the well-thought-out facade of quality control policy hides a somewhat different content, due to the priority of political interests. When the rich invariably get richer and the poor get poorer during frequent crises of various etiologies and stagnation accompanying the exit from the crisis, the middle class, which is a social support, is reduced, doubts are born about the sincerity of economic promises and mistrust of plans aimed at changing the situation in the economy for the better.

It is considered bad form to talk about the class nature of economic policy - it is not modern. Modern history is an era of social partnership and globalization, which requires mutual understanding. The world is tired of wars, revolutions and violence. Humanity deserves the way of life that corresponds to its reasonable status and the social orientation that has developed historically. Do not underestimate the psychological need for a better life and the hope of becoming a part of it not once, but in the real future.

Psychological attitude can reduce the critical reaction of thinking, block the analytical approach. How much objective information is contained in advertising products? The question is clearly rhetorical. Business will be successful if the interests of business success are under the heel of the margin. This was the case at the dawn of capitalism and will continue until the position of business in society and its reflection in public consciousness change. K. Marx put forward and substantiated the idea of the basic position of the economy in social progress. Then everything was the same as always: Karl Marx left not his brain, but simply an idea, a thought in a more or less systematic presentation. If he had added as much to the four volumes of Capital, nothing would have changed in essence. Everyone has their own thinking head. Recognizing Karl Marx as right in his analysis of capitalism and understanding capitalism as Karl Marx himself did are two very different things.

The most serious delusion, noted by his ideological and closest friend F. Engels, to whom the world owes the decoding of the projects and texts of "capital" and their preparation for publication, is the so-called "economic materialism". This looks simplified in the absolutization of the significance of the economic factor in social development. Society does not build its structure freely, guided by needs and in accordance with abstract meaning. Real social creativity is conditioned by economic possibilities, and this means that the reality of social reforms is of a concrete historical nature.

You can dream of anything and everything, but only those plans have a chance to come true that can withstand the economic foundation. However, we are not talking about a rigid and one-dimensional program of social transformation. There is a historical reverse reaction in development and the possibility of implementing one of the social dominants - the social orientation of sustainable development (1) and bets on economic development coupled with an orientation to obtaining maximum profit, supposedly necessary to create an acceleration of subsequent social progress. K. Marx wrote about the economic basis, and not about the economic foundation. The economic basis, unlike the economic basis, is mobile, and its mobility can be used. The question is: in whose interests? 99.9 percent of the time of its existence, humanity did not think about any socially significant systems of quality control of goods. The goods themselves did not exist, production and consumption were linked within the boundaries of a single whole. I ate, got dressed and put on what I cooked. Quality control had an ideal form, it was limited to the manufacturer, who had the maximum family scale. During this time, decisive events in the fate of man have occurred: the ascent to the top of homo sapiens; proof of viability in the process of natural selection; creation of a cultural environment and cultural self-development; finding stability in social progress. Human history can be

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compared to weaving. It combines two types of movement - warp and weft. The warp is the structure, the weft is the resistance to forward movement. Only by knowing the history of mankind as a complex and contradictory process can an individual become an optimist. Our misfortune, like the donkey's ears, came to light in the 1990s and, partly, in the following decades. Its essence is that we snatch individual periods from history and take upon ourselves the right to judge everything by them. No one can judge history, and it is quite reasonable to extract historical lessons from history in the form of "food for thought".

Progress in agricultural production was determined by knowledge and improvement of technical means. The success of using technology in processing agricultural products, the growing need for construction, transport and arrangement of everyday culture stimulated craft activity. Someone could do a great job on his own, like X. Huygens, who developed the pendulum clock, because he was both a great mechanic and an outstanding mathematician. In the Renaissance, there were many solitary craftsmen, and they moved the technical side of industrial progress forward, relying on scientific knowledge. However, they could not move production forward; they needed those who, with intelligence and industrial savvy, turned unique things into series.

The objective regularity of production development splits the Creator and the master, raising the question of ensuring the quality of reproduction of products. There is a version of the conversation between Huygens and the King of France, to whom he presented a watch he had designed. The King asked the mechanical scientist: "How long will he enjoy the gift and how accurately will the watch show the time?": "This watch will serve your successors. - What kind of public quality control could you judge if your professional reputation was at stake? The mark of the master meant being a master or not being one. Quality was identical to business, and the masters put everything they could into the product.

The problem of product quality and the need for quality control in the interests of consumers began to manifest itself at the end of the late Middle Ages, closer to the 12th-13th centuries. The number of craftsmen grew, and with the increase in the mass of commercial products, the difference between craftsmen also became increasingly relevant. A person is unique in everything - in feelings, skills, needs, interests, attitude to his mentality. Differences between people are reflected in the activities and their products. In addition, the growth of production in connection with the formation of a stable market with transnational, trans-regional elements suggests a comparison of products by their quality. It was necessary to develop general mandatory requirements for manufacturers. In turn, manufacturers realized the benefits of combined actions.

In the most economically developed countries of Western Europe - Italy, France, England, Germany in the 12th century there were associations of craftsmen by profession - workshops. Workshops mainly worked where there was a demand for their products - in cities, some of which had state status. This was convenient for everyone. Some had the opportunity to learn from their own experience, bring their work to perfection, others received control over the activities of organizations producing goods, and still others - certain guarantees that they would purchase a quality product. Guilds quickly multiplied and strengthened their positions, both in the market and in society.

In most European cities there were workshops of blacksmiths, gunsmiths, weavers, clothiers, bakers, carpenters. Later they were joined by guild organizations of brewers, winemakers and manufacturers of leather goods. Each store had to have a Charter, agreed with the city authorities, a coat of arms, a seal and a cash receipt. The charters prescribed the working conditions of masters, apprentices, requirements for the quality of raw materials, production technology, conditions for the acquisition of raw materials, the organization of product sales and even the terms of apprenticeship. In fact, it is from the organization of workshops that one can count the time of public control over the quality of production of public goods.

The transformation of seasonal fairs into stable markets led to an increase in demand, and demand led to an increase and diversification of supply. The increase in the number of manufacturers required increased control over the quality of manufactured products. Local authorities took control of a number of key parameters of store operations, and the state also joined local authorities. History had not yet matured to state standards, and the history of GOSTs, one might say, began with the charters of workshops. Technical standardization began with the organization of workshop production, and at that time it was truly effective, since it coincided with the main interests of all market participants, including local governments. An order in a store was the best guarantee of quality, so self-control could be counted on at that time. Employees watched each other, and each of them began with himself, realizing the high cost of violating the work rules defined by the Charter. Of course, the knowledge of the late Middle Ages, the Renaissance and the New Age, which replaced the Renaissance, is difficult to compare with the achievements of the 20th and 21st centuries. In those eras, the birth of modern scientific knowledge began, scientific knowledge was intertwined with religious dogmas, myths and everyday knowledge of "common sense". The statutory canons of the guilds reflected the characteristics of that time, the prevailing worldview, they were, as we now believe, imperfect. At the same time, they were not pressured by the specifics of capitalism of the developed period, focused on margin

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at any cost. They included a sincere desire of the manufacturer and regulator to ensure the legal rights of the consumer to a quality product at its real price. The consumer was protected from the arbitrariness of the manufacturer to the greatest possible extent - cognitive, technological, hygienic, aesthetic. And in this regard, objectivity dominated in market relations. Apparently, there were already some attempts to deceive, but they only confirmed the assessment of the possibility of quality control by defining technical and technological regulations.

The history of standardization was a continuation of the policy of regulating workshop activities. The initial technical regulation was quite consistent with the level of development of economic institutions. Workshop workers were not organized into associations to unite production and release of the same product. Product standardization was carried out with an eye on the quality of the product. The basis of production was still "company secrets", "know-how" developed in the depths of family histories, carefully guarded technological recipes.

In Western Europe, the workshop organization of production activities has long since sunk into oblivion, and popular mass-market goods, in particular beer, wine, tobacco, some types of footwear, clothing, and some fruits and vegetables, retain the stamp of those workshop times. Consumers prefer them, regardless of the volume of supply on the market.

The market masquerade might have surprised us Russians at the end of the 20th century, when the country was flooded with consumer goods from the West and the East; they brought everything that was not in demand locally. Who remembered about quality and quality control tools then, and even if they had, their memory and brains would have been knocked out by the brisk reformers. During the period of "shock therapy" it is appropriate to think not about quality, but about how to survive with the hope that life will be better in the future. Natives of Europe and the Ropati react badly to various products, most of them are conservatives, educated and have traditional family preferences. Conservatism has a healthy beginning; conservatives do not risk being seduced by innovations. They believe in experience, and experience justifies their choice due to the time-tested quality of the product. Naturally, being a conservative is not cheap, but European conservatives are not from the poor part of society either. In this discussion we are more interested not in the moral side of the issue, but in the organizational side, in particular, in the question of the possibilities and limits of standards in regulating production. Experts who think and are aware of the extent of their own responsibility for an invention understand that standardization, no matter how perfect it is, will remain conditional, expressing the objective and subjective circumstances of the action - a specific historical reality. Standardization is

a systemic phenomenon, and at the same time it is an integral part of the general political and economic system. It must have a system of air conditioning, both internal and external. It is naive to believe that standardization develops in the interests of everyone equally. Firstly, everyone who has sufficient financial resources for freedom of choice does not need standardization of most of the necessary products. They are in direct contact with reliable manufacturers. Secondly, standards have long been determined not by manufacturers, which does not mean objectivity, as we want to convince us.

The most democratic government and the most impartial organizations charged with developing standards are not as objective as they may seem. This policy will lose its effectiveness if it refuses to participate in such a matter without its own interest. Politics is driven by the economy and serves the economy.

In standard systems, the objectivity of the calculation bases is determined by minimum values. Otherwise, production will sag and a crisis will occur, or the prices on the market will so exceed the real possibilities of chasing buyers due to increased costs for producers that the market will freeze.

In domestic elite supermarkets, the fabulous wealth of assortment is not explained by the whims of gourmets. The reason for this is directly opposite to the low level of solvent demand of the mass buyer. By and large, with their wallet, there is nothing to choose from. The set of mass buyers does not yet require an assortment. At the same time, turn to standard sets of products manufactured according to minimum standards, so that it is cheaper. SanPiNs are a wonderful thing, but they are not only because of the danger of excess for health. They contain the time of action, socio-cultural, economic and political factors. Let those who do not believe in this, monitor the SanPiNs, compare and see the results of their use.

The high level of subjectivity in defining standards can be judged by the standardization of time. "Standard time" is the official local time for a country or region. A region may be a part of a country, and, conversely, a number of countries may form a common region. There is one invariant feature in the definition of standard time: it must be the same for all points on the same meridian. Local mean solar time depends on longitude; it increases to the east with each degree by 4 minutes. The earth is divided into 24 standard time zones, each of which is equal to $\approx 15^\circ$ of longitude. This is where the administrative initiative of local authorities comes into play. The boundaries of the zones are determined by them and in many cases deviate significantly from the standard 15° , which should not be classified as arbitrary. These costs are associated with administrative divisions and production activities. Time in different (adjacent) zones is divided into 1 hour, and minutes and seconds do not change. Standardization is associated with

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restrictions, so the personal and public perception of standards is formed against the background of a worldview, which is very important for the functioning of standards. The worldview that dominates in historical time serves in different ways. It can be "black soil", fertile soil - stick a branch in and have no doubt - it will take root, but the worldview can also slow down when, having rolled under the absolutization of freedoms by liberals, it forms a militant attitude towards any restrictions.

The easiest way to implement standards in practice was in the Middle Ages. Mythology and religion are reflected in various prohibitions and taboos. The medieval mind was calm about restrictions and understood their necessity. Restrictions were introduced into the statutory norms of craft workshops not so much to simplify technology and make production more technological, but to preserve the developed concept of production, preserve it and promote continuity in the development of production.

The shop was primarily interested in the quality of its products. The regulator tried more to ensure that innovations were not introduced into production that could worsen the result under various pretexts. This became especially relevant with the growth of production and the division of labor. Increased labor productivity often threatened the quality of the product. The negative scenario in the development of production was restrained by the traditions of workshop activity. The history of the shop emphasized its socio-economic status - "Association, company". At the beginning of the seminar, class associations were presented, emphasizing the special position in society of persons who were members of the seminar. The development of the Middle Ages was expressed in a change in the social status of the shop. The workshop was historically concretized and had already become an association of artisans of a common specialty.

We have a general simplified idea of master classes. In fact, due to their social background, shop workers were usually culturally formed individuals with the appropriate knowledge and skills. The conditions of the organization of the workshop required a high level of creative attitude to the matter. It was not easy to become a member of the guild association. For example, artists were included in the shop of doctors and pharmacists as junior members, because they used paints that were prepared as medicines in pharmacies. Sculptors worked in a common workshop with masons, stonemasons, carpenters. According to the terms of the Charter, which regulated the relations, a master could be a member of only one workshop, but most masters sought to master different crafts. The owner of a large workshop, the Florentine L. Ghiberti, who carried out orders for bronze casting, chasing and jewelry, was a sculptor, jeweler, caster, draftsman and painter. In his

Bottega (workshop) the most outstanding representatives of the Italian Renaissance studied: Donatello, Michelozzo, Uccello, Filarete, Finicierra. In order to receive the title of master, apprentices had to complete their own training according to the approved model at the end of the training period. The fact that the title of the work for the title of master was "masterpiece" can be judged by the qualification of the performer.

On the one hand, it was not easy to standardize workshop production, since it was a question of high performance skills and traditions that were formed on the basis of respect for the cause you serve. On the other hand, it was not difficult, because the standards were produced by workshop workers, there could be no random people in the workshop, the organization did not allow it.

In the depths of the standardization of workshop production, two trends developed: the first was the deepening and tightening of requirements for the organization of production and the quality of goods; the second was the expansion of requirements, which ultimately led to the replacement of the workshop organization of production with large-scale production of commercial products. Factories replaced workshops. The main reasons for the decline of the workshop organization of production and the replacement of workshops with manufactories should be sought in politics and economics. In the 16th and 17th centuries, centripetal processes intensified in Europe, the main states in their modern form were formed, and wealth was concentrated. Along with capital, the needs of those in power also grew.

Huge incomes were provided by the colonies, which also provided unique materials for construction and decoration. Luxury became a symbol of power. Workshops guaranteed the highest quality and, in turn, did not require much effort and money to control the quality of work. However, in the new scale of the number of goods, the desire to have everything as quickly as possible, stores were clearly losing. It was time to modernize the organization of economic activity.

Production, from a technical and technological point of view, did not differ significantly from workshops, but quantity is linked to a change in quality - this is the law of development. Quantity in itself, of course, does not turn into quality; it creates, by increasing or decreasing, conditions under which the existing quality loses its quality status. Additional measures are necessary to maintain the quality characteristics of the product.

The size of the workshops, despite the variety of work performed, remained limited. And only on this scale did they satisfy demand. However, the workshops were unable to provide such a clear increase in demand as happened at the very beginning of the modern era. At the same time, at the end of the 16th and beginning of the 17th centuries, the technical

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prerequisites for the industrial revolution had not yet been formed. The most painful question remained about the source of energy for industrial work. They did not know how to use the energy of the sun, and the power of wind and water did not differ reliably. You could not command the wind, and the water, especially in Central and Northern Europe, was icy. The interest of science and technology in steam power, which began long before the modern era, did not yet promise the desired results.

The manufactory had to provide the necessary volume of assortment as quickly as possible without technical and technological re-equipment. It is not surprising that the formation of manufactories took place not only on the basis of workshop production, but also with the preservation of basically the same working conditions. Perhaps someone understood the auxiliary role of the manufactory, its historical uselessness, but such an understanding of real history was of little help. when society does not have a fundamental recipe for solving a problem, it always looks for a solution in what already exists, trying to stay in motion until the desired solution is found.

The manufactory appeared as a new dimension of the old factories. The workshop ceased to be quantitative - but in terms of performers, technical and technological equipment, the quantity of manufactured products, their inherent internal mechanisms for organizing quality activities, lost their power. The workshops exhausted their quality reserves, focusing on the limited demand for industrial goods. Manufactories, of course, for a certain time maintained quality thanks to the achievements of workshop practice, but the growth of production of goods inevitably reduced the quality of the manufactured products. The solution to the problem came: divide the quality into ranks. This was a kind of knightly move. Privileged clients could count on high quality, while others received products of inferior quality. And here the need for intervention in the affairs of manufacturers from the side of an external regulator became relevant. The time had come to standardize the new order. The standardization function evolved.

Public standardization duplicated the basic one, which was prescribed in the workshop charters. The artificial form of production outgrew the potential for self-regulation and caused the need for quality control intervention from external production, not formally, but in fact. Workshops regulated production cycles, established production rules, work schedules and distributed orders, controlling the quality of the manufactured products. Manufactories could no longer rely on the internal system of organization in terms of production.

Large manufactories emerged in the south of Europe, first in Italy, then in France. They arose on the initiative of the ducal courts located in the same places, in the neighborhood. Manufactories mainly

produced expensive goods: tapestry, furniture, tableware, jewelry. The products of manufactories were mainly akin to works of art. An example of this is the first European furniture manufactories in Viscount (1658) and Paris (1662), which served the needs of the Bourbons. At the turn of the 17th-18th centuries, tapestry, bronze casting and phasis manufactories were added to them. In 1710, a manufactory was built in Meissen, which produced the famous Meissen porcelain. The absence of machines and conveyors in factories made the quantity and quality of products dependent on the quality and quantity of manual labor.

As for quality, it was not difficult to gather qualified workshop workers in one place. It was more difficult with quantity. There were few such masters, and orders had to be carried out. The order of workshop training of masters was violated. As a result, it was necessary to strengthen the control function on the part of state institutions, given the highest state status of consumers of products. Quality had to correspond to their position.

Workshops and manufactories had a common essence, but the scale of its expression in the phenomenon distinguished them from each other. Both workshops and manufactories employed masters of their craft; the work was mainly manual, but providing manual labor; the performer knew the fate of his product and it was unlikely to upset him. The products of workshops and manufactories decorated the best buildings and their interiors, causing constant public admiration. The time of expressiveness of alienation in the creativity of the performer's personality had not yet arrived, although the process of alienation with the growth of production was in full swing. In order for the essence of alienation to become obvious, it was necessary to implement a division of labor within production at the microeconomic level. Under the onslaught of technology, manual labor became obsolete. At the same time, the master's attitude to work changed.

"Skill", like any concept, evolves. In the workshop, the master created a masterpiece, a unique work, and realized that he objectified his feelings, thoughts, and skills in it. In manufactories, the master's attitude to the product changed. They retained the creative principle, but it was with the expansion of the scale of production that it became dependent on the quantity of manufactured products. Quantity burdened quality and reduced interest in creativity. Creativity became subordinate to production plans. The responsibility of the artist, the creator, retreated from its former dominant positions.

The original idea of standardization was formed during the period of the latent form of the phenomenon of Aliencia in the creative abilities of the performer of works. The art of the master still felt free, and the continuity of creative work removed the contradictions of production. The master alienated the

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product, but among the feelings that accompanied this alienation there was no sense of social injustice. The product was created for consumption by others, for which the master received a reward, part of which was the opportunity to further reveal his creative potential, working in a workshop or a factory.

Standards were not intended to unify the product, its parts, production conditions and technical structure. Their purpose was to preserve the achieved creative results. In the standards of the period of workshop and factory organization of production, the interests of producers, consumers and regulators coincided, which led to the effectiveness of their actions and insignificant maintenance costs.

Authoritative reference works omit this part of the history of standardization, clearly assuming that it has no bearing on standardization. This interpretation can only be accepted if we return to the Aristotelian approach to concepts. After Hegel established the historicism of concepts, such a retreat looks like a very unfortunate step into the past. In the theory of art, "standard" is identified with "stereotype" - a form that is repeated without changes, regardless of conditions (English standard "accepted", "approved"). "A stereotype," writes V. Vlasov, "is an artificial entity, therefore it differs both from an archetype and from creative thinking. By limiting creative participation in production, the charters of workshops and manufactories did not encroach on creativity as a creative force. The regulations were aimed at protecting the quality of products that correspond to a given model. The problem of standard samples was solved organically. In those areas where it was necessary to improve the quality of products already recognized as high-quality, it was allowed to develop new standards.

The organizers were forced to literally spin around in search of a rational solution to the contradiction between conservatism in production and the need to move forward. The brewers were more conservatism, and the masters who made shoes, harnesses and saddles were less so. No matter how slowly life flowed in the Middle Ages, there was movement and change. There are new materials that have different tastes. All significant changes in public sentiment and views had to be tracked and reflected in the products of production.

The fact that until the 18th century the concepts of "standard" and "standardization" had a somewhat different meaning is not sufficient grounds for conducting an audit aimed at denying the corresponding policy. Standardization had its roots in the medieval period, by the time I learned the history of mobile artisan teams. The form acquired a fixed appearance, was expanded and eventually transformed into shops. Workshops strengthened the position of the creative component of production on the commodity market and thus made it necessary to use control over creativity so that the desire for the

new did not damage the traditions of quality production.

Genius and control are incompatible, but workshops, like manufactories, were forms of relatively mass production, for which the stability of the range and quality of the manufactured products were especially important. Workshops and manufactories were part of public life and in this status required constant control over their activities. Control that took into account the specifics of workshop and manufactory production. Skill does not need special care. Popular wisdom says: "to teach a master, only to harm the business", but in the production of approved samples, a strict order was required, which was subordinated to a standard approach. The certificate has been received, please act in accordance with the regulations. Standardization was more like regulation, but it was not something that did not fit into the understanding of standardization.

We have a classic demonstration, on the one hand, of the connection between essence and phenomenon, and on the other hand, of the misunderstanding of the historicity of the phenomena of social development. "...Nowhere: neither in heaven, nor on earth, neither in the spiritual world, nor in the world of nature is there that abstract 'either or' that is affirmed by reason," Hegel explained. Everything that exists anywhere is something concrete and, consequently, something in itself distinct and opposite. The finitude of things consists in the fact that their immediate existence does not correspond to what they are in themselves." "Homo sapiens" have two types of thinking: rational and irrational. This division is introduced by Hegel in his own linguistic manner. F. Engels translated Hegel's thoughts and expressed them in a language understandable to non-philosophers who prefer to choose and use simpler and more practical thinking, referring to "common sense", which serves as a navigator in knowledge. "Sound human reason," wrote Engels, a very respectable comrade within the four walls of his home, "experiences the most amazing adventures as soon as it dares to go out into the wide expanses of research. The metaphysical (common sense) way of understanding, although it is legitimate and even necessary in certain areas, is more or less extensive, depending on the nature of the subject, but sooner or later each time it reaches a limit beyond which it becomes one-sided, limited, abstract and shrouded in insoluble contradictions, for it does not see the mutual connection between individual things, their origin and disappearance behind their being.

To make our thinking clear, we refer to another authoritative source - the Britannica Encyclopedia: "Standardization, in industry, the development and application of standards that enable large numbers of interchangeable parts to be produced. Standardization may focus on design standards, such as material properties, conformity, and tolerances, and drawing

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requirements, or on product standards, which detail the properties of manufactured products and are embodied in formulas, descriptions, illustrations, or models...". We turned to Britannica because its materials are widely used by other information publications.

The author of the article in the Britannica magazine summarizes the understanding of standardization in our time. When republished, "Britannica" will be modernized. Without much mental effort, one can identify the main concepts: the essence and purpose of standardization. We have already written about the essence of standardization, that is, about its social significance. Standards and control over their observance are the most important conditions for the socialization of production. Production exists as a way to satisfy social needs. The function of the state, no matter how liberal economists demand absolute freedom of producers from political control, has always been to stimulate production, to act not only in its own interests.

The class nature of power does not mean that it openly and directly protects the interests of the ruling class in the economy. Democracy is a historically polished mechanism of political activity of the state, creating the impression of its neutrality. Politics is the art of lobbying for certain economic interests. Standardization is one of the technologies of such a policy. The British are the founders of modern European democracy. They have long mastered the technology of political participation in public life. Presenting standardization from a purely production side, British experts are clearly being disingenuous. Everything that can be learned by reading Britannica's article is true, there is no disingenuousness here. He is behind the text, he was simply not included, either because they considered it unnecessary or inappropriate.

"Standard" is the basic concept of standardization, a concept not so much of a technical and technological nature as of political economy. Having rejected political economy, having replaced political economy with macro- and microeconomics, having descended to economics, one must try to recall the history of economic science and its philosophical roots as little as possible. Saint-Simon, G. Spencer, J. Saint-Mille, economic theory developed in a broad socio-political and historical context. Before becoming a technical and technological concept, the concept of "standard" was intended to regulate a certain level of product quality. And then it acquired technical characteristics, but they also had an auxiliary meaning. Without historical analysis, it is impossible to understand the essence of the main categories.

The instruments of economic phenomena management, depending on their scale and subject-matter certainty, may be within the limits of economic and production competence or have a socio-economic scale of action. The second option requires their

analysis already within the boundaries of social development, as a factor of social progress.

Standardization from the very beginning refers to the second type of management. Moreover, it was precisely in the initial period that its social purpose was especially noticeable and manifested itself both class and general. Standards for brewing beer, making wine, household items, clothing and footwear were calculated for public consumption and were a kind of protection of the interests of broad strata of the population. The production of furniture and jewelry was mainly addressed to the upper class.

In both cases, we see the participation of state and municipal authorities in protecting the interests of consumers by forcing producers to effectively perform their work. The standard was taken as a quality criterion. However, in the initial standardization, it is easy to identify the absence of petty concern for producers, which is explained not by the sentimental approach of the regulator, but by the quality of craftsmanship and professional responsibility of producers. Let us recall that even in factories, production had not yet reached the level of mass action. The essence of standardization was determined from the very beginning of its history - to develop a mechanism for neutralizing the opposing interests of the producer and consumer. A spontaneous search for means to extinguish the growing process of alienation of the individual in labor arose. Hegel is right in asserting that the essence is abstract and manifests itself in experience not in itself, but through phenomena conditioned by a specific historical environment. At the time of its inception, standardization was directly related to the qualitative certainty of the result of labor-product. In the absence of an internal division of labor, the greatest efficiency was achieved in the final expression of the process. Standardization partially regulated the production process itself, but preference was given to centripetal forces - it was necessary to guarantee the quality of the result obtained. The qualitative side of measuring production efficiency was pushed into the background, given over to the manufacturer himself. The controller regulated the quality of the result obtained through the quality of the manufactured products.

The interpretation of production efficiency also corresponded to the historical-economic situation. Such a concept did not yet exist, it was only maturing. Efficiency became vital for many of the same positions when production reached the mass production of goods. Competition for product quality was replaced by competition for production costs. Manufactures did not increase the number of goods produced so much that production costs came to the fore. As for the competition of technologies, it was unlikely to be significantly meaningful. Differences in technologies naturally took place, but within the boundaries of the general manual form of production,

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where advantages could be obtained due to higher qualifications and better organization, time savings, perhaps somewhere due to the successful use of logistical alignment.

Manufacturers had temporarily solved the problem of satisfying the increased demand for their products, but production had not yet grown to the level of measuring efficiency. Product quality remained relevant, and quality guaranteed high rewards. Since most products were made to order, competition was latent.

The need for standardization, potentially inherent in the development of production, was revealed gradually, proportionally to the state of production. Its abstract form was filled with concrete content. The process of establishing a standard was similar to the work of a master tailor, who first took measurements in the absence of any material signs of the future product, made the first adjustment of something not very clear to the customer, and only at the end showed the product that embodied the concreteness of the image. This was also the process of ascending the original goal of standardization to its concreteness, which is recorded in modern scientific and information sources. The functions of standardization changed, and its content as a tool for managing economic activity changed.

Standardization as one of the main methods of economic policy moved from the quality of the final product to the production of a product that ensures its quality. The wind in the sails of standardization blew from another important concept of political economy - production efficiency. While efficiency was determined by customer satisfaction with quality and price, standardization controlled quality. Standardization was based on regulating the parameters of its production technology. The ball was ruled by product samples agreed upon by associations of producers with regulators. The situation was fairly balanced, but its stability was determined by the technological specifics of production.

Progress allows stagnation within certain limits. Just as in the mountains there are vast territories, so in the history of production - the area of active professional activity there is a lull in the movement. They are natural, since they correspond to the social state as a whole. The Middle Ages were not a sleepy kingdom, as it is depicted in school textbooks, it simply reproduced itself equidistantly, without leaps. At that time, humanity was gaining energy for action, creating approaches to obtaining critical values of impulse energy in various spheres of activity. The peculiarity was that religion prevailed in the public life of Europe and not only, and absolute monarchies in the political life, carefully protecting the movement from any restructuring. The feeling of satisfaction with the achieved success dominated in the public consciousness, forced to tolerate troublemakers within the framework of the vector of increment created by

religion. No faith can become an insurmountable barrier to social progress. However, when this happened, changes occurred in religion itself. Christianity entered the Middle Ages as a single faith and emerged from there as a fan.

The peculiarity of the Middle Ages also affected the subsequent development of history. The New Age (XVII-XIX) could not come immediately after the Middle Ages. It was a transitional historical stage - the "Renaissance". It was necessary to clear the socio-cultural and political conditions for the free and independent movement of scientific knowledge, the methodology of scientific cognition, education and technical progress.

In the 17th-18th centuries, the development of scientific knowledge got out of the control of the church. By this time, the formation of science as an independent field of culture was completed. In Europe, there are associations of scientists, bodies governing science. Scientific knowledge is transformed into technical creativity on a new scale. The engineer becomes a "scientist builder". Technical progress is the displacement of manual labor. The factory replaces the manufactory - this is a new way of organizing production and labor. Production becomes mass, so it becomes more accessible.

Accessibility requires a different quality. Quality comes to the fore mass product. It must be and be inexpensive. The place of the named consumer is replaced by X consumer, who can be anyone. The previous possibilities of quality control are compressed by new tasks.

In Russia, there was a common saying: "cheap and cheerful." Young people are unlikely to understand its essence, so let us explain: a product does not necessarily have to be expensive to be in demand, but not every product will be in demand, only one that has the characteristics of a quality product. In our time, the saying has been given a modern form of expression: "a quality product - at a reasonable price."

The change in the nature of production led to a change in the philosophy of standardization. Standardization of product quality by result was replaced by standardization of production of quality product. The "synthetic idea" of sample control disappeared, the "analytical idea" came: all products and the product itself are broken down into components - units, parts, operations down to the last screw, seam, nut, forced movement and take control of everything. Reduce differences to a minimum and maximize universality. For masters of workshops and manufactories, this could not be dreamed of even in the worst nightmare.

Craftsmanship is closed to originality, it is unique. Even the master himself cannot fully decompose the process of making his product. Creativity begins only with a common set of tools, actions and order, but it manifests itself in the fact that it is impossible to build a "constructor" from a set. The

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mind acts in accordance with logic, so there is an opportunity and need for rationalization. An innovator does not invent, his thought is aimed at bringing the invention to its hidden perfection. The mind, and only the mind, jumps from the known to the unknown. It is where the creative power of man is concentrated. Hence the name of the species - "sapiens". Both production and factory production combine creativity with rationality, but they do it differently. Workshops were the first to be created. The master was the creator, the student, and the students provided the conditions for the manifestation of the master's inspiration. At the manufacturing plant, the master is the organizer of the work on the manufacture of the approved sample, essentially the head of the operation for assembling the product or, if it is especially complex, its individual parts. Creation and production are separated, so there is no temptation to deviate from the planned and controlled order. And in this order you do not need to use unreason, on the contrary, only by following a rationally separated and fixed order can you maintain the pace of production when it is mass. The strength of mass production lies in the availability of goods to a wide range of consumers. And no state will deviate from the philosophy of satisfying mass needs. Quality here is the price for mass production, which all participants in the process are forced to pay.

The history of mass production shows how the solution to the problem of quantitative quality was sought. This history is not a series of events and actions, but above all the logic of resolving contradictions, inscribed in the historical process, in the history of economic policy, which should be perceived as the highest school of economics. Having gone through historical experience in your consciousness, you will be able to avoid both romanticism and liberal illusions in the management of economic activity.

The beginning of the history we are studying confirmed the natural character of the development of economic progress. The history began where production was more mature, the importance of science and technical creativity was more in demand, and the political situation in England was more democratic. In this regard, we once again call on Britain for help: the "industrial revolution", the process of transition from an agricultural economy to an industrial one based on machine production. It began in England in the 18th century. Technical changes included the use of iron and steel, new energy resources, the invention of new machines that increased output, including the spinning jenny, the development of the factory system, and important inventions in the field of transport and communication, including the steam engine and the telegraph) ... The Industrial Revolution took place mainly in England from 1760 to 1830, then spread to Belgium and France. Other countries temporarily lagged behind, but when Germany, the United States

and Japan created a powerful industrial base, they surpassed England's initial success. Eastern European countries lagged behind in their development until the beginning of the 20th century.

The description of the industrial revolution was apparently prepared with the mass consumer of information services in mind and is perceived, from a professional point of view, critically. There is no significant assessment of economic development, and the beginning - the transformation of England from an agrarian country into an industrial one - looks somewhat strange. England relied for a long time on its own agrarian foundation, in which the transition to industrial foundations did not occur without complications, as in industrial production, it is enough to recall the well-known testing movement of the "Ludites". At the same time, we can follow the historical path of the industrial revolution in Europe and beyond.

We are interested only in what the author did not say, relying on professional logic and sincerity. The industrial revolution led to a massive scale of production and the need for division of labor in the depth of technical progress. Craftsmanship was replaced by executive discipline, and the internal motivation of the master gave way to external incentives. The industrial revolution led to an economic revolution. The mode of production changed, starting with the source of strength and internal motivation in achieving product quality and ending with the priority in the new mode of production of technical division of labor. The organization of production is steadily becoming a leader in economic theory and practice of business management. The art of the master was replaced by the art of the dispatcher, the importance of technological discipline, the ability to count and read, and to take risks for the sake of victory increased.

The period of economic history following the Industrial Revolution is usually divided into two stages. The first stage saw the mass production of the classical model. We call it classicism to emphasize the uniqueness of the maturity stage. Maturity as a stage of development, regardless of what exactly has reached it, is characterized by the transparency of the essence. The essence emerges from the shadow of the phenomena that hide it, revealing itself almost as it really is. All that is most perfect, the best, is presented at the maturity stage. At the same time, the shortcomings and costs of development appear in greater contrast.

At the zenith of the classic mass production, its philosophy was formulated quite clearly and temptingly for the consumer: the buyer must save time on making a purchase, the store is not the best place for a responsible person to live, so this is how it is necessary to concentrate the assortment in one place as much as possible. We do not know who was the philosopher who helped economists define the

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essence of shopping, because his anonymity is carefully guarded, but exclusivity was not a modern philosopher. The mission of trade was presented as methodologically flawed, without a systematic approach. The bait turned out to be like a bait.

Economics can be separated from politics, but even those who support its transformation into economics proceed from the fact that it is about economics, not about wastefulness. The implementation of the philosophy of product availability in one place presupposes enormous costs that are unjustified both economically and ecologically. It was not possible to write them off, and they weighed heavily on the cost price of the product, significantly increasing the price and undermining the possibility of mass entry into the market.

The foundations of the philosophy of mass production were laid by the end of the 19th century by famous specialists in the field of management: F. Taylor, A. Fayol, A. Sloan, Mr. Ford, Jr. They also have initial experience in developing the theory of production management, in particular, the idea of the system-forming value of quality management through the standardization process. In the 19th and first half of the 20th century, the issues of humanization of the economy and protection of natural conditions of social development were not in the first line of relevance, so they were usually ignored when solving production problems.

By the end of the second millennium, the situation had changed dramatically. Economic planning and design began to depend on higher-level relationships. Decide how to live on? Without answering the question: will there be life? It is illogical. Management experts began to think about the historical logic of providing consumers with the formula "here and now". B. S. Aleshin, L. N. Aleksandrovskaya, V. I. Kruglov, A. M. Sholom and many others opposed mass production with the type of production called "lean production" - lean, expensive production. Having decided that it would not be so massive, since the focus on marketing research can still remove the excessive burden on production, he will make production targeted. It is unclear why they came to the conclusion that it will cease to be mass.

Mass production did not initially become a brand, it merged with the essence of production. In the foreseeable future, production will not be able to be different. Naturally, in parallel with mass production, artisanal and individual heirs of workshops and manufactories coexist, however, unlike their ancestors, who are not limited in technology to hand tools, but actively use scientific and technical products. "Smart production" is a really good trend for a more adequate form of continuation of mass production.

In its previous form, mass production looks decidedly outdated in the twenty-first century. Among

the global challenges: "energy conservation", "resource conservation", "concern for the state of the natural environment", "global warming", "protection from the destruction of the ozone layer", an economic philosophical strategy is being independently developed. What kind of humanism is this? The very participation of science and philosophy in the development of mass production, which, as has been repeatedly noted, was of paramount importance in the matter of social progress, made it possible to create hundreds of millions of jobs, increase purchasing power, force people to study, improve their skills, use civilizational achievements, gain freedom in the national and transnational space, etc. This, undoubtedly, was an important factor. But we should not forget that science and philosophy are initially perfect in comparison with existing knowledge - mythological, everyday. Their strength is not in what they have already done, but in what they can do if they are not allowed to do so. Pythagoras also explained that he was not a sage and not omnipotent, his goal was to understand how wisdom works. At the origins of economic science stood outstanding representatives of philosophical thought, who were able to understand the essence of the issue and give a forecast of development within the limits of historical specificity. They thoroughly understood the present, determined the nature of the coming movement, developed scientific methodology and philosophical foundations of scientific knowledge as a private search within the framework of the general.

Science and philosophy have no right to guess and seek truth in the Holy Scriptures. Their job is to analyze what has grown. Much has grown in the nineteenth and twentieth centuries, but much more has only just begun to grow. These shoots have not been properly appreciated. The natural environment seemed an endless repository for reflection. Dialectics could not be completed in time with a systematic approach.

"Zena production" is not an alternative to mass production, but only its next stage of improvement. The essence in case of a successful transition will remain the same, and the costs associated with excess will be reduced. Understanding the real essence of "prudent, sparing" economy is important for developing sound economic policy.

The effectiveness of economic policy is primarily determined by how well the quality of existing production is assessed. It would seem that there is no need to update the apparent dependence, when everything should be clear to everyone without it. Let us explain: the obvious is a dangerous state of consciousness. In it, the essence of what is happening is often seen as a rod immersed in water. Even a mirror shows its character in the reflection, So what should the mind do that thinks in the reflection?

Physical reflection is devoid of intention, and reflection in consciousness is a way of understanding,

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therefore, along with the object of reflection, the state of consciousness-experience, interest actively participate in reflection. An example is the categorical refusal of bourgeois economic thought of the twentieth century from the political essence and even from the bourgeois orientation. At the dawn of capitalism, the term "bourgeois" was honorable. It reflected the revolutionary restructuring of the economy, social relations and the transition to democratic freedoms. Everything was clear - the time of the feudal social structure has exhausted its historical resource and is obliged, in accordance with social progress, to give way to capitalism - a more perfect social structure. The concept of "bourgeois" was historically included in the definition of the most effective "Great French bourgeois revolution". Then why in the 21st century Russian liberals shamefully hide the term "bourgeois" in relation to the definition of the state of the economy and its reflection in economic science? The reference to the objectivity of scientific knowledge is inappropriate, since it is not science that is defined, but its object. Scientific knowledge and scientific methodology in this context strictly retain their objectivity. Science is applied to a historically specific object and gives it a scientific understanding.

No one and nowhere officially announced the end of bourgeois history. If this had happened, then it would have been necessary to open a new chapter of social progress, which was undertaken in 1917. This attempt was assessed as historical arbitrariness, illegal violence against the history of capitalism, which required the total character of the social structure, violation of individual rights, freedom of speech, etc. in a word, capitalism survived and has not gone anywhere. But try to find the term "bourgeois" in democratic media and modern scientific journals in relation to economics. What prevents this phenomenon from being named adequately? - Historical Logician.

History is a naturally developing process of changing phases (stages, formations, civilizations, epochs, etc.). Capitalism replaced the feudal structure of society, the basis of which was the agricultural and handicraft type of economy, built on manual labor, a non-stationary commodity market, workshop and factory organization of production. Management went through standardization, oriented towards certification of the final product, and not towards the production process. No matter how perfect capitalism is, its perfection is historically regulated. Sooner or later, contradictions will "eat away" its perfection, and it will give up its place.

And what will happen next? This still remains a mystery for science, but it is absolutely clear that for the bourgeoisie and those who support it, it is vitally important to reclassify the historical status of capitalism from concrete historical to non-historical, i.e. to remove the problem of the future of society, to

transfer it to the technical level of regulation, including through standardization.

The bet on lean production is a knight's move. It is intended to show the humanitarian and ecological reserves of the bourgeois economy and draw attention to the need for a new development paradigm within the existing economic platform - the bourgeois mode of production. We cannot share the satisfaction with the transition to "rational production" of a number of authors of the late 20th - early 21st centuries, when research was conducted under various grants, including the Soros Foundation, and scientific products were presented in the technical spectrum, free from ideological influence. There can be no freedom from politics in political economy. Dependence existed during the period of socialist history, and it continues after. Self-determination of the state of the domestic economy as the most convenient course. What we are moving away from has become clear since 1991. Try to figure out where we are moving, but we are going exactly there - to the bourgeois mode of production, without calling it technological industrialization, digital economy. And we will be there eventually, so we must clearly understand that all technical decisions have a political nature, it's just that in some cases it sticks out like a donkey's ears, and somewhere it is hidden for mediation actions.

The bourgeois economy was born as an alternative to handicraft, industrial production, which could not be mass-produced, but was technologically very high-quality. The quantitative leap had to affect the quality, which forced the management to take a course on ensuring acceptable product quality. The only possible vector here is the creation of standard conditions for obtaining high-quality products in bulk. The heterogeneity of mass demand determined a wide range of product quality, which was reflected even on the scale of national and transnational planning.

In Western European countries, products are labeled for consumers in the eastern part of the continent and specifically for Russia. Quality, as well as quality and standards, are largely determined by the political map. Standardization as a technical measure is indeed necessary and reasonable as an instrument of economic policy, but only outside of a systemic understanding. From a systemic point of view, it has political ears that, like donkey ears, no matter how much you hide, will come out.

Let's return to the paradigm of "efficient production". At first glance, writes B. S. Aleshin and co-authors, it may seem that the whole point is in the widespread implementation of the so-called "just in time" system, in which products are manufactured only when they are needed for the next stage of the production process, and only in the quantity that is needed for this. However, a closer look shows that we are talking about more than just organizing production within the framework of this system. It is necessary to

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rethink the logic and technology of production, which inevitably leads to a change in mentality or, as they often say now, to a change in the culture of the organization. At first glance, it seems that the metamorphosis of standardization is inevitable in the context of the development of efficient production. While RP exists only as a project, one can indulge in reflections, the subject of which should be the main thing in any business, regardless of its scale and significance - the quality of the process and product.

If we think strictly logically, the concept of "quality" is a specific philosophical category. In philosophy, it is the second in order, following the concept of being, and reveals the essence of being. In all non-philosophical reasoning, quality is modified, acquires a concrete-objective, very often sensory-concrete certainty. Economic science and production practice are no exception. The difference can be felt by comparing the understanding of quality in philosophy and beyond, focusing on the human explanation of what quality is. Quality, according to a famous German philosopher, is "what is lost, the object ceases to be combat-ready." A philosopher has the right to define quality in this way, because he accepts the object in its abstract form. In abstract form, an object exists conditionally, therefore the object also ceases to exist conditionally, taken in the system of philosophical abstractions. A product ceases to be a product only for a philosopher when it is deprived of consumer value. But who will organize the production of something that no one needs? This could only happen in a madhouse, not in a real production.

The definition of the quality of philosophical phenomena allows for human formulation. The cause has one quality, the effect another. By losing its quality, the effect can become the cause of new changes. It does not disappear, but only transforms in accordance with the natural order of motion. Chance, deprived of quality, becomes necessity; possibility becomes reality or impossibility. A product presupposes, as a necessity, the absence of the producer's own needs. It is produced for sale on the market; and as an addition (if you are preparing it for sale), it must have something that someone really needs, that is why they came to the market. A product really ceases to be a product when it does not have what someone else needs besides the producer. Only such a "product" is not a standard of commodity production. In products intended for the market, the philosophical concept of quality is concretized in terms of the reality of the product and appears as a standard. This explains the fact that the entire history of quality management in the 20th and 21st centuries developed in the form of standardization of mass production.

The modern history of production management is focused on the management of the quality of manufactured products and is carried out through the improvement of standardization. This is what should

guide the assessment of the economic efficiency of management. And we must begin by clarifying the concept of economic efficiency. The reason for this is that the tendency to separate economic efficiency from the systematic functioning of the economic block of social life is increasing.

Scientific economists have linked the methodology of knowledge and management with mathematical support, trying to implement Comte's failed idea in the 19th century to make every science a philosophy at the same time. Karl Marx called one of these attempts "the poverty of philosophy", for which the bourgeoisie is not destined to pay, and not those who serve it, to pay a certain amount to consumers. Therefore, the dynamics of growth looks stable: the rich get richer even in a crisis, and the rest float on the real waves of economic movement. Just as those who are in a hot air balloon in distress try to throw off the ballast in order to get to the right place, so the current economic theorists of the movement strive to break away from the economy, believing that not market, but infrastructural activity is aimed directly at the development of human capital, and at the same time they claim that human capital is the main source and reserve of economic growth.

It is surprising how specialists, carried away by the term "humanization of production", read statistics. "Training is becoming the norm of life", - the authors of the textbook "Philosophical and Social Aspects of Quality" enthusiastically state. The average cost of training in American companies is about 1.5% of the wage fund. Once upon a time, these one and a half percent were an indicator of special attention to something. There is only the division of profit by residual value.

So, let us highlight the essence of our thesis: standardization from the very first steps of its history had the goal of defining and stabilizing quality. At first, the product itself, since there were no special chances to influence the technology and organization of production, but with the transition to mass production, when the value of the organization of production increased significantly as a result of the activity, the direction shifted towards the production process. Standardization of production came to the fore. It was believed that if the organization of production meets the requirements of the developed standard, the result will be of high quality.

The transition to standardization of production from the outside seems to be a completely justified action. In fact, where can you get a quality product when there are only quality actions around. Naive people are convinced that it is enough to combine quality alcohol with quality water, and you will get quality vodka. Chemists hold a different opinion. They argue that in order to obtain a quality alcoholic beverage, it is still necessary to follow the order of combining water with alcohol in order to properly start the reaction.

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Workshop and partly industrial production were subordinated to the quality of the manufactured products. Manual labor was unproductive, but very mobile within the range of skills. That is why creativity is always connected with the product. The quality of the manufactured products completely subordinated the technology and organization of production. It is pointless to fantasize on this topic: would Stradivari or Amati change the sample if they had difficulties with production? They will not retreat one step from the idea of its material objectification, they will seek a solution in production and will find it. The nature of mass production of any type is completely different - wasteful. If a product recommended for mass production cannot be prepared without serious restructuring of production and requires serious costs, then it is easier to attract innovators in order to "improve" the product in the interests of production.

The Soviet experience can be used as an illustration. Consumers knew that the initial deliveries would be perfect, but the further they went, the worse it became. German car manufacturers are among the most qualified, but they also falsified engine specifications, confessed and were fined exemplarily. Similar cases have been repeatedly noted in the practice of Japanese manufacturers. Unfortunately, in the Russian Federation it is even worse. The main reason for the flourishing of corruption.

We must understand the dual function of standardization. It combines technology and politics. Its importance for improving production is objective - it is the only main way for the economy to move forward, but at the same time it is the main means of objectifying economic policy, so the objectivity of standardization has been and will be oriented by political interests. Standardization can be managed (and should be managed!), and therefore it can be manipulated.

When the US President came to power, Trump took steps to withdraw the country from the Paris Agreements on environmental policy, despite the complication of relations with European partners, especially sensitive to the consequences of environmental changes - the continent is small, the population is crowded, and production is large. Trump is a business man, and business policy for him is the essence of politics. Everything else should be subordinate. Trump took on the task of restructuring the economic life of his country, and he will build standards based on purely American interests, without straining the Infrastructure processes that Trump attributes to the state of the natural environment. His political essence is manifested through the technical form of confrontation. And the last argument in favor of the dialectical perception of standardization - the President of the Russian Federation proclaimed the creation of digital production the Central economic task. Since the time of the Pythagoreans, numbers

have been a symbol of absolute abstraction. The number loses its objectivity and is replaced by a number, but not chaotically, but quite definitely. A single digit is meaningless. Another suggested a certain combination of numbers, which, with the help of a certain code, recreates the object in its most precise expression, which opens up almost unlimited possibilities for identification and management. By transferring actions to a sphere independent of the subjective factor, the emotional and motivational component of subjective activity, the costs of professional readiness of the specialist are removed from management. As they say: nothing personal, only in the interests of the cause. It is bad when the role of the individual is underestimated, even worse when the fate of the common cause depends on the individual.

Production management, including standardization, should be carefully prepared with maximum reliance on the reserves of the professional culture of specialists, but it is advisable to entrust the dynamics of the launched production to technical programs and tools. This will make everything safer. In June 2018, the Russian icebreaker fleet was replenished with the most modern diesel vessel of the Arctic class for conducting caravans along the Northern Sea Route as part of the annual reprint. The height is a five-story building, the main engine capacity is 45,000 hp. The vessel is controlled by 19 people, which may be more convincing in favor of the advantages of technical production management. But technical management has its weaknesses. Among them: a high level of energy dependence, computer security is not absolute, and the requirements for the personal abilities of specialists in conditions of personal and team responsibility are increased, sometimes even exceptional. Problems in production usually arise because of people, but it is in the absence of qualified specialists that the most serious problems arise. Technical standardized management is not a panacea.

Let's try to formulate the rules of standardization. In our opinion, there are two main ones. Firstly, standardization should be carried out in three directions, linking them into a complex: define the product standard within the framework of its functional purpose, taking into account a broad understanding of the safety of use; regulate the production process and form a consumer attitude to the product. The consumer is a full participant in standardization. Without due consumer interest in the product, the product will not be in demand on the scale necessary for its sustainable production.

Secondly, the standardization of production is based on a conceptual understanding of its position in the system of specific historical conditions, since it is determined by the quality of the stage of economic development. Regardless of how it is perceived by the mind, we must put up with it. The product must be in

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demand not exclusively, but on a mass scale, otherwise production will be mass and will lose its quality.

The range of serial products in the USSR was small, but the quality of the consumer product was satisfactory and allowed the manufacturer to solve its problems. Departure from the production standards developed in the USSR allowed us to significantly expand the range of manufactured products by improving quality. More and more often, Soviet brands appear in stores and advertising, which did not exist in the USSR at all, being ordinary goods.

Concepts are expressed only in words; they cannot be translated into numbers, unlike products. Let us note once again that the concepts of "quality" and "standard" are related as general and specific in the characteristics of this phenomenon. In reality, quality can only be managed with the help of words, and a word, by definition, generalizes the reflected phenomenon and removes its semantic-objective concreteness, complicating practical impact, reducing efficiency. By defining the quality of a product, we only limit it and clarify management, establishing the management vector and goals. In order for management to become practical, it is necessary to have not an image of the subject, but its objective expression. Here, an object or an adequate sensory, digitalized sample is needed, which, after technical processing, takes the form of a program of practical actions. Digital production is built on the basis of physical impact on an object and requires standardized qualitative reality. The history known as the history of quality management is essentially the history of production standardization, quality specification in the production model.

The teaching of E. Deming is well known, it has received wide practical application. We would like to draw attention not so much to the structural units that make up the concept, but to emphasize the question: What does Deming owe his resounding success, which contributed to the effectiveness of the application of the provisions he developed in the real economy?

The years of E. Deming's creativity coincided with two fateful events in the world economy. First of all, the project, calculated on the omnipotence of technical progress, turned out to be a myth. The history of science repeated itself in the Age of Enlightenment, when it seemed that humanity had found in science a full-fledged replacement for religion. Science is universal knowledge, it will solve all problems. It is only necessary to expand the consciousness of the masses to face science, to make education scientific and universal. E. Deming was the first to realize and warn that the opinion that mechanization, automation and computerization will make a breakthrough in the field of sustainability of product quality relates to the sphere of difficulties in solving the problem of effective quality management,

as well as the attitude to achieve positive results in the shortest possible time. E. Deming proposed his philosophy in the form of a "chain reaction".

Comparing the management philosophy of W. Schuchert and E. Deming, one can see how much economics and economic theory depend on the trends of social development. W. Schuchert reflected in his concept the socio-political and cultural moods that developed after the crisis caused by the First World War. Europe, the United States and Canada were having a hard time recovering because the war of annihilation had called into question the dignity of democracy. At the same time, a certain part of thinking humanity tried to rethink the current situation and preserve the image of democratic transformations, believing in the power of the creative principle of homo sapiens.

Economists of the first half of the 20th century felt the decisive role of the human factor in the development of production, questioned the stake of Taylor, Ford, Fayol on the technical factor. There was still half a century left before the human factor in human capital was specified, but, as in nature, cataclysms in society are more harmful than useful. Revolutions are indeed locomotives in history, with the correction that it is not the time factor that forms the core of a revolution. Revolutions, whether in industry, technology, science, culture or social organization, occur first of all in general, the process of replacing the old quality with a new one. Revolution is identical to the quality of transformation; it turns ideals into standards of practical life. The time factor of revolutionary transformations is secondary and is determined by the concreteness of historical reality. But in history, the decisive force of man as the primary historical factor is important. History is a process of human creativity, although not always successful. But even then there is no one to correct except the man himself.

The informal leader of this group was K. Ishikawa, the future initiator of the "Japanese miracle". In 1950, JUSE invited E. Deming to become more closely acquainted with the technology of American industrial development, but, unlike the Russian reformers of the 1990s and 2000s, the Japanese themselves were well prepared. They were expecting from the Americans not a miracle, but "information for thought".

Ishikawa focused his thoughts on three conclusions:

- all experimental engineering work must be determined statistically adequately. In order to improve the level of knowledge of statistical methods of analysis, a mandatory course on "How to Use Experimental Data" was introduced at the Industrial Faculty of the University of Tokyo at the initiative of JUSE;

* dependence on imports of raw materials and food can only be overcome by increasing and

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expanding the range of exports, and it is necessary to clearly focus on the production of high-quality products so as not to waste resources;

- it is necessary to reorient the minds of specialists and society as a whole to the management of high-quality high-tech products. Japan had no alternative to this path, since financial reserves did not allow planning a total modernization of production. E. Deming was offered to go to the goal not in the American way, but in the Japanese way, moving not from big finances, but from the national mentality, in which the culture of work occupied the most important place.

The domestic democratic reformers failed together because they knew what they needed to get rid of, but they did not know how to do it in a civilized manner and, most importantly, what to replace it with, based on the specifics of Russian reality. The Japanese had already decided what they were going to do. They only needed a specific road map, so they turned to E. Deming as a navigator or pilot. E. Deming was paid for his lectures by the Japanese, and our "brigadiers" were paid for them. The Japanese were saving their national prestige, while our people were cutting down their national historical roots and stealing wherever they could. It is not surprising that the Japanese, 30 years later (by the beginning of the 1980s), produced 40% of the world's color televisions, 75% of transistor radios and 95% of video recorders. Russia, thirty years later, still cannot restore its destroyed potential.

The ideas of Deming, Ishikawa and Juran were implemented, confirming the importance of the counter-courses of the movement of national interests and innovative, creative thinking of unbiased, honest specialists. The "Japanese miracle" is a product of the interaction of scientific thought, critical analysis of the production experience of developed economies and the peculiarities of Japanese national identity. Ishikawa, E. Deming, I. Juran happily met in the very place and at the time when the situation was ripe and

objectively - it was necessary to save and return the economic potential of the country, and subjectively - the Japanese nation bears high and Unified responsibility for its image. Only the Japanese team, which lost the 2018 World Cup match in the last seconds. cleaned up its locker room and left a note in Russian with one word: "Thank you." Of course, this fact has no direct relation to the subject of our study, but it is indicative as a characteristic touch to the national character.

Stations are decision-making stages where certain actions are performed in a sequence determined by the organization of the movement. Problem components at development stages. Juran called them "basic phases". "T. Juran's scheme is still relevant as "food for thought". Let us present it (Table 2).

Problem solving stage Problem components (phases).

Development of the main provisions of the project

1. Drawing up a list of problems and identifying priorities.

2. Determination of the composition, responsibilities and powers of working groups.

Diagnostics

3. Symptom Analysis

4. Formulating versions

5. Verification of versions

6. Identifying the causes

Search for a solution

7. Search for optimal solutions

8. Development of necessary measures

9. Overcoming resistance

10. Implementation of solutions

Maintaining the achieved results

11. Checking the effectiveness of the implementation results. Regularly comparing the achieved results with the planned ones.

Table 2. Main phases of problem solving (author Yu. Yuran)

Problem solving stage	Problem components (phases)
Development of the main provisions of the project	1. Compiling a list of problems and identifying priorities. 2. Determination of the composition, responsibilities and powers of working groups.
Diagnostics	3. Symptom analysis 4. Formulating versions 5. Verification of versions 6. Identifying the causes
Finding a solution	7. Search for optimal solutions 8. Development of necessary measures 9. Overcoming resistance 10. Implementation of solutions
Maintaining the results achieved	11. Checking the effectiveness of the implementation results. Regularly comparing the achieved results with the planned ones.

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The philosophical concept is revealed in the verbal form of the definition. This word has a special meaning here. There should be few and many words, even so many that they convey the essence of quality. The essence of quality is not what is indicated in the manuals, not a list of essential features, but their systematic compliance. The quality of the product plays an indirect role through the identity of the physical substrate - the nature of the market as a structure of two subjects - the producer of goods and the consumer of goods (sellers are in the infrastructure and are not considered). The product is only what someone else needs, not the producer, therefore, along with the physical component, there is a consumer interest in the quality of the product as a superstructure over the physical basis of the phenomenon.

It is impossible to manage a philosophical category; it is used to develop a route for practical action, as a navigator of movement from an idea to a subject (organizational) result.

The quality of the product after a balanced definition must be translated into a form corresponding to the production process, expressed in symbols of technical production management and turned into a standard. Then the history of standardization begins. The concept of "quality" is revealed in dialectics and is controlled by dialectics. The concept of "standard" implies management at the production level. It is described physically, chemically, biologically, ecologically, hygienically and, finally, mathematically. At the standard level, a physical-mathematical model is formed, and the system approach prevails. The future of standardization management is in the system approach. Let us illustrate this with an example of a product manufactured by light industry enterprises. The range of products is so diverse and significant that the probability of a skeptical perception of our example is close to zero and there are sufficient grounds to neglect it.

Let's start with quality as the highest form of abstraction in defining a product. Quality is something, the absence of which makes an object meaningless in terms of its existence. Those who are in places where light industry products are sold, at exhibition demonstrations, have a feeling that the vector of creativity is one - to create something different, dissimilar. A fan has limitations, but creativity has no boundaries. This feeling is false, the limit is hidden in diversity, as Thales said: "all in one". We must always remember this and maintain quality in creativity in the form of a collecting orientation. Shoes, socks, stockings, tights are not similar to each other in appearance, but they are all of the same quality - they serve as clothing for legs and arms, that is, they are clothing in the broad sense of their quality. The head, individual parts of the head, face and body have their own clothing. There are different levels of clothing - internal, external. Light industry protects a

person and ennoble his appearance. It so happened that human evolution, having deprived him of most of his natural means of protection, forced him to solve the problem artificially.

Manufacturers in search of a new product must be guided by the requirements of typical product quality, determined by the quality of the product itself. Clothing must help preserve natural forces (health), protect against the effects of harmful factors, be, if possible, light, elastic, not restrict movement in its natural expression, breathe with the skin, minimize physical development deficiencies and be widely available.

Then the second level of the product quality concept is formed, which ensures its consumer appearance. This "quality" has a subjective basis, represents the spiritual development of the consumer, his personal status. The subjective side of product quality complements the objective quality of the substrate, it tells him without which the product would lose its consumer significance. The objective and subjective sides of product quality, united in a common image, represent the subject specificity of quality.

In this capacity, the philosophical interpretation of quality is combined with the economic and technical representation. Quality, loaded with product specificity, is transformed into a production standard, which receives a technical and mathematical expression in the form of a quality model. The circle of quality movement from an abstract expression to a concrete one is completed exactly halfway. The second part of the history of product quality begins: comparison of the product with the ideal, improvement of the standard (model) in accordance with the requirements for the quality of the product.

Finally, liberal managers are infuriated by the need for a consistent state economic policy, especially in the area of production of export products; mandatory state certification of products for other countries.

Attempts to sell uncertified goods outside the country are considered smuggling. State support for export, assistance in promoting goods to the world market. As a final touch in the Japanese quality management program, it is advisable to consider the idea of dividing problems into sudden and chronic, proposed by J. Yuran. It is impossible to foresee all possible problems in planning, and therefore there is no need for this. It is enough to have mobilization reserves that ensure stability of movement. The goal should be chronic problems that have become part of the organization - in fact, disorganization-production. Chronic problems are often latent in nature, as if they are adapted in the production process. It is no secret that waste-free technology does not exist, therefore, tolerances are a natural state of quality management. Orders, resolutions, appeals, slogans are powerless here. As soon as chronic problems have become part

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of the organization of production, their overcoming should be carried out within the framework of the established order. Juran presented the process of solving chronic problems as a kind of "road map" of movement with four nodal stations. The stations are stages of decision-making, at which certain actions are carried out in a sequence determined by the organization of the movement.

In the 1970s, Japan's expansion in the world markets reached such a scale that the "Japanese miracle" appeared before the United States as the "Japanese threat". Japan's success in producing high-quality and relatively (together with the Americans and Western Europeans) inexpensive products in the field of high technology necessitated the need to actively engage in quality management theory again. The time had come for the author of the "Zero Defects" program, F. Crosby. Based on Deming's experience, Crosby developed his "thirteen points". A. Feigenbaum's program became the development of Crosby's ideas. As a result, total quality control (TQC) was formed, from which all subsequent quality standardization systems grew. Was it finally possible to build a single basic model of quality management based on the standardization of organizational and managerial actions? Yes, a comprehensive program was developed and tested in international practice. As for its systematic assessment, we would refrain from a positive conclusion here. There is still a lack of clarity in the interpretation of the concepts of "quality" and "standard".

International standards ISO 9000-2000, domestic GOST R 57189 - 2016 / ISO / TS 9002-2016 - this is a linear continuation, that is, in fact, a rationalization of what has been achieved. It is necessary to clarify the methodological foundations of the theory of quality and standardization in accordance with the new requirements that have formed at the stage of post-non-classical development of science. First of all, separate the concepts of "quality" and "standard" in order to clarify the hierarchy of their relationships and combine them in a new approach to solving the problem of quality management. For clarity, we rephrase: "quality" is a philosophical category, its use in a non-philosophical context - scientific, scientific-practical, practical - is a logically legitimate phenomenon with the clarification that it will not bring direct pragmatic benefits. It is necessary to descend from the heights of philosophical generalization to the level of practical action, transform the concept of quality, filling it with concrete content reflecting the specifics of the subject activity, in our case, the production of commercial products in mass production. The philosophical concept is revealed in the verbal form of definition. This word has a special meaning here. There should be few and many words, even so many that they convey the essence of quality. The essence of quality is not what is indicated in the manuals, not in the list

of essential features, but in their systematic coexistence. Product quality plays an indirect role through the identity of the physical substrate - the nature of the market as a structure of two subjects - the producer of goods and the consumer of goods (sellers are infrastructure and do not count). A product is only what someone needs, besides the manufacturer, therefore, along with the physical component, there is a consumer interest in the quality of the product as a superstructure over the physical basis of the phenomenon.

It is impossible to manage a philosophical category; it is used to develop a route of practical action, as a navigator of movement from an idea to an objective (organizational) result. The quality of a product after a balanced definition must be translated into a form corresponding to the production process, expressed in symbols of technical production management, and turned into a standard. Then the history of standardization begins. The concept of "quality" is revealed in dialectics and is managed by dialectics. The concept of "standard" implies management at the production level. It is described physically, chemically, biologically, ecologically, hygienically and, finally, mathematically. At the standard level, a model is formed, both physical and mathematical, and a systems approach prevails. The systems approach is the future of standardization management. Let us illustrate this with an example of a product manufactured by light industry enterprises. The range of products is so diverse and significant that the probability of a skeptical perception of our example is close to zero and there are sufficient grounds to neglect it. Let's start with quality as the highest form of abstraction in defining a product. Quality is something, the absence of which makes an object pointless in terms of its existence. Those who are in places where light industry products are sold, at exhibition demonstrations, have a feeling that the creative vector is the same - to create something different and unlike. The fan has limitations, but creativity has no boundaries. This feeling is false, the limit is hidden in diversity, as Thales said "all in one". We must always remember this and keep the quality of our work as a guide. Shoes, socks, stockings, tights are not similar to each other in appearance, but they are all of the same quality - they serve as clothing for legs and arms, that is, they are clothing in the broad sense of their quality. The head, individual parts of the head, face and body have their own clothing. There are different levels of clothing - internal, external. Light industry protects a person and ennoble his appearance. It so happened that human evolution, having deprived him of a significant part of natural means of protection, forced him to solve the problem artificially. Manufacturers in search of a new product must be satisfied with the requirements of typical product quality, determined by the quality of the product itself. Clothing must correspond to the

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preservation of natural forces (health), protect from the effects of harmful factors, be as light and elastic as possible, not restrict movements in their natural expression, breathe with the skin, minimize physical development deficiencies and be widely available. Then the second level of the product quality concept is formed, which ensures its consumer appearance. This "quality" has a subjective basis, represents the spiritual development of the consumer, his personal status. The subjective side of product quality complements the objective quality of the substrate, it tells it without which the product would lose its consumer significance. The objective and subjective sides of product quality, united in a common image, represent the subject specificity of quality.

Conclusion

According to the majority of researchers who used the systemic approach, the cultural peculiarity of Russian entrepreneurs includes dependence on the team and the norms of behavior formed by it, the desire for trusting relationships, and avoidance of irresponsibility. Often, preference is given to the personal qualities of an employee rather than his success in performing his job, and personal and business relationships are mixed. Our Russian reality also notes the tendency of entrepreneurs and their employees to bribe, conceal income from the tax service, forge documents, and disregard for ethical standards in relation to competitors. There is a gap in communication between the manager and the employee, in other words, the manager of the enterprise is inaccessible to lower-level employees. It has also been noted that Russians have an average level of individuality and often try to avoid uncertainty.

As a result of all the above, the conclusion suggests itself that in Russia the enterprise and the

management of personnel management are formed ineffectively and working collective connections are practically absent. Enterprises devote all their attention to fulfilling the conditions set before them by employees of the state bureaucratic apparatus, and not to fulfilling responsibility to consumers and society. Therefore, there is a difficulty in introducing progressive foreign management methods into Russian practice.

In order to most successfully implement participatory personnel management and prepare employees for a change in the approach to working in a team, it is first necessary to establish measures to encourage individuality in each employee of the enterprise and eliminate the established inaccessibility of the manager for the lower echelon. It is important to create a high-quality and effective motivation system and continuous professional development so that the personnel becomes a source of competitiveness of the enterprise, meets modern requirements for human resource management.

The implementation of all the results of the research proposals is possible 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, providing 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 precisely due to the financing of all socially significant programs.

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