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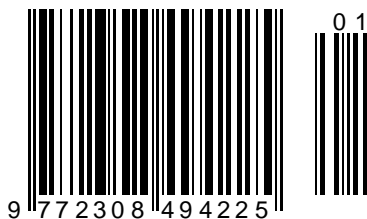
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Artur Aleksandrovich Blagorodov

Institute of Service and Entrepreneurship (branch) DSTU
bachelor,
Shakhty, Russia

Galina Yurievna Volkova

LLC TsPOSN «Ortomoda»
Doctor of Economics, Professor
Moscow, Russia

ON THE EFFECTIVENESS OF THE UNION OF «LEAN ECONOMY» AND SMART QUALITY MANAGEMENT OF MANUFACTURED PRODUCTS, WHICH HAVE PRIORITY AND PREFERENCES AMONG CONSUMERS IN THE REGIONS OF THE SOUTHERN FEDERAL DISTRICT AND THE NORTH CAUCASUS FEDERAL DISTRICT

Abstract: In the article, the authors for the first time considered the issues of a significant improvement in the quality of domestic products, filling them with the following properties: quality ideology, quality management, fashion and technical regulation, quality system, market quality, advertising, excursion into the past - as a guarantee of quality. In the future, all these criteria will provide a quality revolution, guaranteeing manufacturers stable success in the market, and product consumers - its high quality.

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

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Introduction

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The research presented to your attention is the fruit of joint reflections on topical problems of improving the activities of an important branch of the public economy of leading Russian and foreign experts. Collectively performed research always has an advantage over an individual form of creativity. An individual researcher, no matter how knowledgeable and authoritative he is, will be forced by the nature of the circumstances to explain not only his point of view on the problem under study, but also to talk about how

colleagues “see” this problem, to present someone else's view of the order of things, to transform during the announced discussion in their opponents. Such a transformation, despite all its conventionality, is not so harmless for objectivity in understanding. Even such a wonderful thinker as G. Hegel sinned, voluntarily or involuntarily substituting opponents, so that it is more convenient to criticize them. This work presents an original author's approach and opens up the opportunity to learn the most significant first-hand, without intermediaries, who often darken creative relationships. The quality is “written by nature” to be at all times in the epicenter of scientific

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and amateurish reflections. The problem of ensuring the quality of activities is not just universally relevant, it is strategic. The dilemma in relation to quality is reasonable only within the limits of opposing the ratio of actions "direct" and "mediated". The saying "it's all about him" owes its origin to quality. It is possible to "forget" about the problem of quality only because any fruitful and luminous activity is ultimately aimed at improving quality. Quality or "on your mind" or "implied". From the relationship in the dynamics of these projections, quality problems in creative thinking are built into an appropriate schedule, reflecting the relevance and profitability of activities aimed at the development of highly efficient production. To reanimate the role and importance of a quality-oriented strategy, since only in this case enterprise managers will subjectively and objectively have to improve their production using nanotechnology and innovative processes so that competitive and demanded materials and products fully satisfy the needs of domestic consumers. At the same time, the assertion of manufacturers is justified that the consumption of domestic materials and products is regulated by the market. In this case, the requirements of the market must form in production, and they confirm this situation, drawing attention to the role of the state and consumers in the formation of sustainable demand for domestic materials and products, namely: to maintain the range of goods, regulating it by federal, regional and municipal orders; stimulate price stability; increase consumer ability and gradually improve their quality. The implementation of these tasks will create the basis for the consumer to realize the need to pay for the advantages of high-quality materials and products, and the manufacturer to realize that improving the quality of materials and products cannot be associated only with rising prices, but also due to technical innovations aimed at using new technological and engineering solutions, guaranteeing their quality to consumers. paying attention to the role of the state and consumers in the formation of sustainable demand for domestic materials and products, namely: to maintain the range of goods, regulating it by federal, regional and municipal orders; stimulate price stability; increase consumer ability and gradually improve their quality. The implementation of these tasks will create the basis for the consumer to realize the need to pay for the advantages of high-quality materials and products, and the manufacturer to realize that improving the quality of materials and products cannot be associated only with rising prices, but also due to technical innovations aimed at using new technological and engineering solutions, guaranteeing their quality to consumers. paying attention to the role of the state and consumers in the formation of sustainable demand for domestic materials and products, namely: to maintain the range of goods, regulating it by federal, regional and municipal orders; stimulate price stability;

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Main part

Today, and even more so tomorrow, it is important to implement one of the defining principles of production efficiency - the manufacturer produces exactly what the consumer needs.

It is equally important to understand the role and significance of quality activities, that is, how much the leaders have penetrated into the essence of things, learned to manage things, change their properties (assortment), form, forcing them to serve a person without significant damage to nature, for the good and in the name of man. The quality of an activity is the final criterion of its individual, collective and national status. It is in the quality that the energy of creation is accumulated. The quality of activity shows how much we have penetrated into the essence of things, learned to manage things, change their properties, form, forcing them to serve a person, without significant damage to nature. Quality allows us to see the person himself from new perspectives, to pay tribute to his talent, will, and professionalism. Research carried out by the United Nations Development Program, made it possible to measure the share of the "human factor" in national and global wealth: 65% of the wealth of the world community is the contribution of human potential, and only a third of the world's wealth is

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accounted for by natural resources and the production structure. A quality-oriented strategy undoubtedly contributes to an increase in the very role of the subjective factor in the development of production, and to a more complete all-round satisfaction of human needs themselves. The desire to "live according to reasonable needs", as well as the need to "work according to one's capabilities", together with the communist ideal, no one openly and officially dared to abolish, realizing the absurdity of denying the essential forces of man. In the "hot" state, the problem of quality is steadily supported by both the inner forces of active consciousness and external life factors. The highest function of consciousness is cognitive. Learning about nature, we discover its qualities, state of quality, quality levels, embodying new knowledge in production. Classical political economy (A. Smith, D. Riccardo, K. Marx, J. Mill) concentrated quality problems in production. Post-classical economic thought shifted quality towards consumption, trying to give production a "human face" - a person alienates himself in the production process, but this measure is forced and in the systemic sense - temporary, conditional. Labor is a kind of "terrible cauldron" that Vanya the fool had to overcome in order to turn into Ivan Tsarevich. The main thing in production is the result, not the process. Consumption regulates the market. Consequently, market demands must dominate production. The task of society is to contribute to the development of demand in the market worldwide: to maintain a range of goods, stimulate price stability, increase purchasing power, and improve the quality of goods. E. Deming, calling the "network of deadly diseases" of modern production, puts in the first place "production planning, which is not focused on such goods and services for which the market is in demand." Try to argue with him. Production during the transition from industrial to post-industrial society of mass consumption is thought of as a function of the market. not focused on such goods and services for which the market is in demand ". Try to argue with him. Production during the transition from industrial to post-industrial society of mass consumption is thought of as a function of the market. not focused on such goods and services for which the market is in demand ". Try to argue with him. Production during the transition from industrial to post-industrial society of mass consumption is thought of as a function of the market.

The dynamics of market development in the last decades of the last century and at the beginning of the third millennium invariably shows an increase in consumer demand for the quality of goods. For all the economic, social and political costs, humanity is getting richer and wealth is unevenly distributed. Finance, as before, is concentrated in certain regions, however, in the same way as the premieres of modern production. Analysts predict the course towards the

quality of goods confidently and everywhere. The consumer realized the need to pay for the advantage of quality services and products. It's the turn of the manufacturer, who must close "greed" and "deadly sin" in his mind in order to burn out greed. Prominent economists unequivocally declare that an increase in the quality of goods is not causally related to an increase in prices. Positive changes in the quality of goods imply qualitative changes in technology, technology, organization and production management. Manufacturing must improve, which does not mean becoming more costly. And I would also like to draw your attention to one phenomenon that usually escapes in the problematic bustle - the historicity of the economy. The economy has not always been the way we perceive it now and will not remain forever. Economic life changes in time, which forces us to tune in not its changing being. The modern economy is built on a market foundation and the laws of the market dictate their own rules to it. In the foreground are profit, competition, efficiency, unity of command. How long will this continue? The symptoms of the new economic order are already mounting, analysts say. The next round of the economic spiral will also revolve around the market core, but the value of the market will not remain total. The priority of market competition, aggressively pushing the "social economy" to the sidelines, is incompatible with the prospect of economic development, as evidenced by the steady desire of social democracy in the West to deploy the economy as a front for social security and fair distribution of profits. The new economy is called temporarily "lean". It requires humanization not only in the distribution of national wealth. The production itself is also humanized, including the management system. The current principle: "the strongest, the fittest survives", will replace the "social-industrial partnership - the manager and the manufacturer will become members of one team. Mass production will give way to organization, appropriate implementation of the principle - "the manufacturer produces exactly what the consumer needs." The "lean" economy will be focused on resource-saving technologies and environmental friendliness of production. It will require a new look at core concepts. The philosophy of quality will also change. We must be ready for the coming events. To the best of our competence and interests, we tried to share our thoughts with you, entrusted you with our judgments about the past, present and future of the business to which we have dedicated our lives, our research, in order to answer the main question: what dominates quality - advertising or manufacturer and will unite them a revolution in quality or will it be impossible to do it? But life will judge both. The "lean" economy will be focused on resource-saving technologies and environmental friendliness of production. It will require a new look at core concepts. The philosophy

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One of the tasks in the system of increasing the competitiveness of regions is to identify the potential of innovative technologies in these regions. The traditions of the footwear industry in the regions of the Southern Federal District and the North Caucasus Federal District and the trends of its development give a chance for success in the case of interaction of all participants in the process - suppliers, manufacturers, government officials, trade and service companies. The first step towards such interaction must be taken in the course of an exchange of views and clarification of mutual positions. Do the footwear market participants in these regions unambiguously perceive the problems who stood before them? What is the vector of structural changes in the Russian leather and footwear market towards the development or stagnation of the industry? What are the conditions and real opportunities for the development of competitive production in the region? What should be the support for the authorities at the federal and

regional levels? Is it possible in modern conditions to rely on interaction and cooperation as a real factor of competitiveness? How to solve the problem of training and retaining personnel in production?

For the shoe business, the topic of the formation of innovative technologies is very relevant. Their use is one of the most effective tools for increasing the competitiveness of territories. The need for such an approach to managing the competitiveness of enterprises, which consists in the development of a new industrial policy to stimulate the organization and development of innovations based on the formation of relations of network cooperation and public-private partnership (innovation policy) and includes the study of clusters, cluster strategy and methods of its provision are a lifesaver for today. From the point of view of the management process, the cluster approach is considered as a set of stages and activities for organizing clusters and their development, i.e. clustering.

The role of the regional and municipal authorities in launching and coordinating cluster projects is very important, in this regard, it was possible to form an effective mechanism for representing the interests of business in relations with the authorities. An element that serves as a "coordinator and communicator" is proposed. For the development of this element, a substantive dialogue is needed, based on mutual trust and interest, first of all, between the subjects of the industry themselves, both the government and business are interested in this. It is necessary to develop joint proposals on directions, forms and methods of state support for the development of an industry cluster, namely:

- implementation new construction, expansion and reconstruction of production facilities, housing facilities, social-cultural purposes, communal services and consumer services for the population, administrative department, the Ministry of Emergency Situations, environmental protection and ecological safety at the regional level;

- assistance in increasing the competitiveness of products of industrial enterprises and its promotion in the domestic and foreign markets;

- organization and implementation of software projects;

- update the material and technical base of the cluster's production facilities, the introduction of new technologies;

- preservation and development of accumulated potential in the field of science and scientific services; improving mechanisms for financing science; implementation of scientific results in the production and social sphere of the region;

- achievement the quality of education that meets the state educational standard; implementation of a regional order for the provision of additional education services; achieving a dynamic balance

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between the labor market and professional training; development of higher and secondary vocational education.

A set of measures for anti-crisis management of light industry has been proposed, including the following priority areas:

- the rise competitiveness of enterprises light industry;
- development industry information services; continued modernization of fixed assets;
- mitigation lack of working capital;
- the rise efficiency of public administration;
- jointing non-payments.

An action plan has been drawn up to implement the anti-crisis program in the light industry, including:

- normative - legal and scientific - methodological support of anti-crisis activities;
- development of anti-crisis support infrastructure light industry enterprises;
- expanding business opportunities light industry enterprises;

- financial mechanisms for support and development of anti-crisis activities light industry enterprises;

- development of interregional and international cooperation light industry enterprises in the anti-crisis sphere.

For further improvement of the normative and legal regulation of anti-crisis activities, it seems expedient to form an action plan for the implementation of the anti-crisis program in the light industry, namely: concretization and detailing of the goals of sustainable development of light industry enterprises should be built within the framework of the development of the industrial sector of the economy, which is based on structural transformations of the economy and the introduction of anti-crisis technologies for the development of production and export of consumer goods. Within the framework of development, three stages can be distinguished, the terms of which are presented rather conditionally and can be adjusted in the process of implementing sustainable development of light industry enterprises:

Table 1.

- 2016-2018 Anti-crisis development, providing for overcoming crisis phenomena and restoration of crisis losses of light industry enterprises and finding resources for the subsequent modernization transformation of light industry.
- 2019-2021 Investment renewal of fixed assets of light industry enterprises, including a qualitative increase in competitiveness.
- 2022-2025 Innovative development - the beginning of the mass development of new types of equipment and technologies, the transition to expansion into foreign markets of domestic goods of light industry

The use of the developed and proposed methodological provisions for increasing the competitiveness of regions on the basis of the cluster theory will make it possible to make a decision on attracting and rational allocation of investment funds aimed at implementing the necessary measures to improve the efficiency of the subjects of attractive innovative technologies and increase their competitiveness.

To solve this problem, a competitive assortment of men's, women's and children's shoes has been proposed, taking into account the factors affecting consumer demand: compliance with the main fashion trends, taking into account the economic, social and climatic characteristics of the regions of the Southern Federal District and the North Caucasus Federal District. Within the framework of the developed strategy, the production of competitive products will be organized using modern mechanized innovative technological processes. In addition, the production of footwear will be envisaged to meet the demand of an elite consumer using a greater proportion of manual labor in order to give the footwear a targeted focus and high demand.

To implement the developed assortment of men's, women's and children's shoes, innovative technological processes of its production using modern technological equipment based on advanced nano technologies have been proposed, which form the basis for reducing the cost of footwear and, thereby, increasing its competitiveness in comparison with a similar range of footwear from leading world firms, with the possibility of a wide assortment of footwear, not only by type, but also by fastening methods, which will give it demand and increased competitiveness. The layouts of technological equipment are proposed, which provide an opportunity to form a technological process for the production of both men's and children's footwear in volume,

At the same time, the financial well-being and stability of newly created enterprises in the regions of the Southern Federal District and the North Caucasus Federal District largely depends on the inflow of funds that ensure the coverage of their obligations. Lack of the minimum required supply of funds can provoke financial difficulties for enterprises. In turn, an excess of cash may be a sign that the company is suffering

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losses. The reason for these losses can be related both to inflation and depreciation of money, and to the missed opportunity to place them profitably and generate additional income. In any case, it is the constant analysis of cash flows that will allow the company to control its real financial condition and prevent bankruptcy.

If the manufactured shoes are not fully sold, the enterprise loses part of the profit, which is necessary for the further development of production. To reduce losses, the manufacturer must have daily information about the sale of products and make effective decisions, namely: either to change the prices for the manufactured range of footwear in a timely manner, or, which is more efficient and justified, to start producing a new range of footwear that is more in demand on the market. Sales managers or marketers overseeing the sale of a specific range of footwear must calculate the cash flow from their operating activities on a daily basis. As a result of tracking the inflow of funds, we will have information about their net inflow from our operating activities. A decrease in sales will lead to a decrease in cash flow and will require a decrease in the selling price of the product in order to increase sales. If such an event does not lead to an increase in cash flow, then it is necessary to make a timely decision on the advisability of further releasing this range of shoes.

For this calculation, it is important to differentiate the data involved in the calculation. For calculating the cost of a specific manufactured model, the initial data are fixed and variable costs, which depend on the production equipment, the composition of basic and auxiliary materials, the number of employees, etc. The main initial data that are used in the monitoring process are the selling price of a unit of production and the volume of sales. Thus, the calculation can be performed daily, or in a selectable time range, while setting only the sales volume and unit price for a certain period, we will receive an increment in the cash flow for this period.

Calculations are carried out on the basis of assessing the degree of implementation and dynamics of production and sales of products, determining the influence of factors on the change in the value of these indicators, identifying on-farm reserves and developing measures to reduce them, which should be aimed at accelerating product turnover and reducing losses, which will make it possible to achieve significant economic effect. Of great importance in the management of product output is the assessment of the actual output and sale within the production capacity, that is, within the boundaries of the "minimum - maximum" volume of production. Comparison with the minimum, break-even volume allows you to determine the degree, or zone of "safety" of the organization and with a negative value of "safety" to remove certain types of products from production,

Comparison of the achieved volume of output with the maximum volume determined by the production potential of the organization makes it possible to assess the possibilities of profit growth with an increase in production volumes, if demand or the share of sales of footwear on the market increases. For a footwear company seeking a strong position in the market, setting the price of footwear for sale is key to the success of the chosen strategy. Price is a tool to stimulate demand and at the same time is the main factor in the long-term profitability of its activities.

In this regard, it is necessary to conduct a break-even analysis. Various ratios of sales volumes and prices for manufactured products are considered. A decrease in prices occurs when an enterprise uses a system of discounts to increase sales. This action leads to an increase in sales proceeds and additional profit. However, the area of income is not unlimited - when a certain volume of production is reached, its further expansion becomes economically unprofitable. The effectiveness of all these measures in creating a cluster is possible only with the active interaction of the branches of government and, without fail, with support at the federal level - the Southern Federal District and the North Caucasus Federal District can completely or partially relieve the footwear industry from infrastructure costs when creating new industries within the cluster. And only the federation can solve the issues of tax preferences; closing the borders for gray and black imports is again the competence of Moscow, and given that the industry is in a severe depression, changes for the better require a very powerful set of tools and power decisions, and joint actions of all interested parties.

Perhaps now, when the Don shoemakers see how quickly their ranks are thinning under the pressure of competition, the readiness for joint action will be more effective. Otherwise, Rostov will soon cease to be the shoe capital of the south of Russia. Finally, the institutional-organizational scenario presupposes an answer to the question, how should a cluster be organized, how should it be formed and grown? For us, a cluster presupposes the co-organization of at least four large technological groups that form the technological basis of the cluster:

- breakthrough scientific laboratories - pilot production, on which the foundations of new technologies are created;
- development centers, on the basis of which mock-ups and samples of technologies will be created for testing in experimental production;
- industrial and technological groups capable of tooling production for the manufacture of pilot series;
- marketing groups capable of promoting a new type of product to the market and generating sustainable demand.

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The managerial superstructure that ensures the interconnection of these four large technology groups with each other can be:

- investor council who decides on the priority financing of a project;
- expert council considering various projects as they prepare for implementation;
- creative center preparing materials for decision-making by the expert council and the council of investors.

Achieving the goal in the field of cluster development is possible only with a comprehensive technological modernization of the real sector of the region's economy. With regard to the Southern Federal District and the North Caucasus Federal District, it is possible only if the interests of all participating economic entities are taken into account. We are talking about such areas as:

- increase the share of the innovation sector and the introduction of technological innovations in enterprises that form clusters;
- development entrepreneurial activity in the field of large, medium and small business and mutual cooperation in order to introduce innovations, which leads to the expansion of existing and creation of new clusters;
- gain ties and interdependence of industrial enterprises and research and educational centers and schools;
- improvement territorial location of industrial enterprises.

In conclusion of the consideration of the process of formation and implementation of cluster policy in the region, we point out that this is a difficult task, the development and implementation of which should be of a scientific nature. Its success depends on many factors and conditions, and the central place here belongs to the scientific principles of management and the desire for the dynamic development of the region, the interest of all branches of government, both municipal and regional, and federal branches of government.

Nevertheless, the weakest point of enterprises is the low level of information support of precisely the technological preparation of production. This is explained by automated CCI systems are specialized and depend on the nature of production, type of products, serial production. In addition, the ASTPP application software is heterogeneous in purpose, it is formed from a set of products, each of which ensures the development of a separate type of technological processes. Therefore, there is a need to create information support in the form of a universal database in order to reduce labor intensity and increase the efficiency of work at the stage of technological preparation of production through their use.

For the technological process of assembling shoes with the adhesive fastening method, the authors have created information support, the purpose of which is the formation of a model passport and an automated selection of the technological process. To create information support, the authors completed the following tasks:

- highlighted criteria that determine the structure of the technological process of assembling shoes with the adhesive fastening method based on the methods of a priori ranking and rank correlation;

- developed classifier and block diagram of shoe model coding for automated design of technological process;

- drawn up a matrix of coincidences of technological operations, depending on the design, materials and processing methods of the upper blanks, insole and sole units, heels and intermediate parts for an objective substantiation of the procedure for drawing up a process flow diagram and an algorithm for its selection;

- developed a structural-logical model of shoe assembly with an adhesive fastening method based on the principles of a systematic approach, which ensures the development of optimal technological solutions;

- developed information support for computer-aided design of the shoe assembly technological process in the form of a set of databases that contain information about various options for performing the same technological operations, depending on the equipment and capacity of the enterprise;

- built the algorithm of the program, in accordance with which the precise prescriptions defining the computational process leading from varying initial data to the original result;

- developed software enabling to form the technological process of assembling shoes with the glue method of fastening with the simultaneous determination of the labor intensity and the number of workers for the production of a given number of models.

The developed software meets the main indicators of the quality of information systems, such as:

- flexibility - the ability to adapt and further develop, the ability to adapt the information system to new conditions, new needs of the enterprise;

- reliability - functioning without distorting information, losing data for "technical reasons" by creating backup copies of stored information, performing logging operations, maintaining the quality of communication channels and physical media, using modern software and hardware;

- efficiency - the ability to solve the tasks assigned to it in the shortest possible time, is ensured by the optimization of data and methods of their processing, the use of original developments, ideas, design methods and is confirmed by its ability to

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minimally depend on equipment resources: processor time, space occupied in internal and external memory, bandwidth the ability used in communication devices;

– security - the property of the system, by virtue of which unauthorized persons do not have access to the information resources of the organization, is provided setting the launch parameters in such a way that the user, having launched the application, sees only the main button form and such a menu and toolbar, in which he cannot use the buttons intended for the application developer.

The software, in accordance with the algorithm, processes the selected conditions and prints out a ready-made version of the technical process for a given shoe model with the calculation of the labor intensity and the number of workers, as well as the model's passport. When using the developed information support, the task of the technologist in the formation of the technological process is reduced to the choice of design features of the model and the main limitations, which include production capacity, availability of equipment, production areas; analysis of results; correction of the selected conditions (if necessary) and the choice of the optimal variant of the technological process. With regard to the effectiveness of the implementation of information support, any enterprise can be assessed from various sides, namely: economic, financial, organizational, temporary, environmental, social.

The result of calculations for any separately applied method for assessing the effectiveness of the proposed solution is able to reflect only a part of their positive aspects. Meanwhile, the numerical values of the various criteria that can be used may differ significantly, and sometimes even be in conflict. In such a situation, it is justified to use a synergistic (complex) assessment of the effectiveness of solutions, which imply the determination of advantages not by one criterion, but by a set of criteria. The effectiveness of the implementation of the presented information support can be assessed by two strategies: social and economic.

The social effect of the implementation of information support for computer-aided design of a technological process is as follows:

1. As a result of the introduction into the educational process - an increase in the level of training of specialists through the use of innovative technologies in education.

2. As a result of implementation in production - a change in the nature and improvement of working conditions, resource equipment of labor activity, increasing professionalism, increasing the average duration of the technologist's time free from "paperwork".

Evaluation of the economic efficiency of the implementation of information technologies often occurs either at the level of intuition, or is not performed at all. On the one hand, this is due to the

reluctance of suppliers to spend significant efforts on conducting detailed preliminary analysis, on the other hand, there is probably a significant share of consumer distrust of the results of such studies. However, both of these problems stem from one source, namely, the lack of clear and reliable methods for assessing the economic efficiency of IT projects.

The full economic efficiency of the use of software for the automated design of the Chamber of Commerce and Industry consists of savings in the field of technological preparation of production, which is a consequence of an increase in the labor productivity of technologists due to the automated selection of the list of technological operations with the calculation of labor intensity and the number of workers.

In the field of production, savings are obtained due to the choice of the optimal technological process due to the typification and unification of the technological decisions taken. In addition, the preparation time for production is significantly reduced, and this factor can hardly be overestimated in our time, when competitiveness can be achieved only with a frequently changing assortment of products, and for this it is necessary to achieve good technical and economic indicators of the enterprise. These and other advantages of automated selection of technological processes, although many of them are difficult to determine through direct economic calculations, contribute to a significant improvement in the performance of shoe enterprises. The results obtained allow us to speak about the achievement of a synergistic effect both from the point of view of technology (due to a significant reduction in the time for technological preparation of production, selection of the optimal technological process, reduction of changeovers of the technological process when changing the assortment, choosing the correct sequence of launching samples), and from the point of view of efficiency production as a whole due to the simultaneous achievement of social and economic effects. Today, a light industry enterprise, striving not only to survive, but also to develop, requires the ability not only to competently operate the available technologies, but, first of all, to actively position itself on the market, supplying in a short time high-quality products that meet the requirements, requests and expectations of consumers. at the lowest price. In other words, at the present time, the one who will be the fastest to release to the market the products that most fully meet the requirements of consumers, while ensuring the minimum cost of its production, will survive.

What should the company undertake to make the listed indicators become its competitive advantages?

1. Understand not only current but also future customer preferences and be able to design products that match those preferences.

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2. Provide setting up technological production processes, guaranteeing their minimum cost by identifying and eliminating all types of costs that do not bring value to the product.

3. Withdraw products to market faster than competitors.

The implementation of the listed tasks will depend on how smoothly and efficiently all departments will work at the enterprise. How can this smooth and efficient work be ensured?

1. By defining a set of processes or activities that ensure the production of products with quality characteristics that meet the requirements, requests and expectations of consumers.

2. Establish clear and understandable interactions between processes.

3. Definition of quality objectives at the enterprise and divisional level that provide an understanding of the results to be achieved by the divisions and that ensure the achievement of the overall objectives of the enterprise.

4. Planning the resources needed to achieve the goals.

5. Definition of procedures to ensure that work is carried out in departments in the most efficient way.

6. Measuring the results and comparing them with the set goals.

7. Analyze and decide what needs to be improved within each department.

That is, a set of processes is presented, due to the functioning of which an enterprise management system is formed, orienting it towards the production of products that correspond in their characteristics to the requirements, requests and expectations of consumers and adjusting all types of activities related to ensuring production to an efficiency indicator, namely:

- a system for identifying sources of costs is being built, and the development of adequate measures to reduce them,

- reliable data are formed that demonstrate the effectiveness of the use of invested investments, which can help to attract new investors;

- the cost of production is reduced, which makes it possible to reduce the price, expand the market and increase the volume of production;

- cost reduction is usually associated with a reduction in the number of rejects and other types of waste, which has a positive effect on such indicators of the enterprise as the impact on the environment, the state of industrial safety; the image of a socially oriented enterprise is formed;

- a clear statement of goals and objectives for each employee, defining the result that should be obtained when performing work;

- identifying the resources needed to get the job done and providing resources;

- providing the knowledge and skills necessary to understand how work should be done in order to maximize its effectiveness;

- measuring performance at the level of employees, departments and the organization as a whole and comparing results with goals;

- analysis of results and adequate response to them through a system of corrective and preventive actions.

As practice shows, the ability to implement these processes at the level of top management creates the conditions necessary for the formation of a competitive enterprise, that is, all this can be adopted by the head today in order to ensure this very economic stability for his enterprises.

In addition, it is important that there are not too many product names. For the majority of Russian enterprises, the main reserve for assortment optimization still lies in a significant reduction in the assortment range. Too large assortment has a bad effect on economic indicators - there are many positions that cannot even reach the break-even level in terms of sales. As a result, the overall profitability drops dramatically. Only the exclusion of unprofitable and marginal items from the assortment can give the company an increase in overall profitability by 30-50%. In addition, a large assortment diffuses the strength of the enterprise, makes it difficult to correctly offer the product to customers (even the sales staff are not always able to explain the difference between a particular item or name), and scatters the attention of end consumers.

Here it will be appropriate to recall the psychology of human perception of information. The reality is that the average person is able to perceive no more than 5-7 (rarely up to 9) semantic constructive decisions at a time. Thus, a person, making a choice, first chooses these same 5-7 options based on the same number of criteria. If the seller offers a larger number of selection criteria, the buyer begins to feel discomfort and independently weeds out criteria that are insignificant from his point of view. The same happens when choosing a product itself. Now imagine what happens if there is a hundred practically indistinguishable (for him) goods in front of a person, and he needs to buy one. People in such a situation behave as follows: either they refuse to buy at all, since they are not able to compare such a number of options, or prefer what they have already taken (or what seems familiar). There is another category of people (about 7%), lovers of new products, who, on the contrary, will choose something that they have also tested.

Thus, from the point of view of the buyer (to ensure a calm choice from the perceivable options), the assortment should consist of no more than 5-7 groups of 5-7 items, i.e. the entire assortment from the point of view of perception should be optimally comprised of 25 - 50 items. If there are objectively

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more names, then the only way out is additional classification. It is generally accepted that the customer wants a wide range of products. This widest assortment is often referred to even as a competitive advantage. But in fact, it turns out that for a manufacturer a wide assortment is hundreds of product names, and for a consumer - 7 items is already more than enough. And thus, the consumer does not need a wide assortment at all, but the variety he needs. This is possible if the constituent parts of Russia's development strategy until 2025 are implemented, namely: the task of transferring Russia's economic development from an inertial energy scenario to an alternative innovative social-oriented type of development, in the formation of an effective industrial policy, for which it is necessary:

- to develop and legislatively consolidate the foundations of an effective state industrial policy as a system of agreed goals, priorities and actions of state bodies, business and science to improve the efficiency of industry, ensure high competitiveness of products, goods and services and a steady growth of production. In its formation, provide for outrunning growth in all sectors of high-tech products with an increase in its share in the total volume of industrial production by 2025 at least 50%, equality of subjects of industrial policy, guarantees of property rights;

- to provide implementation of special measures to support priority high-tech industries in order to create conditions for the effective development of the entire industry in Russia;

- to ensure an increase in the volume of investments, the creation of economic and legal prerequisites for the introduction and use of high technologies and new materials, primarily developed in Russia; to do this, legislatively consolidate the foundations of the national innovation system in the Russian Federation; to establish a multiplier for R&D expenses included in the cost price;

- reduce VAT to 12%; to exempt from taxation the profits of enterprises invested in production; to create institutions of long-term crediting of modernization and technical re-equipment of industry at a low interest rate; to improve the system of VAT administration, to change the procedure and terms for paying taxes to replenish their own working capital by industrial enterprises; to make the transition to a differentiated tax rate for the extraction of minerals depending on natural conditions, the degree of depletion of deposits, etc.;

- develop and implement measures to combat price monopoly, to stabilize tariffs for the services of natural monopolies, to prepare and adopt a federal law "On price and tariff policy"; to promote the creation and promotion of domestic national, regional and corporate brands of domestic products for the development of a competitive environment in order to create competitive products, for which to introduce a quality system, to promote the implementation of

programs aimed at identifying, independent assessment of the quality and promotion of domestic products, to intensify work on standardization, including the cost of research in this area to develop new and adjust existing national standards;

- at read, that mechanical engineering is a backbone complex, for which to ensure its modernization and restoration of the technological basis of the national engineering complex in a short time - machine tool industry. To this end, use both domestic developments and the purchase of foreign equipment and technologies, using the international division of labor, and use the leasing mechanism more broadly. In addition to general measures to support industry, it is necessary to additionally prepare and adopt a state strategy for the development of the machine tool industry for the period up to 2025, including the implementation of special targeted programs aimed at financing promising scientific developments;

- modify the size and procedure for levying customs duties to stimulate the import of the latest technological equipment while promoting the revival of domestic production of such equipment, in particular, to abolish customs duties and VAT on the import of new imported technological equipment not produced in the country;

- to develop and to take a set of special measures to provide mechanical engineering and machine tool building with scientific and engineering personnel, highly qualified workers, especially in the field of scientific research and applied development, to form a system of employment of young specialists; to develop and adopt amendments to the Tax Code (Chapter 25), establishing the regimes of accelerated depreciation and preferences (premiums), allowing the amortization of the active part of fixed assets in an amount exceeding their book value;

- take action to stimulate the system of state and commercial leasing of technological equipment for the purpose of technical re-equipment of the engineering industries; consider provisional 100-interest payments from the federal budget of the cost of deliveries to enterprises of unique imported equipment, including on a lease basis, necessary for the purposes of technical re-equipment of machine building and machine tool building;

- to introduce into practice the conduct of a systematic all-Russian census of metalworking equipment, which will make it possible to have objective data on the state of the machine tool park of machine-building enterprises;

- design and implement a set of measures to solve the problem of a shortage of qualified personnel in industry, to improve the quality of training in higher educational institutions, to provide young specialists with housing on preferential terms, to introduce into practice the training of specialists on state orders, to provide modern technology and hostels on the basis of

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public-private partnerships professionally - technical schools, allow enterprises to allocate funds spent on personnel training to production costs in full, adopt special legislative and regulatory documents aimed at ensuring the industrial development of Siberia and the Far East;

- R develop and legislate consolidate a set of measures to ensure the interest of business entities in actively participating in projects to increase resource - and energy efficiency, including elements of monetary policy, foreign exchange and investment regulation, subsidy mechanisms, special tax and depreciation regimes;

- implement a set of measures aimed at the massive development of small and medium-sized enterprises in the industrial - production, innovation and service sectors, primarily in terms of providing small and medium-sized enterprises with access to production facilities, purchasing equipment, including on a lease basis, developing microfinance and credit cooperation;

- NS take action to create the Russian processing industry of equal competitive conditions with importers, to accelerate the development and adoption of the federal law "On Trade" and accompanying regulations on the organization of the effective functioning of the Russian wholesale and retail trade;

- develop a strategy regional industrial development of the constituent entities of the Russian Federation, including the territorial distribution of productive forces in the long term, to link the development of regional infrastructure with the location of industrial facilities;

- clearly spell out the system implementation of the fundamental goals of the state industrial policy, ensuring the solution of systemic problems of the real sector of the economy, to correlate the need for investment, sources of investment and really achievable socio-economic results.

The Strategy for the Development of Light Industry for the Period up to 2025 and the Action Plan for its implementation take into account the national interests of Russia (improving the level and quality of life of the population, the health of the nation, the strategic and economic security of the state), proposals of the constituent entities of the Russian Federation, public organizations and associations on the necessary measures supporting the industry in priority areas of its development. The strategy was based on the transition of light industry to an innovative development model. Particular attention is paid to the issues of protecting the domestic market from shadow trade, technical re-equipment and modernization of production, import substitution and export. Today, the light industry of the Russian Federation is the most important diversified and innovatively attractive sector of the economy.

The contribution of light industry to industrial production in Russia today is about 1% (in 1991 this

figure was 11.9% and corresponded to the level of developed countries, such as the United States, Germany and Italy, which have maintained this figure at the level of 8-12% for a long time.), in the export volume - 1.3%. Currently, the light industry has 14 thousand large, medium and small enterprises located in 72 regions of the country. About 70% of enterprises are city-forming. The average number of industrial and production personnel employed in the industry is 462.8 thousand people, 75% of whom are women. Scientific support of the industry is carried out by 15 educational, research and design institutes, many of whose developments correspond and even exceed the world level.

The main territories for the location of enterprises that determine the industrial and economic policy of the industry are the Central (55 enterprises), Privolzhsky (30) and Southern (17) federal districts, which have the largest share in the total volume of production and are the most socially significant. The results of the industry's work in 2020 showed that in a crisis situation it is able to increase production volumes in sub-sectors oriented directly to the market. It should be noted that during the crisis, the range of goods supplied to Russia is sharply narrowed. This gives the domestic light industry strategic opportunities to occupy the vacated niches and strengthen its position in the market.

In 2019, the retail turnover of light industry products amounted to 2.0 trillion. rubles, its share in the retail turnover of the country is 14.5%, and in the retail turnover of non-food products 26.3%. In terms of consumption, light industry products are second only to food products, far ahead of the markets for consumer electronics, cars and other goods. Taking into account macroeconomic indicators and development trends, the market for light industry goods by 2025 may amount to over 3.3 trillion. rub. The existing preferences and the problems solved to one degree or another at the federal and regional levels are still insufficient to eliminate the influence of negative factors on the development of the industry and turn it into a competitive and self-developing sector of the economy.

The situation in the industry was further aggravated by the global financial crisis. In the conditions of the crisis, even those enterprises that in recent years have achieved positive results in innovative development, paying significant attention to the modernization of production, are already forced and will be forced to reduce production volumes and abandon long-term investments in the coming years. This is due to the difficulties that have arisen associated with attracting bank loans (the share of borrowed funds in working capital in recent years has reached 40%), on the one hand, an increase in the volume of official imports, counterfeit and contraband products, a fall in demand and a slowdown in the sale of many types of consumer and industrial goods. -

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technical appointment, reduction of workers and specialists - on the other hand. The absence of cardinal measures to solve the identified problems will significantly affect the economy of the industry, its technological lag in the foreseeable future may become an irreversible process, which will lead to the degradation of high-tech industries, to an increase in commodity dependence on foreign countries, the losses of the state will grow geometrically, which will increase the strategic and national danger of Russia. The situation can be changed only by developing and implementing anti-crisis measures and measures aimed at raising the economy of light industry, giving it new impulses in innovative, social and regional development, in increasing the competitiveness and efficiency of production on a new technique - the technological level. Today, the industry provides with its products only a quarter of the effective demand of the population, and the mobilization needs of the country - only by 17 - 36%, which contradicts the law on state security, according to which the share of domestic products in the volume of strategic products should be at least 51%. Therefore, today the light industry faces new challenges and tasks, the solution of which requires new approaches not only in the short term, but also in the long term.

This determined the goal of the Strategy - creating conditions for the accelerated innovative development of the light industry in Russia, ensuring the effective correspondence of production volumes, quality and range of products to the aggregate demand of consumers, increasing the national importance of the industry and its image in the world community. The goals and objectives of the Strategy are consistent with the state policy in the field of innovative and socio-economic development of Russia in the medium and long term. The strategy is intended to become: one of the main tools in solving the problems of the industry and to interconnect the task of its economic growth with meeting the needs of the country's citizens, law enforcement agencies and related industries in high-quality and affordable consumer goods, in technical and strategic products.

The implementation of the Strategy will enable the light industry of Russia to become an industrially developed industry that will provide jobs for many thousands of people, improve the welfare of workers, and strengthen the strategic and economic security of the country.

The main result of the Strategist - this is the transition of light industry to a qualitatively new model of innovative, economic and social development, the basis of which is a new technological and scientific base, new methods of production management, the relationship between science, production and business. This is to ensure the effective correspondence of production volumes, quality and product range to the aggregate demand

from the Russian and world markets. Once again, I would like to draw your attention to the fact that all this will become a reality if one condition is met, namely, light industry products will be produced of high quality and taking into account the interests of this very consumer. It is necessary to begin the study in a classical way with the formulation and general description of the problem. Surprisingly, nevertheless, it is a fact that, despite the numerous literature on the proposed topic,

The reason is simple, except for the work of B.S. Aleshina with coauthors, the promise of a comprehensive study of the problem remains a wish. The content of research usually does not go beyond one or two aspects of considering quality and the possibility of quality management. The rest of the angles are either declared or applied in such a sequestered state that their presence is perceived as a kind of burden for the pleasure of joining the author's reasoning on a topic that is undoubtedly relevant at all times and for any activity. The noted drawback is inherent in our works devoted to the problem of quality. Our only excuse is that so far we have avoided making an application for a comprehensive study of quality in the context of management. A tough reaction from our critics is quite possible and even predictable. They apparently overturn our conclusions on us, finding a weak link in our opus. And they will do the right thing. Others - and we, taking into account the criticism, will step further, forward, collectively solving what is beyond the power of individual researchers, even in the case when they combine their various cognitive resources and when, for example, in our case, sectoral specialist, systems economist and philosopher.

The theory of quality management is based on the philosophical development of this concept. "Quality" is a philosophical category and the solution of the put forward problem depends on how the philosophical component is presented in the theory of quality management. In philosophy, however, there has never been a single interpretation of quality, there is no mutual understanding in our time. An important conclusion follows from this: it is necessary, before building a quality management strategy, to decide on which philosophical "shore" you are going to land. Quality is a general and fairly stable definiteness of the subject set. Only the forms of being and its substance are more stable than qualities - the only thing that is invariable by definition. Quality, however, also flows along the river of time and changes. The quality within itself changes, changing its states, and radically, losing its certainty,

Differences in the philosophical understanding of quality are due to the complexity of quality as a subject of research, but to an even greater extent they are a consequence of the philosophical understanding of the world and the methodology on which it is formed. "Materialism", "idealism", "metaphysics",

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"dialectics" are philosophical concepts that are pretty shabby by class ideology. Philosophers - conservatives in the Soviet era settled well, erecting barricades, because of which they shot arrows of anger at their enemies, absolutizing the political background of philosophical trends. The critics triumphant in the arms of liberal democracy do not look in the best light, cracking down on the restless legacy. Inspired by "noble anger", they essentially turned into the past and not so much "trample" on this hated past, but rather treading water, slowing down the movement of the cognitive process.

"Materialism", "idealism", "metaphysics", "dialectics" must not be abandoned, but they must be cleansed of pseudo ideological "husks", thereby revealing the inherent rational meaning in these phenomena. These concepts are a kind of "border pillars" of philosophical and scientific knowledge, warning, on the one hand, of the need to adhere to certain guidelines in cognition, on the other, requiring the development of conditions for border interaction. The boundaries in cognition are intended not to limit, to isolate one from the other. Their rationality lies in the fact that they regulate the cognitive process. K. Marx, who wrote that Hegel's idealism is "materialism put on its head," is not responsible for his followers who simplified Marxism and, in particular, the philosophy of Marxism - dialectical materialism. The idealist G.

The history of philosophy warns anyone who has embarked on the path of knowledge: above all, be afraid of one-sidedness. It inevitably leads to absolutization, a state of knowledge in which the natural connection between the ideal and the material is broken, and the movement towards truth is closed. Quality management begins with a philosophical, that is, ideological and methodological orientation of the theory. There are no alternative options. In developing control theory, it makes no sense to deviate from the philosophical foundations. It is necessary to actively seek cooperation with a philosophy that is rationally interpreted. The question: where is this rational philosophy - has long been rhetorical, since the time of the first philosophers. It was not in finished form, no, and will not be like a "magic wand", "self-assembled tablecloth", "philosopher's stone".

Rationally interpreted philosophy is an exclusive product of the interaction of professional thinking with the philosophical heritage. Objections like "not everyone can do this" is quite appropriate for the situation. True, this is given to everyone, but not everyone takes on the responsibility of building a quality management system. Most are awaiting full instructions and guidelines. In the current fashion: a briefcase with documents. Our Russian market not only tore apart the national economy in an ugly manner, giving some fat pieces, to others, left the illusory hope that someday their lean life would change and a holiday would come to their streets. The

Russian market has deprived us of our national unity, devaluing what is widely known as the "mysterious Russian soul", or, simply put, our inherent craving for thinking "for life in general" including personal and national problems. A German is distinguished by law-abiding, an American from the USA - adventurism, an Italian - spontaneity. Our ancestors were distinguished by a responsibility that was fading away before our eyes.

The philosophy of quality is a collective concept, synthetically built. The understanding of quality in various philosophical theories differs significantly, for it is "adjusted" to the system and the method used in its development. In such an ambiguous situation, one must start with the conclusion: everyone is right and no one is wrong. What kind of gibberish, - a person accustomed to thinking according to the formula "either - or" will say, "We do not need riddles, we want everything to be according to the principle:" To each his own. " The task is precisely to sort everything out "on the shelves." It's easier, clearer, you can't go wrong. The formal logic of thinking develops spontaneously, reflects the world of things in the first approximation, roughly. F. Engels rightly compared it with elementary mathematics, which is not capable of describing the process, therefore, it is limited to actions with finite quantities.

Prohibitions on thinking are also introduced by political ideology, dividing thoughts into their own and hostile, right and wrong, forcing the public consciousness to work according to the simplified rules of the formal logic of individual thinking. Logical blinders are justified, pseudo ideological justifications have no, as well as the actions of those who stun views different from their ideology, unwilling or unable to critically comprehend them. The Marxist and Hegelian concepts of quality have more in common than differences. The main thing is that the most essential thing in understanding quality is the same. K. Marx and F. Engels, distancing themselves from Hegel's idealism, in every possible way protected his dialectical understanding of thinking, developed the propositions put forward by him, and defended them from criticism. They understood better than anyone the reserve inherent in the Hegelian dialectic of knowledge.

- firstly, by a set of in a certain way related essential properties of phenomena;

- secondly, they understood quality as an objective state, even in the case when it is created by human consciousness, since consciousness creates quality in accordance with the objective order of the world. Quality is invariant and objective;

- thirdly, in their understanding, quality changes in accordance with the dialectics of the development of the world. It has a concrete historical way of expression.

All three of the above quality characteristics form a methodological framework: quality theory and

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quality management strategies. The famous predecessor of G. Hegel, the English philosopher J. Locke, also contributed to the philosophy of quality. J. Locke divided the quality into two groups: the objective qualities of things, inherent in them significantly, and the qualities that arise in the process of cognition. The latter are absent in things, but are formed by the interaction of things and human feelings. Things arouse certain feelings and they react with the formation of qualities corresponding to the received signal - sensations. Locke's theory of duality of quality was not criticized only by the laziest. He got it from the materialists for concessions to idealism: the idealists did not spare him for a group of objective qualities.

Does such an active criticism of the beliefs of the English thinker mean that he was wrong in everything, getting lost in the jungle of the philosophy of quality? Not at all. The ideas of a smart person cannot be stupid if they are not a joke, and Locke was not joking. The philosopher tried to find a solution to the contradictions in the development of the doctrine of quality. He was not satisfied with the view of the quality of either simplified materialism or subjective idealists, whose judgments led to a dead end. Locke was far from combining the ideas of his opponents, and with such a primitive method to overcome the existing conflict. He wanted to emphasize the role of consciousness in the history of the formation of quality, the activity of the subject, but he could not consistently implement his plan. The essence of his initiative deserves special attention - the desire to include the activity of the subject in the theory of quality. Time has passed the idea matured under the influence of practical factors. Philosophers returned, not to Locke's philosophy, to his idea of the activity of the subject and the role of his activity in the formation of the quality of things. Not to mention that the problem of the originality of the quality of the activity itself, which creates the quality of things, has also become relevant.

Suffice it to recall the modern, international quality control system ISO-9001. It is precisely the idea of the quality of activity that is basic in it. It would be a mistake to identify quality and a thing. As a special combination of properties, quality is, by definition, not the same as a thing. G. Hegel defined the quality of the phenomenon simply and, within the limits of a philosophical understanding, which in the conditions of market relations is combined with consumer assessment, the concept: "quality is that, depriving of which, the object ceases to be itself." "It ceases to be itself," but it does not cease to exist at all. Not meeting the quality requirements, the phenomenon turns from one state to another, or into another phenomenon. The expert examination gave a conclusion about the discrepancy between the goods and the technical (and consumer) parameters. The product was transferred to the category of

unconditioned, defective product, but the thing remained and along with it some kind of prospect of its utilization was preserved: elimination of non-compliance with the standard, processing. You can't wear shoes, you can try to scoop water out of a leaking boat with it, ram the tow, work, but you never know what a failed boat can do in a large household - you can even put on a samovar.

It is a mistake to separate the quality from the subject not only from a philosophical position, but also from the point of view of non-philosophical comprehension, otherwise the quality will turn into something independent, like "The Nose" from the novel by N.V. Gogol, and quality management will lose its subject specificity. F. Engels emphasized: "There are not qualities, but only things that have quality, and, moreover, infinitely many qualities."

Specialists distinguish a shift in market needs towards high-quality products. The market is maturing. This is confirmed by the monitoring of demand. In this long-awaited situation, it is important not to lose philosophical ground when developing a business plan in accordance with new circumstances. Quality is the highest and permanent goal at the same time, so you need to have one for the future, and give the other today's image. Only the correct orientation in a specific time as a life interval, when it is relevant, guarantees the success of the sale of the product. The manufacturer and seller must be up-to-date. Their modernity is due to the ability to find the optimal product range and match a specific product with the expected level of quality in order to get into the optimal price range dictated by the effective demand of the consumer of the product,

Quality for the consumer is not an abstraction created by the professional mindset of the manufacturer. The consumer looks at quality through the sight of the wallet. As long as the market exists, the price remains its hallmark. If the buyer first asks to show the product and only then asks how much it costs, then the result does not change from the rearrangement of the behavioral elements. The client will ask his sacramental question, the answer to which will depend on how the act of purchase and sale is resolved. Quality is not adapted to independent existence. A thing is presented in quality when it appears on the market - a commodity. And this is where the main thing in the theory of quality begins, so let's stop and analyze the problem in more detail.

The quality of things that form nature arose naturally, spontaneously, according to a complex combination of natural laws. It follows that the quality of such naturally created phenomena is unambiguously objective in all respects. The history of the quality of the phenomena created by human activity turns out to be different. In social practice, the spiritual component of a person is realized. A person builds a house, sews shoes, clothes, coordinating his actions with the mechanical, physical, chemical,

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biological properties of natural things, but when we make the final product not for nature - we will omit special cases. In the created thing, in its properties, in its quality, we realize our goals, needs, interests: we

either materialize or objectify. The differences in the objectivity of the quality of a natural phenomenon and a created person are shown in (Figure 1).

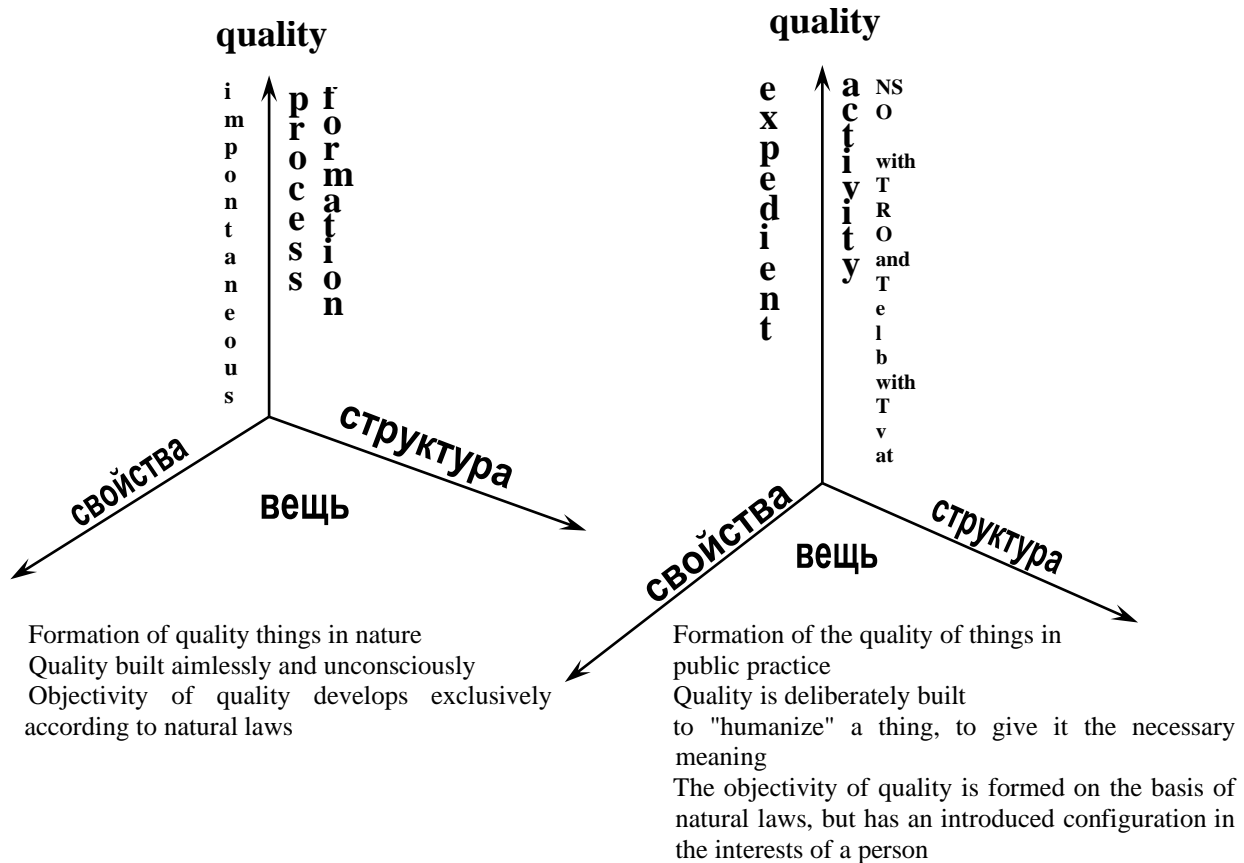


Figure 1 - Differences in the objectivity of the quality of a natural phenomenon and created man

As things produced by the practical activity of a person, as this activity itself, the objective properties of things and the subjective forms of human existence are intertwined, fused. The quality of things made by a person is objective, but their objectivity expresses the rationality (or unreasonableness) of a person. And this is where the knot of contradictions between the producer and the consumer lies. It can only be unleashed by reconciling the views on the consumer properties of the manufacturer's product with a real assessment of consumer needs and opportunities. The quality of goods should be developed solely taking into account careful marketing monitoring, accordingly tightening production reserves. We continue to observe a divided market mechanism. Hence the problems with the sale of domestic products.

Professional activity, like a sculptor, sculpts the quality of a thing, relying on the natural properties of the material, raising them through talent and labor to a state that awakens the specific interest of

consciousness. Things of natural origin also attract human interest by their ability to evoke aesthetic feelings, provide a healing effect, be a material or a condition for the production of everyday life, which is understandable - a person "left" nature, remaining its special part. However, at the same time, their quality retains its "natural purity". Professional activity is a systemic factor in ensuring the quality of value-added goods. It, according to the position, should also be the initial link in the development of the ideology of quality management.

Only high-quality professional activity can produce a quality thing - this is the first and basic law of production quality. Natural disasters can do a lot. People use them by purchasing precious stones, metals, building materials. Diamond is the brainchild of natural elements. The mineral has an original unique natural quality, however, diamond products build on the natural quality so many new qualities in which a person is interested, that the natural quality remains essentially important only for the processors

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of natural stone. The final diamond product, be it a piece of jewelry or a technical element, is the result of professional activity. In the gemstone market, there is a difference in interest in the source material - from which deposits it is, but, most importantly, in something else: who will turn diamonds into diamonds. The quality of a diamond is due to the combination of raw materials and craftsmanship in the product. And since the master chooses the raw materials, the contribution of his professionalism to the quality of the product is of decisive importance.

Hence the second law of production quality: to ensure the quality of a product, high-quality training of specialists is necessary, capable of maintaining and increasing professional skills. The third law of production quality requires the focus of professional activity on improving the technological process through integration with science and technical progress.

The concept of "quality", reflecting the objective diversity of the world, is thereby obliged to reproduce in itself an objective difference. This is feasible through the structuring of quality. The structured

quality of quality is a particularly significant factor in the theory of quality management. It is advisable to divide the quality into the following seven structural levels according to the level of significance from the contribution of the "human factor":

- the quality of natural objects;
- quality of natural material;
- the quality of the recycled natural material;
- quality of technical equipment;
- the quality of the software product;
- quality of production activities;
- quality of organization and production management.

Organizational and managerial activities aimed at the production of a quality marketed product itself requires quality control. The audit of the quality of the organization and the management of the quality of production involves the structuring of the relevant activities. Our research experience of the problem suggests that the process of organization and management should be decomposed into four components (Figure 2).

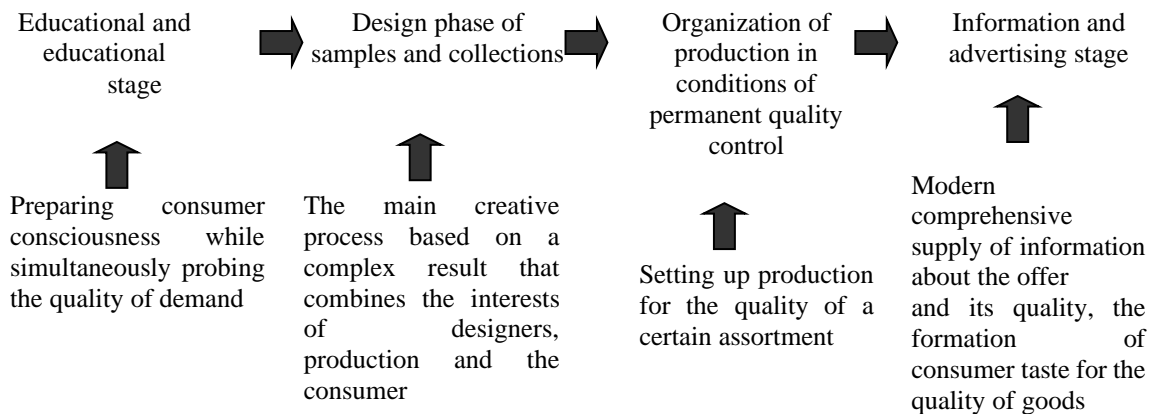


Figure 2 - Stages of the inclusion of creative professional activity in the process of forming the quality of the product - the constituent organization and management of production quality

The logic of creating the quality of things created by man pushes the quality of activity into the foreground, close-up, focuses research attention on the signs of quality activity, the need to build their systemic relationships. Philosophical literature on the selected problems is more "silent". Philosophers are still at war. Supporters of the objectivity of quality prove the inconsistency of the views of their opponents, instead of looking at quality not only in the context of the objective reality of the world, but also transforming the material world of human, professional activity. In the spirit of pre-Marxist materialism, it is impossible to develop a scientific and philosophical doctrine of quality, for the old materialism was, in essence, a philosophy of contemplation, and not the transformation of the world. It was not in vain that K. Marx taught: it is

necessary not only to reflect the world, but also to change it. Dialectics - a materialistic worldview is based on the practical interaction of man and nature. Activity, primarily creative, is the credo of dialectical philosophy and science.

The universal model of relations between the systemic properties of professional activity is explained by the scheme already cited and proposed by us. The features of professional activity included in the scheme are well known. Professionalism is usually associated with them both in scientific and practical consciousness. The novelty consists not in the features themselves, but in their representation by systemic education, which gives them a new level of meaning. When presenting a system, researchers usually refer to the effect of the systemic connection of properties discovered by Bertollanffy: the discrepancy between

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the sum of the attributes of the system and the sum of the attributes of the elements that form the system. The effect described by Bertollanffy makes it possible to judge the systemic organization of properties, actions, phenomena as the most effective form of relations, which is important for the effectiveness of management, on the one hand, and the perfection of the organization, on the other (Figure 3).

Quality management, tuning in on its philosophical interpretation, makes the next step along the path of the systemic organization of the activity program, dealing with the location of the systemic signs of activity, so that the built system would be vitally stable, relevant and moderately safe. A systematic approach at this time is the highest quality way of knowing and organizing the

management of any complex activity. Those who doubt the greatest efficiency of the systematic approach, probably, no longer exist. There are those who inadequately perceive and evaluate the indisputable advantages of the systems approach, absolutizing its value to the detriment of other methods, in particular, an integrated approach. An integrated approach in theory and in practice has not squandered its value in competition with the systemic one. They are not very badly combined, complementing each other,

It is more convenient to analyze the quality of activity from the standpoint of a systematic approach. The theory of quality management, it seems to us, is more reasonable to build on the foundation of a comprehensive examination.

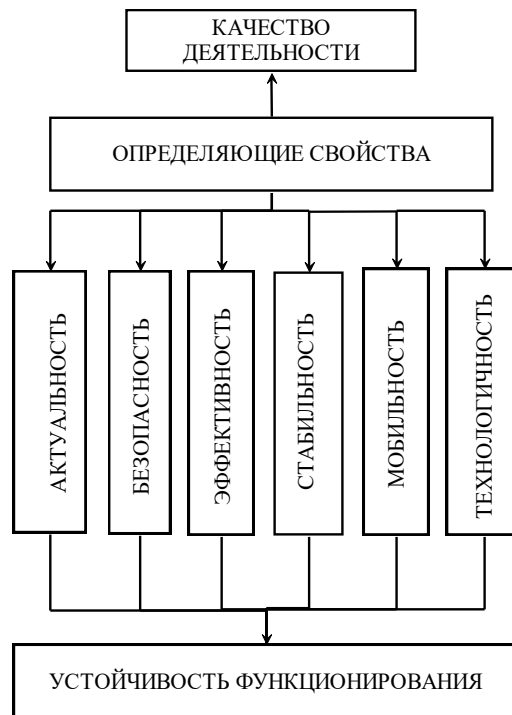


Figure 3 - A universal model of systemic relationships of the qualitative properties of professional activity

The situation that has formed in special - not philosophical - cognition (in practice, too) forces us to return to the difference that exists between complex and systemic methods, because substitutions of these methods have become too frequent. The systematic approach is fundamentally distinguished by the way of building knowledge, in which the relationships that form the elements, signs, are built depending on the basic relationship, called the system-forming factor. The system is formed similarly to the crystallization process by a sequential increment of its constituent parts. It is systematically expedient to build, for example, products from leather, fur, textiles, when a certain agreed state of the quality of the material is taken as a system-forming factor and the whole range proposed for production is "tied" to it. The quality and

place on the market in this case will be determined by the quality of the corresponding state of the material used in the manufacture of each specific series of products. An integrated approach is based on a certain qualitative basis and requires a comprehensive analysis of the quality of the phenomenon, and the aspects of research can be both equivalent and appear in a certain rating dependence. A good example of using an integrated approach is the construction of quality management. Schematically, it looks approximately as shown in Figure 4. and act in some rating dependence. A good example of an integrated approach is the construction of quality management. Schematically, it looks approximately as shown in Figure 4. and act in some rating dependence. A good example of an integrated approach is the construction

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of quality management. Schematically, it looks approximately as shown in Figure 4.

The above diagram demonstrates the relationship and role responsibility of the main elements of the preparation and implementation of the production quality management process. The nodal relations are quite clearly visible on it: the connection of the philosophical aspect with technical regulation, which makes it possible to concretize methodological and theoretical studies to the level of normative and technical tasks; technical regulation with a legal aspect, including in the latter the use of patent and licensed elements: philosophical and economic analysis, which gives the former a specific subject orientation in market conditions, and the latter a methodological perspective, the dependence of production quality on the technological state of production and scientific equipment Complete a philosophical analysis of quality at the level , A conceptual diagram of the relationship of philosophical concepts describing the quality, combined with economic categories, will help to use this knowledge in the practice of economic management of production quality. It was developed by us several years ago. Our return to her is forced. The reason is that we didn't have a choice. Philosophers continue to analyze quality abstracted from specific forms of economic practice in the light

of their professional interests. Economists represent quality narrowly empirically within the framework of mercantile interest. Philosophy warns that the objectification of quality has real meaning exclusively in the epistemological aspect of its consideration: when deciding the question of the nature of quality. Indeed, from the perspective of the relationship "object - subject", quality is primary - it is objective in nature. Even while constructing quality, we are deprived of absolute freedom in our creativity. Professional creativity is limited by the objective roots of the quality created by creativity. The quality of both things and theories is objective with the only difference that the quality of a thing is objective in material expression, while the quality of a scientific theory is objectified by the adequacy of the reflection in it of the objective quality of a thing, the relations of which are reproduced in scientific theory. The quality control system is shown in Figure 5. while the quality of a scientific theory is objectified by the adequacy of the reflection in it of the objective quality of things, the relations of which are reproduced in scientific theory. The quality control system is shown in Figure 5. while the quality of a scientific theory is objectified by the adequacy of the reflection in it of the objective quality of things, the relations of which are reproduced in scientific theory. The quality control system is shown in Figure 5.

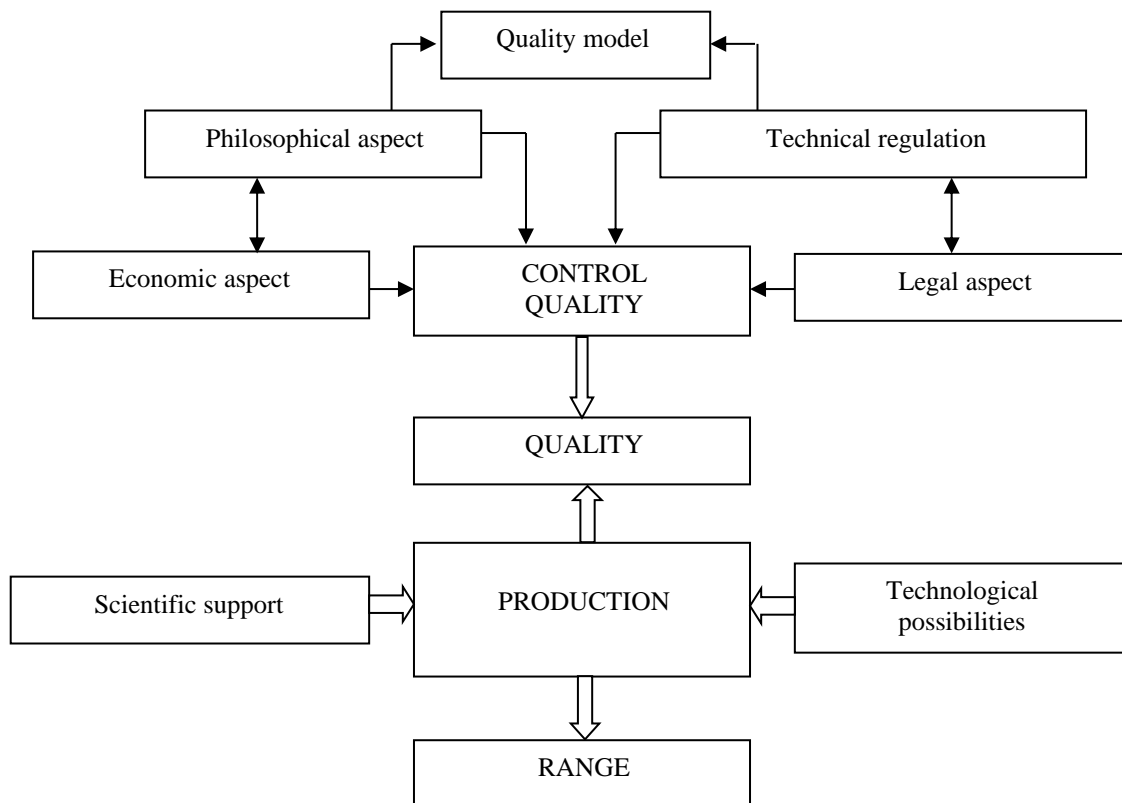


Figure 4 - Schematic diagram of integrated quality management production

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In the theory of quality management, it is important to correctly understand dialectics as a production organization; as an activity organized by production, finally, as an objective and subjective commodity produced. Prominent Russian scientist, public figure L.P. Krasavin, in order to emphasize the active nature of quality associated with the subjective creativity of a professional, coined the term "quality". The subjective side of the quality of a product is

revealed on the market through a complex relationship between creators, intermediaries and consumers. The originality of the national mentality intersects with them - in the United States and Western European countries, a pragmatic, utilitarian approach dominates the interpretation of quality on the market, in Russia the traditional side of the attitude to the quality of goods was contemplation,

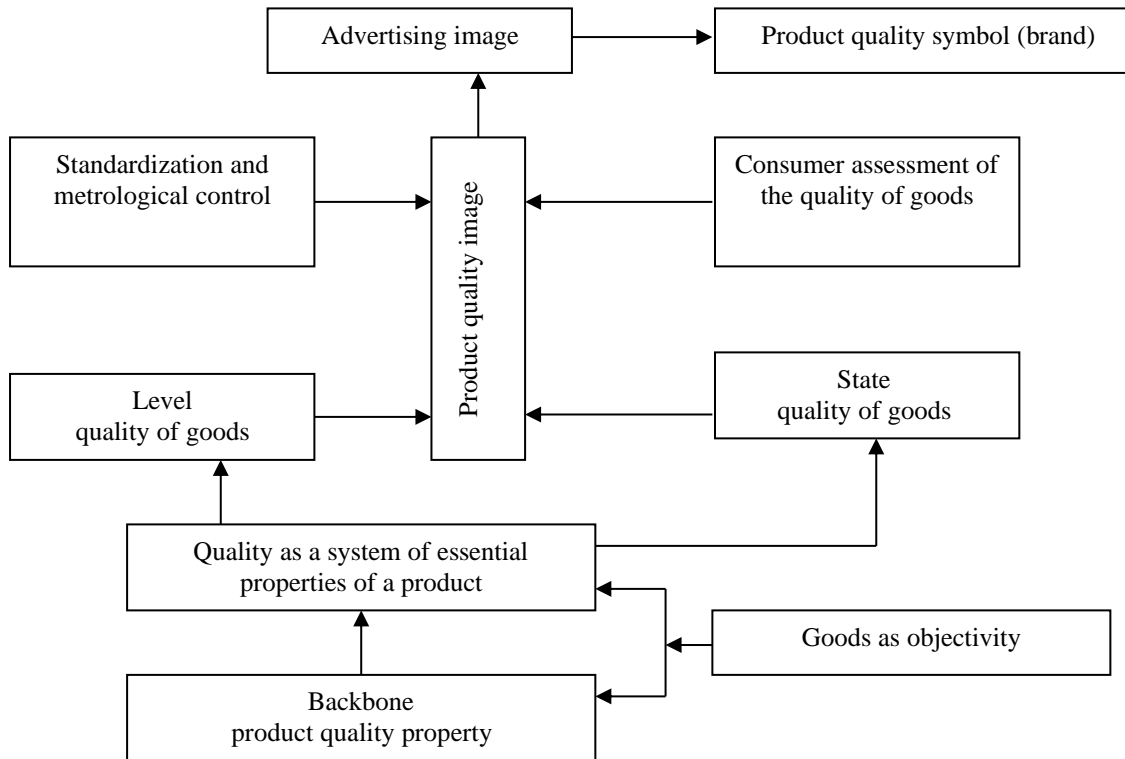


Figure 5- Quality control system

Creators and manufacturers of high-quality goods need to educate potential consumers of their products, based on the fact that in market conditions, product quality is a collective image. The image of the quality of a product, of branded production, of course, can be promoted with the help of advertising, but such one-sidedness is relaxed and dangerous. The sustainability of the reputation of a quality product is ensured by the entire mechanism of the market, including its extensive infrastructure. The enlightened consumer is actively involved in the process of "struggle" for quality. The market needs it like a pike in a pond to keep the crucian carp awake. The unwillingness to spend decent funds for educating the consumer, the desire to "shoe" him with false, superficial advertising will inevitably turn into a boomerang. Unfortunately, many Russian manufacturers are not afraid of the boomerang. They know, that they will not stay in this sector of production for a long time. Until the market puts everything in its place, reacts appropriately to pseudo

quality, they will be different and this "crap" for them will lose relevance. Although experts believe that the Russian market has swung towards product quality, objectively the situation on the market has not changed significantly. The small percentages on which encouraging conclusions are based are far from being qualitative characteristics.

The effective demand of the overwhelming majority of Russian citizens does not allow them to focus on the quality of goods. The shift towards interest in the quality of the goods must go through the obligatory stage of expanding the range of available goods for the mass buyer, and this stage has not been passed by the Russians, which, in other words, does not mean deactualization of the quality of the goods. Integrating what has been said, we present formula (1), which allows us to reveal the terms of the quality of a product, that is, a product produced by a person to meet certain needs. Under it can be summed up the phenomena of natural origin included in market relations: clean air, mineral springs, therapeutic mud,

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clay, warm sea, etc., as well as the one whose production is not designed for implementation, considering these cases as simplified option.

$$K_T = \underbrace{\sum ec + D}_{\text{objective compound}} + \underbrace{C_{II} + P}_{\text{subjective compound}} \tag{1}$$

where CT - product quality;
 ∑es - the sum of the natural properties of the material;
 D - activity, natural prerequisites are transformed into a commodity;
 Joint venture - the consciousness of the buyer;
 R - advertising support.

The graphical equivalent of formula (1) is shown in Figure 6.

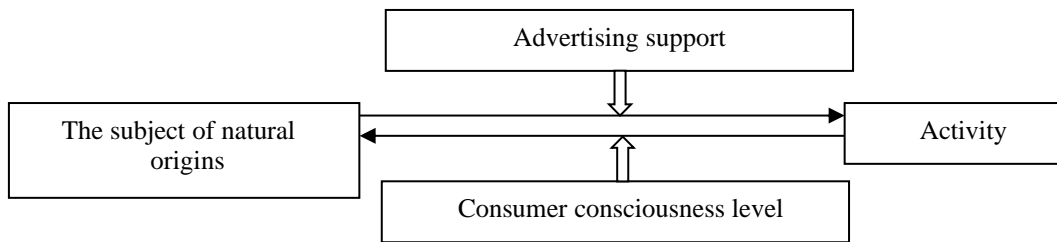


Figure 6 - Graphical equivalent of the above formula.

This formula also describes the quality of an intellectual product. Why it is necessary to expand the interpretation of the concept of "natural properties" by including in its content the intellectual and psychophysiological prerequisites for creative activity. An economic understanding of quality, on the basis of which all known concepts of production quality management were directly developed. It evolved according to dialectical laws, while economists themselves were far from always aware of the dialectic of the process. The development of economic awareness of quality was carried out "under the influence of contradictions between the internal and external goals of the manufacturer - ensuring the quality of products and, accordingly, strengthening the position of the manufacturer in the market (external goal), as well as increasing production efficiency, that is, an increase in the profits of companies (internal goal). At each stage of production, market and society, this contradiction had its own specifics and was resolved in different ways."

B.S. Aleshin et al. Distinguishes four phases in the formation of the modern philosophical and economic interpretation of quality: the "rejection phase", "the quality management phase", the "continuous quality improvement phase" and the "quality management program".

The history of economic quality management

dates back to the era of workshop production. In medieval cities, guild organizations were necessarily created, one of the most important functions of which was the certification of craftsmen. To become a recognized master, it was required to pass a serious quality check of their products. All products of the workshop craftsmen had the author's "stamp" and were unique in their own way. Quality management was simplified by production itself, by its manufacturing nature, which did not allow production to expand on a scale. Of course, no agreed quality standards existed at that time due to the difficulty of comparing strictly individual products of masters, and even more so trying to develop a certain model to follow. The uniqueness of the master's work excluded the imitation of anything in principle.

Only a long time later, standardization of product quality appeared at S. Colt's arms factories. Such an unusual decision was prompted by the fact that in conditions of mass production, the final product began to be assembled not from specially made and fitted parts for it, but from randomly selected parts from the corresponding batch. For the first time, production was equipped with special gauges, and trained inspectors checked the parts on them before assembly. The heyday of the idea of standardization fell on the era of the development of automobile production in the United States. G. Leland, the creator of the

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Cadillac company, came up with a pair: "through" and "non-through" caliber. G. Ford, having built an assembly line, went further. He replaced the input control of components with output control, thanks to which calibrated, high-quality parts were delivered to the main production - assembly, which significantly increased labor productivity and significantly improved the quality of the final product. For the first time, a technical control service was created at Ford plants, independent of production.

G. Ford's associate F. Taylor, who worked in conjunction with his patron, did a serious job of scientific understanding of innovations in production. As a result, he managed to formulate the principles of scientific management focused on the quality of production: a systematic approach; personnel management; obligatory division of responsibility between performers and organizers in achieving high-quality and effective work; the need for scientifically grounded labor rationing. UGH. Taylor, undisputed founder of scientific management. It was he who first discovered the "depletion" of the effectiveness of the main position in management practice: "initiative - reward" for the quality of work. "In contrast to this, Taylor argued, the development of the scientific organization of labor suggests the development of numerous rules, laws, formulas, which will replace the personal judgment of the individual worker and which can be usefully applied only after systematic accounting, measurements, etc. have been made. their actions. "

One cannot but agree with the resume of D.M. Gvishanina: what Taylorism has in the strict sense of this term boils down to the following:

1. Creation of a scientific foundation that replaces the old, traditional, practically established methods of work, scientific research of each of its individual elements.

2. Selection of workers based on scientific criteria, their training and education.

3. Cooperation between management and workers in the practical implementation of a scientifically developed work organization system.

4. Equal distribution of labor and responsibility between management and workers.

F. Taylor himself represented the guarantees of the quality of production and its efficiency: "Science instead of traditional skills; harmony instead of contradictions; collaboration instead of individual work; maximum performance instead of limiting performance; development of each individual worker to the maximum productivity available to him and maximum well-being. " Try, argued to argue F. Taylor. Not surprisingly, his view of the organization and management of machine production hypnotized his contemporaries. There is an opinion according to which the concept of F. Taylor, G. Ford, A. Foyle and M. Weber "In its basic features, has existed until now and has become a model for organizing production of

most modern enterprises.

The ideology of the "rejection phase" was simple and clear: at the output of production there should be only high-quality products, the meeting of the consumer and defective products should not be allowed. The main efforts of managers should be focused on quality control of components and assembly of finished products. The relative simplicity of the "rejection phase" concept was its reliability and the relativity of its reliability, led to the need for innovations in the future. The reliance in the ideology of production quality on the "rejection phase" has a practical effect. It would be surprising if the result were not positive. Increased attention to quality control is logically presupposed as a condition for the functioning of production. This requirement at the market level of comprehension accompanied the development of production activities throughout its existence.

The stability of the scientific solution to the problem of managing the quality of production of the economic (and, to a certain extent, social) effect, achieved by the pioneers, is surprising. And yet the latent side of the "rejection phase" had to appear. The displacement of management to the phase of high-quality preparation of production - in essence, towards the special status of control functions - signaled an increase in the corresponding costs of providing quality products. The quality of production and the quality of manufactured products are one and the same, but not the same. The development of production is undoubtedly due to the quality of manufactured goods. E. Deming rightly at the head of the list of the "seven deadly diseases" of modern production put "production planning, not focused on such goods and services,

During the transition from industrial to post-industrial society of the mass consumer, production is increasingly becoming a function of the market "The buyer is always right" - no matter how the well-known judgment is contrary to the seller, who is forced to adapt to the buyer's demand, he has no choice. There is also no choice for the manufacturer, for whom the "seller" is the "buyer". Product quality is a special "song" of production. Only a "concert" cannot be made up of one song. The quality of production is also characterized by its economic efficiency. The pursuit of product quality cannot be the end in itself of production, otherwise a good deed will turn into a fatal disease. The quality of the product is not able to compensate for the inefficiency of production as a whole. Improving the quality of the final product always requires the cost of providing it, which becomes a problem for developers of an efficient production strategy. The goals of increasing production efficiency and improving the quality of manufactured products were not combined in the concept of the "rejection phase", so it was replaced in the 1920s by the "quality management phase". Its

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developers have attempted to overcome the critical value of product quality costs evident in the "rejection phase". They were unable to resolve the contradiction that had arisen. We managed to soften it. Among the innovators of the "rejection phase" reconstruction was V. Shewhart, an employee of the technical control department of the American company "Western Electric", who proposed a method for constructing diagrams, better known as "W. Shewhart's map control". The goals of increasing production efficiency and improving the quality of manufactured products were not combined in the concept of the "rejection phase", so it was replaced in the 1920s by the "quality management phase". Its developers have attempted to overcome the critical value of product quality costs evident in the "rejection phase". They were unable to resolve the contradiction that had arisen. We managed to soften it. Among the innovators of the "rejection phase" reconstruction was V. Shewhart, an employee of the technical control department of the American company "Western Electric", who proposed a method for constructing diagrams, better known as "W. Shewhart's map control". The goals of increasing production efficiency and improving the quality of manufactured products were not combined in the concept of the "rejection phase", so it was replaced in the 1920s by the "quality management phase". Its developers have attempted to overcome the critical value of product quality costs evident in the "rejection phase". They were unable to resolve the contradiction that had arisen. We managed to soften it. Among the innovators of the "rejection phase" reconstruction was V. Shewhart, an employee of the technical control department of the American company "Western Electric", who proposed a method for constructing diagrams, better known as "W. Shewhart's map control". Its developers have attempted to overcome the critical value of product quality costs evident in the "rejection phase". They were unable to resolve the contradiction that had arisen. We managed to soften it. Among the innovators of the "rejection phase" reconstruction was V. Shewhart, an employee of the technical control department of the American company "Western Electric", who proposed a method for constructing diagrams, better known as "W. Shewhart's map control". Its developers have attempted to overcome the critical value of product quality costs evident in the "rejection phase". They were unable to resolve the contradiction that had arisen. We managed to soften it. Among the innovators of the "rejection phase" reconstruction was V. Shewhart, an employee of the technical control department of the American company "Western Electric", who proposed a method for constructing diagrams, better known as "W. Shewhart's map control". Its developers have attempted to overcome the critical value of product quality costs evident in the "rejection phase". They were unable to resolve the contradiction that had arisen. We managed to soften it. Among the innovators of the "rejection phase" reconstruction was V. Shewhart, an employee of the technical control department of the American company "Western Electric", who proposed a method for constructing diagrams, better known as "W. Shewhart's map control". Its developers have attempted to overcome the critical value of product quality costs evident in the "rejection phase". They were unable to resolve the contradiction that had arisen. We managed to soften it. Among the innovators of the "rejection phase" reconstruction was V. Shewhart, an employee of the technical control department of the American company "Western Electric", who proposed a method for constructing diagrams, better known as "W. Shewhart's map control".

As a first approximation, the American specialist's initiative looks quite radical. W. Schuhart rejects the key scheme of quality control of F. Taylor,

G. Ford. In the center of quality management, instead of the stage of preparation for production, at which it is necessary to reject low-quality products, the production process itself turns out to be. The system of V. Shukhart's methods was aimed at improving the technological process, which was intended to help increase the output of finished high-quality products.

In the concept of W. Shukhart, one senses from the outset a dialectical approach to the matter. His predecessors tried to "sort out production on the shelves" and load the "shelves" so as to get the desired result. As a result, they overloaded one of the flank "shelves" and the whole structure was skewed. The stage of preparation - control became the most costly, while the main stage - the technological one became dependent on it and was pushed to the periphery of the management process, undeservedly suffered. V. Shukhart called "things" by their proper names and arranged the stages according to the rank, highlighting the technological rank. He risked, simplifying the stage of preparation for production, reducing the quality of component parts. In exchange, he hoped to receive a gain in the main production link. Prioritizing investments in improving technology, the manufacturer strengthens the production process, makes it, in principle, more efficient due to the organization and technical equipment. As for marriage, it is more expedient to track it precisely when organizing relations in production itself, relying on scientific developments and the timely introduction of new products in the technical process, complete with measures for preparing the quality of the readiness of performers.

The main object of quality management of V. Shukhart's concept is the production process. The exit from it represents the flow of measurements of the quality parameters of individual products. V. Schuhart retires Ford's former goal of "getting into admission". G. Ford's idea worked out, awakened new thinking. She is replaced by V. Schuhart forms a tandem of goals: ensuring the sustainability of the process and reducing variations in stability. V. Schuhart considered the presence of variations a natural formation. He even deduced a criterion for the quality of the process - the stability of the process should be considered in a statistical sense. Variations in the parameters of products are nothing more than the implementation of a stable random process, the distribution function of which remains constant for a certain time. V. Schuhart believed that variations in the parameters of products are the result of the action of two groups of reasons: special and general. The special ones are rooted in the disruption of the production process. They are identified using a control chart and eliminated based on the readings of such a chart. Common causes are inherent in the process itself. There are many of them, but individually they are not essential. The danger lies in the sum of these causes. Common causes of variation in product

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parameters are of concern to managers, often of high level and skill. By their investigations and actions, they are able to limit the actions of common causes. At the same time, V. Schuhart made two very valuable conclusions, which should be guided by the production manager: They are identified using a control chart and eliminated based on the readings of such a chart. Common causes are inherent in the process itself. There are many of them, but individually they are not essential. The danger lies in the sum of these causes. Common causes of variation in product parameters are of concern to managers, often of high level and skill. By their investigations and actions, they are able to limit the actions of common causes. At the same time, V. Schuhart made two very valuable conclusions, which should be guided by the production manager: They are identified using a control chart and eliminated based on the readings of such a chart. Common causes are inherent in the process itself. There are many of them, but individually they are not essential. The danger lies in the sum of these causes. Common causes of variation in product parameters are of concern to managers, often of high level and skill. By their investigations and actions, they are able to limit the actions of common causes. At the same time, V. Schuhart made two very valuable conclusions, which should be guided by the production manager: By their investigations and actions, they are able to limit the actions of common causes. At the same time, V. Schuhart made two very valuable conclusions, which should be guided by the production manager: By their investigations and actions, they are able to limit the actions of common causes. At the same time, V.

Schuhart made two very valuable conclusions, which should be guided by the production manager:

First, the search for the guilty is necessary, however, having found the guilty, we are rarely able to influence the situation. It is necessary to look for the reasons for the discrepancy and eliminate them, involving all its participants in this process.

Second, process variations become the source of defects and inconsistencies. Reducing variations in V. Shuhart's quality management system is a complex goal. Associating the number of variations with the organization of the production process, W. Schuhart was clearly aware that in order to reduce variations, a new configuration of relations between people employed in production was needed. The essence of such a new configuration should be comradely cooperation. People by the very feature of production are rallying into teams.

W. Shewhart's system is a serious step forward in comparison with F. Taylor's system. F. Taylor focused on the mechanism of action, and W. Schuhart - on the mechanism of interaction between people in the entire spectrum of their relations: technical, economic, psychological. B.S. is absolutely right. Aleshin et al, arguing: "Such a concept as "tolerances" (one of the most important inventions of F. Taylor) undoubtedly remains in practice. "Tolerances" are the form, language of quality requirements, the result of quality planning. Another thing is changing: the opposition of the tasks of planning, execution, control and corrective actions. Such tasks are performed by teams. Comparison of the two above-mentioned systems of economic quality management can be presented as follows (Figure 7).

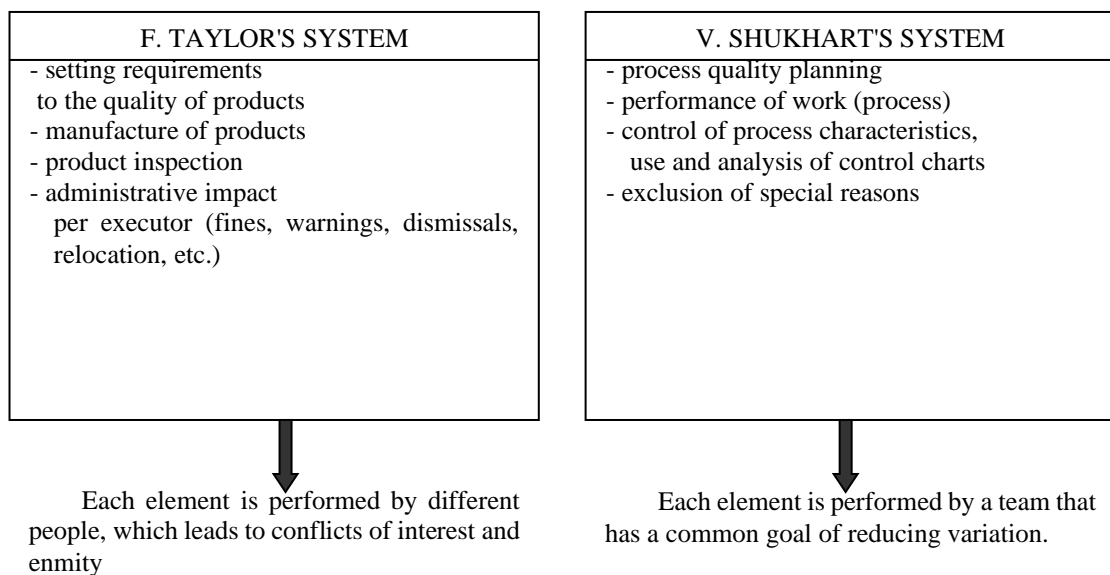


Figure 7- Comparison of Taylor and Shewhart systems

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At the same time, we note that the ideas and methods of V. Shukhart continue F. Taylor's aspiration to put quality management on a scientific basis, to use scientific methods in the organization of production. But even here W. Schuhart is "ahead" of F. Taylor. Science (and scientific methods) for F. Taylor, G. Ford boiled down to those concepts that allow one to quantitatively measure the mechanical actions of an individual performer, find the optimal route of movements and take it under effective control, having previously loaded it with tasks in full. The "classical" (Taylor's) theory of quality management was based on centrifugal forces and movements and production: division of labor, specialization of actions, individuality of the performer. This one-sidedness was understood by critics. V. Shewhart considered the mechanistic view of the development of production in general and quality management in particular as an obvious simplification. The production process not only results in the interaction of centrifugal and centripetal forces - individual and collective actions: it does not allow the reduction of what is happening in it to relations of a mechanical type.

A person participates in production as a subject of actions and relationships. Moreover, a person as a subject of labor is a decisive factor in production. The development of production should be based on the development of the subject and the relations of the subject and the relations of the subjects. Subjective potential in the form of individual knowledge, skills and aspirations is the main reserve of production efficiency, which science helps to activate and organize properly. In this understanding, science includes social and humanitarian components.

An organic defect of the "classical" theory of production quality management is the simplification of the presentation and the nature of human behavior in the organization. V. Shukhart understood this, explained it as best he could, and expected to be understandable and in demand by practical management. V. Shukhart's new ideas did not pass unnoticed by the business, but, apparently, the inertial forces of the business movement are so great that the ideas begin to act on it only over time and totally. The shortcut to profit out of habit was thought to be the simplest. Any complication comes with additional costs. Will they be justified? In addition, measuring the mechanics of an action is much easier than measuring the motivation for action.

It is not surprising that, almost half a century later, J. March and G. Simon noted: in the United States, two views on the position of people in an organization are widely spread: something given, and not as a variable in the system. " Another authoritative scientist M. Hare agrees with them: "There are implied assumptions about a person on which, as it seems to me, the classical theory of organization and management is based: he is lazy, short-sighted,

selfish, prone to mistakes, does not know how to judge sensibly and even can be a little dishonest. " M. Hare's text explains that the classical interpretation of the organization of management is still very popular in practical management.

Three main provisions of the "classical" theory of quality management have not been eliminated until now. They continue to impress, warming the souls of patrons, caressing their self-awareness, reinforcing self-confidence in their chosenness. Everything is so well laid out in its place: the worker is a performer, in fact a "rational animal" with a clearly expressed dominant to maximize economic conclusions; "Each individual responds to economic incentives as an isolated individual"; "People can be treated like machines in a standardized way." W. Schuhart had many supporters who left their own noticeable and appreciated mark: M. Follett, E. Mayo, C. Barnard, F. Rotlisberger, G. Simon. The thirties of the last century were marked by the "humanistic challenge" of the "preaching of administrative responsibility". In theory, events unfolded according to a logical scenario. Practice, on the other hand, was not so susceptible to changes in views, so the effectiveness of the new approach to economic quality management left room for reflection on the complexity of the relationship between theory and practice.

The construction of the economy itself hindered the totality of the introduction of progressive ideas. In order for a person to develop as a subject of production - to mobilize his ability to know, it is imperative that the economy turns its "face" to the person, acquires a "human face". In another way, it is impossible to inscribe the talents of the individual into the interior of the production, to make them interested colleagues. Dialectics warns: truth is concrete. The theory is effective in a concrete historical framework. Her life may be long or short, but it is always finite. The elements of the theory and the experience of its exploitation, expressed in historical lessons, continue to work, being embodied in other, relevant theories and practical actions.

Today's economic component of quality cannot fail to take into account the acquisitions of V. Shukhart, M. Follett, G. Simon and all those who argued the need to engage in the struggle for the quality of the subject's ability to think and get involved in business. In particular, in our opinion, the strength of V. Shukhart's "control charts" remains. They are simple and make it possible to monitor the quality of the process and the activities of the performers. And for the performers they are more understandable than the not always understandable displeasure of the manager, so we give a sample of them (Figure 8).

Having developed a model of a sustainable process, V. Schuhart significantly expanded the possibilities of scientific analysis of the quality of production, thanks to which those aspects and stages

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of production that remained in the shadows in the "classical" concept were revealed. He introduced the concept of "adjusting the process according to the data of its measurements" into the characteristic of the quality of production, which is quite fashionable to consider as a concretization of the concept of "feedback" in relation to quality management.

In the theory of random processes, a quantitative measure of the dependence of a sequence of random variables is the autocorrelation coefficient, which takes values from 0 to 1. When its values are close to 0 for neighboring observations (in practice, <0.2-0.3), the process is considered "white noise" ... If the values of the autocorrelation coefficient are close to 1, then various feedback control systems should be used for this process.

It is not difficult to see in V. Shukhart's concept

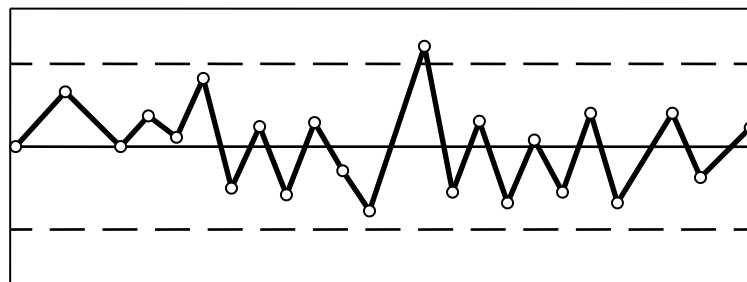
a desire to theoretically comprehend the specific state of mass production of that time. He tried to look at the conveyor belt through the eyes of science. And he managed to do a lot. At least, V. Shukhart's ideas today, although they have aged, are still viable. With a creative approach, they give good results.

A remarkable contribution to the practice of quality management was the creation of a quality audit service, the function of which was significantly different from the tasks faced by F. Taylor's technical control departments. She was involved not in sorting, but in checking the performance of the quality assurance system by monitoring small workings from batches of products. Thus, W. Schuhart found a way to reduce the cost of quality, which increased disproportionately when organizing production according to the recommendations of F. Taylor.

Upper control limit

Center line

Lower control limit



1

DATA
COLLECTION:

Collect data and map it

2

CONTROL:

Calculate trial control limits from the process data.
Identify the specific causes of variation and act on them

3

ANALYSIS AND
IMPROVEMENT:

Assess variations for specific reasons and take action to reduce them

Repeat these three phases to continuously improve the process.

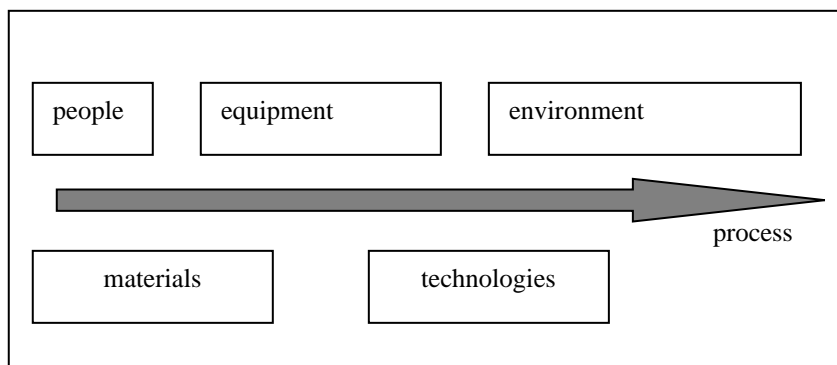


Figure 8 - V. Shewhart's control card

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However, the original thinking of V. Shukhart and his organizational talent did not resolve the old contradiction between the need to ensure production efficiency and the market demand for a quality product, and the production itself for quality raw materials and components. Each production process has a limit on the yield of quality products. This limit is not laid down in the process. It is an attribute of the system practiced at the enterprise, the product of all aggregate activities, the characteristics of labor organization and production management, including the quality of production. Approaching the limit leads to an increase in the main contradiction. Quality assurance requires more and more resources, which leads to a decrease in production efficiency. In the fifties, a new concept of quality management was formed. Her inspiration was E. Deming. The name of the next stage in the development of a philosophical and economic understanding of production quality management emphasizes its essence "the phase of continuous improvement of quality." The version of production quality assurance proposed by E. Deming turned out to be a long-liver, having existed "in authority" for almost half a century, until the mid-nineties. Such duration of the practical relevance of the concept of E. Deming is explained, as it seems to us, by the fact that it was skillfully "planted" on the basis prepared by W. Schuhart, and in its form was already a software product. E. Deming's management program is built on three axioms focused on industrial practice: Deming's version of production quality assurance turned out to be a long-liver, having existed "in authority" for almost half a century, until the mid-nineties. Such a duration of the practical relevance of E. Deming's concept is explained, as it seems to us, by the fact that it was skillfully "planted" on the basis prepared by W. Schuhart, and being already a software product in its form. E. Deming's management program is built on three axioms focused on industrial practice: Deming's version of production quality assurance turned out to be a long-liver, having existed "in authority" for almost half a century, until the mid-nineties. Such a duration of the practical relevance of E. Deming's concept is explained, as it seems to us, by the fact that it was skillfully "planted" on the basis prepared by W. Schuhart, and being already a software product in its form. E. Deming's management program is built on three axioms focused on industrial practice:

– the first practical axiom asserts that any activity must be defined as a technological process, from which the conclusion follows about the

possibility of its improvement;

– the second practical axiom was formed by E. Deming as follows: production has two forms of state - is in a stable or unstable state. In both cases, it is not enough to solve particular problems, fundamental changes are needed;

– E. Deming's third practical axiom is as follows: the top echelon of enterprise management in all cases is obliged to take responsibility for the result.

Deming's axioms achieve practical concreteness within the framework of a special management program that summarizes the theoretical and real experience of organizing production quality management. The program is represented by several levels of comprehension and practical implementation of ideas: "Fourteen points", "Seven fatal diseases", "Difficulties and false starts", "Chain reaction according to E. Deming", "The principle of continuous improvement (Deming cycle)". Of particular interest for the practice of improving quality management at enterprises are the penultimate and last sections of the program. The Deming Cycle is essentially a scheme proposed by W. Schuhart, which Deming also admitted. "Chain Reaction" is a product of E. Deming's own creativity. In the Deming-Shewhart cycle, four stages are looped: observation, development of measures to improve the situation, implementation and analysis. The task of the quality manager at the first stage is to collect information and identify weak links in production that require restructuring. At the second stage, the manager develops organizational measures aimed at changing the situation. Among them is the connection of all performers through motivation. The next stage is implementation and monitoring of the modernization process. The cycle ends with the stage of analyzing the results obtained from the implementation, building up experience to repeat the cycle. Probably, graphically, the Deming-Shewhart cycle best demonstrates the spiral of development, each turn of the spiral is a relatively closed cycle of actions. The next round "relies" on it, continuing the general process. If it were not for the tradition to call such discoveries by the names of the authors, then the Deming-Shewhart cycle would be called the "spiral cycle" of quality management.

We cannot but pay tribute to E. Deming and for his development of a "chain reaction" in quality management, shown in Figure 9.

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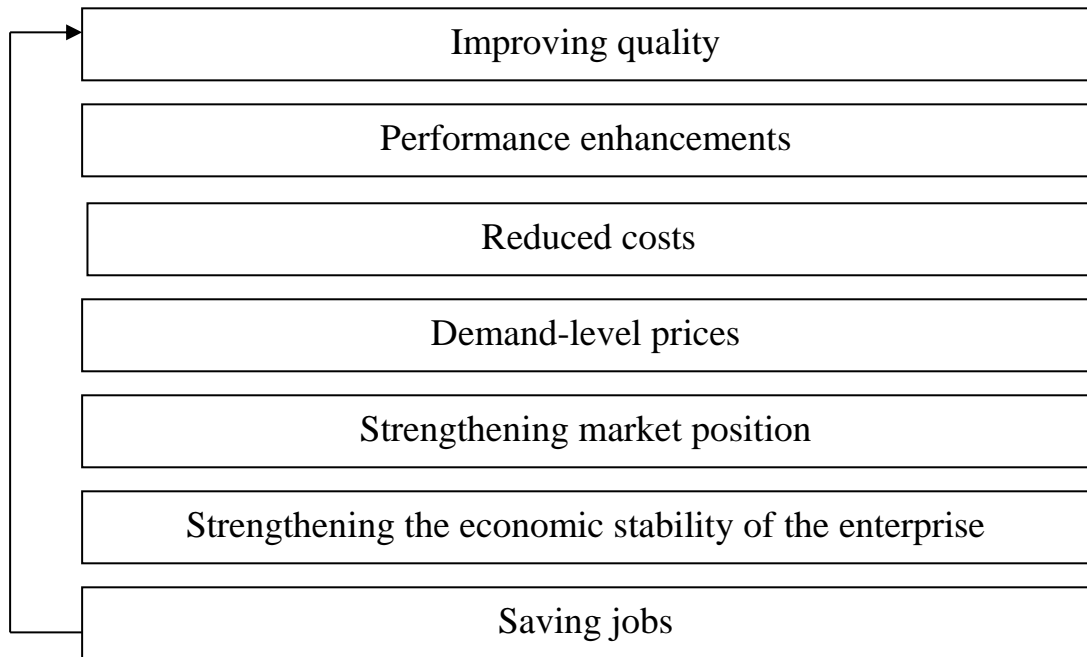


Figure 9 - "Chain Reaction" by E. Deming

In it, he linked economic and social actions, emphasizing the character of historical time.

The flourishing of E. Deming's creativity is associated with the revival of the Japanese economy. The government and industrialists of the country believed Deming's argumentation and he deservedly shared with them the glory of the "Japanese miracle". His contribution is also obvious in the achievement of Japanese specialists in the field of improving the quality of production, which are clearly highlighted in the study by B.S. Aleshina with co-authors:

1. Long-term, consistent and purposeful solution of quality problems on the basis of everything advanced that accumulates theory and creates practice in this area.

2. Consistent and persistent establishment of a system for studying consumer demands - (prevention of the main "fatal disease of the economy" according to E. Deming's classification - ed.), The formation of a respectful attitude towards the consumer and his requirements up to the cult of the consumer - (the consumer is always right - ed.) the consumer (in this case) is understood in a broad sense, as the next link in the technological chain.

3. Striving for universal participation in achieving quality, from senior managers to executors of specific work.

4. Understanding that even a well-oiled work organization system loses efficiency without constant checks and improvement.

5. Organization of work on quality assurance directly by foremen and foremen. Training, including special programs on national television, national conferences for foremen and foremen.

6. Particular attention is paid to the mobilization of the physical and intellectual potential of workers. Quality circles - a group analysis of the state of affairs at a specific site and the development of proposals for improving quality and increasing the efficiency of processes, production.

7. Extensive development of a permanent system of promoting the value of high quality products to ensure high rates of economic growth.

8. Government influence on a radical improvement in quality, primarily of export products, including mandatory state certification. An attempt to export uncertified products is considered contraband. State support for exports, assistance in promoting goods to the markets of other countries. "

We deliberately did not shorten the fragment describing the Japanese practice of creating a quality management system, because in it, like a mirror, one can see Russian miscalculations, namely Russian ones, since, having declared the Russian Federation the successor of the USSR, Russian politicians and economists close to them in 90 -ies systematically destroyed the socialist experience of building the quality of production instead of rationalizing it. In the 90s, quality was not needed by anyone who was supposed to be responsible for it. The economy was reoriented to raw materials, the quality of which is either determined by natural origin, or "compensated" by the realized quality.

Comparing the economic policy of Japan in the 50s and subsequent years with the economic policy of the Russian Federation in the 90s, announced by the revival of Russia, leads to a sad conclusion: loud statements rarely correspond to deeds. The interests of

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the Fatherland in the period of Yeltsin's democratic reforms worried politicians least of all, and did not care about quality at all, squandering previous national acquisitions. However, a political assessment of this stage of our history was given long ago, and we are interested in that part of the theory that directly works for the country's economy. In this context, it is appropriate to "walk" through a number of Japanese achievements, bearing in mind the opportunity to draw practical political and economic lessons from them. The total conclusion is beyond doubt: the efficiency of the economy is determined not by the quality of the goods produced, but by its assortment and quality. The transition from quantity to quality could be expected only by those who simplified dialectics to stupidity. It is not quantity that turns into a new quality - quality and only that.

The Japanese were taught by Americans, but the Japanese studied very seriously from the experience - both positive and negative - of the Soviet Union. We still haven't made up our minds in practice. The whole world is skeptical about our current declarations and certifications. Those who do not know how to appreciate and use their own achievements are not able to adequately master others. In Japan, the attitude towards quality became a national idea, and was embodied in the form of "struggle", in which everyone from the watchman to the general director was prestigious to participate. A system of mutual interests has developed, we are supported by finances, organizationally (building a career) and spiritually. We are continuing a protracted search for an idea that would unite the nation. The quality is not visible even next to what is offered. It does not appear in the candidates for the national idea. Only enthusiasts are seriously engaged in quality, making his way through the "bushes" of democracy, apathy, etc. Our "helmsmen" are not up to quality. Captains are still paving the way to the West and investing in non-native economies. Paradox: investments of foreigners in the Russian economy in the near future will exceed the contribution of compatriots.

Having lost the prospect of becoming an oligarch and feeling pressure from the fiscal services, oligarch candidates are looking for happiness in distant countries.

The Japanese concentrated their capital in their home country. Patriotism meant more to them than personal gain. This is the reason (not the only one) of the "Japanese miracle". The Allies in 1945 destroyed everything that was on the Japanese islands, except for national self-esteem. And it became a launching pad for the country's revival. We emphasize that the Japanese were actively looking for specific mechanisms for transforming quality into the total interest of the nation in the practice of organizing a quality service in the USSR: "cards decide everything!", "Quality is the main focus!" Are slogans from Soviet history. And behind them was tough party

and state control. The Japanese submitted to the struggle for quality all national and state (municipal) reserves, forcing even television to work for quality. Essentially - the media weren't limited to quality advertising. They organized schools, courses, universities for quality training of key players: foremen and foremen. National finances were used to educate and train quality work and its organization. What do we have? Quality is at the mercy of everyone who makes a profit on training and education. What they did was cram the problem into the ad product.

We do not have a national quality assurance program. We also do not have a state priority project (along with well-known national projects). One gets the impression that, having officially announced the support of international quality systems, the top political management of the Russian Federation considered their mission fulfilled, deciding that the rest will be regulated by the market. E. Deming's ideas were continued in the concept of another American who worked for the "Japanese miracle", J. Juran. J. Juran shifted the emphasis in the development of a quality management system from statistical methods to the direction of making the customer's value absolute, dividing the emerging problems into random and chronic ones. Accidentally (suddenly) emerging quality problems of one-time (single) origin. They are not inherent in production. Random problems should be dealt with routinely as part of ongoing management. To this end, it is necessary to fairly clearly distribute the responsibility of managers for taking control measures and the timely introduction of corrective measures.

The problem of a chronic nature is another matter. They are present in the process and are, as it were, "planned" from the very beginning. J. Juran understood chronic problems as a result of assumptions made in the previous phase of the process. Until a certain moment, such tolerances do not significantly affect the quality, then, under the influence of the conditions of sale and their own movement, they acquire significant importance and become inadmissible. It was the chronic problems that J. Juran "blamed" for stagnation or loss of quality indicators. The management of the company should not be complacent about the good performance compared to the past. It is necessary to look not backward, but forward, otherwise it is easy to get into a crisis situation. Calm management is a "deadly disease" for production.

It is pointless to try to solve chronic problems with orders. We need to start by identifying their main causes and sources. Knowledge of the reasons, J. Juran, is usually found behind the capabilities of line managers. This requires a collegial form of analysis of what happened - "brainstorming". The second half of the twentieth century was marked by an intensive invasion of quality management by mathematical methods of process research. A new scientific

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discipline arose - the theory of management decisions, which was the development of operations research. In decision theory, the focus was on decision making. It was interpreted by a process available for quantitative measurement. The work was carried out in two directions. The supporters of the first of them tried to find mathematical models suitable for use in real production situations (Fogal, Luce). The developers of the second turned to statistics, game theory, widely using methods of statistical testing ("Monte Carlo method"). The one-sidedness of both approaches gave rise to the third school, its founders wanted to "tie" mathematical research to the tasks of quantifying economic phenomena as much as possible. As a result, a so-called "econometric" approach to the analysis and management of, first of all, economic processes, efficiency and quality of production appeared.

According to the above concept, the economic and mathematical model should have four components:

1. It should include economic phenomena of qualitative content, expressed in certain units of measurement. Such quantities are parameters of the model;

2. It should include certain quantitative relationships and dependencies between parameters. These can be balance ratios or more complex dependencies linking the results of processes with their causes;

3. The model must determine the area of permissible changes in the parameters of the model in time, space and volume - "restrictions imposed on quantitative dependencies";

4. It should be a system of interrelated parameters, dependencies and constraints with certain inputs and outputs.

The control of such a system, that is, obtaining certain results at the output, should be carried out by influencing only the input. Without interfering with its internal structure. The most famous economic models belong to L. Klein and A. Goldberg. V. Leontiev, who received the Nobel Prize for his work, also contributed to the mathematical modeling of economic activity. The effectiveness of economic and mathematical modeling of relatively large-scale economic phenomena is not high. Without denying the importance of such modeling, the prominent economist T. Havello wrote: "It is quite possible that as more and more advanced methods develop, we will come closer and closer to the realization of one unpleasant fact: economic "laws" are difficult to accurately measure, and therefore we live in fact in the world of large, but largely superficial or spurious correlations. You can, of course, refer, as always, to bad statistics. However, I think we can find an explanation in another, namely, in the imperfection of economic theories."

Quality management is somewhat of an exception. In contrast to the low efficiency of using

the mathematical apparatus in the study of the economy as a whole or individual industries, the application of mathematics to quality management turned out to be quite an acceptable action. Deming and Juran actively used its opportunities.

Analysis of the economic strategy in the field of quality management shows that the effectiveness of quality management depends on the agreed macro and microeconomic views. Real Japanese experience teaches this as well. The solution of the quality problem itself is assumed to be a step-by-step process from identifying problems, through diagnosing their condition and searching for solutions to implementing the decisions made, maintaining and developing the results achieved. At the first stage, J. Juran called "a problem in which a solution is programmed", problems are singled out, priorities are identified, a rating order is established; the performers and their powers are determined. At the diagnostic stage, the optimal symptoms of the condition are determined; hypotheses are built, tested; the search for the reasons is in progress. The stage of finding solutions involves finding optimal solutions; development of the necessary measures; implementation of the adopted decisions.

The final stage consists of checking the effectiveness of the implementation results, comparing the dynamics of the achieved results with the planned ones. The high efficiency of the concepts of Deming and J. Juran provoked F. Crosby to combine their systems with the experience of quality management accumulated in the USA. F. Crosby's Zero Defects program did not become something fundamentally new in the theory of quality management, but it contained interesting ideas. For example, a statement about the prevention of defects; the need to develop a "quality policy", the requirement to connect to the quality of the activities of non-production units.

F. Crosby believed that at each technological site there should be an engineer responsible for quality. His professional duties include providing a daily list of problems causing significant and frequent defects; systematizing them according to the degree of importance for quality; determination of corrective actions; attraction of personnel employed at the site. The "Continuous Quality Improvement Phase" helped to overcome the tension between quality costs and production efficiency. The consumer began to receive a quality product at an affordable price, and the implementation of the idea of a "consumer society" came closer. From the point of view of the manufacturer, this is an ideal situation. But the assessment of the situation was one-sided, only from the point of view of the consumer; the quality parameters were not set by the one who consumes the product, for whom the product is made.

Quality was standardized in the manufacturer's norms and, naturally, reflected primarily his own

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interests. The consumer was left with a choice: to purchase a product of a certain quality or refuse. This again led to the "overheating" of production, to an increase in its cost, as there were frequent miscalculations in determining the needs of consumers. A high-quality (according to the manufacturer's assessment) product, available at a price, did not find the necessary demand from consumers. The new form of contradictions had to be eliminated taking into account the interests of the consumer. The "Continuous Quality Improvement Phase" has given way to the "Quality Planning Phase". The work of G. Taguchi is considered the beginning of the next phase. It was he who introduced the concept of "loss function" into the theory of quality management and developed a modern methodology for planning industrial experiments. The aim of the research by G. Taguchi has been bridging the tension between quality assurance and production efficiency in its existing forms. Four new ideas form the foundation of the quality planning concept:

1. Conclusion that product defects are mainly due to poor quality actions at the design stage.
2. Conclusion on the need to focus the main products not on full-scale testing of models of goods, but on mathematical modeling of both goods and the process of their production. Due to this, they hoped to find and eliminate the reasons for the increase in marriage in a timely manner. It was proposed to take design and technological processes under control until the stage of real production.
3. The idea that the concept of "zero defects" should be replaced with the idea of "satisfied customer".
4. High quality of goods to emphasize reasonable prices and constant price reductions, thus ensuring a

stable market demand for quality goods.

A new round in the development of quality management, overcame the marked form of the fundamental contradiction between quality and production efficiency, but not the contradiction itself. At present, its next "ecological" form is taking shape. The inclusion of ecological cleanliness in the quality characteristic of a product requires significant costs.

The peculiarity of the modern stage of quality management lies in the fact that all known formulas (phases) are practiced at enterprises. B.S. Alyoshin and co-authors, reflecting this unusual way of existence of history and modernity, built the "Tower of Quality". It is of not only theoretical but also practical interest (Figure 10). In the seventies, A. Feigenbaum summarized the accumulated intellectual and practical experience in the development of the problem of economic quality management and laid the foundation for what is known today as TQC-Total Quality Control (total quality management).

Essentially, TQC is not a quality management system, but a system of sufficient conditions for a quality process. Development logically went to the development of TQC. All previous steps on the path to quality management of quality, despite the progress of the movement, were of the same type. They "tied" the solution of the problem of economic quality management to some fragment (s) of the process. Thus, the improvement of quality management "bypassed" the essence of the production process - its unity and the systemic nature of its unity as well-built connections and dependencies.

E. Deming, K. Isikawa, F. Crosby and A. Feygenbaum came closest to understanding the quality system as a reflection of the production system.

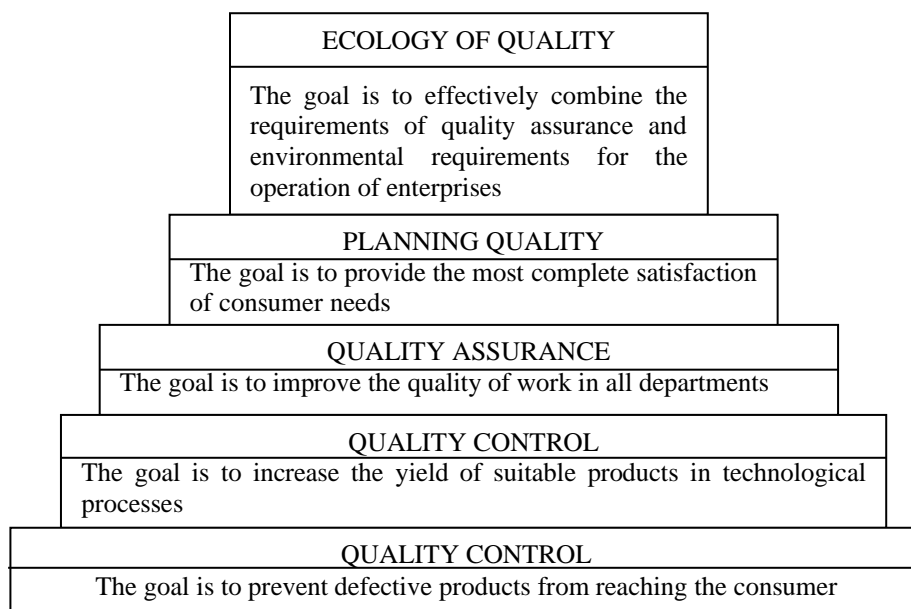


Figure 10 - "Tower of quality" according to B.S. Alyoshin

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The main conditions of TQC are the following:

- ensuring the totality of participation in solving the quality problem of all employees;
- awareness of total responsibility for the quality of all participants in the process, understanding that not a single specialized department (quality control department, OUK, etc.) is able to cope with the task;
- compliance of the quality of activity with all stages of the "life cycle" of the product: from the development of the product concept and marketing research to the method of disposal of the product and its packaging. In the context of increasing environmental requirements in a number of countries, for example, Japan, product certification implies the mandatory development of a method for recycling even packaging;
- the totality of improving the knowledge and skills of performers and managers; regularity of specially organized forms of professional development; planning related costs;
- achieving a total understanding that the quality of work is achieved not so much by technology and technology as by focusing on the quality of employee motivation, and motivation should not be one-sided, closed only on financial returns. Then it will be stable;
- the totality of the structuring of activity, its differentiation into operations, interrelated technological processes, transitions, and each link in the process should be understandable for its intended purpose to all performers. Studies of eliminating the causes of defects have shown that up to 90% of the problems submitted for consideration are resolved, while 75% of them are capable of solving by the controllers themselves (direct executors and organizers);
- totality as understood by the consumer; the consumer is not someone who is outside the brackets of the production process, the consumer is every next link of the production itself - "internal consumer", therefore, an awareness of responsibility to the consumer is required throughout the production cycle;
- total cultivation of the special status of the consumer and his interest in the quality of the product;
- continuous quality engineering;
- understanding the importance of defect prevention, its economic advantages over the elimination of defects;
- team spirit of all participants in the process; corporate culture;
- leading position in activities that ensure quality, top management, understanding quality as the goal of entrepreneurship.

Quality management in the XXI century is based on the reciprocity of total quality management (TQM) and quality system standards (ISO 8402; ISO 9000; ISO 9001). The main difference between the quality

system standards is that in many countries - including Russia - they have acquired state registration and are administratively fixed. Therefore, clarity in the definition and content of the concept of "standard" is important. In the USSR and the Russian Federation, it is customary to assign a "quality mark", officially certifying that the product meets certain agreed parameters. "Standard" in Russia and most other countries is a set of rigidly fixed, often administratively, characteristics of products, services, and activities. Analogs of our "quality marks" are found in European countries, in particular in Sweden (TCO 92; TCO 95; MPR on monitors).

From the perspective of consumer interests, the "standardized" concept of "standard" is not as relevant as for the manufacturer. The latter, taking advantage of the starting advantage, taking into account, first of all, his own interests. Hence the conventionality, the relativity of any standard and "standard sign" until the standard balances the mutual interests of both parties: the manufacturer of the product and its consumer. The most common quality system standard ISO 9000 is built on the DeI special system of organization. The basis of this idea is the thesis about the documentation of all processes related to production: purchase of raw materials, components; preparation of production by its organization; delivery of products to the consumer; providing warranty support; scientific and technical equipment of production; personnel management.

As a result, the concept of "quality" acquires new facets, expands; the traditional understanding of quality is being modified. The content of the concept of "quality" is loaded with knowledge corresponding to the changed situation. A classic example of the dialectic of the development of a concept. The most obvious illustration of what has been said is the rather frequent reports that reputable firms such as Ford, Toyota and others are recalling their products due to the discovery of a technical inconsistency in just one node. It would seem that it was easier and cheaper to instruct service centers to replace low-quality components. In fact, firms are doing the right thing in terms of market competition and their brand position. In a complex system, a structural and technological defect of one unit inevitably affects the entire system, so it is not easy to replace a unit or block.

ISO 9000 and its modifications ISO 9000-2000 do not guarantee product quality. They are "determined" to provide such production conditions that make it possible to count on the "most probable" quality reserve of productive activity.

Another "weakness" of these systems is that they explain "what to do", but they practically do not explain "how to do it". ISO 9000 ideologues argue: "What should be done?" - the question is "standard" and is subject to standardization. The question is: "How should I do it?" - due to the specific conditions of production in each individual case. Therefore, "how to do it" must be decided by manufacturers on the

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spot. With the introduction of ISO 9000-2000, the concept of "QS" (quality system) has become obsolete, giving way to QMS defined by the International Organization for Standardization:

- constant monitoring of consumer interests;
- systemic leadership of the head, which ensures the unity of the goals and directions of the firm's activities, as well as a stable internal environment based on cooperation and all-round motivation;
- maximum involvement of the abilities, knowledge and skills of employees in the production process;
- using a process approach in managing activities and resources;
- the need for a systematic approach to management;
- striving for continuous improvement of the firm's activities;
- making decisions only taking into account a comprehensive analysis of the entire possible amount of "information for thought";
- development of mutually beneficial relationships with suppliers.

From now on, international quality standards require not goods to be submitted to the "quality mark", but the method of their production. "Quality" is the compliance of the organization and management of the enterprise's activities with the quality management system (QMS). The modern history of the economic aspect of quality management reveals a very instructive relationship between specific scientific, special and philosophical approaches to solving socially urgent problems of production activity. Philosophical teachings about quality, no doubt, have always had an effect on economic knowledge. K. Marx began with G. Gogol, went through the "course" of economic analysis and founded the historical-materialist view of social development. Then he returned to the analysis of economics and left an impressive mark on social philosophy and economic theory. Something similar can be said about the creative ways of O. Proudhon, J.St. Mill.

History repeats itself on a new round. Thinking economists go from practice to philosophy in order to use philosophical knowledge and method to develop a deeper understanding of the subject of their own research. All modern concepts of quality management are due to philosophy no less than economic theory. The philosophical analysis of the social process led to the conclusion about the growing role of the "subjective factor" in it. The "human factor" in philosophical humanism has always been presented as the decisive condition of history. This was the opinion of the leading thinkers of Antiquity, the Renaissance, the Enlightenment. But the "human factor" and the "subjective factor", contrary to the widespread

practice of bringing them closer to the point of identification, are far from the same thing.

"Human factor" is a concept that characterizes the entire complex of human capabilities. The concept of "human factor" expresses the dualism of our nature - a combination of biological and social in it; organization and personality; physics, physiology, psychology, intelligence, behavior and activity. How advertising likes to present: "all in one" or "in a package". The human factor "is, in fact, the person himself in the context of his opportunities for realizing his own potential. The clever, educated Oblomov lying on the couch, as well as the active Stolz, are examples of contrasts along with the title "Human Factor". In the concept of "human factor" is not an expression of preference not biological, not social. I think that's right. To define "a person in action" - it does not matter in which one: turning over with a newspaper in his hands Oblomov,

It was proposed to call an abstract person in a state of abstract activity "human factor", thus including an abstract person in an abstract historical process. In theory, the main thing is to find a conceptual equivalent to describe the object of research. The object of research in our case is social progress. The task is to understand the factors that set history in motion and give the movement of history progressiveness. The logic of reasoning is not complicated. The history of mankind is either objectification outside of human substance (objective idea, World reason, World Will, God, etc.), or the product of the activities of people themselves: their reason, feelings, will and practical activity.

The problem can be simplified, because in both versions, human activity is envisaged, with the only difference that in the first case, history is made by him according to a program developed outside of human life, and in the second, a person paves the way for history, guided by his own ideas and motives. In history, whatever one may say, one cannot deviate from human participation. History is "tied" to a person just as he is "tied" to history. It is then that it becomes relevant to "disassemble" the "human factor" into its components, its quality, to divide what exists in a person himself exclusively in unity. Divide conventionally, depending on the contribution to historical progress of two "halves" of a person: biological and social.

The concept of "subjective factor" appears. And its components are the "individual" form of the subjective factor, and the "collective form of the subjective factor." Politics emphasizing the historical nature of human activity, the collective essence of this activity. With regard to production and production quality, the "subjective factor" is concretized to the level of "performer", "manager" and "team". For those who object to us, believing that we have narrowed the understanding of a person in the structure of the economic form of his activity to the

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size of a “subjective factor”, ignoring his biological status, which is also represented in production and affecting its quality, we will answer: no, modern production, that is science-intensive, high-tech production, based on the power of knowledge, not muscles; responsibility and organization depends, namely,

The logic of the development of the process of economic quality management convincingly testifies that total quality management, to which, in general, everything was going, is possible with the total mobilization of human subjective forces: knowledge, beliefs, desires, will of interests, upbringing, education, concentrated in the professional form of culture ... The classics of quality management economics, from Taylor to Crosby to Freygenbaum, were deeply concerned with mobilizing the motivation of production participants, rightly believing that it is the lifeblood of quality work. But they were realists and realistic experience told them: do not absolutize the moral factor, no matter how significant it is. Quality is created by free will, but it is controlled administratively and legislatively.

Is it possible to imagine a situation where quality will be achieved only through the self-organization of the manufacturer, thanks to the team spirit, social dedication of each and every one individually, and a high level of professional qualifications? The answer is at the discretion of the reader, but a hint suggests itself: it is possible. So what happens? Is legal regulation an unnecessary or unnecessary matter? No. Trial fantasy does not take into account the purpose of production, which, by the way, is very well spelled out in TQC. The goal of production is not the quality of the product (this is a crafty goal, self-deception). The purpose of production is not the quality of production (this is also a craftiness). The goal of production is customer satisfaction with the quality! Production even in a subsistence economy, in which the producer and the consumer are one and the same person, does not exist on its own and for itself.

Therefore, the understanding of quality is not in the competence of the manufacturer alone. It is formed in the mutual interest of the manufacturer and the consumer in the properties of the product (and its price), intended for sale. The manufacturer has one small advantage in dealing with the consumer. It is not easy to use it, but the chance is quite real. A manufacturer of technically complex products that require knowledge and skills in operation may try to form a consumer's taste for it through educational and advertising activities. The mechanism, of course, is costly, but it is unlikely to win sharp competition in the market in any other way. The interests of the producer and the consumer do not always coincide, not immediately and not for a long time, because these are the interests of the subjects of production, separated by the barricade of the market. The market is the ring for them. The manufacturer is interested in

profit. The consumer is in the preservation of finances. One strives to fill the cash register, the other does not empty the wallet. In doing so, both look at quality as a reward for winning a battle. Legal regulation helps to give the fight a civilized character. Prevent deception.

The state cannot be aloof from the events taking place in the market, for the economy gives rise to politics; the movement of the market determines the movement of large social groups. And if today the class struggle has lost its relevance, then tomorrow the place of the proletariat and peasants will be taken by dissatisfied consumers - some with quality, some with a price - consumers, whose number will be no less, and the desire to win is even steeper. The state cannot deal with the fate of each citizen individually, and it is hardly advisable, but the fate of social groups should be in the zone of special attention of any state and always, if, of course, the state itself does not want to be in the zone of special attention of that main part of society, which in calm times is called the electorate, and in turbulent times - the people.

Quality is a policy, firstly, and only, and secondly, a product of the intricacies of relationships in the market. Supporters of absolute market liberalization are “scientists” provocateurs of tension in public relations and “disrupters” of national security. All modern social experience confirms that participation in quality management is a function of the state and even interstate cooperation. An example is the Bologna Agreement. It was prepared by the social movement, but, to give it a real power as a controller of the quality of education, legalized by the collective political will. “The attention of the state should be focused on:

- intensification of the import substitution process by improving the quality of domestic products;

- building up the production potential of enterprises, creating advanced technologies and new types of high-quality products, so as to expand the share of Russian products in the domestic and foreign markets as the domestic market develops and integrates into the world economy. ”

The actualization of the legal resources of the state along the entire vertical of political power in the field of quality management will undoubtedly contribute to the achievement of the following most important results:

- ensuring a high-quality standard of living of the population, without which it is definitely impossible to get out of the demographic collage. In order to be among the leaders in a non-absolute indication - a reserve fund, a loan paid ahead of time, a loan, writing off a part even to those who are not able to pay it in the foreseeable future - it is necessary to improve the quality of products and services in the social sphere;

- strengthening security, territorial integrity,

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preventing military aggression;

- strengthening of the position in Russia in international relations, greater pliability in economic partnership;

- creating an image of Russia as a really great, and not just a huge country;

- developing environmentally sound policies and economic practices.

Integrating the analysis of real to the consequences of the intensification of state behavior in the quality market, we note the most important thing. This is the only effective way to ensure national security, that is, what is in the ranking of the state's tasks above everything else, since the achievement of everything else is possible only under conditions of national sovereignty. A systematic approach to solving the quality problem in the USSR began to take shape in the 50s. The Saratov system of defect-free manufacturing of products, the NORM, KANARSPI, KS UKP systems were quite a successful experience of the socialist embodiment of the need to manage the quality of production. In the mid-60s, the Lvov initiative was widely adopted in the domestic industry, which was recognized as a "system of defect-free labor" - STB. The highest achievement of the "fight for quality".

This system turned out to be the first, where the organizational and technical basis of product quality management was the enterprise standards. Unfortunately, the effectiveness of the application of best practices was low. By the beginning of the 90s, only 10% of technical products for civilian purposes corresponded to the best foreign counterparts. The state possesses large and multilevel possibilities of influencing the quality of production and the quality of products. The legal mechanism in the hands of the state is capable of influencing both directly and indirectly improving the quality of the production process. With the help of tax policy, you can stimulate high-quality production and block low-quality ones. Protecting the consumer from a low-quality product, the state actively prevents unscrupulous manufacturers from entering the market.

The basis of legal support for the quality of production in our state is the Constitution of the Russian Federation. The 1993 Constitution was developed at the height of the redistribution of property, and therefore its creators did everything to make the provision (articles) of the Supreme Law extremely abstract, declarative. But in its abstract format, the Constitution of the Russian Federation did not ignore the right of Russian citizens to quality goods. Relevant articles have been formulated to match the time of its birth, nevertheless, in this form, some certainty is present. Article 41 of the Constitution of the Russian Federation says: "Everyone has the right to health protection." Of course, it would be better to add - "and a healthy

lifestyle." And even better: "the right to health protection and a healthy lifestyle of Russian citizens is guaranteed by the state." However, in this case, the "legitimate" interests of the future oligarchs would suffer, so we settled on what we have. This article does not seem to have a direct relationship to legal quality management. There is an indirect one, mediated by the protection of the country's population's right to health.

Goods for immediate and long-term consumption must be of the required quality level so as not to harm health. Otherwise, there are serious legal and financial penalties for the manufacturer and the seller. In order to ensure the protection of the right to health protection, all possible tolerances (MPCs), sanitary and hygienic requirements, state standards for products, services, industry standards were developed in the company with which their own "standards" of enterprises (TU) turned out to be. Management structures were created or modernized ones inherited from the socialist time. On the basis of the rights of citizens to quality goods proclaimed by the Constitution, a modern structure of legal support for quality management has been built. The state does not interfere in the technology of production quality management.

The market is dedicated to environmental activities within a normalized relationship. Prices, priorities, demand, supply, advertising - all these are the mechanisms of the market as long as they remain within the economic relations that are moral for the same markets.

The scheme of legal quality management assurance is shown in Figure 11.

Many violations of economic relations inevitably lead to the intervention of law enforcement agencies designed to protect the affected entity within the framework of the current legislation. Any act of "sale and purchase" is a subordinate act and the legislator or the executor must be included in the process. Otherwise, the rights of the owner will suffer and the violator of market relations under the jurisdiction will not receive punishment. The situation with the legal support of quality management is complex. The market has divided the producer and the consumer, squeezing an intermediary (and more than one) between them. In this connection, it is necessary to differentiate the concepts: "production quality"; "The quality of the goods produced"; and "the quality of the goods purchased" by the consumer. An intermediary - a "speculator" - is quite capable of violating technical conditions when delivering goods to the place of sale, in storing goods, preparing them for sale. As a result, the quality parameters of the product will change. The legal protection of the consumer spelled out all possible situations and measures of responsibility of the seller.

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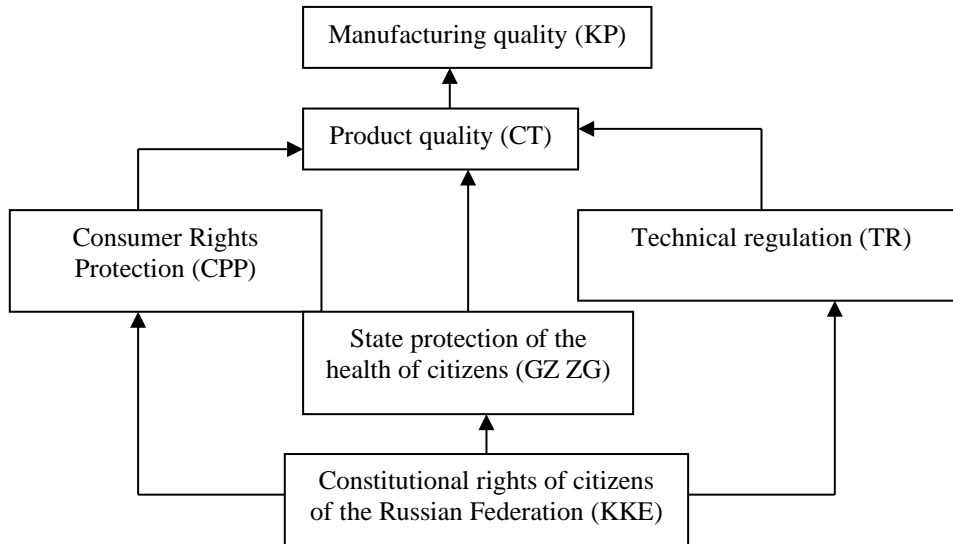


Figure 11 - Scheme of legal assurance of quality management

Consumer legislation has been around for a long time in European countries and North America and has been refined over the centuries. In its current state, it is quite effective, which forces violators to reckon with it in order to avoid serious financial sanctions and deadly anti-advertising. The Russian experience in the legal regulation of relations in this area is much poorer; moreover, it took shape in the specific conditions of the socialist market. The Law of the Russian Federation "On Protection of Consumer Rights" was adopted in 1992 and was repeatedly amended (09.01.96; 17.12.99; 30.12.01) in order to make it more adequate to the developing economic situation. The subject, whose interests are protected by this law, is a consumer who has purchased a product, more precisely, a product that does not meet the entire set of consumer and technical characteristics. And the object of legal relations is the quality of the goods. Thus, the Law has a double effect: it protects the buyer from low-quality products and protects the market from low-quality goods. The manufacturer (and the intermediary) received a legal signal about the need to present quality products to the market.

In the peripheral zone of interest of the legislators was the intensification of the activities of a number of federal bodies: for standardization, metrology and certification, sanitary and epidemiological supervision, environmental protection and natural resources. The categorical apparatus of the Law on the Protection of Consumer Rights was made up of the concepts: "consumer", "manufacturer", "seller", "standard", "lack of goods", "significant shortage of goods", "safety of goods". As you can see, in the categorical apparatus of the law there is no mention of "quality", despite the fact that it protects the consumer from low-quality goods, and doublet tries to protect the market from marriage and counterfeit products. The developers of the ideology

of the Law acted logically. They divided the content of the concept of "quality of goods" into components: "manufacturer of goods", "performer", "seller", "standard", "consumer",

The relationship between the consumer and the producer is regulated in the Law with the help of the concept of "standard", which is subject to change in a certain system of units. "Standards" are meant to exist at two levels: universal, controlled by the state, and sectoral, private, set by the manufacturers themselves, and have passed the necessary certification procedures. According to the logic of building subordinate relations, the requirements of a higher level of organization are guidelines for the rest of the "pyramid". In the event of a contradiction, the advantage belongs to the one who (or what) is higher, i.e. more important. It was superfluous to introduce into the conceptual apparatus of the Law the concept of "quality (goods)". It has been successfully replaced by the more verifiable concept of "standard". At the same time, it reminds all market participants, from the manufacturer and the contractor to the consumer, who is the boss in the house. From a philosophical and economic point of view, the main flaw of the law is the locality of purpose. The state is still hypnotized by the effectiveness of the economic liberalism of the American model, overly delicate in expressing its economic interests, forgetting that these are not the interests of state administration, but of the people of Russia. The state, especially the executive branch as a top manager, must fulfill the interests of the people, instead of fearing to be misunderstood by foreign partners. Foreign partners, when necessary, tighten the nuts tightly. overly delicate in expressing their economic interests, forgetting that these are not the interests of state administration, but of the people of Russia. The state, especially the executive branch as a top manager, must fulfill the interests of the people,

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instead of fearing being misunderstood by foreign partners. Foreign partners, when necessary, tighten the nuts tightly. overly delicate in expressing their economic interests, forgetting that these are not the interests of state administration, but of the people of Russia. The state, especially the executive branch as a top manager, must fulfill the interests of the people, instead of fearing to be misunderstood by foreign partners. Foreign partners, when necessary, tighten the nuts tightly.

The state should introduce an economic policy in relation to quality on a larger scale, then its effect will be more significant and the private court practice that has considered private claims against the seller about poor-quality goods will be sharply reduced. A private lawsuit for a manufacturer of low-quality products and a wholesaler who fills it up in the market is all too early, like a mosquito squeak. It is necessary to protect the market from low-quality goods, as G. Ford, senior, did in his time when he entrusted the "phase from rejection" to special production, taking quality control out of the brackets of the main production process. As a result, substandard components were no longer supplied to the assembly line. The state does not need to strive to be a subject of the market, it needs to be above the market, stimulating producers of quality goods, and preventing low-quality goods from entering the market. In the first case, economic incentives are required, in the second, administrative and criminal sanctions. Now the state is approaching the problems of quality management, as if, in a half-turn, modestly distancing itself. It is necessary to turn to face him and tackle quality, "rolling up your sleeves." Only then will the time come when the ministers will not be able to postpone the execution of the President's instructions for years.

The modern economy is more and more often called "smart", "prudent", innovative. This is a clearer definition in comparison with the "postindustrial" one, but to what extent it adequately characterizes its state is not an idle question. The character manifests itself in development, determines the planning of economic policy. The latest crisis clearly shows:

firstly, that planning is not only compatible with the market mode of management, it is necessary to prevent and mitigate negative phenomena generated by undivided economic freedom bordering on arbitrariness;

secondly, the ongoing crisis has revealed the limitations of the desire to present the built economy as "smart". There should be a smart economy, it is impossible to build it with just one mind.

The central figure of commodity production is not finance, as many politicians believe, including domestic ones. The money is just for the entire equivalent of the goods and will remain with them forever. The commodity creates labor, which, in turn, is also a commodity. Consequently, the movement of production is rooted in the aggregate expression of

human activity, first of all, the work of consciousness, its potential. Mind is not equivalent to consciousness. The mind is a tool for building consciousness. "Smart consciousness - knowing, cunning, mobile - but no more. The mind needs, like any force, a vector that directs the application of the mind, the construction of consciousness. The role of the vector is played by values: professional, national, universal. Consciousness fuses them in a unique personal expression. A "smart" economy is nothing if you do not put it on a value foundation. The main thing in the personality - the decisive factor of social reproduction - is her morality. Not everyone is allowed to be top managers, general designers, VIPs in politics. Someone has to work with their brains, someone with their hands. The trouble comes when the "brains" and "hands" become sticky and something that is not supposed to stick to them. Immorality undermines the foundations of professional culture and professional activity is transformed from a creative force into its opposite - it destroys what has been created. The smart economy can turn out to be a terrible reality if it continues to be immoral. We are not utopians or idealists; we understand well concretely the historical position of morality. Now we are not talking about equality and brotherhood - only about conscience and responsibility. The economy can and should be, first of all.

As long as free competition is subject to calculations - how to more effectively deceive a partner, consumer, competitors and the state; is based on corruption and lobbying, manipulation of the work of mass media sources, which are natural for the development of the market. Cyclical, economic crises will grow unnatural - systemic. The system-forming factor of the latter is the dishonesty and irresponsibility of the largest manufacturers. The classics of the genre: "greed has ruined the prayer" - looks like a childish prank against the background of what American and multinational companies have created.

And what should have been done by the state, called upon to be the social guarantor of a democratic society and the defender of the rights of citizens. It was forced to "add fuel to the fire" - to subsidize a business that went bankrupt on scams in order to avoid economic and social collapse. True, European leaders at the same time sent "firefighters" to the "sources of fire" - they made the further work of the fined firms dependent on moral principles - they introduced moral and financial regulations designed to sober up businessmen who had lost every measure. It is symptomatic: it was France and Germany - the initiators of strict moral and financial monitoring - that were the first to feel the signs of economic recovery. England and the United States, more affected by corruption and less prone to moral dictatorship,

Russia, as one would expect, missed a real opportunity to use the crisis to revitalize the national

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industry. First, they poured finance into the banks, then very vague actions were taken in order to awaken the conscience and responsibility of the bankers. As if forgetting that a banker with no liquidity and with liquidity - "two big differences." There was a chance, at the expense of national funds, to force banks to be a financial lever for raising industrial production, science, and technical creativity in the country. It was necessary not to pray for the banks - to educate the banks with the ruble (currency). He naively hopes that having fed up, the "wolves" instead of continuing to rob, will serve their savior. As a result, the currency earned on the world market has flowed back and it is necessary to "start all over again".

How many more opportunities do we have to step on the same rake standing in the same corner? There is, of course, a margin of safety. The situation can be changed by uniting the mind - we have nothing to do with it, and conscience - the deficit of which has grown surprisingly quickly over the years of democratic reforms. The reason for this alignment should be sought in economic chaos and disproportionate in the growth of the administrative apparatus. It turns out strange: the more officials, the less effective the management - the dynamics are obvious, but the course is the same. Our lag behind someone is a natural thing. In the historical "peleton" subjects have their place, change places - this is how it should be. It is a tragedy for national development to lag behind the times, to lose a place in the "peleton". In the G8 we were eighth, but in the G8.

Time will tell what we will be like in the G20 in 5-10 years. Economically, we are no longer eighth there, while maintaining a place in the top ten. But the time is still in the memory of most Russians, when the USSR was the second line of the world economic rating. History does not return, but this is not a reason to forget history. Whatever the continuation of history is, it is its continuation. Rejecting national traditions, you can find yourself in a "broken trough". It is not only the Second World War that is falsified; the country's scientific, technical and industrial achievements are distorted and hushed up. Faith in national forces, the people's ability to regain lost positions is undermined. The current situation is extremely difficult, nevertheless, it is not more critical than those turning points in Russian history that seemed without initial ones: the devastation after the civil war.

Then there was no finance available as start-up capital today. Therefore, the solution to the problem of creating a modern economy rests technically on the need to develop an effective system of management and control over the implementation of the adopted programs. The program replaced the plan. And what has replaced the responsibility for the failure of the plan? The lack of an effective control system is the most serious flaw in current economic policies, which allow laymen to lead with a sense of being in action.

The revival of the economy in the existing conditions of professional irresponsibility is impossible. Only professionalism and the associated responsibility for the cause you serve are capable of making the necessary transition to a new economic quality, building an economical and mobile economy on the basis of the all-round development of science, stimulating technical progress and improving professional training of personnel. The economy of the XXI century can be called in different ways. The essence of the definition is not in the name - in the content of the concept. The diversification of names shows the versatility of the modern economy. It is methodologically significant to single out the leading link or links in this set. Undoubtedly, the quality of the economy is among the clear contenders.

The presence of quality in the characteristics of any phenomenon is invariant, since quality combines its most essential features. At the same time, it should be clearly understood that the quality itself changes - it is historically specific. Correspondingly, the idea of quality is changing - must change - too. From the first attempts of A. Fayol, G. Ford and F. Taylor to put the quality of goods under control, which were crowned with serious success, it became theoretically clear: the future of the quality of the economy belongs to activity. The determining factor for the economy will be not so much the quality of the goods accepted for production, as the quality of the organization and management of its high-quality production. For handicrafts and small-scale production, the quality of the sample and the marketable product is combined with the technology, as a rule, unchanged. Here, the quality depends entirely on the skill of the technique and compliance with the declared technology in a limited-scale production. Often the foreman, technologist, manager and marketer are the same person.

G. Ford for the first time put the production of a complex product on stream, dividing operations and responsibility, and, thereby, determined the turn in the fate of quality. Henceforth, the fate of quality was determined by "introduced" factors - the organization of production, management and control. It was not the skill of the direct manufacturer that came to the fore, but the ability to masterfully organize production, including its expanded reproduction, that is, supply, marketing, personnel management. The diversification of activities revealed its special position in achieving a high-quality result. The Second World War has confirmed: personnel and management are everything!

Since the 1950s, the search for quality management programs through the quality of activities has been sharply intensified. If at the beginning of the twentieth century the technical regulation of the product and its components acquired relevance, then half a century later there was a qualitative clarification of the meaning of technical

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regulation. At the epicenter of interests was the technical regulation of the organization and management of production, which is confirmed by the modern international system of quality regulation. The shift in the center of gravity in the understanding of economic policy aimed at ensuring high-quality sustainability of production towards technical regulation of activities did not pass without costs and dead-end routes, which, in principle, was expected. Activity united by production, not homogeneous and not autonomous.

The concept of "key activities" was first substantiated by A. Feigenbaum. In 1951 his book "Total Quality Control" was published. ISO 9000 and ISO 14000 were developed already on the basis of A. Feigenbaum's proposals. Both sets of International Standards were intended to help move from "enterprise-conglomerates" to "enterprise-systems".

In the process of development of industrial production under the influence of scientific and technological progress, a contradiction in the rate of change in the material side and the evolution of managerial thought concerning the organization and harmonization of the production process was rapidly formed and aggravated. The latter clearly did not keep up with the former, slowing down progress, increasing

risks and costs. The rigidity of central planning only worsened the situation, which explains the stagnation of the 1970s and the recession in the 1980s. The organizational scheme of the "enterprise - conglomerate" did not fit well into the transition to a systematic organization of the enterprise's work, primarily because it did not activate initiative and creativity. It is no coincidence that the "shock workers", "innovators", "rationalizers" in the USSR were mainly involved in the party, Komsomol, and trade union organizations.

In a simplified way, the organizational chart of such an enterprise is as follows (Figure 12).

The scheme of building management, in which the main production links are functionally autonomous and connected indirectly through a common manager, anti-system. When someone designs something, others have to produce it, still others - to control the quality, fourth - to sell products on the market, separates the participants in production, and block the creative alliance. All are nominal accomplices in the process and have little idea of who is doing what and why. There is no team spirit, everyone acts on their own, at their own peril and risk, often at the expense of colleagues, substituting the latter.

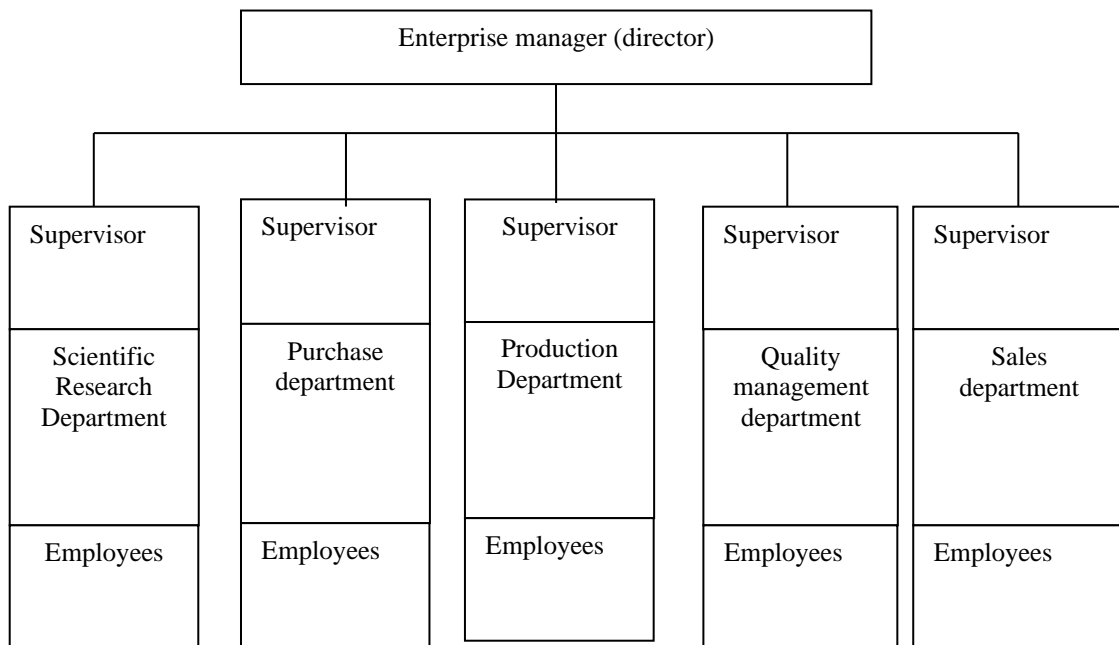


Figure 12. Organizational chart of the enterprise

The fundamental misconception of managers of "enterprises - conglomerates" is the belief that their "brains" should be enough to timely recognize and correct force majeure in the production process. The management scheme "enterprise - conglomerate" essentially coincides, despite the presence of a specialized department with a quality management scheme, because the functions of the quality

management department are reduced mainly to control activities.

In 1924, W. Schuhart proposed to optimize this control method using the principles of the theory of statistical variation, providing managers with a statistical control chart. Improvement in work was not slow to affect the results, but the matter was limited to partial changes for the better. Instead of using it as a

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basis for management, the "philosophy of the theory of variation" has been relegated to the level of statistical tools used by technicians with limited and very specialized areas of responsibility. Lack of knowledge of the theory of the behavior of industrial processes made management unable to correctly recognize situations that required or did not require action. For this reason, management became extremely vulnerable to three types of costly management mistakes:

1. the attitude to all variations of the output parameters of the process as a surprise in the behavior and suppression, in fact, of their imaginary causes, which leads to the destabilization of the process.

2. treating all variations in the output parameters of the process as natural manifestations and inaction regarding the detection and suppression of the causes that cause them, which leads to unstable behavior.

3. the assumption that process optimization and stabilization are technical solutions for which a specific department is fully responsible, and not a solution to an organizational problem that requires the full support of management and the efforts of several departments. "

Restructuring enterprise management on the principles of systemic organization provides:

- interconnection of key activities so that various departments of the enterprises are coordinatedly involved in coordinating actions, for example, to revise product quality taking into account specific customer comments, improve staff training, promotions, etc.;

- embedding other processes in key activities;
- integration of new key activities into existing ones.

A dangerous delusion in the construction of enterprise-system management is to interpret optimality as the sum of optimal restructuring of individual departments. In this case, the enterprise is still viewed as a conglomerate, the sum of the departments that play a special role. There is no view of activity as the integration of all its constituents. In European literature, the new term "quality revolution" is increasingly encountered. We will not argue how adequately it captures the dynamics of a policy aimed at improving the quality of production, we will only note that the involvement in the study of the concept of "revolution" looks quite natural. Comparison of the modern practice of quality management with the not so distant past unambiguously testifies to a radical restructuring of the understanding of quality technology.

- 1960s - the stage of self-determination of the quality of goods as the main factor of market competition;

- 1970s - a shift from the dominant quality of goods to the quality of technology and production;

- 1980s - the transition from the quality of technology and production to the quality of the "quality system" or "quality management system";

- 1990s - the ascent to the quality of education, the quality of intellectual resources.

The path of the Europeans to the Bologna Accords was long and difficult. He exposed many shortcomings and contradictions. In particular:

- the obvious gap between the requirements of the society of industrialized countries to the education system and its capabilities;

- the discrepancy between the fact that the most significant discoveries and inventions are made mainly at the intersection of sciences; and education is built on the separation of subjects;

- insufficient mobility of the organization of retraining of specialists, its growing lag behind the acceleration of changes in technology, technology, science;

- inertia in the development of new educational paradigms, programs, methods, lag in the development of new educational literature.

Nevertheless, there is also serious progress - three levels of education quality assurance have been identified and balanced: university, national and European. The intellectualization of the economy, intensified by the transformation of science into a direct force of production, which experts of the 21st century are so fond of talking about, have exposed the fundamental contradiction of human consciousness between intelligence and decency. Philosophers sought its solution in the rationality of homo sapiens, emphasizing the basic function of morality. Hypertrophying the activity of consciousness due to the actualization of intellectual abilities, focusing attention on the creative powers of the mind, reducing consciousness to thinking, supporters of the "smart" economy do not see or do not want to see the dependence of the mind on morality, oppose the role of the mind to the value of moral values. We have already noted that the power of knowledge only on a private scale can have its own vector. In systemic terms, the power of knowledge is directed by the indigenous rather than private and corporate interests of the manufacturer. Morality was formed as the first derivative of labor as a way of first survival, then development of humanity. The main criterion of social progress cannot be production efficiency - this is a purely economic parameter, Man is a social being and the degree of his achievements is determined by how much the movement strengthens human relations - first of all, moral ones. then the development of mankind. The main criterion of social progress cannot be the efficiency of production - it is a purely economic parameter, Man is a social being and the degree of his achievements is determined by how much the movement strengthens human relations - first of all, moral ones. then the development of

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mankind. The main criterion of social progress cannot be the efficiency of production - it is a purely economic parameter, Man is a social being and the degree of his achievements is determined by how much the movement strengthens human relations - first of all, moral ones.

Economic activity should be wise when the mind is not locked on itself, but on aggregate, personal, national and universal interests. It's time to understand that it is dangerous to hold humanity for the masses of idiots, to build corporate happiness with someone else's "hands". There is no historical perspective without a rigid moral regulation that subordinates all other aspects of human life to itself. The mind is valid only as an operator clearing the path to the economy of the future. If someone likes to call the economy of the future smart, intelligent, then it is imperative to clarify that smart is a smart economy that is not built on cunning and private benefits. The current crisis has shown the vulnerability of democratic relations. The freedom to act that led to the crisis was opened by the amorphousness of democratic postulates, not clever worship of the regulating abilities of the market, not adequate perception of the actions of the "powerful of this world." Innovation in economic construction expresses the new thinking of humanity, fusing intelligence and morality.

The Chinese and Hindus will be the first to build an innovative economy, that is, those peoples who have retained the authority of moral values in their consciousness, subordinating scientific and technological achievements to national interests. It is they who will "shod" both Europeans and Americans in the near future, and, apparently, us too! One hundred and fifty years ago, K. Marx wrote "In our time, everything is, as it were, fraught with its opposite ... Even the pure light of science cannot, apparently, shine otherwise than against the gloomy background of ignorance. All our discoveries and all our progress, as it were, lead to the fact that material forces are endowed with intellectual life, and human life, devoid of its intellectual side, is reduced to the level of simple material strength. This antagonism between modern industry and science on the one hand, modern poverty and decline on the other,

It is possible not to share the communist conclusion of Karl Marx, but one thing is indisputable - he is absolutely right in assessing the socio - economic situation in the middle of the 19th century. A restructuring in the public consciousness was and remains. Money should not rise above morality, otherwise the main citadel - homo sapiens - his wisdom will collapse. The validity of K. Marx's conclusions is confirmed by the socio - economic situation that has developed today in the footwear industry in Russia. The liberalization of foreign economic relations played with it a fatal role in the catastrophe that happened. On the one hand, a stream of better quality imported footwear poured in, as a

result of which Russian footwear was no longer in demand. On the other hand, using the right to set any prices, our manufacturers raised them to the level of prices for imported shoes, and the quality level remained the same. And for this reason, they also stopped buying it. The government would have intervened and protected its producers (with cheap loans and customs barriers), but this was not done. The government did not help due to the prevailing erroneous beliefs: our light industry is uncompetitive, there is nothing to invest in it, it will be cheaper if you start it from abroad. In general, the government considered the light industry, like agriculture, a "black hole" unworthy of investment. And we both there and here received what we have today. there is nothing to invest in it, it will be cheaper if you start it from abroad. In general, the government considered the light industry, like agriculture, a "black hole" unworthy of investment. And we both there and here received what we have today. there is nothing to invest in it, it will be cheaper if you start it from abroad. In general, the government considered the light industry, like agriculture, a "black hole" unworthy of investment. And we both there and here received what we have today.

When we hear about the protection of Russian manufacturers of whatever: machine tools and cars, clothing and footwear, food and furniture, etc., we always think about the shadow side of the coin from such innovations: about the quality of goods. Shoe companies are losing the incentive to improve and update the range of shoes, because in the absence of imports, people will take whatever they want. But the manufacturers have something else in mind: the decriminalization of the supply of clothing and footwear to the domestic market. The demand of the Russian light industry market with a total volume of 1250 billion rubles is formed from the following sources: 230 billion rubles (18.4%) - Russian legal manufacturers; 240 billion rubles (19.2%) - legal imports; 780 billion rubles (62.4%) - illegally imported and manufactured counterfeit goods, the same picture is characteristic of the shoe market. Today, the population of Russia purchases about 600 million pairs of shoes, the domestic industry produced only 52 million pairs (in 2019 - 46 million pairs), 100 million pairs come from official imports. Where does the other four hundred-odd million come from? They are imported in all kinds of illegal ways, i.e. a huge volume of footwear remains, which would be in demand if financial support and legal protection were provided to domestic footwear enterprises.

Why is there no end to those wishing to invest in the oil and gas industry? Why do car companies go to Russia? Why are there even those willing to invest in agriculture? And why, against the backdrop of all these "why do not investors go to light industry?"

The general answer is that there is no favorable environment for investors. Therefore, everything is fine

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with the creation of joint ventures in the oil and gas and automotive industries, where ministers and governors are watching over every enterprise. And here officials will be afraid to take bribes and will not drive investors through the bureaucratic circle. And the opening of light industry enterprises, due to their small volumes, is entirely in the hands of officials. In addition, foreign firms argue: why create enterprises in Russia, take risks when our goods are bought there so well? And Russian and Western firms go to China, where the ideal conditions for investment; where is a cheap, disciplined labor force; where a stable favorable tax system.

Today the equipment at the light industry enterprises is extremely worn out. The renewal rate in recent years is 0.4 - 0.6% per year. While at foreign enterprises, technological equipment is replaced every 5-7 years, that is, 15-20% annually. How to compete here? Funds are needed for the technical re-equipment of the industry. They can either be earned by the enterprises themselves, or provided in the form of loans, or come from foreign investors. The capabilities of the enterprises themselves are very limited. Loans from commercial banks are expensive, the government does not encourage concessional lending, and foreign investors, as already mentioned, do not enter the industry. Hence the answer to the question, what to do? First, to provide loans to enterprises at minimal interest, or even better - without them (as farms producing food, according to the national project "Development of the agro-industrial complex"). Secondly, to create such conditions for foreign companies to enter light industry, bringing in addition to capital their design, production culture, management, etc.

It should be noted that the last twenty years have shown that light industry enterprises are very responsive to the slightest attention to them from the authorities, to changes in the situation. Take, for example, 1991, the famous default. Import rose in price, and light industry immediately revived. There has been growth for three years. Another example. The exceptionally low export duties on raw hides have led to their massive export abroad. Leather and shoe factories were left without raw materials. In 2000, a protective duty was introduced on the export of leather up to 500 euros per tonne (instead of 100 euros). As a result, the production of finished leather in Russia increased from 1.1 to 2.2 billion square meters. decimeters. Instead of importing leather goods, their export began. In favor of the fact that the resuscitation of light industry is not only necessary, but also possible, say today examples of the successful work of individual enterprises of the industry in the Southern Federal District and the North Caucasus Federal District, both old and newly created. Let's name at least a few. Novorossiysk shoe factory "Breeze - Bosphorus" (general director - IK Zykov), the enterprise was created in a "bare place", gives 16 million pairs of shoes a year and all shoes are in

demand. Rostov enterprise "Gloria Jeans" (General Director - V.V. Melnikov). It is also new, starting with a cooperative. Provides products worth 7 billion rubles (up to 10% of all Russian sewing goods and up to 30% - for children). His products are sold abroad, including the United States.

So it is worthwhile for Rodina to lend a shoulder and its light industry, which has found itself in such a difficult situation, will start working, especially in the Southern Federal District and the North Caucasus Federal District. We are not talking about the fact that the revival of the light industry would help to solve the social problems of small towns in the Southern Federal District and the North Caucasus Federal District, in which today more than 16 million people live. Here, with the beginning of the reform, small factories (branches of associations) were the first to perish. But they appear to be small on a national scale, or on an industry scale. While for a regional center of 10-20 thousand population, some shoe factory for 300 workers is a large, city-forming enterprise that not only gave money to the budget and produced goods necessary for the population, but also provided a decent life for many residents of a small town or the regional center, and here the factories are not became. It is unlikely that car factories or branches of defense factories will ever be built in these cities, and light industry ones - please. But so far, as far as we know, the problem in such a formulation is not even discussed by the government.

One cannot hear concern about another problem, even the threat that has arisen in connection with the collapse of the light industry. Previously, every enterprise in light industry, like any other, had mobilization reserves (equipment, tools, materials, etc.), which made it possible, within 24 hours, in the event of the outbreak of war, to switch to the production of the necessary army products. Instead of model shoes, to sew tarpaulin boots, instead of suits and coats - gymnastics and overcoats, instead of "fashionable sheepskin coats" - soldier's short fur coats, etc. God forbid this will happen - we will have nothing to dress and shoe our army, especially since the Southern Federal District and the North Caucasus Federal District is a border district with a difficult situation. This is another reason why it is necessary to take seriously the light industry. A very acute situation has developed with the provision of children's shoes. The majority of Russian shoe factories continue to reduce the production of children's shoes due to the high price increase caused by the abolition of subsidies from the federal budgets, and some shoe factories, including those in the South and North Caucasian districts, have completely stopped production. In 2020, compared to 2019, the production of children's shoes decreased by 21%.

On the consumer market of the Southern Federal District and the North Caucasus Federal District, domestic manufacturers of goods for children were actively ousted by foreign suppliers, who can afford

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to transfer shoes for sale on the condition of payment after their actual sale. However, the stream of beautiful and fashionable children's shoes that have poured into our markets from abroad, for the most part, do not have certificates of conformity, not to mention hygiene certificates, which is a crime against children. Consumer demand acts as the main factor influencing the formation of the assortment, which, in turn, is aimed at maximizing and meeting the demand of the population. Consumer demand combines a whole group of indicators that will form their niche for domestic footwear, namely:

taking into account age characteristics and work activity:

- children's footwear;
- footwear for the elderly;
- leisure footwear;
- footwear for special purposes;
- office footwear.

for a socially unprotected group of people:

- footwear for the unemployed receiving social benefits;

- footwear for retirees;
- footwear for people with chronic diseases.

taking into account the peculiarities of the regions:

- national footwear;
- exclusive shoes;
- elite footwear.

Thus, the implementation of the requirements of the main parameters that form consumer demand will allow the formation of distinctive features that the new range of footwear will have to satisfy. The parameters that determine demand include:

-comparative competitive advantages: the product must have pronounced features, or pronounced advantages in comparison with analogues existing on the market, products, or services of competitors;

-social orientation: it is necessary that the product fits into the existing social conditions, so that the proposed product corresponds to the prevailing lifestyle and system of values of the consumer;

-the ability to satisfy the consumer: the product must fulfill all the functions to meet the key needs and requests of the buyer. The following set of measures is proposed:

- *creation* a regional program for the development and maintenance of domestic shoe production in the district;

- *Adoption* measures to reduce the import of imported footwear into the region. These measures should provide, first of all, the suppression of trade in footwear, which is smuggled and without permission for their sale in local markets;

- *help* in the employment of young specialists, graduates of universities in existing and newly created shoe enterprises;

- *help* enterprises in the process of promoting domestic shoe brands in local markets. First of all, it is necessary to develop a competent marketing strategy for regional shoe enterprises;

- *creation* a special lending program for regional light industry enterprises, taking into account the specifics of production: the seasonal nature of the products sold and the peculiarity of the turnover of working capital by the enterprises of the industry.

In our opinion, for the successful implementation of all these measures, the interest of both federal and regional branches of government in the organization and development of the shoe cluster is necessary, which will provoke a decrease in prices for component materials, energy costs and transport, ensuring that the manufacturer can offer the domestic consumer at the expense of the price niche. demanded and competitive footwear. All this together will provide such a formation with a long life and stable positions not only in domestic, but, which is especially important, in foreign markets. All that is needed is the goodwill and interest of all participants in the implementation of the proposed activities. Such progress has been made; now the firm will and desire of the interested parties is required. The assortment for the formation of a consumer niche is shown in Figure 13.

And again, the state of quality of domestic goods is the main base, the basis for the success of modern domestic enterprises. This conclusion has the right to life, because quality is the most ancient value of mankind. And it is precisely in the quality of Russian goods and services, in the quality of management that we are losing in global competition. Have you seen sophisticated products with the inscription made in Russia anywhere in the world? We haven't seen either. Long hoped for a worldwide ISO system. Alas, in Russian conditions it slipped into a crisis. Sorry, dear colleagues from the world of quality certification, but it's time to publicly list what it has become and what almost everyone recognizes among themselves:

- an immense number of documents, in which there is no strength to navigate;

- meaninglessness of many of them (for example, according to the conditions ISO requires job descriptions, and everyone rushes on the go that- then sketch, and then forget them without a trace);

- one entrepreneur once said: "We have been certified for ISO ". And then he added: "Do not think, we were certified by such and such a Norwegian company." Can you guess what this is about? Yes, selling certificates. Not everyone sells, of course, but reputation is never accidental.

So now, you will say, do not be concerned with quality? No, you just need to understand that the light has not converged like a wedge at ISO. Let's agree on terms. What is quality? Compliance with standards, most will answer. Of course, where standards are possible, they are. Although the standards have

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tolerances. And the difference between the upper and lower divisions in these tolerances can be significant. And there are also limits to standardization. Let's say customer contact. Everyone knows that the quality of such a contact is critically important for the success of a business, when prices, assortment, terms are aligned under the pressure of competition. A certain set of friendly words, dress code, etc. can be considered a standard. Although we know very well what is covered by them. The current enthusiasm for describing business processes is also gradually approaching absurdity. And where- that has already reached him: at different firms we already meet a rigid description of the interview, not only when applying for a job, but even the standard for meeting and negotiating.

Now a different approach appears: quality is compliance with the needs of the client, the user. Whoever buys is the one who evaluates. It is only necessary to more accurately understand what exactly he values. If hit- here it is, the required quality, that is, the degree of customer satisfaction with the properties of the product.

But this approach is also limited and stretches from the last century. Then the formula was considered indisputable: the buyer is always right. In our time, another imperative is much more true: the buyer does not know our capabilities. Where are we heading? Understanding quality as conformity (standard, need) is outdated. Today, understanding it as a comparison with another product or with the same, but the same, is becoming much more capacious. Comparison gives the superiority of product over product, service over service, specialist over specialist, organization over, organization. Comparison with a standard or need does not imply superiority. Only equality is possible there. The standard and the need indicate the minimum. And for whom is the minimum enough? Few. But superiority is interesting to everyone, because the law of increasing needs is inexorable. In practice, this means switching the quality assessment system to levels. For example:

A. Sufficient quality, below which the defect goes, that is, the minimum acceptable, the use of which will not cause damage.

B. Reference quality - according to the principle of conformity to the standard, that is, the best available. The standard can appear from the standard,

but any sample can serve as it: from what we have live in our company, from competitors, or at least somewhere in the form we know.

B. Avant-garde quality - something that has been achieved for the first time, surpasses the standards, but can count on effective demand and an exit to profitability immediately or in the future.

This is the vertical of quality. She may admit more degrees. And one more thing: it's time to give up the idea that any quality can be measured. You can evaluate everything, but little that is important to us lends itself to measurement.

Figure 15 shows a model of an integrated quality management process for products and services produced both in individual regions and in the footwear industry as a whole. The model is a closed-loop control (regulation) system that implements the principle of "deviation" regulation. The quality of products in the consumer market can be characterized by a multidimensional quality indicator Q . In the process of conformity confirmation, testing and certification of products, a documented indicator of product quality Q_d is formed. The required high quality indicator Q_0 is set in the technical documentation for the best world samples, in technical regulations, national GOST and international ISO standards. In the process of comparing these two values, carried out by the competition committee,

$$\Delta Q = Q_0 - Q_d \quad (2)$$

This deviation ΔQ (mismatch in control systems) in our case is always non-negative ($\Delta Q \geq 0$), since the correctly selected preset high level Q_0 is always higher than or equal to the actual Q_d , which is practically extremely rare. In this case, we have a system with a non-zero static error, which is most typical for static systems with their inherent stability and speed, the accuracy of which is mainly determined by the gain and power of the "proportional" controller. In our case, the function of the regulator is performed by the link "Measures to ensure a given level of quality of products and services", which simulates the quality management system of the enterprise, the quality service in production, the actions of which take into account the assessment of the quality of products and the recommendations of the competition committee.

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Figure 14. Assortment for the formation of a consumer niche, taking into account the characteristics of the regions

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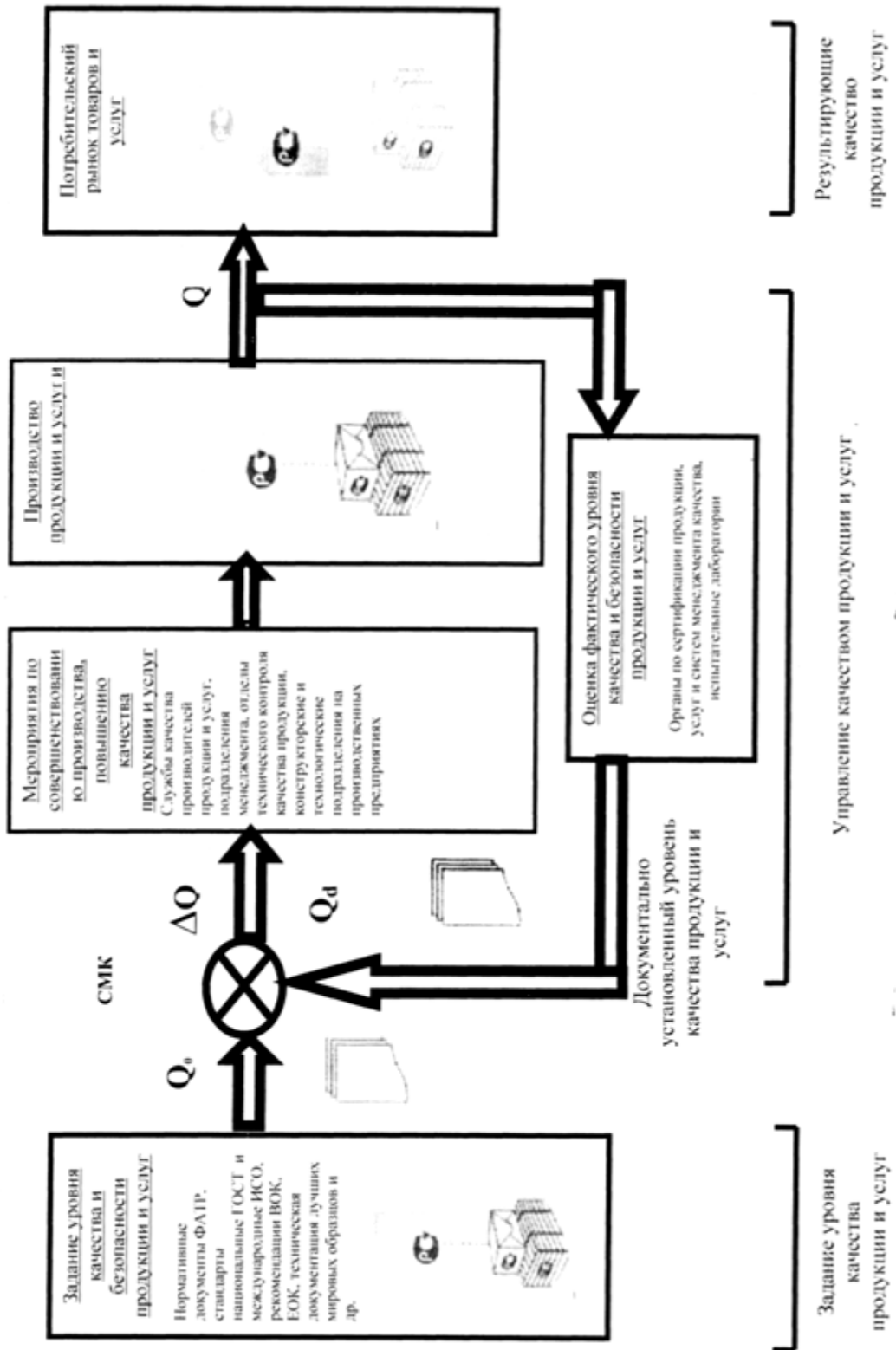


Figure 15. Model of an integrated process for managing the quality of products and services in the region

As can be seen from Figure 15, the quality Q of the products produced and supplied to the market is formed in the process of its production as a result of

measures to improve production, improve the quality of products and services carried out by the quality service and quality management units, purposeful

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actions, which, in turn, are determined by the results of the assessment products in the process of its implementation.

In the new economic conditions, only such production is progressive that actively and dynamically responds to emerging problems. The principle "to produce only what is needed, when needed, and as much as needed" requires shoe enterprises to adapt to the conditions of production in small batches with frequent changes in the assortment of shoes, ie. to the conditions of many assortment small-scale production. The efficiency of the footwear enterprise, and in many respects the ability to survive in the competition, depends on the ability in a short time and with minimal costs to readjust to the production of footwear in accordance with fluctuations in demand. The development and implementation of flexible production systems opens up great opportunities for this.

The technological and organizational flexibility of production systems determines the variable potential of enterprises, their ability to quickly and adequately respond to changes in market conditions and acts as a mechanism for optimizing the structure of the technological system in order to reduce the cost of footwear. Thus, the development of flexible technological processes for the production of leather goods ensures high efficiency with a large assortment of footwear and will provoke a sharp increase in demand for the products of footwear enterprises in the Southern Federal District. The same problems are typical for other branches of the light industry. Sores are common, and their treatment may have some slight differences, but consciousness and desire to get them out of this swamp is possible only if Rodina lends its shoulder and the light industry starts working successfully again.

- professional;
- national;
- universal.

Conclusion

The domestic light industry is going through hard times, and the consumer is offered products of dubious quality that have entered our markets by counterfeit and other illegal means, that is, they have no guarantees for buyers to exercise their rights to protect themselves from unscrupulous manufacturers and suppliers. It is necessary to reanimate the role and importance of a quality-oriented strategy, since only in this case the heads of enterprises will subjectively and objectively be forced to improve their production using nano technologies and innovative processes so that competitive and demanded materials and products fully satisfy the needs of domestic consumers. At the same time, the statement is justified that the consumption of domestic materials and products is regulated by the market. In this case, market requirements should be dictated to producers on the

need to increase the role of the state and consumers in the formation of sustainable demand for domestic materials and products, namely: to maintain a range of goods, regulating it by federal, regional and municipal orders; stimulate price stability; increase consumer ability and gradually improve their quality. The implementation of these tasks will create the basis for the consumer to realize the need to pay for the advantages of high-quality materials and products, and the manufacturer to realize that improving the quality of materials and products cannot be associated only with rising prices, but also due to technical innovations aimed at using new technological and engineering solutions, including making a revolution in quality, or through the quality of advertising.

Today, and even more so tomorrow, it is important to implement one of the defining principles of production efficiency - the manufacturer produces exactly what the consumer needs in an assortment that creates the basis for satisfying his demand. It is equally important to understand the role and significance of high-quality activities, that is, to what extent managers have penetrated into the essence of things, learned to manage things, change their properties (assortment), form, forcing them to serve a person without significant damage to nature, for the good and in the name of man, that is, in accordance with the requirements of the Federal Law "On Technical Regulation". Both political leaders and the government have recently been talking about the need for a competent industrial policy. However, if you carefully consider the normative, methodological documents on the structural restructuring of industry, then an idea appears, Are we not here stepping on the same rake that all the years of reforms have come upon, namely: we did not care about our manufacturer. A world-renowned quality specialist E. Deming, who at one time was a scientific advisor to the Japanese government and led Japan out of the economic crisis, in his book "Out of the Crisis" says: "... managing paper money, not a long-term production strategy - the way into the abyss".

Regarding whether the state needs to pursue industrial policy, one can quote the statement of the outstanding economist of the past Adam Smith, who laid the foundations of the scientific analysis of the market economy 200 years ago. About the role of the state, he said: "... only it can, in the interests of the nation, limit the greed of monopolists, the adventurism of bankers and the egoism of merchants." You can't say more precisely. What are the results of economic activity today, what are the achievements in this area? Growth of gold and foreign exchange reserves, decrease in inflation, budget surplus and other financial and economic achievements. And what, is this the end result of public administration, and not the quantity and quality of goods and services sold in the domestic and foreign markets and the population's ability to pay to purchase these goods and

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services? And, ultimately, not the quality of life of the country's population?

Therefore, it is quite natural that today the task is posed for all levels of the executive and legislative authorities - to improve the quality of life of Russian citizens. Let's carry out an enlarged factor analysis of the quality of life problem. The quality of life of citizens depends on the quality of consumed goods and services in the full range - from birth to ritual services, as well as on the ability to pay of citizens, which allows them to purchase quality goods and services. These two factors (quality and solvency) depend on the state of the country's economy, which in turn depends on the efficiency of enterprises in various sectors of the economy, including light industry. The efficiency of enterprises' work depends on the state of management, on the level of application of modern management methods, on the implementation of production quality requirements.

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

It was absolutely right that attention was drawn to one phenomenon that usually escapes in the troubled bustle - the historicity of the economy. The economy has not always been the way it is perceived now and will not remain forever. Economic life changes in time, which forces one to tune in to its changing being. The modern economy is built on a market foundation and the laws of the market dictate their own rules to it. In the foreground are profit, competition, efficiency, unity of command. How long will this continue? The symptoms of the new economic order are already mounting, analysts say. The next round of the economic spiral will also revolve around the market core, but the value of the market will not remain total. The priority of market competition, aggressively pushing the "social sphere" to the sidelines, is incompatible with the prospect of economic development, this is confirmed by the steady desire of social democracy in the West to deploy the economy as a front for social security, fair distribution of profits. The new economy is called temporarily "lean". It requires humanization not only

in the distribution of national wealth. The production itself is also humanized, including the management system. The current principle: "the strongest, the fittest survives", will replace the "social-industrial partnership - the manager and the manufacturer will become members of one team. Mass production will give way to an organization corresponding to the implementation of the principle - "the manufacturer produces exactly what the consumer needs." The "lean" economy will be focused on resource-saving technologies and environmental friendliness of production. It demanded a new look at the fundamental concepts. And therefore the philosophy of quality must also change. We must be ready for the coming events.

The quality is "written by nature" to be at all times in the epicenter of scientific and amateurish reflections. The problem of ensuring the quality of activities is not just universally relevant, it is strategic. The dilemma in relation to quality is reasonable only within the limits of opposing the ratio of actions "direct" and "mediated". The saying "it's all about him" owes its origin to quality. It is possible to "forget" about the problem of quality only because any fruitful and luminous activity is ultimately aimed at improving quality. Quality is either "on the mind" or "implied." From the relationship in the dynamics of these projections, quality problems in creative thinking are built into an appropriate schedule, reflecting the relevance and profitability of activities aimed at the development of production.

The most significant and global are international quality management standards. The use of modern methods in them makes it possible to solve not only the problem of improving quality, but also the problem of efficiency and the problem of productivity. That is, today the concept of "quality management" is being transformed into the concept of "quality management". Thus, solving the problem of increasing the efficiency and competitiveness of the economy, and ultimately the quality of life, is impossible without the implementation of a well-thought-out and competent industrial policy, in which innovation and quality should become a priority.

The results of studies carried out under the UN Development Program have made it possible to measure the share of the "human factor" in national and global wealth: 65% of the wealth of the world community is the contribution of human potential, and only a third of the world's wealth is accounted for by natural resources and production structure. A quality-oriented strategy undoubtedly contributes to an increase in the very role of the subjective factor in the development of production, and to a more complete all-round satisfaction of human needs themselves. The desire to "live according to reasonable needs", as well as the need to "work according to one's capabilities", together with the communist ideal, no one openly and officially dared to abolish, realizing the absurdity of

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denying the essential forces of man. In the "hot" state, the problem of quality is steadily supported by both the inner forces of active consciousness and external life factors. The highest function of consciousness is cognitive.

It is believed that learning about nature reveals its quality, state of quality, quality levels, embodying new knowledge in production. Post-classical economic thought shifted quality towards consumption, trying to give production a "human face" - a person alienates himself in the production process, but this measure is forced and in the systemic sense - temporary, conditional. Labor is a kind of "terrible cauldron" that Vanya the fool had to overcome in order to turn into Ivan Tsarevich.

And here it is absolutely justified that the main thing in production is the result, not the process. Consumption regulates the market. Consequently, market demands must dominate production. The task of society is to contribute to the development of demand in the market worldwide: to maintain a range of goods, stimulate price stability, increase purchasing power, and improve the quality of goods. E. Deming, calling the "network of deadly diseases" of modern production, puts in the first place "production planning, which is not focused on such goods and services for which the market is in demand." Try to argue with him. Production during the transition from industrial to post-industrial society of mass consumption is thought of as a function of the market.

Researchers fill these quality properties with criteria, namely:

- ideology of quality - the perspective of production development;

- quality management is an integrated approach to solving quality problems;
- fashion and technical regulation - components of the quality of the manufactured footwear ;
- quality systems "ORDERING / 5 S" and "THREE" NOT "- not only the basis for the stability and safety of production, but also a quality guarantee;
- quality in the market is a paradigm for the formation of production that meets the needs of the market;
- advertising is always at the service of quality;
- excursion into the past as a guarantee of quality in the future;
- the product quality assessment model is the production priorities;
- forecasting the cost of quality in the development of a new range of footwear - the guarantee of its relevance and its competitiveness;
- methodology of business visual assessment of a product - a means of assessing the effectiveness of quality;
- improving the quality and competitiveness of domestic special footwear;
- about indicators for assessing the quality of footwear - as a tool for the formation of popular products;
- quality and market: a marriage of convenience and this is indisputable;
- the stability of the enterprises - the guarantor of the quality of their footwear - all these aspects together and provide a revolution in quality, guaranteeing the manufacturer stable success in the market with unstable demand;

References:

1. (2017). *The concept of import substitution of light industry products: preconditions, tasks, innovations*: monograph / VT Prokhorov [and others]; under total. ed. Doctor of Technical Sciences, prof. V.T. Prokhorov; Institute of the Service Sector and Entrepreneurship (branch) of the Don State Technical University. (p.334). Novochoerkassk: Lik.
2. (2018). *The competitiveness of the enterprise and the competitiveness of products is the key to successful import substitution of goods demanded by consumers in the regions of the Southern Federal District and the North Caucasus Federal District*: collective monograph / VT Prokhorov [and others]; under the general ed. Dr. tech. Sciences, prof. V.T. Prokhorov; Institute of the Service Sector and Entrepreneurship (branch) of the Don State Technical University. (p.337). Novochoerkassk: Lik.
3. (2018). *Management of the real quality of products and not advertising through the motivation of the behavior of the leader of the collective of a light industry enterprise*: monograph / O.A. Surovtseva [and others]; under the general ed. Dr. tech. Sciences, prof. V.T. Prokhorov; Institute of the Service Sector and Entrepreneurship (branch) of the Don State Technical University. (p.384). Novochoerkassk: YRSPU (NPI).
4. (2019). *The quality management system is the basis of technical regulation for the production of import-substituting products*: monograph / A.V. Golovko [and others]; under the general ed. Dr. tech. Sciences, prof. V.T. Prokhorov; Institute of the Service Sector and

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- Entrepreneurship (branch) of the Don State Technical University. (p.326). Novocherkassk: YRSPU (NPI).
- (2019). *On the possibilities of regulatory documentation developed within the framework of the quality management system (QMS) for digital production of defect-free import-substituting products: monograph / A.V. Golovko [and others]; under the general ed. Dr. tech. Sciences, prof. V.T. Prokhorov; Institute of the Service Sector and Entrepreneurship (branch) of the Don State Technical University. (p.227). Novocherkassk: Lik.*
 - (2005). *Imai Masaaki. Kaizen: The Way To Reduce Costs And Improve Quality / Per. from English. (p.346). Moscow: Alpina Business Books.*
 - Porter, M. (p.608). *Competition / trans. from English. (p.608). Moscow: Ed. house "Williams".*
 - Pande, P. (2004). *What is Six Sigma. A revolutionary method of quality management / per. from English. (p.158). Moscow: Alpina Business Books.*
 - Vume, D. (2005). *Lean Manufacturing: How to Get Rid of Waste and Make Your Company Prosper. from English. (p.473). Moscow: Alpina Business Books.*
 - Michael, G.L. (2005). *Lean Six Sigma: Combining Six Sigma quality with Lean speed. from English. (p.360). Moscow: Alpina Business Books.*
 - (2005). *Imai Masaaki. Kaizen: The Key to the Success of Japanese Companies. from English. (p.274). Moscow: Alpina Business Books.*
 - (2016). *Research and analysis of innovative processes of production of import-substituting products at enterprises of the regions of the Southern Federal District and the Northern Federal District: monograph / Korablina S.Yu. [and etc.]; under total. and scientific. ed. Dr. tech. Sciences, prof. V.T. Prokhorov, ISOiP (branch) DSTU in Shakhty, (358 p.).*

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Javahir Nizami Nasibova
Azerbaijan State Agrarian University
Teacher of the Department of Languages

LINGUISTIC, TYPOLOGICAL FEATURES OF INFINITIVE AND COMPOUND INFINITIVE SENTENCES IN ENGLISH AND AZERBAIJANI LANGUAGES

Abstract: In recent years, thanks to the efforts of the national leader of our people, Heydar Aliyev, the Azerbaijani language has gained great prestige as an official state language in the system of international relations. Giving great authority to the development of the Azerbaijani language in authoritative organizations is a manifestation of the many years of hard work of the outstanding head of state. Opens up a wide range of possibilities for identifying similarities and differences between them.

Key words: infinitive, English, typology, linguistics, Azerbaijani, compound infinitive, typology, form.

Language: English

Citation: Nasibova, J. N. (2022). Linguistic, typological features of infinitive and compound infinitive Sentences in English and Azerbaijani languages. *ISJ Theoretical & Applied Science*, 01 (105), 150-152.

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Introduction

Annotation

As you know, the Republic of Azerbaijan is one of the world powers, expands economic, political, scientific and cultural ties. In all these areas, especially in the development of our army building, there is a great need for foreign languages, especially English. Teaching foreign languages is a matter of strategic importance for our country. The Azerbaijani state is represented by an international organization with an independent policy. This is just as important as using weapons in combat. To speak at the required level in each language, including foreign ones, it is necessary to thoroughly master various aspects of the languages. A verb in the Azerbaijani language is one of the main parts of speech, denoting an action, process or state. Both in Russian and in Azerbaijani languages, the verb is characterized by personal and impersonal (nominal) forms. - (2 p. : 166)

The verb in the personal form changes according to persons, numbers, tenses, has the categories of voice and mood.

The forms of all these categories are formed in an agglutinative way typical for the Azerbaijani language - by adding affixes (şəkilçilər) to the stem of the verb. The dictionary form of the verb in the

Azerbaijani language (as well as in Russian) is the infinitive - an indefinite impersonal form of the verb, which consists of a stem and an affix -maq / -mək.

In this case, the affix -maq is used with verbs, the last vowel at the base of which is a, ı, o, u (these are back vowels).

The affix -mək is used with verbs, the last vowel of which is e, ə, i, ö, ü (these are the front vowels).

Adding the affixes -maq / -mək to the stem of the verb follows the law of vowel harmony (ahəng qanunu):

Back vowels (a, ı, o, u) can only be followed by back vowels, front vowels (e, ə, i, ö, ü) can only be followed by front vowels. Examples of verbs and bases.

Açmaq - to open, reveal, untie. Base: Aç-
Bağlamaq - to close, tie, conclude (agreement).

Basis: Bağla-

Almaq - take, receive, buy. Base: Al-

Vermək - to give, to give. Base: Ver-

Satmaq - Sell. Base: Sat-

Satılmaq - for sale. Base: Satıl-

Bacarmaq - to be able, to be able, to cope (with something). Basis: Bacar-

Bilmək - to know, to be able. Base: Bil-

Bildirmək - inform, let know. Base: Bildir-

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Götürmək - take, take. Base: Götür-
Etmək / eləmək - to do. Base: Et- / (elə-)

Olmaq - to be, to become, to occur. Base: Ol
(<http://woman-az.ru/viewtopic>)

The article mainly explores infinitive and infinitive forms, which are one of the impersonal forms of the verb in various systematic languages. The main goal is to compare the features of infinitives and infinitives in modern English and Azerbaijani languages in a linguistic, typological direction (3 pages: 97-106).

The main purpose of the article

Features of infinitives and infinitives in Azerbaijani and English is the study of features. In the process of work carried out for this purpose, the following tasks were set:

-Ways of forming infinitives and compound infinitives in different systematic languages

-Explore infinitive and infinitive structures and characteristics.

connections;

- analyze structural variations within speech components;

- Similarity of infinitive and infinitive compositions in modern English and Azerbaijani languages.

and identify differences;

-Overview of the scope of development of infinitives and infinitive components;

-Translation of infinitives and compound infinitives into different system languages

- find out the possibilities;

Comparison of infinitives and compound infinitives in modern English and Azerbaijani languages

Thus, if we turn our attention to the world view of languages at the end of the 20th and the beginning of the 21st centuries, we will see that the most common language among modern languages is English. English is also the official language of many countries around the world (UK, USA, Canada, Australia, New Zealand, Puerto Rica, and others). Japan, the Philippines, China, India, South Africa and other countries also use English in addition to their native languages. English is the primary language of over three hundred million people in the Americas, England, Canada, Australia and New Zealand. English is also the official language of the United Nations, as well as the language of international conferences, symposia and seminars. Of the world

There is no country where English is taught. These countries are separated by hundreds of kilometers, even by continents and oceans. Since the citizens of English-speaking countries are of different nationalities and races, they pronounce words in different phonetic and graphical ways when using the language, and

they write differently, even interfering with sentences and expressions. Features arising from the

historical development of each country, nation and race, socio-economic situation, national customs and traditions, physiological qualities, one way or another, are expressed in language (p. 4: 105).

All this, due to the mobility of the language, mobility, and so on, causes various expressions and combinations in the English language. Ways and means of creating such figurative expressions and combinations are today one of the most important questions for English linguists. In modern English and Azerbaijani languages, the peculiarities of the infinitive and infinitive structures are studied on the one hand, their national qualities in one language system, and on the other hand, the situation in different system languages is clarified. The paper analyzes the typology of infinitives and compound infinitives in different systems, identifies common and different features. From this point of view, this research work can be considered as one of the first steps in the creation of a typology of infinitives and composite infinitives. Scientific innovations in the language system, the place and position of infinitives and compound infinitives, the stability of components in infinitives and compound infinitives, syntactic relations between components, etc. arise in connection with the interpretation of questions. Theoretical and practical significance of the research. There are certain difficulties in learning infinitives and compound infinitives in different languages. In this regard, this study is especially useful for students who are currently studying a foreign language is important (5th page: 29-34). The theoretical significance of the study lies in the fact that modern English is characterized by the presence of infinitive and composite infinitive components in the Azerbaijani languages, which are far from each other and typologically-linguistically analyzed with such a structure belonging to different systemic languages, no common or different symptoms were found. Often the translation and analysis of infinitives and compound infinitives in different systematic languages causes certain difficulties. In this regard, the study is of particular practical importance for students studying a foreign language. Can use separate sections of the research, analyzed materials and obtained scientific results, both in private and general linguistics, as well as in comparative (comparative) research. The results of our research can play a useful role in relevant practical and theoretical seminars, courses in special vocabulary, translation theory, comparative typology, teaching English in Azerbaijani-speaking classrooms and extracurricular learning with undergraduate and graduate linguists (pp: 112-145). This research paper is written to identify the components of the infinitive and compound infinitive used in research work that can be challenging for English learners, philologists, diplomats, translators, journalists, and businessmen.

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References:

1. Vorno, M., Kashina, A., Mashinevskaya, E.M., & Potorova, V.A. (1955). *Lexicology. into English.* (p.4). L..
2. Mamedov, N. (1968). *Theoretical foundations of Azerbaijani linguistics.* (p.166). Baku.
3. Yartseva, V.N. (1962). *Formation and development of modern English.* (pp.97-106). Moscow.
4. Demirchizade, A. (1984). *Modern Azerbaijani language.* (p.105). Baku: Scientific publishing house.
5. (2015). *English (United States) at Ethnologue (18th ed., 2015).* (pp.29-34).
6. (2017). *"Unified English Braille (UEB)". Braille Authority of North America (BANA).* 2 November 2016. Retrieved 2 January 2017. (pp. 112-145).
7. (n.d.). Retrieved from <http://woman-az.ru/viewtopic>
8. (1970). *The style of the Azerbaijani literary language.* (p.356). Baku: Science.
9. Belchikov, Yu.A. (2000). *Stylistics and speech culture.* (p.160). Moscow, ed. URAO.
10. Buslaev, F.I. (2010). *About teaching the native language.* Moscow: ed. Librcom.

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Ionuț-Adrian Drăguleasa

University of Craiova

Master student,

Faculty of Sciences, Department of Geography, Romania

adriandruguleasa@yahoo.com

TOURISM IN PROTECTED NATURAL AREAS. CASE STUDY: IRON GATES NATURE PARK

Abstract: The elaboration of this article resulted from the fact that there are numerous fundamental values of human existence and specific elements of tourist attractiveness within the geographic and touristic area of the Iron Gates Nature Park (Decebal's Face, the Big and Small Cauldrons of the Danube; monastic settlements: Baziaș Monastery, Mraconia Monastery, Vodița Monastery, Saint Anne Monastery; caves: Ponicoava Cave, Veterani Cave, etc.) which, in the context of an efficient management, could create an added value in terms of staff income from tourism activities carried out on the park territory, tourism promotion of the Iron Gates Nature Park at local, regional, national and international level, thus contributing to the development of urban and rural localities in this geographical area. Nowadays we are facing this crisis caused by the SARS COV2 virus (COVID-19), which has directly and indirectly affected everything regarding tourism, has adverse consequences economically, psychologically and physically on companies/businesses but also on entrepreneurs who are at the beginning of their careers, in terms of opening a business (restaurant, tourist B&Bs, agritourism guesthouse).

Key words: protected natural areas, tourism, types of tourism, nature park, tourist infrastructure.

Language: English

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Introduction

The International Union for Conservation of Nature defines a protected area as "a terrestrial and/or marine area specially dedicated to the protection and conservation of biological diversity, with natural and cultural resources, managed through legal or other effective means", according to the 2003 IUCN report - Financing Protected Areas.

According to the Explanatory Dictionary of Terms Used in Tourism, a nature park is defined as "a territory of special beauty that generates a series of tourist attractions, namely original natural forms, ethnography and folklore, which serve for recreational purposes of the population, without damaging the natural balance." (Stănciulescu et al., 1998).

A more complex definition is adopted by the European Environment Information and Observation Network (EIONET), a network set up

between the European Environment Agency and the EU member states, the states that join the EU. A protected natural area is therefore represented by "parts of a territory protected by legislation and special restrictions in order to conserve the environment. These include large areas of land designated for the protection of wildlife and its habitat; areas of significant natural beauty or unique interest; areas containing rare forms of plant and animal species; areas representing exceptional and rare geological formations; places of historical and prehistoric interest; areas containing ecosystems of special importance for scientific study and research, and areas in need of biosphere protection" (Doderò, 1983).

Some Romanian authors propose in the environmental protection lexicon that a protected area should be defined as "a geographically delimited area, with rare or high percentage of rare

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natural elements, designated or regulated and managed to achieve specific conservation objectives; it includes national parks, nature reserves, biosphere reserves, natural monuments and others" (Bran et al., 1999, p. 77).

In line with most views in the theory and practice of this field, a protected natural area can be considered to be "an area designated by specific legislation and appropriately managed, with the purpose of protecting and conserving representative elements of flora, fauna and their habitat, outstanding physical, geographical and ecological features, with significant opportunities for scientific, educational and recreational activities, having a sufficiently large and well-defined area to ensure the integrity of its characteristics". (Smaranda, 2008, p. 26).

In Romania, according to Law no. 49/2011 for the approval of Government Emergency Ordinance no. 57/2007 on the regime of protected natural areas, conservation of natural habitats, wild flora and fauna, the protected areas are "terrestrial and/or aquatic areas in which there are species of wild plants and animals, biogeographical, landscape, geological, paleontological, speleological or other elements and formations of particular ecological, scientific or cultural value, which have a special protection and conservation regime, established according to legal provisions".

Introduction

Specific objectives, in relation to the research topic "Tourism in protected natural areas. Case study: Iron Gates Nature Park":

- Physical and geographical location of the park;
- Characterisation of the natural setting (relief, climate, hydrography);
- Analysis of the typology of protected natural areas worldwide;
- Analysis of the types of tourism practised in the natural park;
- Analysis of the tourism infrastructure (tourist accommodation structures, tourist accommodation capacity, number of arrivals of Romanian and foreign tourists, overnight stays of tourists).

The reasoning for establishing the park was made by the I.C. BIOL. study (1992), which classified the area as a "Biosphere Reserve" for an area of about 115,000 ha, close to that proposed in subsequent studies (110,000 ha - Oarcea, 1999).

Law no. 5/2000 included this protected area in the general category "national parks, nature parks, biosphere reserves", with an area of 115,665.80 ha,

and GD No. 230/2003 classified the territory as a nature park with the same area.

Tourism mainly refers to the movement of individuals away from their permanent residence, usually to places located at great distances, in areas with a splendid natural setting (relief, landscapes, fauna, etc.), with particular aesthetic value and/or being interesting from a cultural and historical point of view. These destinations include protected natural areas, which are characterised by a diversified natural environment that is attractive for the curious tourists and of great biological, scientific, historical and cultural interest.

The protected natural areas acquire a real value in the tourism sector only under the conditions of their organization for visiting and practicing activities specific to each natural area; tourism is a pillar that contributes to the creation of a competitive tourist demand and offer at local, regional and national level.

The organization of the protected natural area leads to increased attractiveness of the tourism area compared to other areas, to the individualization of the nature park, differentiating itself from other parks by: attractive tourist trails, appropriate marking of the routes, flora and fauna, geographical location of the park.

The development and adequate tourism facilities of the nature park ultimately contribute to attracting a very large number of visitors, high income for locals, practice and sustainable development of various types of tourism, preservation and conservation of the protected natural area and tourist attractions.

It can also be stated that in terms of sustainable tourism in protected areas and correspondingly their visitation must, in essence, be carried out in such a way that "any use of a resource is made under the conditions of a superior valorisation, without destroying the resource or its possibilities of regeneration, what is being valued must be exploited at the highest possible level, thus achieving maximum cultural, educational, social and economic efficiency" (Constantinescu, 1976). This must be taken into account, since if there is no interdependence between (natural and man-made) tourism resources and the level of use of the types of tourism, the protected nature park/reserve will be degraded and tourism resources will become unavailable and depletable for future generations of visitors.

Iron Gates Nature Park is located in the south-western extremity of the Southern Carpathians, along the Danube River, between Baziaş and Schela Cladovei; on the territory of Mehedinţi and Caraş-Severin counties (Fig. 1).

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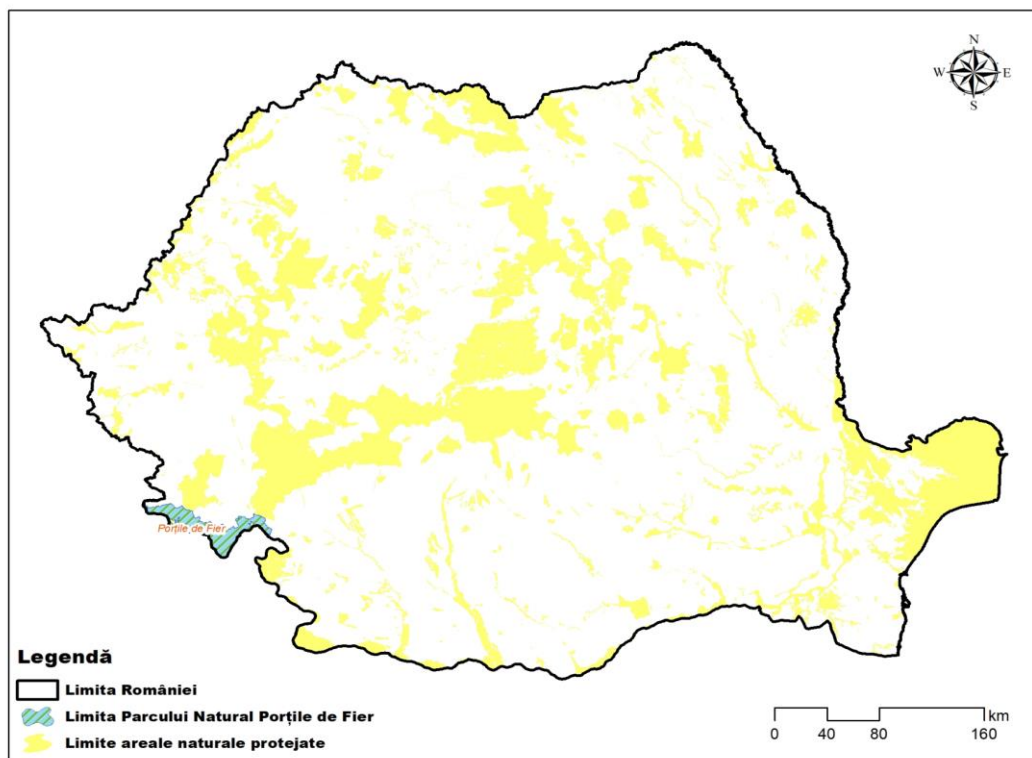


Fig. 1. Location of the Iron Gates Nature Park in the regional context

Source: data processed by authors in ArcGIS

The relief, an indispensable structure of the natural landscape, takes on different configurations, depending on the variety of geomorphological, geological and mineralogical constitution, which, over the years, has sculpted unparalleled landscapes that intensify the remarkable picturesque character of the region; throughout the area, the relief presents a series of steps that descend gently from north to south. The highest level is formed by the south-eastern extensions of the Godeanu Mountains, which rise boldly to 2000 meters above sea level. The considerable extension of the relief in altitude entails a considerable diversification of the physical and geographical elements (climate, hydrography, soil factors, vegetation, flora), which vary according to exposure and altitude (adapted from Albulețu, 1982).

The Iron Gates tourism area, due to its geographical position, the levelling and fragmentation of the relief, together with the presence of the wide Danube corridor, has a temperate continental climate with local nuances. With the exception of the northern sector of the area, i.e., the high sector of the Godeanu Mountains and the Cerna Mountains, throughout the year, but especially in winter, there are invasions of humid and warm air masses of Mediterranean and oceanic origin. This causes the air temperature values in most of the area to be higher than in the rest of the country, frosts occur less frequently and with less intensity (Albulețu, 1982).

Water resources are represented by underground water (groundwater and deep water) and surface water (rivers and lakes). They are a component of the geographical landscape, with important implications for tourism both through the sometimes spectacular changes in the natural landscape (lakes, waterfalls, etc.) and through the possibility of developing resorts of national importance (Herculane Baths – Băile Herculane). The water network is entirely tributary to the Danube, which borders the area in its southern part. The Danube waters the territory of the area over a length of 150 km, between Baziaș and Ostrovul Șimian, developing on this stretch one of its most attractive sectors, that of the gorge, over a distance of 130 km. (Albulețu, 1982).

The hydrographic network tributary to the Danube in the Gorge area (Fig. 2), is represented by a series of permanent or intermittent rivers (Oravița, Berzasca, Mraconia, Eșelnița, Topolnița, Bahna, etc.). The karst lakes Ponoarele and Zătonul (Fig. 3), or as they are more commonly called Zătonul Mare and Zătonul Mic, appear as small depressions upstream (Ponoarele) and downstream (Zătonul) of the Ponoarele Natural Bridge (Fig. 4), each drained by a stream (Gheorghiești and Valea Mare) which flows underground through a depression. The Iron Gates reservoir was formed following the construction of the Gura Vale-Șip dam as part of the Iron Gates I hydropower and navigation system (Fig.

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5). The lake has an area of 32,000 ha, a length of 140 km and a water volume of 2,550 million cubic meters (Albulețu, 1982).



Source: *author's own archive*

On the surface of the park there is a varied and attractive vegetation described by the opulence and brilliance of the species (the Cazane tulip, the Dyer’s greenweed, the yellow iris, the Dalmatia gladiolus, the Turkish cherry tree, the fig tree, the ivy, the wild walnut tree, the lilac, etc.). The Mehedinți plateau and the mountain area is covered with beech, sycamore maple, birch trees forests and beech forests mixed with sessile oak and spruce trees. A characteristic of the Iron Gates Nature Park is represented by the forests with thermophilic (heat-loving) elements such as flowering ash, Banat pine and Turkish hazel (adapted from Albulețu, 1982).

Data and Methods

The working methodology is adapted to the specific objectives and therefore different working methods are used for each specific objective.

The research methodology used for the paper "Tourism in protected natural areas. Case study: Iron

Gates Nature Park" took into account both traditional methods (observation of the phenomena, synthesis, analysis, description, field photography of tourist objectives, bibliographic documentation, identifying the main works written in accordance with the studied topic) and modern methods (cartographic and graphical method, statistical data provided by the National Institute of Statistics, interpretation of diagrams made in excel).

The detailed work was based on graphical and cartographic representations, with diagrams and maps as the main tools for both the initial analysis of the park and the interpretation of the results of the analysis.

Results and Discussions

1.1. Typology of protected natural areas

In January 1994, the Resolution 19.4 of the 19th Session of the IUCN (International Union for Conservation of Nature) General Assembly was

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adopted in Buenos Aires, whereby the classification adopted in 1978 was improved and brought more into line with the experience of the various countries and the new conservation requirements. The following six categories of protected areas were established, a structure which is still in use today, as presented in the Guidelines for Protected Area Management Categories, issued by the IUCN in 1994.

Category I: Strict nature reserve/wilderness area: protected area managed for science or wilderness protection. This category has two sub-groups, namely:

Category Ia: Strict Nature Reserve: protected area managed primarily for science. Equivalent to the category in the system established in 1978: scientific reserve/strict nature reserve.

Category Ib: Wilderness area: protected area managed primarily for the protection of wilderness. This is an extensive unmodified or slightly modified area of land and/or sea, retaining its natural character and influence, without permanent or significant habitation, which is protected and managed to conserve natural conditions.

Category II: National Park: protected area managed primarily for ecosystem protection and recreation. It represents an area of a territory and/or marine area having the function to:

- protect the ecological integrity of one or more ecosystems for present and future generations;
- exclude hostile exploitation or occupation for the purpose of area designation;
- provide a foundation for spiritual, scientific, educational, recreational and visitor opportunities, all of which must be culturally and environmentally compatible.

Category III: Natural Monument: protected area managed primarily for the conservation of specific natural features. The natural monument is an area containing one or more natural/cultural features which is of special or unique value because its rarity

is essential, having representative or aesthetic qualities or cultural importance.

Category IV: Habitat/Species Management Area: protected area managed primarily for conservation through management interventions. This category designates a terrestrial and/or marine area that is subject to active intervention for management purposes in order to maintain habitats and/or to understand species-specific needs.

Category V: Protected landscape/seascape: protected area managed primarily for the conservation of the landscape/seascape and recreation. This category recognises an area within a territory, with coastline (shoreline) and sea as suitable where the interaction between people and nature over time has produced an area with distinctive features of important aesthetic, ecological and/or cultural values and often with high biological diversity. Safeguarding the integrity of this traditional interaction is vital for the protection, maintenance and evolution of such an area.

Category VI: Protected area with sustainable use of natural resources: protected area managed primarily for the appropriate use of natural ecosystems. This category designates an area containing predominantly undisturbed natural systems managed for the long-term protection and maintenance of biological diversity while providing a sustainable flow of natural products and services for community needs.

It can thus be concluded that, over the years, from its creation to the present day, IUCN has succeeded in imposing certain principles in the organisation of protected natural areas, which are accepted throughout the world and which help to develop national systems of protected areas.

In terms of protected areas (Fig. 6), it can be seen that the largest number of protected areas worldwide are in category IV. (Habitat/species management area, counting 37,737 areas) and at the opposite end, with the lowest number, is category Ib. Wilderness (4,867 areas).

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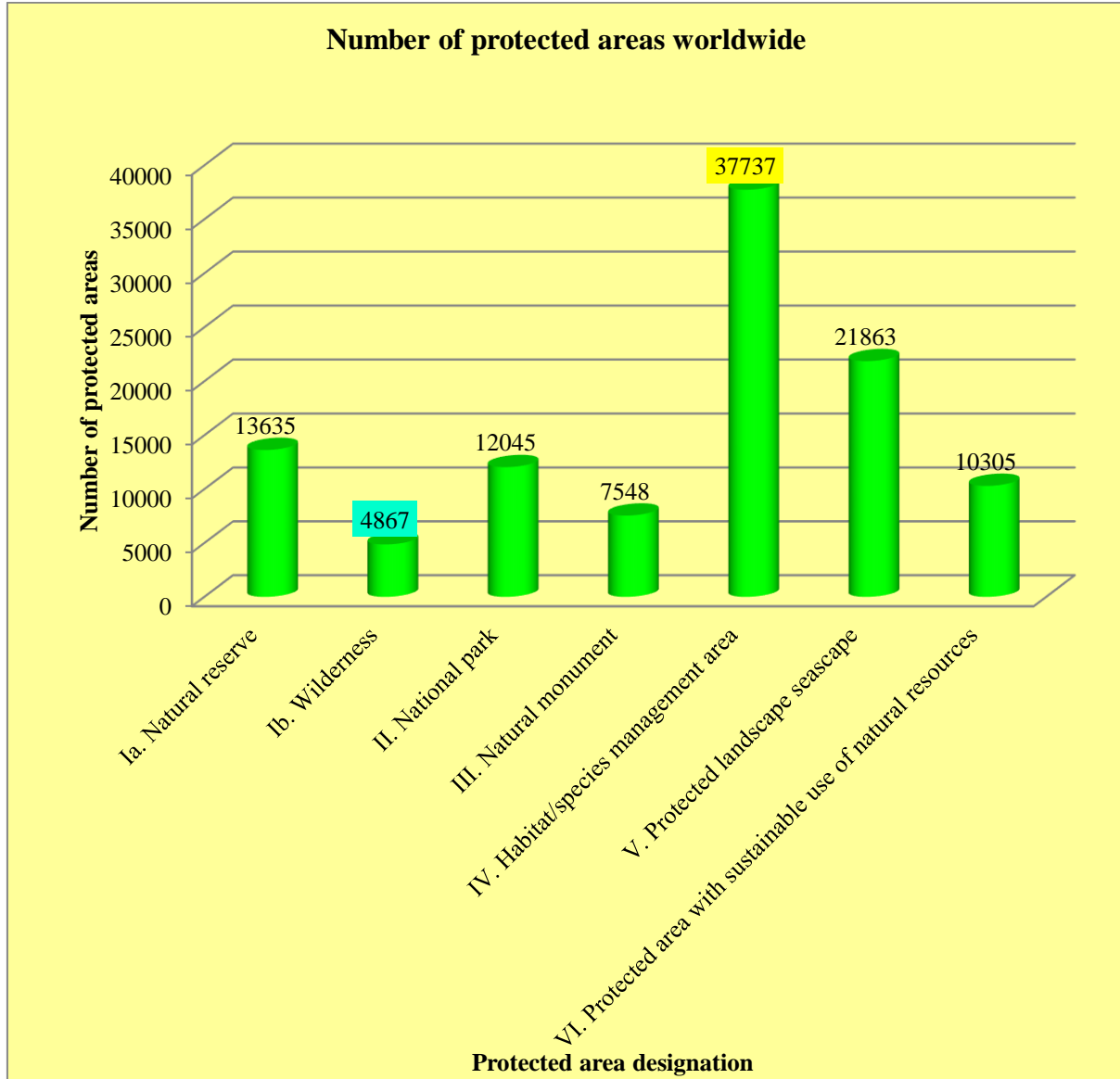


Fig. 6 Number of protected areas worldwide by IUCN category

Source: author processing based on the World Data Base on Protected Areas, quoted by Băltărețu, 2011

If we consider the surface area of protected areas (Fig. 7), it is worth noting that the highest percentage is occupied by category IV. Habitat/species management area (26%), closely

followed by category VI. Protected area with managed resources (about 25.5%); at the opposite pole is category III. Natural Monument (2%) with the lowest percentage recorded.

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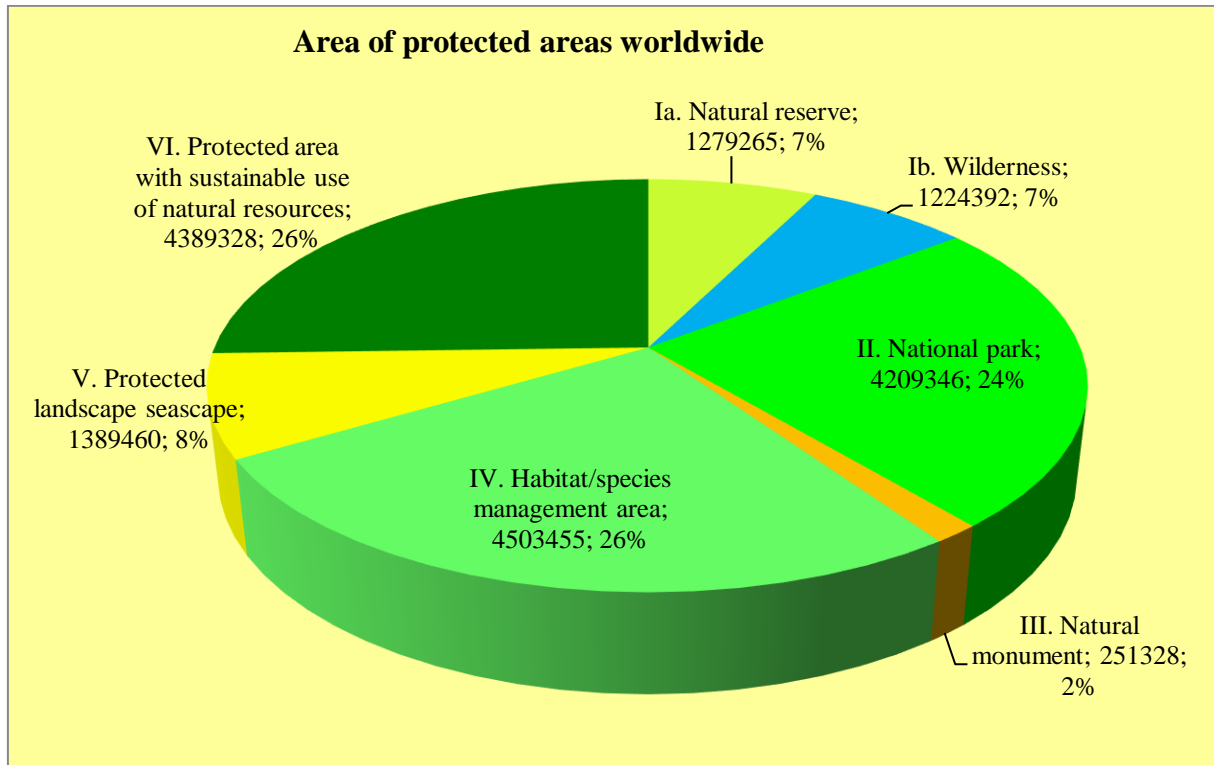


Fig. 7 Area of protected areas worldwide by IUCN category

Source: author processing after the World Data Base on Protected Areas, quoted by Băltărețu, 2011

The functional structure of protected natural areas in Romania (Fig. 8), in terms of area occupied is distributed as follows (https://wwfeu.awsassets.panda.org/downloads/anexa1_descr_ariiprot_rnp.pdf):

1. Nature parks - 42%;
2. Danube Delta Biosphere Reserve - 32%;
3. National parks - 17%;
4. Reserves and monuments - 9%.

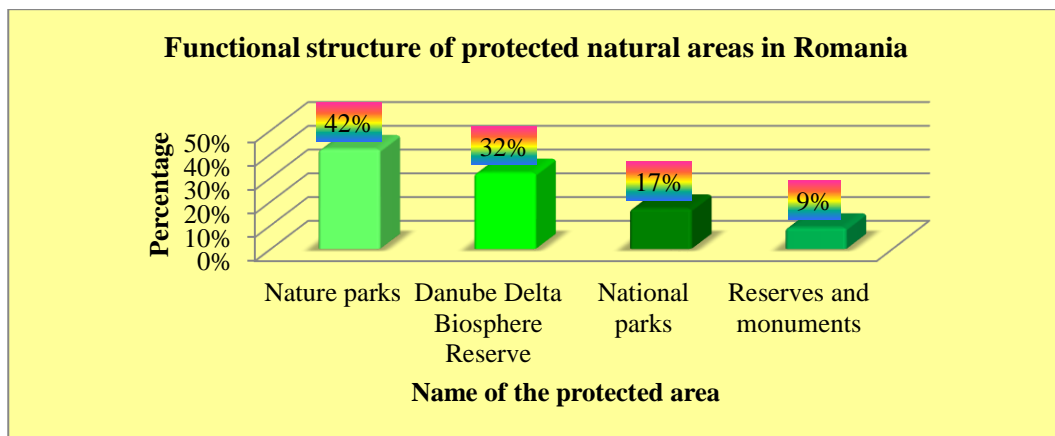


Fig. 8 Percentage distribution of the area occupied by the main protected natural areas in Romania

Source: author data processing from https://wwfeu.awsassets.panda.org/downloads/anexa1_descr_ariiprot_rnp.pdf

1.2. Analysis of the "Iron Gates Nature Park" tourism area

The "Iron Gates" tourism area comprises the territory located on both banks of the Danube, between Baziaș and Drobeta-Turnu Severin, with

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varying depths in Romanian and Serbian territory. The Romanian part of the "Iron Gates" tourism area, which is the object of study of the Iron Gates Nature Park, is delimited by the Danube and the line Șimian - Malovăț - Florești - Apa Neagră - Izvoarele Cernei - Mehadia - the southern slopes of the Almăjului Mountains and the Locvei Mountains - Baziaș. Taking into account the fact that the delimitation of the tourist area has a dynamic character over time, which can be modified by the possible appearance or

disappearance of tourist attractions or economic objectives likely to influence tourism, such as the "Iron Gates II" hydroelectric system, which can introduce into the landscape an element that can also constitute a tourism objective, the limits of the tourist area can be revised and updated (Albulețu, 1982).

Types of tourism that can be experienced in the Iron Gates Nature Park (Fig. 9):



Fig. 9 Types of tourism experienced in the Iron Gates Nature Park

Source: adapted from Drăguleasa, 2021

The diversity of relief landforms and ecological environmental factors encourages the presence within the park of numerous types of fauna, described by the presence of animals unevenly distributed on vegetation levels, specific to the adaptive environment, most of which are of hunting interest, alongside which elements of sub-Mediterranean and implicitly Balkan origin cohabit (Drăguleasa, 2021).

Rural tourism is a form of tourism focused on destinations in rural areas with a functional accommodation facility and other heterogeneous

services. Rural tourism takes different forms of stay with a varied range of motivations: hiking, winter sports, traditions and customs (Mazilu & Drăguleasa, 2021).

Ecotourism is seen as a new form of tourism that should contribute to both nature conservation and local community development, as a form of alternative tourism, ecotourism emerged, like the others, as a consequence of widespread dissatisfaction with conventional forms of tourism (Mazilu & Drăguleasa, 2021).

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Ecotourism activity, in addition to being anchored in the area of sustainability, works alongside the economic integration and generates development strategies necessary to support the transition. The real meaning of ecotourism includes the modernization of infrastructure, the forms and types of tourism that are practised, the degree and possibility of tourist development, the analysis of tourist facilities (accommodation, food, leisure, etc.), sustainable rural-urban tourism development (Mazilu & Drăguleasa, 2021).

In the last 20 years a specific category of nature tourism has emerged and developed, namely "ecotourism"; it is, according to the IUCN Ecotourism Programme, "environmentally appropriate travel and visitation to relatively undisturbed natural areas in order to enjoy and appreciate nature (and any other characteristic cultural elements - both past and present), that promotes conservation, have a low impact and

provide the active socio-economic involvement of local people" (Ceballos-Lacurain, 1996).

In 1991, the International Ecotourism Association (TIES) established a similar definition: "ecotourism is appropriate travel to natural areas that conserves the environment and sustains the prosperity of the local people". (www.ecotourism.org).

Taking up some notions related to the valorisation of unaltered natural resources, other authors consider that "any trip to isolated natural areas with the aim of enriching the understanding and appreciation of the ecological and cultural heritage, without damaging them, falls under the term ecotourism" (Matei, 2006).

The fruition of the natural environment and the representative attractions of a geographic territory is one of the essential needs of ecotourism. From this point of view, it combines with other forms of travel based on nature and the environment, integrating into green (ecological) tourism (Drăguleasa, 2021).

Table 1. Ecotourism destinations in Romania

No.	Name of the ecotourism destination
1.	Pădurea Craiului (Pădurea Craiului Mountains)
2.	Colinele Transilvaniei (Transylvanian Highlands)
3.	The Danube Delta
4.	Țara Hațegului – Retezat
5.	Eco Maramureș
6.	Mărginimea Sibiului
7.	Țara Dornelor
8.	Ținutul Zimbrului (Land of Bisons)
9.	Băile Tușnad and the surrounding areas
10.	Zărnești – Piatra Craiului

Source: data processing from <https://www.eco-romania.ro/eco-destinatii/>

The basic elements of an ecotourism destination, which attract tourists to satisfy their needs during their holiday/vacation (Fig. 10).

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Fig. 10 Elements of an attractive ecotourism destination

Source: *Drăguleasa, 2021*

The wonders of the natural landscape, together with the scientific value of certain species of vegetation in the area of origin, led to the

establishment of several protected areas (Table 2) within the Iron Gates Nature Park (*Drăguleasa, 2021*).

Table 2. Protected areas within the Iron Gates Nature Park

No.	Reserve name	Surface area (ha)
1.	Balta Nera-Dunăre	10
2.	Baziaș	170,9
3.	Calinovăț Island	24
4.	Râpa cu lăstuni	5
5.	Divici – Pojejena	498
6.	Valea Mare	1179
7.	Water Cave in Valea Polevii	3,2
8.	Moldova Veche Island	1627
9.	The fossil site Svinița	95
10.	Big Caldrons and Small Caldrons (Cazanele Mari and Cazanele Mici)	215
11.	The fossil site Bahna	10
12.	Duhovna Hill	50
13.	Gura Văii – Vârciorova	305
14.	Fața Virului	6
15.	Cracul Crucii	2
16.	Vărănic Hill	350
17.	Oglănicului Valley	150
18.	Cracul Găioara	5

Source: data processed by authors from <https://www.pnportiledefier.ro/>

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1.3. The tourism infrastructure of the Iron Gates Nature Park

The accommodation base is the main key element in the development of tourism activities, given their fundamental appropriateness, i.e. the social and economic efficiency. Through the tourists

accommodation, the social component (the need for relaxation, recreation and relaxation, etc.) is complemented by an economic component (income from services provided to tourists), which helps to shape the tourism phenomenon and the sustainable development of tourism.

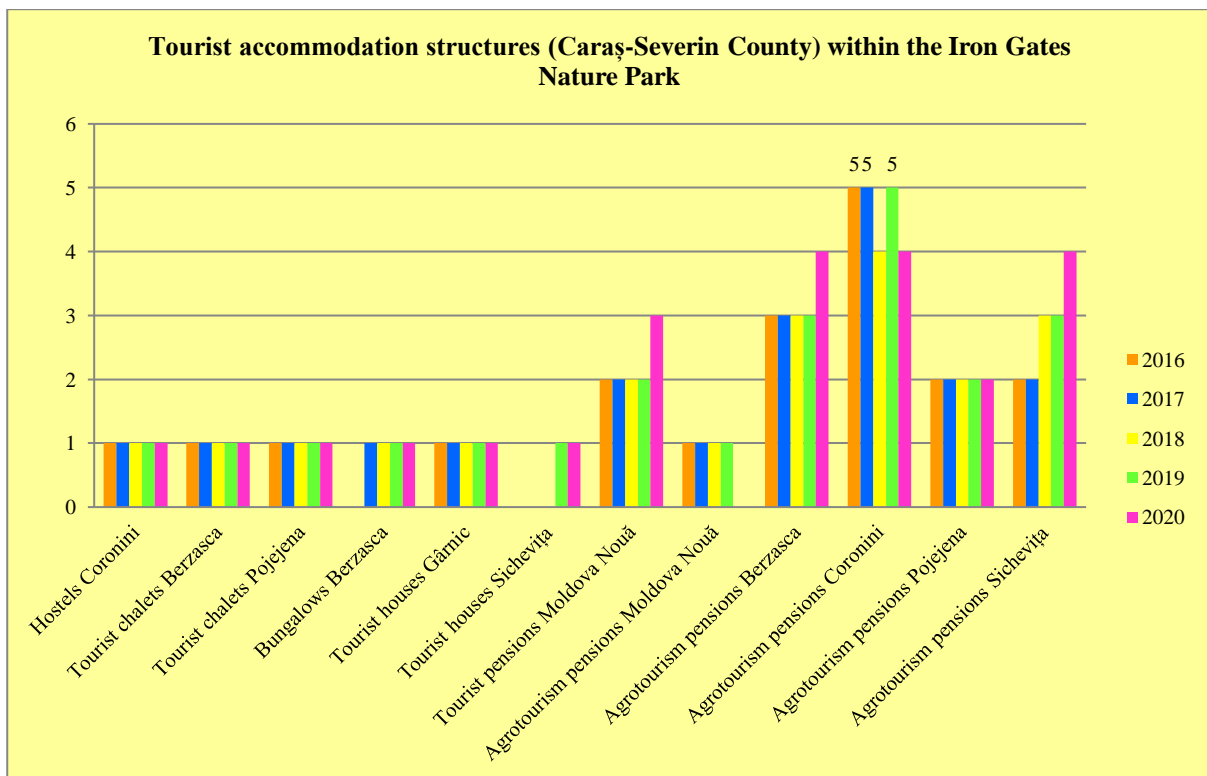
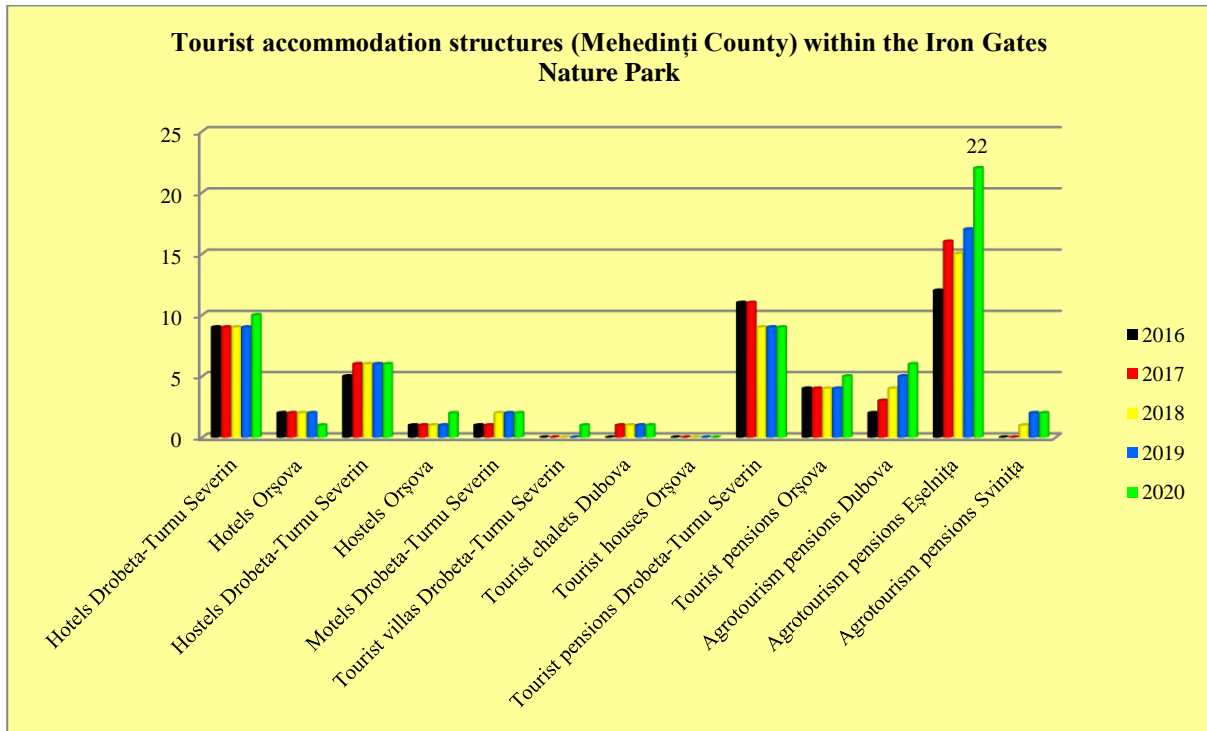


Fig. 11 Tourist accommodation structures in Mehedinți and Caraș-Severin counties, components of the Iron Gates Nature Park

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Source: *data processed by authors from insse.ro*

As for the tourist accommodation facilities (Mehedinți County and Caraș-Severin County), in the Iron Gates Nature Park, during the analysed period (Fig. 11), it can be noticed that, in 2020, despite the Covid-19 pandemic, the agrotourism guesthouses and the tourist pensions registered the highest increases. The highest values are recorded in the following tourist accommodation structures with accommodation function: tourist cottages, tourist villas, motels, etc.

The accommodation capacity is the essential element of the material tourism base on which the very development of tourists activities is organically dependent. There is a continuous correlation between the size, structure and grouping of the material accommodation base with the intensity and channelling of tourists flows or with the emergence of new types of tourism, all grafted onto a complex tourism background (Ciangă, 2007).

We observe (Fig. 12) oscillations in the number of accommodation places in hotels, with the highest increase in the number of accommodation places in 2020 (799 places) - Drobeta-Turnu Severin, Mehedinți county; the agrotourism guesthouses have recorded an upward trend, 120 places being registered in 2016 - Coronini, Caraș-Severin county.

Tourism circulation is one of the three essential components (together with tourism potential and the material base) that contribute to the definition of the tourism phenomenon. The effect of tourism movement is combined: *social*, contributing to the possibility of organising leisure time, the prevention of certain illnesses, the restoration of biological potential or the improvement of health, the broadening of information horizons; *economic accumulation*, especially for regions receiving tourists flows, which make perpetual or seasonal use of their primary tourism offer, *renewable* through planning and adaptation (Ciangă, 2007).

Tourists circulation is about people/tourists wanting to relax, spend their leisure time, visit sights, photograph landscapes, etc.

Most tourism specialists group the factors of tourism circulation into: supply and motivation, leisure time, income, as they are found to be absolutely necessary to drive tourists away from their place of residence.

Tourism flows are a form of spatial interaction between two areas, where the destination area has a surplus of amenities (e.g. tourists attractions) and the generating area has a deficit (or has other amenities). Tourism flows follow certain rules and are influenced by pull and push factors (Dinu, 2005).

Burkart and Medlik (1981) identified three main reasons why statistical measurements of tourism flow are important for understanding the tourism activity:

- to assess the size of tourism flows and monitor any changes; this allows a forecast of flows and a deciphering of market trends;
- to allow planning of future tourism activities;
- to be used for both the public and the private sectors as a basis for marketing activities.

Regarding the number of tourists arrivals in tourist accommodation facilities (Fig. 13), it can be observed that tourists (Romanians and foreigners) chose the following hotel structures: hotels, agrotourism hostels, tourist hostels and bungalows.

In the analysed period 2016-2020, there was a maximum peak in 2019 for hotels in the tourism sector, where more than 42,386 tourists arrived in Mehedinți county; there was a maximum for agrotourism hostels in 2019 in Caraș-Severin county (2,141 Romanian and foreign tourists).

At the opposite end, there are the following tourist accommodation structures where the lowest number of Romanian and foreign tourists were registered during 2016-2020: tourist villas (Drobeta-Turnu Severin), tourist cottages (Dubova), agrotourism pensions (Svinița), tourist cabins (Pojejena), tourist cottages (Gârnice).

In (Fig. 14) it is obvious that the trend of Romanian and foreign tourists to stay in hotels, tourist cottages, agrotourism guesthouses and tourist pensions is maintained.

The tourists circulation most accurately portrays the value and level of exploitation of tourism potential; this index is also a geodemographic phenomenon, with a heterogeneous, large-scale structure, made up of temporary population flows, belonging to various age groups, types, genders, and social categories.

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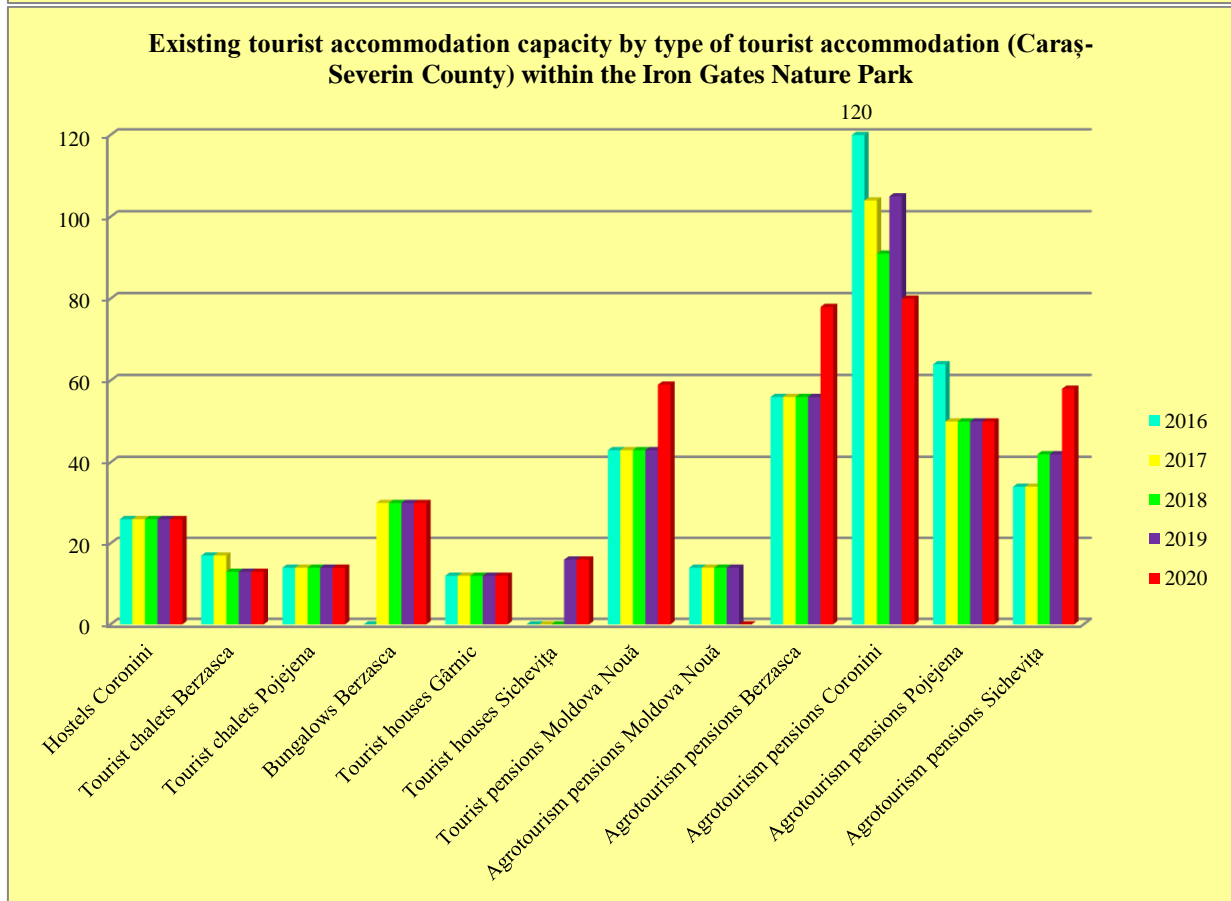
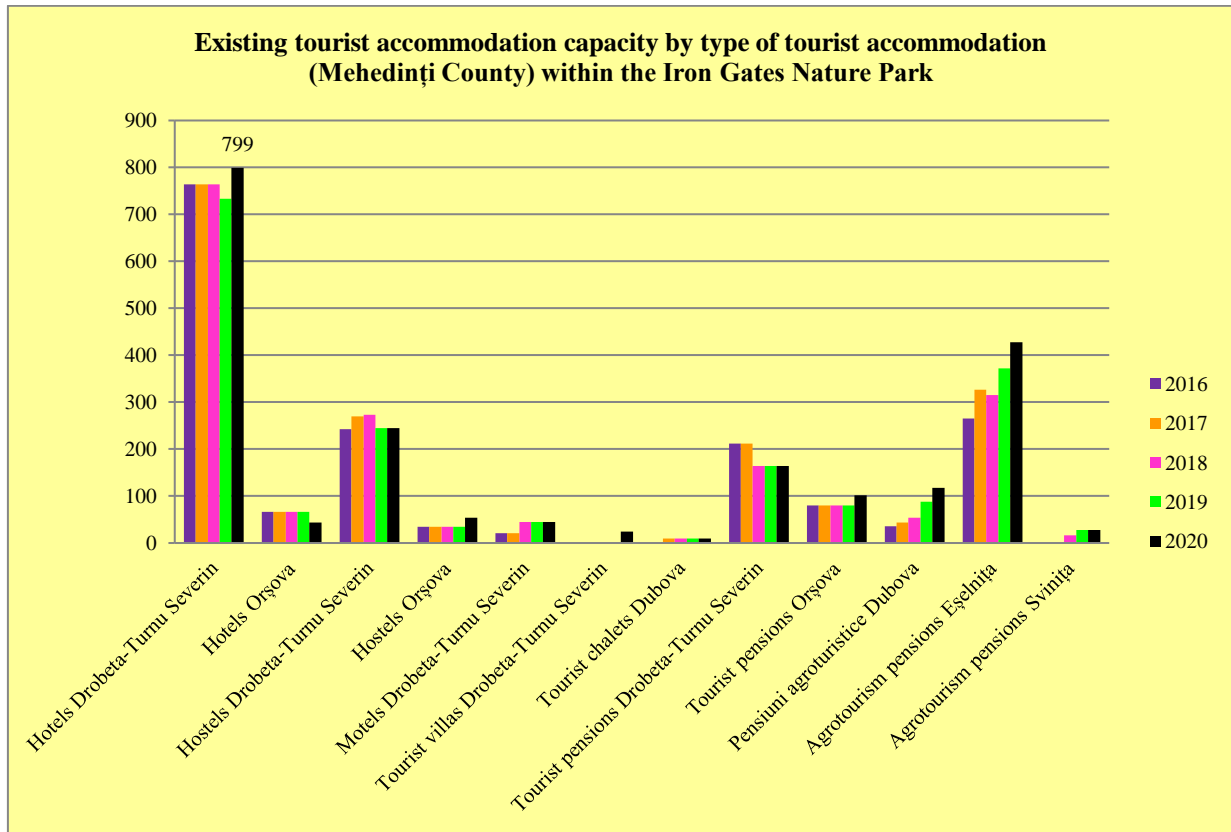


Fig. 12 Tourist accommodation capacity in Mehedinți and Caraș-Severin counties, components of the Iron Gates Nature Park

Source: data processed by authors from insse.ro

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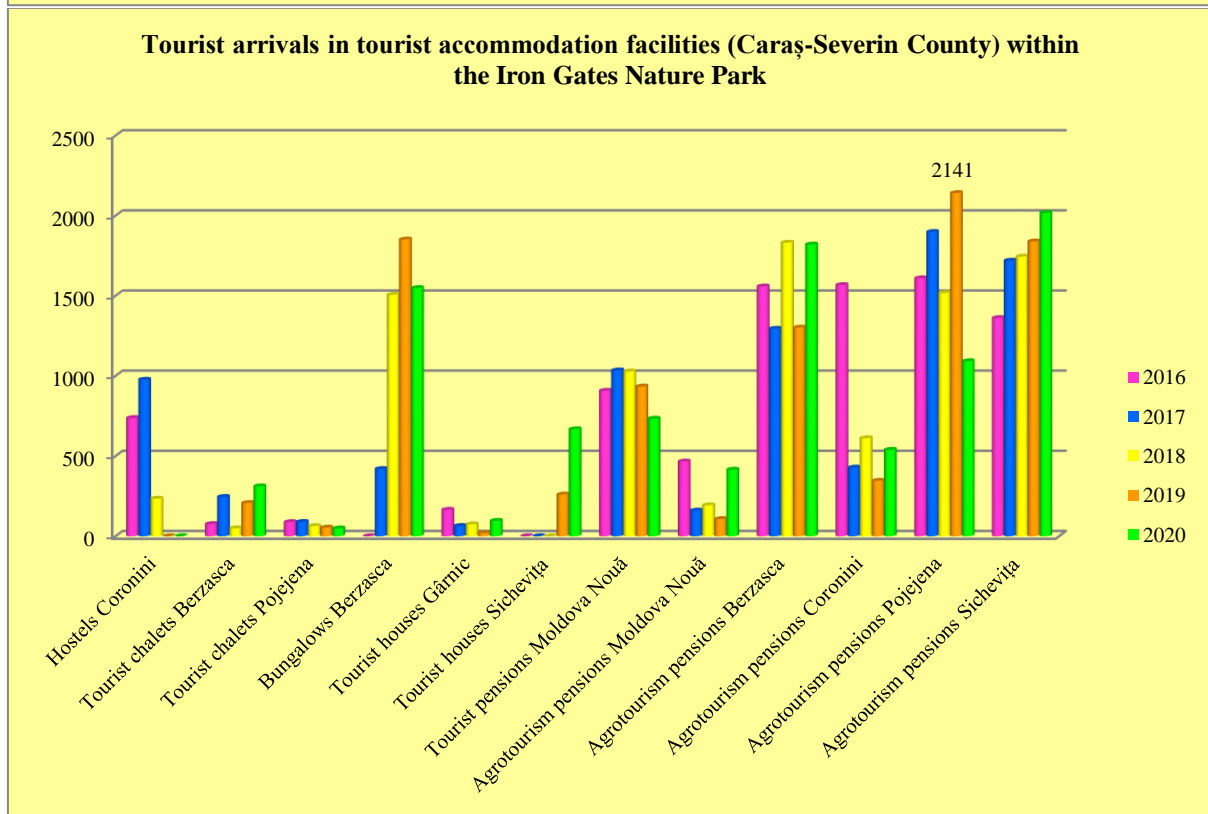
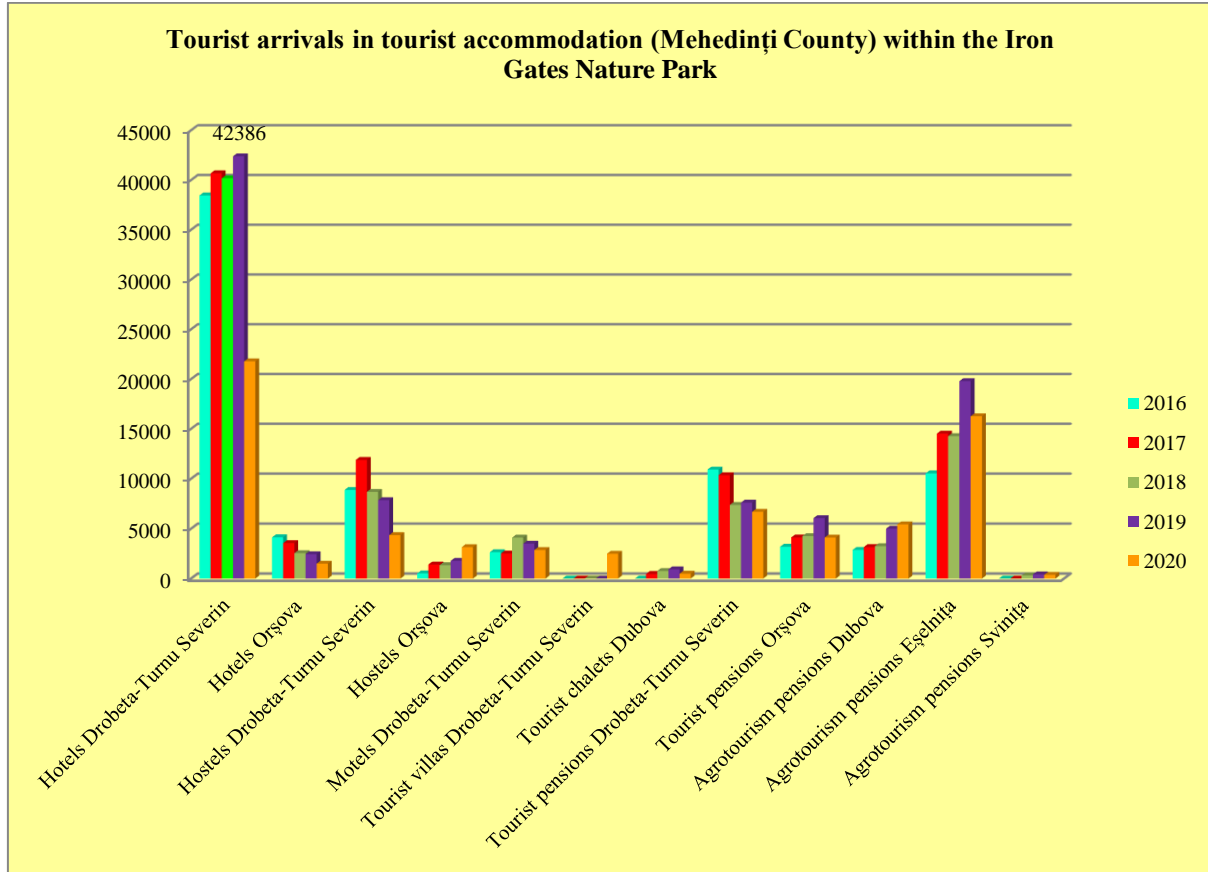


Fig. 13 Tourist arrivals (Romanian and foreign) in Mehedinți and Caraș-Severin counties, components of the Iron Gates Nature Park

Source: data processed by authors from insse.ro

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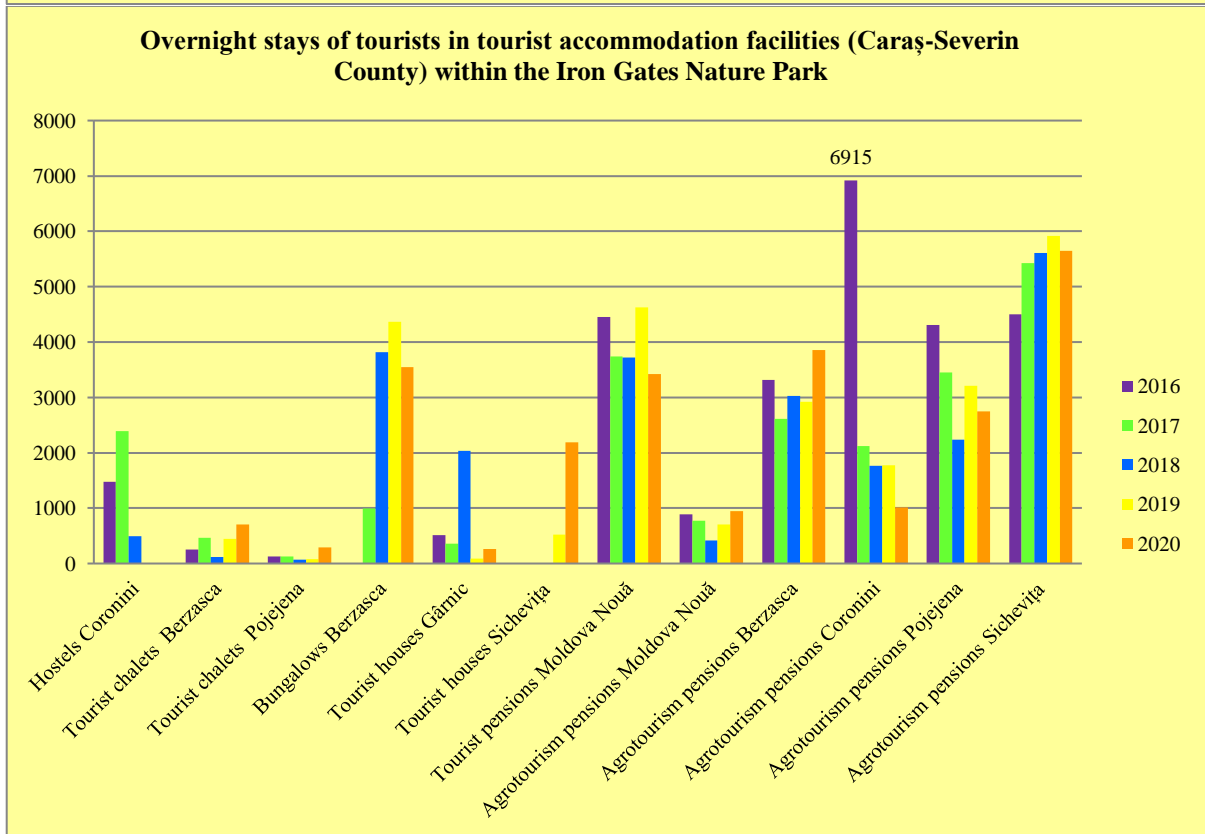
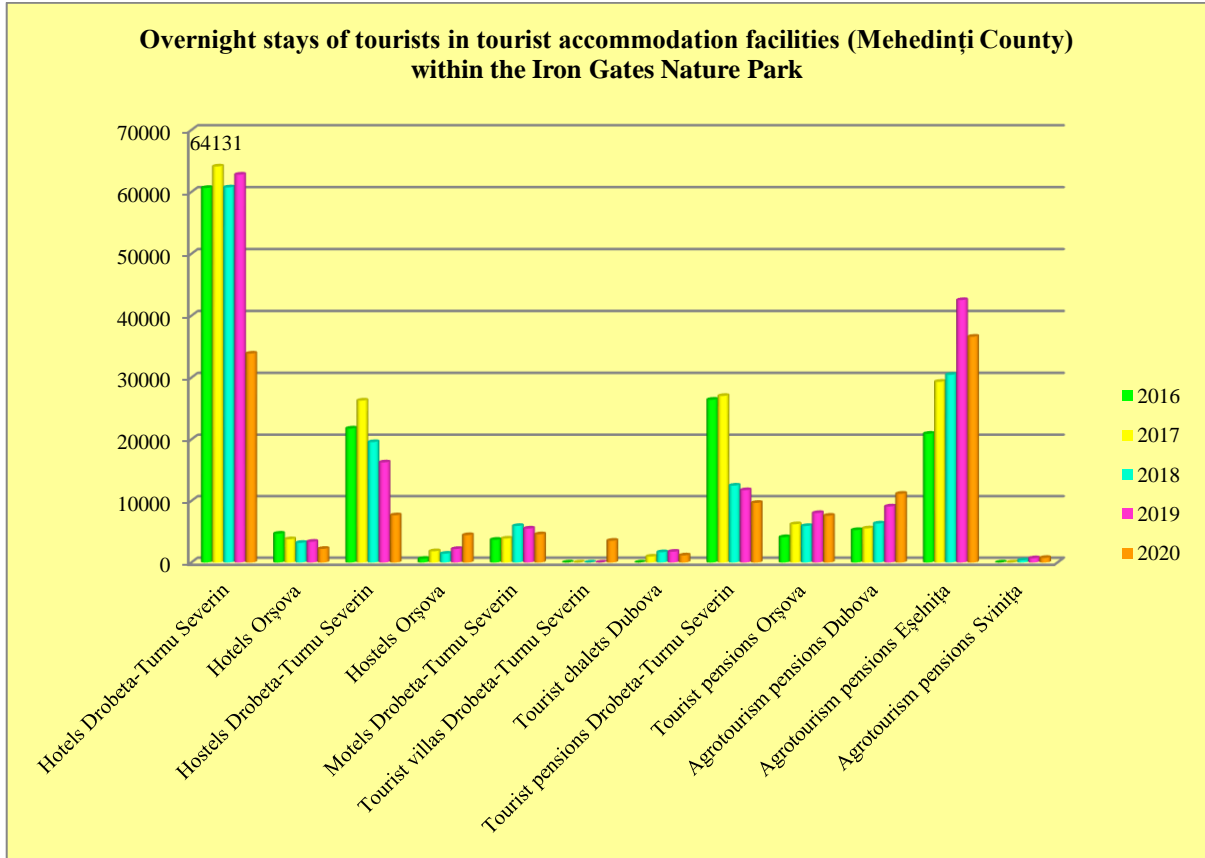


Fig. 14 Overnight stays of tourists (Romanian and foreign) in Mehedinți and Caraș-Severin counties, components of the Iron Gates Nature Park

Source: data processed by authors from insse.ro

Impact Factor:

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Availability of tourism infrastructure and superstructure: there are 'supporting' elements for the development of sustainable tourism:

- Tourist Visitor Centre which is located in the town of Orșova;
- Tourist Information and Documentation Centre in Drobeta-Turnu Severin (within the Iron Gates Region Museum);
- Tourist Information and Documentation Centre in Berzasca (hosted by the Cultural House of the commune);
- Tourist Information and Documentation Centre in Moldova Nouă (housed in a building of the Moldova Nouă Forestry Park).

Accessibility - there are various ways to reach the park

(<https://www.directbooking.ro/obiectiv-parcul-natural-portile-de-fier-clisura-dunarii157.aspx>):

- air access (from Timisoara and Craiova airports);
- road access (on the E70 road between Drobeta-Turnu Severin and Orșova and continuing on the DN 57 between Orșova and Baziaș);
- river access (via the ports of Orșova and Moldova Nouă and other moorings such as Drencova, Svinița and Tisovița);
- rail access (to the CFR train stations in Drobeta-Turnu Severin and Orșova).

Tourist activities that can be experienced in the Iron Gates Nature Park:

- ecotourism trails in the village of Eibenthal (mountain tourism);
- photographing fauna, flora and spectacular landscapes (scientific tourism);
- doing speology in the Danube Caldrons;
- fishing on the Danube (catfish, carp, trout) and hunting (wild boar, deer, roe deer);

- water sports on the Danube (canoeing, kayaking);
- cycling;
- practicing and learning traditional crafts;
- sightseeing (individual/group tourism);
- consultation of documentary material (brochures, tourist guides, films) about the nature park in the tourist reception and information centres for tourists/visitors;
- ecumenical/religious tourism (Vodița Monastery, Mraconia Monastery, St. Anna Monastery).

Conclusions

In conclusion, tourism has become a global hospitality industry, but its activities are not evenly distributed across the territory/space, between different tourism regions and geographical areas; planning can help the emergence of new tourism destinations and even the rehabilitation of protected areas that require certain technical and infrastructure facilities and the tourism development of their space.

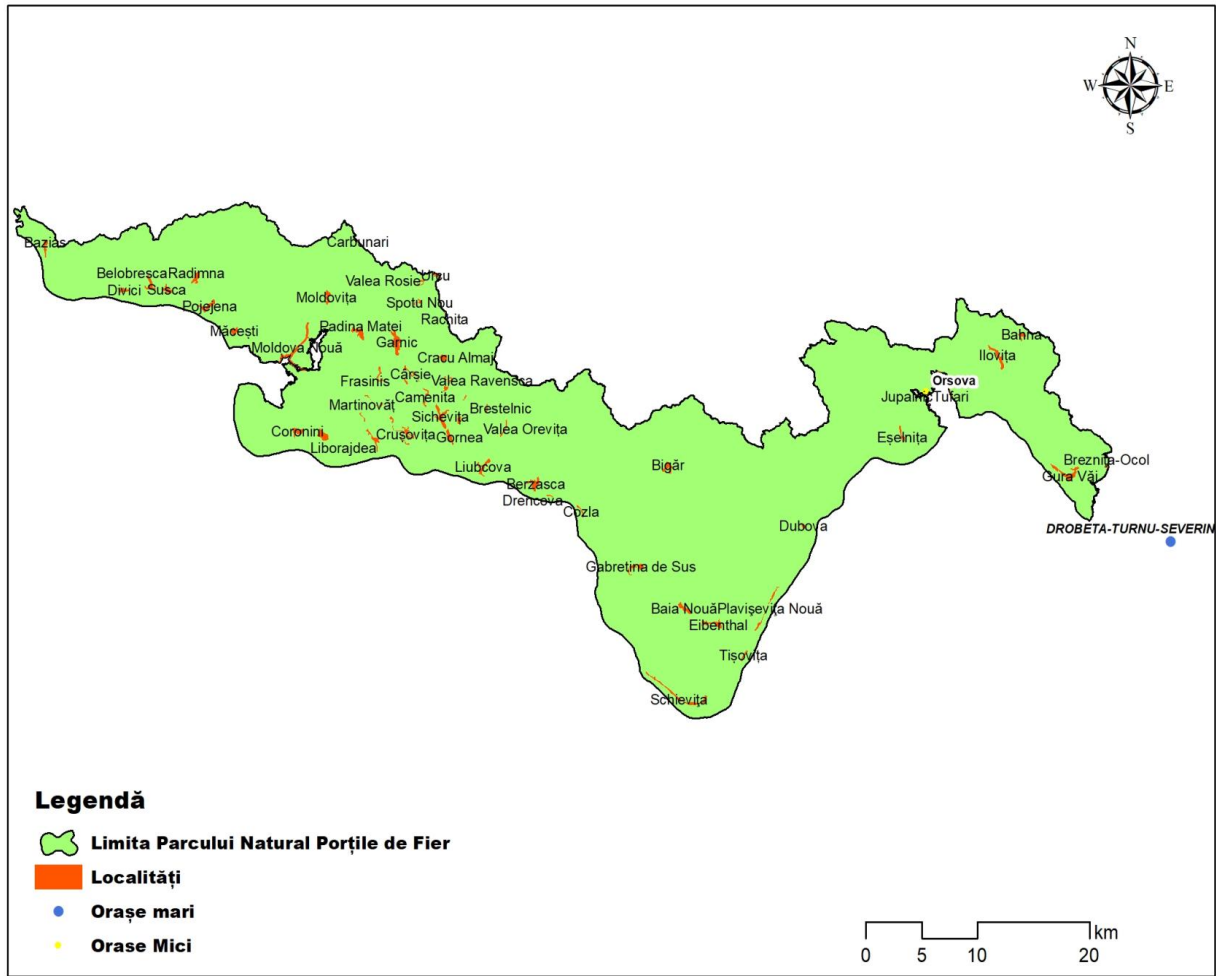
The complexity and importance of the tourism potential and the continuous development of the tourist accommodation structures within the Iron Gates Nature Park attract year after year tourists interested in practicing various forms of tourism, from ecotourism, water sports (canoeing, water skiing, wakeboarding), ecumenical tourism, agrotourism, etc.

Therefore, as a defining element of the tourism phenomenon, together with the natural tourism attractions and the characterization of the natural environment, the tourism traffic mobilizes important segments of the population, people of all ages, directly and indirectly reflecting the manner and stage of exploitation of the natural and man-made tourism potential of the Iron Gates Nature Park.

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Annexes

Annex 1. Map of the administrative and territorial components of the Iron Gates Nature Park

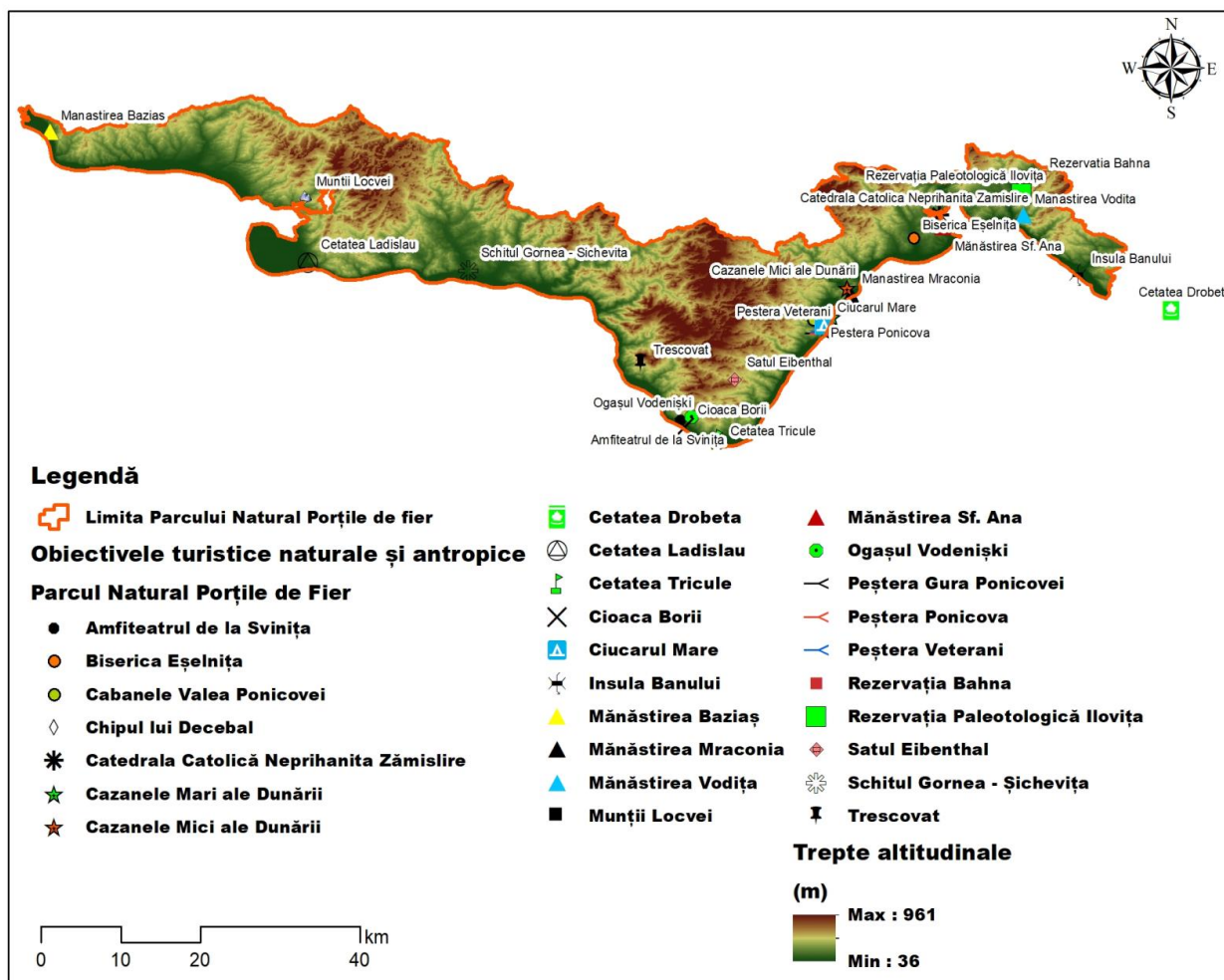


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Annex 2. Map of natural and man-made tourism objectives/attractions within the Iron Gates Nature Park



Source: data processed by authors in ArcGIS

References:

- Albulețu, I. (1982). *Zona turistică Porțile de Fier*, Editura Sport-Turism, București.
- Băltărețu, A.M. (2011). *Arii protejate: Ecoturism: Dezvoltare Durabilă*, Editura Pro Universitaria, București.
- Bran, F., Ildiko, I., Marin, D., & Mockesch, C. (1999). *Mic lexicon de protecția mediului*, Editura Economică, București.
- Burkart, A.J., & Medlik, S. (1981). *Tourism, past, present and future*, Heinemann, London.
- Ceballos-Lacurain, H. (1996). *Tourism, Ecotourism and Protected Areas*, IUCN, Gland, Switzerland and Cambridge, UK.
- Ciangă, N. (2007). *România. Geografia turismului*, Editura Presa Universitară Clujeană, Cluj-Napoca.
- Constantinescu, N.N. (1976). *Economia protecției mediului natural*, Editura Politică, București.
- Dinu, M. (2005). *Geografia turismului*, Ediția a III-a, Editura Didactică și Pedagogică, București.
- Dodero, G. (1983). *Glossario di Ecologia, Inquinamento, Igiene ambientale*, Edizioni Universitarie Scientifiche, Roma.

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JIF = 1.500

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SJIF (Morocco) = 7.184

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IBI (India) = 4.260
OAJI (USA) = 0.350

10. Drăguleasa, I.A. (2021). *Politici și Strategii pentru Dezvoltarea Turismului Durabil – Regiunea Sud-Vest Oltenia*, Editura Sitech, Craiova.
11. (2003). IUCN. *Financing Protected Areas*, London: IUCN
12. (1994). IUCN. *Guidelines for Protected Area Management Categories*, London: IUCN
13. Matei, E. (2006). *Ecoturism*, Colecția „Geografie” București.
14. Mazilu, M.E., & Drăguleasa, I.A. (2021). The Development of Ecotourism South-West Oltenia Region, *International Journal of Innovation Scientific Research and Review*, Vol. 03, Issue, 09, pp.1755-1760, September, 2021., IF: 4,95. <http://journalijisr.com/sites/default/files/issues-pdf/IJISRR-656.pdf>
15. (n.d.). *National Institute of Statistics, TEMPO online*: Retrieved April 2021 from <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>
16. Oarcea, Z. (1999). *Ocotirea naturii. Filozofie și împliniri. Parcuri naționale și parcuri naturale*. Editura. Presa Universității Române, Timișoara.
17. Smaranda, J.S. (2008). *Managementul turismului în ariile naturale protejate*, Editura Oscarprint, Cluj-Napoca.
18. Stănculescu, G., Lupu, N., & Țigu, G. (1998). *Dicționar poliglot explicativ de termeni utilizați în turism*, Editura ALL, București.
19. (n.d.). *World Data Base on Protected Areas*.
20. (n.d.). *hărți realizate în programul ArcGIS*.
21. (n.d.). Retrieved April 2019 from <http://geo-spatial.org/vechi/download/?pg=4>
22. (n.d.). Retrieved March 2021 from <https://www.pnportiledefier.ro/>
23. (n.d.). Retrieved April 2021 from <https://www.directbooking.ro/obiectiv-parcul-natural-portile-de-fier-clisura-dunarii-157.aspx>
24. (n.d.). Retrieved May 2021 from https://wwfeu.awsassets.panda.org/downloads/anexa1_descr_ariiprot_rnp.pdf
25. (n.d.). Retrieved May 2021 from <https://www.eco-romania.ro/eco-destinatii/>
26. (n.d.). Retrieved June 2021 from www.ecotourism.org

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Dilbar Alimovna Ruzibaeva
Tashkent State Agrarian University
English teacher

Nilufar Alisherovna Baykhanova
Tashkent State Agrarian University
English teacher
Department of Languages

DEVELOPING THE WRITING SKILLS OF STUDENTS IN NON-LINGUISTIC UNIVERSITIES

Abstract: One of the specific features of an ESP letter is its authenticity. Written assignments given to students differ depending on their specialization. For EAP (English for Academic Purposes), these are usually articles, abstracts, even research papers. However, English for Professional Purposes requires other types of written assignments such as reports and lectures, letters and emails, notes or instructions.

Key words: foreign language, technology, method, technique, specificity of the language.

Language: Russian

Citation: Ruzibaeva, D. A., & Baykhanova, N. A. (2022). Developing the writing skills of students in non-linguistic universities. *ISJ Theoretical & Applied Science*, 01 (105), 172-174.

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Scopus ASCC: 1203.

РАЗВИТИЕ ПИСЬМЕННЫХ НАВЫКОВ СТУДЕНТОВ НЕЯЗЫКОВЫХ УНИВЕРСИТЕТОВ

Аннотация: Одной из специфических особенностей письма ESP является его аутентичность. Письменные задания, которые даются студентам, различаются в зависимости от их специализации. Для EAP (English for Academic Purposes) это обычно статьи, рефераты, даже исследовательские работы. Тем не менее, английский для профессиональных целей требует других типов письменных заданий, таких как отчеты и лекции, письма и электронные письма, заметки или инструкции.

Ключевые слова: иностранный язык, технология, метод, прием, специфика языка.

Введение

Хотя понятие «аудитория» должно занимать центральное место в любом письменном задании, в ESP ему уделяется еще больше внимания. Следует отметить, что говоря о написании ESP термин «дискурсивное сообщество» является более точным. Однако этот термин был введен М. Нистрандом в конце 20 века. Дискурсивное сообщество включает в себя людей, которые разделяют схожие взгляды, цели, культуру и, как следствие, ведут себя одинаково [1. с. 84]. Говоря о роли дискурсивного сообщества в написании ESP, оно формирует формат письменных работ, включая стиль, выбор слов и структуру. Зная

дискурсивное сообщество, к которому человек обращается в своем письме, можно подобрать нужные слова и формат.

При обучении академическому письму студентов ESP можно выбрать несколько подходов, предложенных в разное время. Продуктивный подход был применен одним из первых [2. с. 16]. Это довольно традиционный способ отработки навыков письма. Он состоит из нескольких этапов. Начальный этап содержит представление образца текста, который в дальнейшем послужит моделью. Образец текста представляется преподавателем и внимательно изучается учащимися. После этого пишется новый

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продукт, однако он аналогичен исходному тексту по формату и структуре. Хотя многим специалистам он может показаться малоэффективным, он все же имеет право на существование.

Тем не менее, продуктовый подход был заменен процессным подходом. Его отличительная черта заключается в ориентации на процесс написания, а не только на конечный продукт [3. с. 224]. В результате он включает в себя большее количество этапов. Согласно Триббллу, есть 4 основных этапа, которые можно разделить на более мелкие. Этапы: предписьменный; сочинение/черчение; пересмотр; и, наконец, редактирование. Он аналогичен тому, который используется при обучении письму в вузах как лингвистических, так и неязыковых специальностей. Сравнивая два подхода, видно, что первый не включает этап подготовки к написанию, т.е. мозговой штурм, кластеризация или изложение. В процессном подходе большое внимание уделяется проверке черновиков и редактуре. Это может быть сделано учителем или учащимися - путем сверстников или даже самооценки. Составление может быть выполнено два или даже три раза в зависимости от понимания и прогресса учащихся [4. с. 46].

Однако в обоих вышеупомянутых подходах отсутствует признание роли общества или культуры в процессе письма. В этой ситуации был предложен социально-конструктивистский подход. Этот подход связан с понятием дискурсивного сообщества. Основное внимание здесь уделяется обществу или конкретно читателям данного произведения. Однако разница между терминами «аудитория» и «дискурсивное сообщество» в основном заключается в том, что для последнего также имеют дело с ценностями, потребностями и ожиданиями сообщества. Таким образом, в процессе написания автор должен сконцентрировать вышеперечисленные факторы для достижения желаемой цели и воздействия на читателей [5. с. 139].

При обучении написанию академических работ, таких как тезисы или даже деловые письма, стоит упомянуть жанровый анализ. По Суэйлеу, жанр — это «класс коммуникативных событий, участники которых разделяют некоторый набор коммуникативных целей». Таким образом, прежде чем приступить к процессу написания, необходимо проанализировать жанр. Дадли-Эванс приводит множество примеров различных жанров. Для анализа жанра необходимо изучить большое количество письменных произведений. Выявляются сходные черты в структуре и использовании языка. По результатам составлен «скелет», состоящий из ходов. Наконец, писатель может следовать заданной структуре, и текст будет максимально приближен к ожидаемому

результату, поскольку он будет адресован конкретным читателям, а не возможным. Можно определить более широкие жанры, такие как письма, или более конкретные, такие как письмо-заявка, сопроводительное письмо и т. д. Обычно письма включают около шести или семи ходов, в зависимости от типа письма.

Тот же анализ можно применить для классификации статей или лекций. Наиболее часто в академических лекциях используется модель «гипотетически-реальная» [6. с. 158]. Типичные лекции начинаются с теоретического утверждения лектора, которое затем подтверждается. Однако можно сделать и наоборот, и к концу лекции утверждение будет опровергнуто. В обоих случаях гипотетическое утверждение подтверждается или опровергается с помощью фактов, примеров предыдущих исследований и различных других «реальных» данных. Схема «претензия-обоснование» может быть достаточно распространена при написании научных статей, основанных на предыдущих исследованиях. В начале работы делается теоретическое утверждение и утверждается, что оно истинно. Основная часть статьи обосновывает требование, описывая исследование и его результаты. Знание типов паттернов может сильно помочь писателям и значительно облегчить процесс написания [7. с. 78].

Примером письменного задания для студентов ESP, специализирующихся на строительстве или архитектуре, может быть описание конструкции, для студентов-медиков — описание нового лекарства или лечебной процедуры. Как правило, студенты обеспечены большим количеством материалов по заданной теме, описание процедур лечения различных заболеваний. Студенты анализируют его, обращая внимание на выбор слов, структуру предложений и другие необходимые аспекты. Следующим шагом перед тем, как перейти к процессу написания, является определение аудитории — потенциальных читателей. В данном случае это могут быть профессионалы, такие как ученые, исследователи, преподаватели и даже студенты-медики. Хотя неспециалисты также могут прочитать данное произведение, это гораздо менее вероятно. Кроме того, студент ESP должен учитывать социальное происхождение аудитории и цель чтения. Это может быть либо знакомство с методом; реализовать его на практике, сравнить с другими, подобными методами или даже подвергнуть критике. Если все шаги соблюдены, конечный продукт должен отражать и соответствовать всем потребностям читателей и быть максимально приближенным к оригинальным, аутентичным произведениям [8. с. 47].

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Последним аспектом является оценка студентов ESP. Этот аспект часто игнорируется или ему уделяется мало внимания. Тем не менее, правильный метод оценивания может как повысить мотивацию учащихся, так и дать четкое представление о сильных и слабых сторонах учащихся в письменной форме. Дадли-Эванс предлагает дать учащимся два задания и около 40 минут. Хотя можно утверждать, что две задачи требуют больше времени, чем одна, этот выбор все же имеет свои преимущества. Предоставляя учащимся варианты, учитель дает им больше шансов успешно сдать тест. Во-первых, две задачи короче одной и разум человека воспринимает это положительно. Таким образом, человек более уверен в себе и повышается вероятность успеха в

тесте. Второе преимущество двух заданий заключается в том, что если ученики не знают, как выполнить одно из заданий, они могут сконцентрироваться на втором и все же получить какие-то результаты. Чтобы сохранить достоверность, рекомендуется интегрировать чтение и письмо в тест. В ЕБР (English for Business Purposes) учащимся может быть выдана памятка для чтения и написания отчета или письма в ответ на него.

Существует несколько различных подходов к обучению письму. Хотя они совершенно разные и даже противоречат друг другу, каждый из них можно использовать, однако в определенном случае.

References:

1. Zhura, V.V., Martinson, J.S., Protopopova, N.V., Chervatyuk, N.V., & Guba, T.I. (2009). *Latin language and the basics of medical terminology: a study guide on the Latin language and the basics of medical terminology (in English) for foreign medical students studying in the specialty "General Medicine" and "Dentistry"*. Volgograd: VolGMU.
2. Provotorova, E.A., & Uvarova, M.A. (2018). The influence of the language of instruction on the sequence of presentation of educational material (on the example of the course "Latin medical terminology"). *Problems of modern education. Interuniversity collection of scientific papers. International edition*. Issue 11, M.: RUDN.
3. Provotorova, E.A., & Uvarova, M.A. (2017). *Methodological differences in teaching Latin to Russian-speaking and English-speaking students of the Faculty of Medicine*. Higher School: Experience, Problems, Prospects. Materials of the X International Scientific and Practical Conference. Moscow: RUDN.
4. Matveeva, O.N. (2010). *Formation of professional competence among students - future translators using a training thesaurus: author. dis. ... Cand. ped. Sciences: 13.00.08*. - Samara.
5. Azimov, E.G., Shchukin, A.N. (2009). *New dictionary of methodical terms and concepts (theory and practice of teaching languages)*. - Moscow: Publishing house IKAR.
6. Grebenyuk, T.B. (2008). *Methodological foundations of the competence-based approach in education*. Problems of the competence-based approach in secondary and higher education: collection of articles. scientific. tr. / ed. T. B. Grebenyuk. - Kaliningrad: Publishing house of the RSU im. I. Kant.
7. Arkhipova, I.S. (2014). Formation of professional competence of future doctors in the process of teaching Latin (from work experience). *Philological sciences. Questions of theory and practice*, No. 7 (37), Part II.
8. Drozdova, D. V. (2009). Integrated teaching of Latin and English in the pedagogical college. *News of the Russian State Pedagogical University. A. I. Herzen*, No. 94.
9. Lyubomudrova, T.A. (2012). The role of parallel teaching of foreign and Latin languages in the professional training of future physicians. *Bulletin of the Nizhny Novgorod University. N.I. Lobachevsky*, No. 1 (2).

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Nizomiddin Najmiddin ugli Ochilov

State Testing Center under the Cabinet of Ministers of the Republic of Uzbekistan
Uzbekistan, Tashkent

ANALYSIS OF INTERNATIONAL AND LOCAL STANDARDS OF INFORMATION PROTECTION IN MODERN OPERATING SYSTEMS

Abstract: The article analyzes international and local standards in this field in order to ensure information security based on encryption algorithms in operating systems. Block encryption algorithms are widely used in open source operating systems. The encryption system, in turn, slows down the operating system. All encryption / decryption operations are performed invisible to the user. When the entire hard disk is encrypted (virtual memory files, temporary files), it is encrypted regardless of the level of importance.

Key words: encryption, decryption, standard, parallel computing, linear, differential, round, key length.

Language: English

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Introduction

The purpose of this article is to ensure information security based on encryption algorithms in operating systems, as well as the use of cryptographic methods based on the analysis of international and local standards of information protection in modern operating systems.

In order to apply cryptographic algorithms in the operating system in the article, it is necessary to introduce a functional and flexible cryptographic subsystem in the system. The following subsystem program can be presented to users (program, service and service) in the form of a set of cryptographic algorithms. The cryptographic software of the operating system consists of two mechanisms [1].

Connection library of cryptographic functions. This mechanism is used at lower levels of the operating system (kernel level applications).

The operation of cryptographic functions is performed in the process of functions that determine the minimum latency of responses to queries. The amount of RAM required to perform such actions must be reserved in advance by the system administrator. Because the computer has a limited amount of RAM, libraries cannot be used anywhere [2].

Main part

In the Republic of Uzbekistan, there is a decryption/decryption algorithm based on the standard UzDSt 1105:2009, which describes the block encryption algorithm. This article presents the theoretical results obtained based on the standard UzDSt 1105:2009. In the cryptographic standard UzDSt 1105:2009, the table exchange consists of the replacement of 256 values, and according to the given formula, the bits on the arguments d , L , R , are formed depending on the extended k_{se} k_{ey} .

Modern operating systems use cryptographic methods of information protection everywhere. A special module is created to unify cryptographic functions into operating systems. This module includes various cryptographic functions.

Ensuring information security is a priority of the international community is one of the functions. Cooperation between the states in this area is still developing, and in the Republic of Uzbekistan, special attention is paid to the protection of state secrets and confidential information.

From the results of the analysis (Figure 1), it can be seen that the twofish algorithm, which works in modern operating systems, is effective, but it is not registered as a standard in the Republic of Uzbekistan. Therefore, it does not fully comply with the

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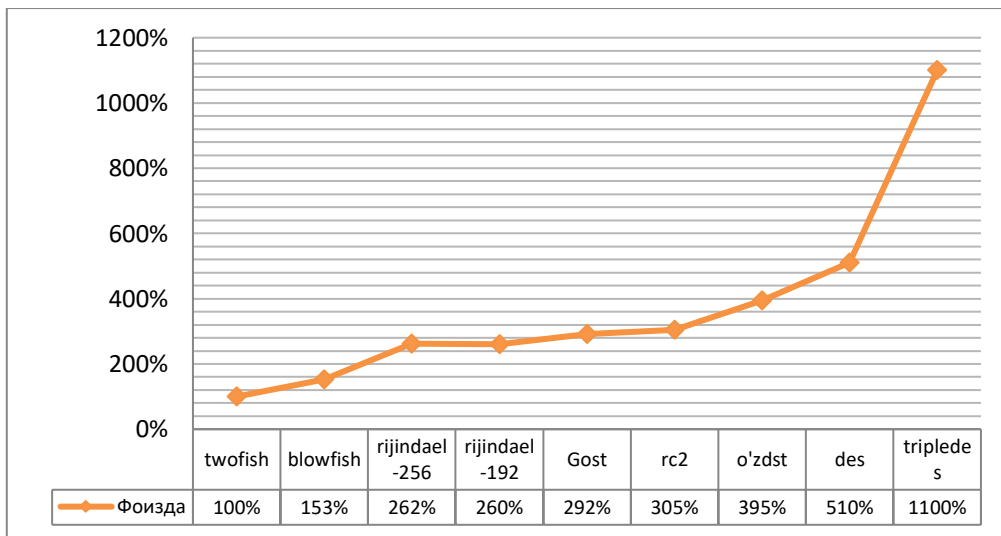
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requirements of the legislation when working with confidential documents (Figure 2).

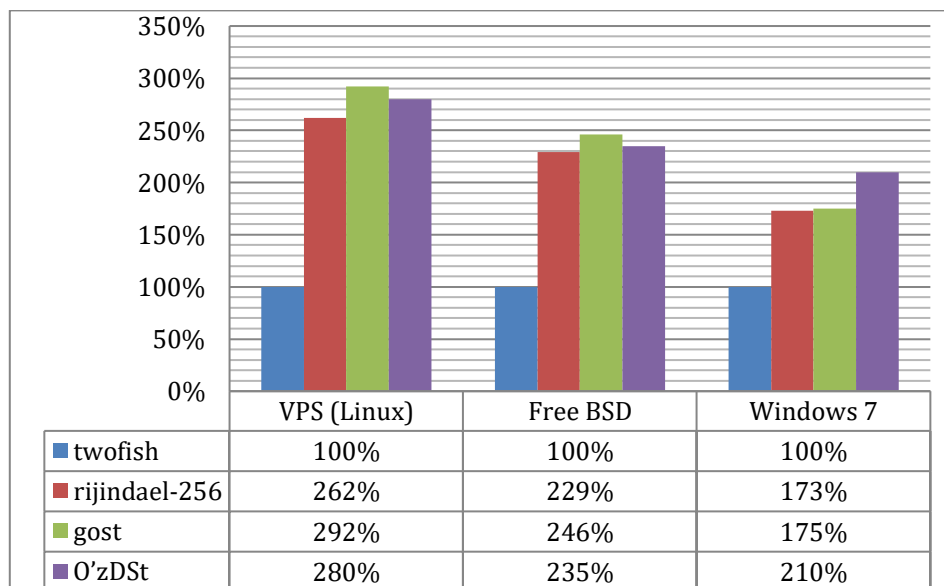
One of the most common encryption algorithms running on operating systems is the DES algorithm. In the DES algorithm, block exchange can occur in affine exchanges [2]. Many of the logical functions used in exchanges differ from the affine functions for only two of the sixteen possible sets of arguments, i.e., the nonlinear change in the DES algorithm is two (the nonlinear change in a 4-bit change is four). This in turn increases the resilience of the DES encryption algorithm to differential and linear cryptanalysis. Also, DES, if x, z - is plain text and a key, the following equation $DES(x, z) = DES(x, z)$ has the

property of being reasonable. This is a disadvantage of the DES encryption algorithm, which halves the selection method performed when the key is detected at the level of accuracy for the intruder. After the advent of differential cryptanalysis, the DES algorithm was able to reduce its tolerance to 237 levels. Later, these figures were also reduced using linear cryptanalysis. It should be noted that the determination of keys using the differential method is based on the assumption that different keys are used for each round.

Therefore, an increase in the number of keys does not significantly increase the robustness of this algorithm.



1. Figure. Speed of execution of all encryption algorithms running on operating system



2. Figure. Encryption algorithms in modern operating systems

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In the encryption algorithms GOST 28147-89 and UzDST 1105:2009, switching blocks, as in DES, are not installed and are confidential. The key used in encryption is 256 bits, which increases the crypto currency tolerance.

Experiments with the DES algorithm have shown that wildcard replacement significantly reduces the reliability of the algorithm. Distribution mechanisms are different in the algorithms GOST 28147-89 and DES. If in DES the replacement of bit blocks in the mat is achieved, then in GOST 28147-89 this is done by adding 232 modules. The experimental results show that to ensure stability against differential and linear cryptanalysis methods, it is advisable to select extreme substitutions with linearity 4 and distribution 1. In addition, the largest difference between the two substitution results should have the least probability (the sum of the differences is determined by modulus 2). Finding such differences poses significant challenges. The number of cycles in GOST 28147-89 is twice as much as in DES. Cryptanalysis of GOST 28147-89, consisting of 24 cycles, shows that its tolerance for random replacement blocks is 254.

$$\{[(i + L) \bmod 256] + 1\}^d \bmod 256$$

Here is the d - R upgrade. The total number of replacement tables generated based on various values of these parameters is 4,161,600. Therefore, our main goal is to analyze the method of automatic quality control of the switching tables used in the encryption algorithm of the UzDSt 1105:2009 standard. The algorithm used in the UzDSt 1105 cryptographic standard: 2009 of the Republic of Uzbekistan is relatively new because it is relatively new. The analysis of the UzDSt 1105:2009 cryptographic standard uses a parallel algorithm that automatically evaluates its replacement tables. Allows you to parse arbitrary replacement tables based on the generated algorithm. For example, you can improve this algorithm when checking the stability of all 4-bit switch tables or specific function classes. Since the S-box is the "heart" of the entire cryptosystem, the results of his research are of great practical importance.

The main object of our analysis is the exchange table, consisting of the exchange of natural numbers. A lookup table or lookup field is a bijective transformation.

$$F: \mathbb{F}_2^n \rightarrow \mathbb{F}_2^n$$

There \mathbb{F}_2 is a secondary limited area.

F can also be calculated as a system of logical functions ($f: \{0, 1\}^n \rightarrow \{0, 1\}^n$):

$$F(x_1, x_2, \dots, x_n) = (f_1, f_2, \dots, f_n)$$

Therefore, the i-function is called F_i , the i-component of the vector. We express $x = (x_1, x_2, \dots, x_n)$, x_i . We define the binary vector 1 in the i-position as $e_i = (0, 0, \dots, 1, 0, \dots, 0)$.

$$\sum_i = \{(x', x'') : x', x'' \in X, x'_i + x''_i = e_i\},$$

$$\sum_i = \bigcup_{i=1}^n \Sigma_i$$

If n of any of the incoming bits changes, and each of the outgoing bits varies with probability $p = 1/2$, then F satisfies the basic strict criterion. F satisfies the basic strict criterion if

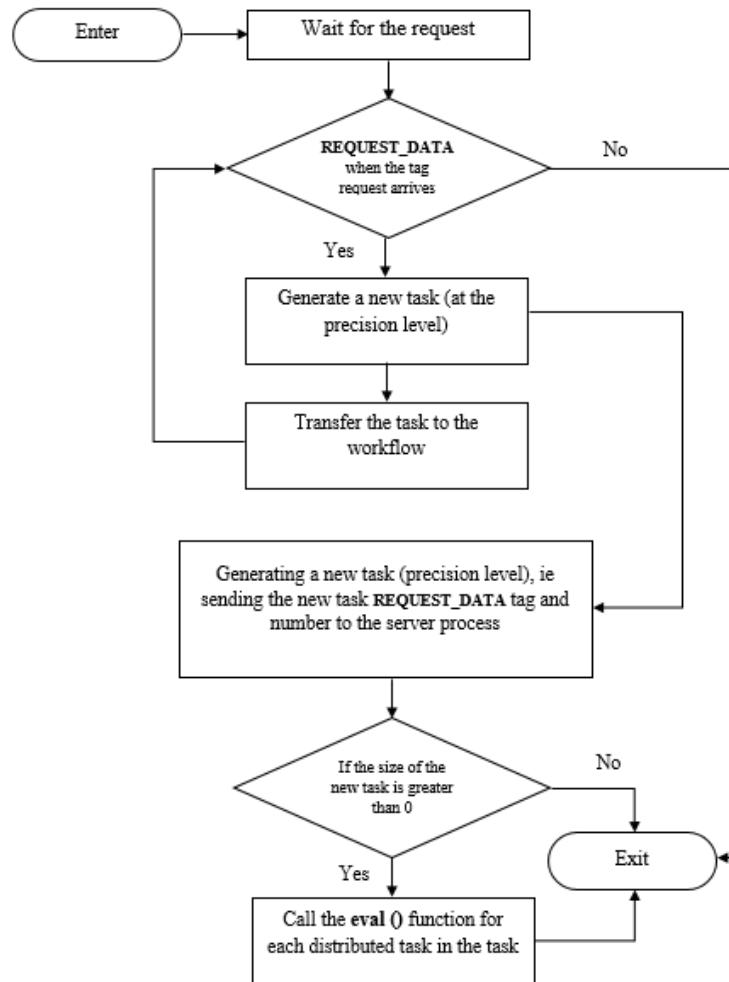
$$P(v_i^j = 1) = \frac{1}{2}, \forall j = \overline{1, n}$$

$v_i = (x', x'') = F(x') + F(x''), (x', x'') \in \Sigma_i$ herefore, parallel algorithms with high scale and accuracy based on parallel computing technology were created through OpenMPI (library of message transmission interface). The algorithm automatically adapts to the computing resources given to it-the number of computational processes-without changing the code. In addition, the high accuracy ensures that none of the computers in the cluster running the algorithm will run idle, even if they have different parameters. There are at least two calculation processes, and they are all numbered (from 0). One of the processes is called the server process (from 0) or simply in the server cluster. The rest are called computing or working processes. Server performance algorithms and workflows differ. The server devices are responsible for breaking down the initial task into smaller classes of a certain size (set in the compilation of the program). The algorithm is presented in block diagram 1.2.

In order not to lose all data during a power outage or power outage while the program is running, data of a certain frequency is written to temporary files using functions in the log file. The total number of replacement tables generated on the basis of the different values above was 4,161,600, for each of which a linear and differential method was used to automatically perform the quality assessment eval () function and organize the attacks. If tables are identified during the linear analysis process, then the independence criteria for such tables are not met. Based on the results obtained, it is possible to confirm that the replacement tables are resistant to linear and differential analysis, which is sufficient for more than 4 rounds. The encryption algorithm UzDSt 1105:2009 and the difference between GOST 28147-89 are given in Table 1.2 and the encryption algorithms in other foreign countries.

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1.2. Block diagram. Algorithm block diagram based on parallel computing technology.

The analysis of the encryption standard UzDSt 1105: 2009 revealed the following:

-UzDSt 1105: 2009 encryption algorithm uses 2 keys: an encryption key and a functional key, each of which is a 256-bit sequence. The interaction of these keys is equivalent to the use of a 512-bit encryption key in the encryption algorithm, which in turn prevents the possibility of unauthorized decryption of data;

-if high-level security elements are used, the functional key is changed in each session;

-The encryption standard UzDSt 1105: 2009 has been confirmed to be resistant to linear and differential analysis, which requires more than 4 rounds.

Conclusion

It can also be seen from the results of the analysis that the analysis of encryption modes was carried out using parallelism tasks when assessing the quality of encryption algorithms. This article compares data encryption/decryption standards in modern and open source operating systems, evaluates processing speed and cryptanalysis, and shows that the UzDSt 1105:2009 encryption standard is resistant to linear and differential analysis, as well as the GOST 28147-89 encryption algorithm. High-dimensional and high-precision parallel algorithms based on parallel computing technology were created through OpenMPI (Library of Interface). The total number of conversion tables to the UzDSt 1105: 2009 encryption algorithm is 4,161,600.) Functions and attacks were organized and cryptographic resilience was determined.

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References:

1. Torvalds, L., & Diamond, D. (2002). *For Fun = Just for fun*. (p.288). Moscow: EKSMO-Press. ISBN 5-04-009285-7.
2. Love, R. (2006). *Linux kernel development = Linux Kernel Development*. 2nd ed. (p.448). Moscow: "Williams". ISBN 0-672-32720-1.
3. Rodriguez, K. Z., Fisher, G., & Smolski, S. (2007). *Linux: ABC of the kernel*. (p.584). SPb: "KUDITS-PRESS". ISBN 978-5-91136-017-7.
4. Barret, D. (2007). *Linux: basic commands. Pocket guide*. 2nd ed. (p.288). SPb: "KUDITS-PRESS". ISBN 5-9579-0050-8.
5. Torvalds, L. (2015). *Linux Format = Linux format*. (p.228). Moscow: EKSMO-Press. ISBN 0-04-009183-1.
6. Ochilov, N. N. (2019). The Driver for the Scull_Open Discovery Function, Read / Write Scull_Read / Scull_Write For a Protected Linux OS. *International Journal of Computer Science Engineering and Information Technology Research (IJCSEITR)*. c. India, Vol - Issue: 9-1, 30 June, pp. 31-42.
7. Palix, N., Thomas, G., Saha, S., Calves, C., Lawall, J., & Muller, C. (2011). *Faults in Linux: Ten years later*. Proceedings of the sixteenth international conference on Architectural support for programming languages and operating systems (ASPLOS '11), USA.
8. Tixomirov, V.P., & Davidov, M.I. (1988). *Operatsionnaya sistema UNIX: Instrumentalnûe sredstva programirovaniya*. (p.206). Moscow: Finansû i statistika.
9. Stolyarov, A.V. (2009). «Operatsionnaya sreda UNIX dlya izuchayûiix programmirovaniy», MGU im. Lomonosova, fakultet VMiK, Moskva.
10. Ball, T., Bounimova, E., Kumar, R., & Levin, V. (2010). *SLAM2: Static Driver Verification with Under 4% False Alarms*. FMCAD.

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Abbass Mhson Salman Al-Hameedawi
University of Kufa
Ph.D., Professor of
the College of Agriculture,
Iraq



Zainab Rehman Jassim AL-Malikshah
Wasst Agriculture Directorate
Ph.D., Iraq

INFLUENCE OF PEELS ROOT BERBERS EXTRACT, CuSO_4 AND IRRIGATION, ON IMPROVE STORABILITY FRUITS OF FIG CV. IRANIAN

Abstract: An experiment was conducted on private orchard at Al- Abbasyia / AL-Najaf Governorate on fig cv. Iranian that brought from one of the mountains that located about 25 Km northeast country Mayame in Mashhad Governorate in Iran on 15 January 2016. After 5 years trees were spraying with peels root Berbers extract 30% , CuSO_4 at concentrate 350 mg/L and treated with 3 periods of irrigation in single way or in combination at 15 March and 15 May in 2021. Results indicated that, trees treated with peels root Berbers extract CuSO_4 and periods of irrigation and their interactions caused a significant decrease percentage of weight loss, total decay , percentage of brown coloring of the area around the ostiole, respiration rate and increase vitamin C, total soluble solids ,total sugar , Anthocyanine pigment in fruit peel, fruit firmness, Antioxidant capacity and degree of taste after 8 days of the storage on 5C^0 and relative humidity 80-85 % compared to control treatment . There were a significant effect between treatment. Treatment of spraying (peels root Berbers extract + Cu SO_4 + Irrigation after 15 days) gave the highest rate of parameters studied.

Key words: peels root Berbers extract, CuSO_4 , Irrigation, Fig Iranian.

Language: English

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Introduction

Turkey, Egypt, Algeria, and Morocco account for 65% of the world production. Turkey is the leading Country with 27% of world fresh figs and 53% of dry figs, accounting for 51% of fig fruit world exports (Yilmaz et al., 2017). Fig trees (*Ficus carica* L.) are deciduous fruits, belong to genus " Ficus " , which is follows to the Family " Moraceae " , where it believed that its origin is Arabian peninsula and Spread to the subtropical regions and native to western Asia and has been cultivated and consumed in the Mediterranean Basin since the earliest stages of the agricultural

civilization (Stover et al., 2007). The variety of fig cv. Iranian was found in one of the mountains that located about 25 KM northeast country Mayame in Mashhad Governorate in Iran and resisting to cold temperatures and dryness. This fig had the best result characteristics in the percentage of total soluble solids, vitamin C, titratable acidity, total sugar, antioxidant capacity, firmness of fruits and length of fruit / diameter of fruit (fruit shape). Also it was gave the lowest rats of leaf aria, petiole length and ostiolum diameter of fruits compared with three fig cultivars were Aswod DIALA, Waziri and Kadota that grown in a private orchard in

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Abbasyia, Najaf Governorate. The Iranian fig are belongs to normal fig group *Ficus carica* var. *hortensis* (AL - Hameedawi and AL- Sharea, 2020). The type and degree of skin damage varied among cultivars. For 'Brown Turkey', 'Kadota' and 'Sierra', slight skin-damage and coloring of the area around the ostiole prior to cold storage increased decay and reduced postharvest life with reduced irrigation 55% (Kong et al., 2013). AL- Malikshah (2017) mentioned that, the fruits of figs are among the fruits of rapid perishability, and storing them is a re-organization of marketing and prolonging the period of displaying the fruits in the market. The best storage period for fig fruits ranges from 7 to 10 days at a temperature of 5 C⁰ and a relative humidity of 80-85%, and most of the diseases that occur during storage are disease of *Aspergillus Niger*, *Alternaria tenuis*, *Penicillium* explosion Sourcing, *Alternaria Fiji*, *Fusarium solani*, *Ulocladium atrum*. Muhammad and Kamel (2019) noticed that the peels of Root Berbers containing isoquinoline alkaloids 2-3%, the most important of which are: berberine, berbamin, berbaminun, magnoflorine, and Jatrorrhizin. In addition to containing materials Afsih resin and organic pigments. Studies in different regions of the world were found that, some nutrients, such as Cupper has an important to increasing content of leaves from growth hormones, total chlorophyll, length and number of branches, firmness of fruits and production of fig trees and also led to decrease the percentage of dropping and cracking of fruits. The decline element Cupper in fig trees led to injury with deses rusty leaves, leaves pot, (Exanthema or die back) of branches and internal breakdown, senescent scald of fruits (George, 2019). AL- Hameedawi .et. al. (2021) noticed that, spraying with Willow inflorescence extracts at concentration (30 and 40%), CuSO₄ 300 mg/L and hemorrhage cane vine local cv. Das alanze

at (40 and 50%) on the local fig cv. White Adriatic in single way or in combination caused a significant increase in carotene pigment in fruit peel, percentage of total acidity (TA), percentage of total soluble sold (T.S.S), T.S.S/ TA, vitamin C, firmness and peel thickness and reduced percentage of souring, total cracking at maturity stage. Leonel and Tecchio (2010) studied the effect of different irrigation levels on fig trees in the region of Ilha Solteira, São Paulo State, and concluded that the applied levels promoted positive effects on the yield of ripe fruits, total yield, branch length, and length and diameter of ripe fruits, recommending the application of 75% of Class A pan evaporation. when evaluating the pruning effect, either in the presence or absence of irrigation, from July to October, concluded that the irrigation practice promoted higher harvest numbers and expansion of the production cycle. AL- Hameedawi and AL- Noumani (2014) found that, the spraying fig cv. Kadota with paclobutrazol at conc. Of 200 mg/L, Zinc sulphate at conc. Of 3000 mg/L and 3 periods of irrigation on 1/5/ at 2011 and 2012 respectively before 6 weeks fruit harvest in single way or combination caused a significantly increased the total soluble solids, total sugar, vitamin C, percentage of carbohydrate and firmness for the two growing seasons, respectively. AL - Hameedawi (2019) found that spraying with seaweed extract 3%, CaCl₂ at concentrate 1% and 2 periods of irrigation, in single way or combination on the fig cv. Aswod Diala for season 2017 was increased the firmness of fruit, calcium pectate and anthocyanine pigment in fruit peel at maturity stage of fruits compared to control treatment. The main objective of this investigation is to study the effect of spraying with peels root Berbers extract, CuSO₄ and irrigation, on reducing percentage of weight loss, total decay, and improve storability of fruits of fig cv. Iranian that stored 8 days at 5 C⁰ and 80- 85 R.H.



Figure (1)



Figure (2)

Figure (1 and 2) : Fig trees cv. Iranian in one mountain of country Mayame in Mashhad Governorate in Iran in 15 January 2016.

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Materials and methods

The small seedlings of fig cv. Iranian brought from one of the mountains that located about 25 Km northeast country Mayame in Mashhad Governorate in Iran on 15 January 2016 (Figure 1 and 2).

The trees were planted creeping morphology form at rise 60 cm, The trees were preservation of leaves and fruits despite on lowering temperatures which reached to 3C⁰ in October month and the temperatures of summer to go pass 40C⁰ and lower humidity and no rains during months (June, July and August). The texture of the soil of mountains of this aria is Sand Silt Clay. The fig trees founded in mountains which rise about 300-600 m from level of valley (Figure 3 ,4,5 and 6). Most of plants of this aria prickly alhagi and favash which planted in bottom of valley. There were no spring near from this shrubs. The small seedlings were planted on 20 January in a private orchard at Abbasyia, Najaf Governorate. For the 2021 season, 48 at same size and growth trees were selected with 5 years of age, that planted on (5 x 5 m.), they watered every five days, and fertilized by Nitrogenous and phosphates in two periods in March and May of each year at a rate of 300 g. per tree, as well as by manure for the two years. The experiment included 16 treatments with three replicates. It is adopted according to Randomized Complete Block Design (RCBD), and the results were statistically analyzed according to Duncan test at the probability level of 5% (Snedecor, and Cochran, 1990). Treatments were adopted at 15 March and 15 May in 2021, spraying was done early morning until wetness was full addendum. Tween 20 was added at concentration of 1cm³/ L. as spreader material. Treatments were as follows :

- Control . -1
- Peel root Berbers extract (Prbe) conc. of 30% . it was natural extract of peels root Berbers (Berberis vulgaris L.) .It was brought from the city of Quinn , south Khorasan .
- CuSO₄ 5H₂O (Cu) at conc. of 350 mg / L . -3
 - Irrigation after 5 days . -4
 - Irrigation after 10 days . -5
 - Irrigation after 15 days . -6
 - Prbe +Cu . -7

- Prbe + Irrigation after 5 days . -8
- Prbe + Irrigation after 10 days . -9
- Prbe + Irrigation after 15 days . -10
- Cu + Irrigation after 5 days . -11
- Cu + Irrigation after 10 days . -12
- Cu + Irrigation after 15 days . -13
- Prbe + Cu + Irrigation after 5 days . -14
- Prbe + Cu + Irrigation after 10 days . -15
- Prbe+ Cu + Irrigation after 15 days . -16

In 1-10 -20121 harvested 96 Kg fruits similar in size and color without dieses and mechanical injures from trees of experiment. Fruits were divided into 16 treatments weight 6 Kg for each treatment. The fruits of each previous treatments were divided into 3 replicates and each part weight was 2 Kg . These parts were placed in polyethylene bags with 22 holes for each bags and the diameter of the hole were 0.5 cm. The fruits were stored under 5C⁰ temperature and relative humidity 80-85 % for 8 days starting in 1 / 10 /2021. The design for this treatment was similar to that of the field experiment. In 8 / 10 /2021 fruits were taken out and traits were measured. The percentage of weight loss according to (Lisa and Kader 2003). percentage total decay that includes (disease of Alternaria tenuis, Alternaria fici, Penicillium expausum, Aspergillus niger and Souring according to (Crisosto and Kader ,2004). Ten normal fruits were taken at random in the end of storage from each treatment for quality determination. Acidity percentage, Vitamin C mg /100 ml Juice, % Total sugar and anthocyanin pigment in fruit peel according to (A.O.A.C, 2019). The percentage of total soluble solids were determined by hand refract meter. Firmness Kg/cm² was measured on two sides of each fruit with an Effegi penetro meter (Model NI, McCormick Fruit Tech ,Yakima ,WA) Fitted with an 0.5 cm tip.). Antioxidant capacity (mmol TE/g FW) was determined to previous work (Crisosto and Crisosto, 2001). Respiration rate mg CO₂ / Kg /hr according to (Ibrahim, 2010). In estimating the quality of the taste of the fruits at the end of storage, it was based on the taste of the participants in the examination. Examination forms were dictated by them on a scale (1-4), where given 1 = bad, 2 = acceptable, 3 = good, 4 = very good .

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Figure 3



Figure 4



Figure 5

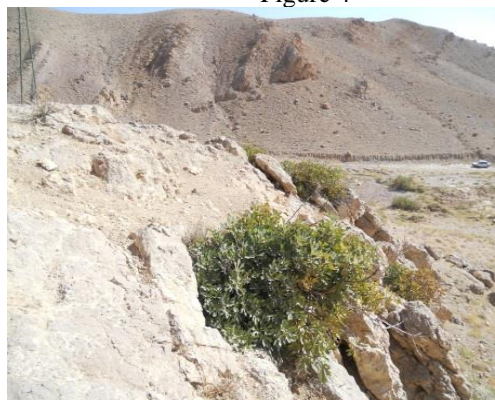


Figure 6

Figure(3,4,5 and 6) : Fig trees cv. Iranian in one mountain of country Mayame in Mashhad Governorate in Iran in 25 October 2018, the maximum temperatures was 11°C and minimum temperatures 3°C.

Results and discussion

1-Weight loss percentage.

Data in Table (1) shows that, spraying trees of fig cv. Iranian with peels root Berbers extract 30%, CuSO₄ at concentrate 350 mg/L and treated with 3 periods of irrigation in single way or in combination led to significantly decreased the percentage of weight loss after 8 days of storage that gave the lowest percentage 3.33 % in the treatment (Prbe+ Cu + Irrigation after 15 days) in comparison to the highest percentage 5.20% in the control treatment . The reason for the decrease in the percentage of weight loss may be due to the effect of the sprayed materials on the trees, in addition to the irrigation periods in causing some physiological changes in the fruit peel and decrease respiration and transpiration of water through peel tissue and changed in structure of

membranes and this leads to make the peel thick and firmness and decrease the moisture loss (Nabifarkhni et al., 2015). As well as to a decrease in the rate of respiration of the treated fruits, an increase in their nutritional content and an increase in their hardness table (1 and 2).

2- The percentage total decay and percentage of brown coloring of the area around the ostiole.

Results indicated in table (1) shows that, treating trees of fig cv. Iranian with peels root Berbers extract 30%, CuSO₄ at concentrate 350 mg/L and treated with 3 periods of irrigation led to decreased in the percentage of total decay and percentage of brown coloring of the area around the ostiole significantly compared to control treatment, The treatment (Prbe+ Cu + Irrigation after 15 days) gave the lowest values

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in percentage of total decay it was 4.59% and 2.05% in comparison to the highest rates 9.76% and 3.95% in control treatment in the end of storage. The increase in the content of the fruits of carbohydrates, in addition to the inhibiting effects on the growth of fungi, bacteria and some physiological diseases, made the fruits of trees treated with copper sulfate more resistant to diseases that occur during storage compared to the control fruits (Devlin and Witham, 2001). The bark of the roots of Berbers is contains a high percentage of berberine, which is from the amino acid tyrosine group, which follows isoquinoline alkaloids, which have an important role in inhibiting the growth of bacteria and fungi that infect fruits (Tadeusz, 2011).

3- Acidity, total soluble solids, Vitamin C, anthocyanine pigment in fruit peel and antioxidant capacity.

Concerning the results in table (1 and 2) shows that percentage of acidity was not significant with the single way or in combination treatment spraying to fig trees compared with untreated trees. Vitamin C, total soluble solids ,total sugar in juice ,anthocyanine pigment in fruit peel and antioxidant capacity were increased significantly when trees sprayed with peels root Berbers extract 30% , CuSO₄ at concentrate 350 mg/L and treated with 3 periods of irrigation in single way or combination. The highest significance result were recorded in treatment (Prbe+ Cu + Irrigation after 15 days) that, gave the highest percentages of percentage of Vitamin C, total soluble solids ,total sugar in juice, anthocyanine pigment in fruit peel and Antioxidant capacity, they were (7.28 mg / 100 ml Juice, 17.60%, 19.21% ,401.28mg/100g peel and 3.15 mmol TE/g FW) comparison with lest rates of percentages (6.09 mg / 100 ml Juice, 15.20%, 17.25%, 237.70 mg/100g peel and 2.21 mmol TE/g FW) in the control treatment respectively at the end of storage. The increase in chemical companied of fruit juice because of fruits treated with such materials led to decreasing the loss in weight, increase in firmness peel of fruits and reduction the respiration rate (Hounsoume, et.al, 2008). Increasing fruits from Vitamin C, total soluble solids, total sugar in juice and anthocyanine pigment in fruit pee which results through spraying with peels root Berbers extract and CuSO₄ in single way or in combination with 3 periods of irrigation due to the fact that this compound increase vegetative growth and thus encourages the accumulation of carbohydrate materials in fruits leading to increased content of these materials (Matsuhira, et.al, 2006). Some plant extracts containing alkaloid compounds have been used as environmentally friendly biological fertilizers that improve plant growth and increase production, and the qualitative and quantitative characteristics of the fruits (Naguib, 2011).

4- Firmness of fruits .

Data presented in Table (2) shows that, spraying peels root Berbers extract, CuSO₄ and irrigation period alone or combination treatments led to increased fruit firmness that gave the highest rates 0.410 kg/cm² in the treatment (Prbe+ Cu + Irrigation after 15 days) in comparison to the lowest values 0.300 kg/cm² in control treatment. The reason of increasing the fruit firmness as a result of the experiment treatments. Above mentioned treatments led to the root system in absorption the nutrients elements in which some of them are parts of chlorophyll which led to increase its quantity in comparison control treatment. This process increases photosynthesis an activate plant growth which led to enhance hormones synthesis (Lambers, and Oliveira, 2019).

4- Rate of respiration of fig fruits.

Concerning the results in Table (2) that, the rate of respiration was decreased in the all treatments compared to control treatment. The respiration of fig fruits were significantly affected by all treatments. It is cleared when spraying peels root Berbers extract, CuSO₄ and irrigation period alone or combination to the fig trees decreased compared with control treatment. In addition, spraying this material in combination gave the lowest parameters it was (16.80 mg CO₂ / Kg /hr). On the other hand, the fruits of untreated trees gave the highest value rat (38.73 mg CO₂ / Kg /hr). Using peels root Berbers extract, CuSO₄ and their combination caused increase in epidermis and cortex thickness of fruits and this reusing led to decreasing rate of respiration of fruits (Allegra et. al., 2017).

5- The degree taste of fruits.

Data in Table (2) shows that the degree of taste in fruits was increased significantly when trees sprayed with peels root Berbers extract, CuSO₄ and irrigation period in single way or combination compared to control treatment. The highest significance result were recorded in treatment (Prbe+ Cu + Irrigation after 15 days) that gave the highest degree of taste, it was 4.00 comparison with lest rates 2.01 in the control treatment at the end of storage. The increase in degree of taste because of fruits treated with such materials led to decreasing the loss in weight, increase in firmness peel of fruits and reduction the respiration rate table (1 and 2).

11-George, M. (2019). Fruit Sciences & Postharvest Group, Agricultural Sciences, Biotechnology and Food Science (ABF) at the Cyprus University of Technology (CUT), based in Lemesos, Anexartias 57, Pareas Building PO Box 50329, 3603 Lemesos Cyprus.

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Conclusion

Generally it could be concluded that trees fig cv. Iranian treated with peels root Berbers extract 30%, CuSO₄ at concentrate 350 mg/L and 3 periods of irrigation at 15 March and 15 May in 2021 in single way or in combination caused a significant decrease percentage of weight loss, total decay, percentage

respiration rate and increase vitamin C, total soluble solids, total sugar, Anthocyanine pigment in fruit pee, fruit firmness, Antioxidant capacity and degree of taste after 8 days of the storage under 5C⁰ and relative humidity 80-85 % compared to control treatment with significant differences between treatments.

Table 1 . Effect of spraying of peels root Berbers extract, CuSO₄ and irrigation, on percentage of weight loss, total decay and chemical characterize of fig fruits cv. Iranian after 8 days from storage at 5 C⁰ and 80-85% R.H. for season for season 2021

Treatments	weight % loss	% Total Decay	brown % coloring around ostiole	Acidity%	Vitamin C mg / 100 ml Juice	Total % soluble sold
Control	5.20 a	9.76 a	3.95 a	0.320 a	6.09 k	15.20 i
Prbe	5.06 ab	9.45ab	2.80 c	0.316 a	6.16 j	15.35 ghi
Cu	5.11 abc	9.50 ab	2.66 c	0.317 a	6.23 ij	15.39 fghi
Irrigation after 5 days	4.90 abc	9.11 c	3.70 b	0.312 a	6.41 f	15.41 efgh
Irrigation after 10 days	4.82 abc	8.60 d	3.45 bc	0.313 a	6.30 ij	15.46 efg
Irrigation after 15 days	4.75 bcd	8.36 de	3.28 bc	0.310 a	6.74 e	15.52 efg
prbe +Cu	4.85 cde	8.63 d	2.49 cd	0.311 a	6.85 cd	15.75ef
Prbe + Irrigation after 5 days	4.65 def	8.05 ef	2.75 c	0.306 a	6.78 de	15.88 de
Prbe + Irrigation after 10 days	4.50 def	7.70 fg	2.41cd	0.309 a	6.27 ij	15.95 cde
prbe + Irrigation after 15 days	4.48 efg	7.10 g	2.20 d	0.309 a	6.30 hi	16.20cd
Cu + Irrigation after 5 days	4.35 fgh	6.85 gh	2.70 c	0.305 a	6.38 hg	16.47 bc
Cu + Irrigation after 10 days	4.20 ghi	6.43 hi	2.53 cd	0.302 a	6.42 g	16.53 bc
Cu + Irrigation after 15 days	3.98 hi	5.91 hij	2.17 de	0.307 a	6.92 c	16.71 ab
prbe +Cu + Irrigation after 5 days	3.75 ij	5.71ij	2.15 ef	0.299 a	6.90 c	16.73 ab
Prbe +Cu + Irrigation after 10 days	3.61 j	5.60 jk	2.11 ef	0.294 a	7.09 b	17.16 b
prbe +Cu + Irrigation after 15 days	3.33 k	4.59 l	2.05 efg	0.295 a	7.28 a	17.60 a

Means followed by the same letters are not significantly different.

Table 2 . Effect of spraying of peels root Berbers extract, CuSO₄ and irrigation, on physical and chemical characterize of fig fruits cv. Iranian after 8 days from storage at 5 C⁰ and 80-85% R.H. for season for season 2021

Treatments	Total % sugar	Anthocyanin e in fruit peel mg / 100g pe	Antioxidant capacity (mmol TE/g FW)	Fruit firmness Kg/cm2	Respiration rate mgCO ₂ / Kg /hr	degree of taste
Control	17.25 j	237.70 i	2.21 fg	0.300 i	38.73a	2.01 j
Prbe	17.53 hij	337.60 fgh	2.33def	0.325 fgh	36.91b	2.17 ij
Cu	17.50 hij	340.75 fg	2.37 fgh	0.327 efg	36.20 b	2.19 hij
Irrigation after 5 days	17.66 ghi	345.19 efg	2.35efg	0.328 efg	34.54 c	2.15 ghi
Irrigation after 10 days	17.85 fgh	347.21efg	2.31 efg	0.323efgh	36.70 b	2.29 fgh

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Irrigation after 15 days	17.81 efg	354.62 def	2.26 efg	0.335 defg	34.88 bc	2.35 fg
Prbe +Cu	17.70 efg	351.73 def	2.33 def	0.340 cde	32.60 d	2.66 efg
Prbe + Irrigation after 5 days	17.95 def	355.35 def	2.35def	0.343 def	33.40 bcd	2.90 ef
Prbe + Irrigation after 10 days	18.18 de	360.69 cde	2.40 de	0.352 cd	31.54 cd	3.03 def
Prbe + Irrigation after 15 days	18.20 cde	362.69 abc	2.45de	0.349 cde	30.40 cd	3.25 de
Cu + Irrigation after 5 days	18.35 cd	365.57 cde	2.59 cd	0.355 cd	29.61 cde	3.66 bc
Cu + Irrigation after 10 days	18.49cd b	569.87 bcd	2.75 bc	0.360 cd	25.17 ef	3.48 cd
Cu + Irrigation after 15 days	18.42 bcd	370.42 bc	3.02a	0.369 cd	24.44 fg	3.72 bc
Prbe +Cu + Irrigation after 5 days	18.65 bc	380.25 abc	2.90ab	0.380 bc	22.51 gh	3.84 abc
Prbe +Cu + Irrigation after 10 days	18.90 ab	392.45ab	3.00 ab	0.395 bc	19.90 hi	3.91 ab
Prbe +Cu + Irrigation after 15 days	19.21 a	401.28 a	3.15 a	0.410 a	16.80 j	4.00 a

Means followed by the same letters are not significantly different.

References:

- AL – Hameedawi, A. M., & AL – Noumani, R. M. I. (2014). Effect of periods irrigation and spraying with Paclobutrazol and Zinc sulphate on fruits quality of fig cv. Kadota and type of cracking. *International Journal for Sciences and Technology (IJST)*, 9(1) : 11-16.
- Al – Hameedawi, A. M. (2019). *Influence of periods irrigation, seaweed extract and Ca on containing fruits Fig cv. Aswod Diala from Nutrient Element and percentage of cracking*. First Scient. Conf. of Agricultural Researches / Special Issuance (1 – 8).
- AL – Hameedawi, A. M., & AL – Sharea , R. J. (2020). New variety of fig resisting to dryness and cold temperatures compared to varieties of AL-Najaf in middle aria of Iraq. *Theoretical and Applied Science*, 1 (81) : 101-107.
- AL – Hameedawi, A. M., AL – Sharea, R. J., & Tabbara, L. I. (2021). Effect of Willow inflorescence extract, CuSO₄ and hemorrhage cane vine on vegetative and fruiting growth of fig cv. White Adriatic. *Theoretical and Applied Science*, 1(93): 49-54 .
- AL- Malikshah, Z.R.J. (2017). Effect of spraying with Wilt-Pruf, Grofalcs and benzyl adenine on storage life and quality characteristics of fruits fig tree cv. Kadota (Ficus carica L.) . *Impact , International Journal in Applied, Natural and Social Sciences*, 5(3):15-20.
- Allegra, A., Sortino, G., Inglese, P., Settanni, L., Todaro, A., & Gallotta, A. (2017). The effectiveness of Opuntia ficus-indica mucilage edible coating on post-harvest maintenance of ‘Dottato’ fig (Ficus carica L.) fruit. *Food Packag. Shelf Life* 12, 135–141.
- (2019). *Association of Official Analytical Chemist*. Official Methods of Analysis, 21st Edition. SPADA. Official Methods of Analysis (OMA) is a Crisosto publication of AOAC.
- Crisosto, C.H., & G.M. (2001). Understanding consumer acceptance of early harvested ‘Hayward’ kiwifruit. *Postharvest Biol.Technol.* 22:205–213.
- Crisosto, C. H., & Kader, A. A. (2004). *In the Commercial Storage of Fruits, Vegetables, Florist, and Nursery Stocks*. Washington, DC: ARS-USDA.
- Devlin, R., & Witham, F. (2001). *Plant Physiology*, 4th Ed., C.B.S Publishers and distributors, Daragani, New Delhi, India.
- George, M. (2019). *Fruit Sciences & Postharvest Group, Agricultural Sciences, Biotechnology and Food Science (ABF) at the Cyprus University of Technology (CUT), based in Lemesos, Anexartiasias 57, Pareas Building PO Box 50329, 3603 Lemesos Cyprus*.
- Hounsome, N.W., Hounsome, B.Y., Tomas, D.L., & Edwards-Jones, G.H. (2008). Plant metabolites and nutritional quality of fruits. *J.Food Sci.*, 73(4): 48-65.
- Ibrahim, H.M. (2010). *Analysis of plant samples. AL-Menia Unui. Dar AL- Fajar for printing and publishing*. Egypt.
- Kong, M., Lampinen, B., Shackel, K., & Crisosto, C. H. (2013). Fruit skin side cracking and ostiole-end splitting shorten postharvest life in fresh figs (Ficus carica L.), but are reduced by deficit irrigation. *Postharvest Biol. Technol.*, 85, 154–161.
- Lambers, L., & Oliveira, R.S. (2019). *Plant Physiology and Ecology*, 3th Ed., C.B.S.

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- 17- Leonel, S., & Tecchio, M. A. (2010). *Water requirement and yield of fig trees under different drip irrigation management*. 69(3): 571-580.
 16. Lisa, K., & Kader, A.A. (2003). *Small-Scale Postharvest Handling Practices: A Manual for Horticultural Crops (4th Edition)*. University of California, Davis. Postharvest Technology Research and Information Center.
 17. Matsuhira, B., Lillo, L. E., Sáenz, C., Urzúa, C. C., & Zárate, O. (2006). Chemical characterization of the mucilage from fruits of *Opuntia ficus-indica*. *Carbohydr. Polym.* 63, 263–267.
 18. Muhammad, D. A., & Kamel, D. K. (2019). *Medicinal and aromatic plants and used medical*. Arabic home for publishing AL- Noor-book team. Cairo.
 19. Nabifarkhni, N., Sharifani, M., Shakeri, A. R., Garmakhany, A. D., & Moghadm, E. G. (2015). Alternation of primary metabolite and quality attributes of sweet cherry affected by natural edible coating. *Minerva Biotechnol.* 27, 55–61.
 20. Naguib, N.Y. (2011). Organic Vs Chemical Fertilization of Medicinal Plants: A Concise Review of Researches. *Advances in Environmental Biology*, 5(2): 394-400.
 21. Stover, E., Aradhya, M., Ferguson, L., & Risosto, C. H. (2007). The fig: overview of an ancient fruit. *Hortscience*, 42, 1083–1087.
 22. Snedecor, G.W., & Cochran, W. G. (1990). *Statistical Methods 7th Ed.* The Iowa State Univ.Press, Ames, Iowa, USA.
 23. Tadeusz, A.M. (2011). *Alkaloids-Secrets of Life Alkaloid Chemistry, Biological Significance , Applications and Ecological Role*, Oxford OX5, IGB. UK.
 24. Yilmaz, S., Gozlekci, S., & Ersoy, N. (2017). A review of fig sector in Turkey. *Int. Symp.* 1173, 409–414. doi: 10.17660/ActaHortic.2017.1173.70.

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Zarina Zafarovna Muzaffarova
 Samarkand State Institute of Foreign Languages
 teacher of English
 Uzbekistan


POTENTIAL OF ORIGINAL FICTION AS A MEANS OF FORMING FOREIGN LANGUAGE COMMUNICATIVE COMPETENCE OF STUDENTS

Abstract: *The article is devoted to the methodology of teaching the reading of the original literary text in the framework of the second higher education in the direction of "Linguistics", which is provided in the universities of the country. It is designed to provide a high level of foreign language training, which is reflected in the curriculum. The necessity of the "Home Reading" aspect is considered as a condition for moral and aesthetic education of students in the light of a personality-oriented approach and the formation of foreign language communicative competence, which will allow specialists in various fields of activity to meet the requirements of a professional natural language situation. The analysis of scientific domestic and foreign literature made it possible to determine the necessity and possibilities of reading literature in the original language, which to a greater extent forms the understanding of world conceptual systems. The selection of literature for reading should correspond to the level of foreign language training and age characteristics of the students. If necessary, the text should be shortened without loss of authenticity. The difficulties of the artistic style are explained, associated both with understanding the realities of another linguistic community, and with the peculiarities of the author's idiosyncrasy: the lexicon and figurative means that he owns to reveal the ideological content of the work. Reading foreign-language fiction meets the tasks of an interdisciplinary approach in the upbringing of a person who has the qualities of a value-semantic, moral and social orientation. The author's experience of organizing a course of reading foreign language literature as part of a practical course of teaching foreign languages based on materials compiled in accordance with the conclusions of the theoretical method is presented. The work carried out showed the presence of a great interest of students in reading original literature, a readiness for metacognition, which is manifested in the ability of students to apply cognitive and metacognitive experience and an appropriate level of foreign language training required for reading complex texts that form an artistic style. Reading foreign language literature is a means of forming a secondary linguistic personality.*

Key words: *authentic literature, communicative competence, personal approach, cognitive, metacognitive, professional activity.*

Language: English

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Introduction

Teaching a foreign language is a multifaceted process. It includes various components, one of the most important of which is "Home Reading", since it covers all types of speech activity and is associated with the development of such aspects as phonetics, grammar, vocabulary. Subject training always has several goals and, along with the one that lies on the

surface (teaching communicative competence), no less important is the goal that meets the requirements of the personality-oriented approach adopted today in Uzbek education. It is implemented in close unity with other approaches, for example, cultural. E.V. Bondarevskaya writes that the new quality of personality-oriented education is determined by the principle of cultural conformity, that is, this means

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that “the cultural core of the content of education should be universal, universal, national and regional values ...”.

Z.G. Nigmatov, noting the annoying appearance of gaps in the culturological approach of training teachers, writes that “the humanistic culture of a teacher is manifested in the orientation of professional activity towards universal cultural values, towards a creative, reflective attitude - to love people ...”. Consequently, teaching to read foreign language literature meets the goal of forming knowledge and skills that contribute to the personal development of a person. It contributes to the accumulation of the experience of creative activity in a person, the creation of an emotional-value attitude towards life, a person and the world around him, as well as the formation of a system of moral and ethical foundations that determine his behavior in diverse life situations.

The need of a modern person to successfully integrate into the world space, the expansion of intercultural contacts in various fields of activity are motivating factors in the study of foreign languages. A foreign language is noticeably a priority in the educational process, along with professionally significant disciplines.

Today, within the framework of the decisions of the Bologna Process, the European Union's Lifelong Learning Program (lifelong learning program) is being implemented in the country's universities, one of the directions of which is the organization of second higher education courses in the direction of Linguistics. The possibility of obtaining a second higher education attracts many applicants. Upon completion of the courses, students receive diplomas in various profiles of language training, which include: "Theory and methodology of teaching foreign languages and cultures", "Translation and translation studies", "Translator in the field of professional communication", "Theory and practice of intercultural communication", "Communication theory and international public relations", etc.

A feature of these programs is deep language training. They are designed to train highly qualified specialists in the linguistic field, which assumes knowledge of both the literary version of a foreign language and the professionally oriented one. The curricula, along with the course of practical teaching of foreign languages, provide for basic disciplines that provide the theoretical foundations of foreign language competencies: communication theory, translation theory, stylistics, lexicology, history of a foreign language, etc. The disciplines of English linguistics are taught. Depending on the profile of training future specialists in different universities, there are variations in the proposed disciplines.

Such a systematic approach opens up perspectives of research work for graduates both in the field of general theory of foreign languages and translation studies, and in professional activity. The

programs have the flexibility inherent in liberal arts education and have a clear focus on the changing demands of the labor market. In professional language training, curricula provide for courses aimed at providing the skills and abilities of intercultural communication in various fields of professional activity: jurisprudence, economics, management, engineering.

A small overview of the possibilities of a second higher education in foreign languages makes it possible to determine the purpose of our work - to describe the role of reading fiction as a way of forming a foreign language speech competence of students, which makes it possible to ensure mastery of all types of professionally-oriented speech activity in line with a personality-oriented approach in education.

In the process of teaching to read a foreign language literature, the main issue is the selection of texts as one of the significant elements of the teaching content. The works of Uzbek scientists show that the study of fiction is a conscious (cognitive) and creative process. Learning a language is not only the acquisition of means of coding concepts, but also the formation of a picture of the world, consisting of both verbal and objective meanings. To master a language means to understand the differences of world conceptual systems, and for the correct formation of a linguistic picture of the world, authentic material is needed. In this regard, N.D.Galskova writes that “the learning process of a foreign language should rely on an authentic foreign language text as a unit of communication (a product of textual activity), in which signs of another (foreign language) linguistic community are presented”.

A feature of authentic texts of different styles is the level of difficulty, where the prose style is the most difficult. Why? The answer lies in the fact that prose texts organically combine logical (intellectual) information with figurative (emotional) information. The cultural context of such a text can contain realities from different spheres of communication, and at the same time it is characterized by an individual author's handwriting: compositional construction, a number of explicit figurative means (comparisons, metaphors, epithets; syntactic constructions), implicit information. These difficulties require pre-textual and post-textual explanations, the presence of culturological information when reading a specific text. The principle of authenticity means the rational use of authentic materials, considering age characteristics, the level of language and speech training and the degree of difficulty of the original text.

The analysis of foreign works showed a similar view on the role and necessity of teaching to read authentic fiction. Foreign studies of this issue can be grouped according to the following general features:

a) the validity of reading authentic literature and the importance of the correct selection of material

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depending on age, level of personal and speech competence of students, goal setting, choice of forms and methods of work in the lesson, personality of the teacher are studied. The language of fiction is considered as fundamental in the development of other literary styles "... the language of literature is an independent kind of discourse and teaches students different ways that language can be used. In this way students also build their knowledge of registers ...;

b) the difficulties of teaching the language of fiction are explained, due to the metaphoric nature of the author's language, where the term "metaphoric" means both the author's figurative means and a holistic work as an allegory of the existing reality;

c) explores the need for teaching reading strategies that motivate cognitive and metacognitive abilities of mental activity, which meets the objectives of higher education: effective mastering of language competencies when reading fiction and the development of critical and analytical thinking abilities;

d) the potential of national and foreign fiction in the education of a person with the qualities of a value-semantic, moral and social orientation is studied. D.Goleman refers to these qualities as "responsibility, respect, justice, courage, honesty, citizenship, self-discipline, responsiveness, perseverance".

Based on the theoretical conclusions made by domestic and foreign researchers, we have developed a module "Home Reading" in the practical course of English for the second higher education.

The material for the module was manual, which was based on short stories by writers representing the period of "early realism" (the beginning of the 20th century) in American literature: Mark Twain, O. Henry, Jack London, Keith Chopin and Canadian humorist Stephen Leacock. The main criteria for selecting the material were:

- origin of the author (American literature);
- synchronization;
- short forms;
- genre "realism" with a positive development of the storyline.

The selected stories were subject to minor adaptations. Exercises have been compiled for the texts of the stories, which, in accordance with the classification used in the domestic methodology, are divided into three groups: pre-text, pre-text and post-text. The various exercises included in the manual form blocks, the nature of which meets the learning objectives at each stage of working with artistic text, as shown in table 1.

Table 1. The content and structure of exercises in working with a literary work

Stages of work	Aim	Exercise pattern
Pre-text	Stimulate the emergence of thoughts, feelings and ideas motivated by the source material in the introductory reading. Removing difficulties.	1) acquaintance with new words and expressions; 2) search in the text of difficult sentences and translation; 3) answers to questions.
While-text	Stimulate the process of recognition / understanding (awareness) of active vocabulary and consolidate it in the process of speaking during repeated reading.	1) translation into Uzbek (English); 2) drawing up a plan; 3) retelling of the episode with new words and expressions; 4) reproduction of the dialogue in the role of the heroes of the story.
Post-text	Stimulate understanding of the conceptual and ideological content of the text of the work with the development of fluency skills.	1) determination of the topic, idea of the story, expression of one's attitude; 2) characterization of heroes, understanding of the author's attitude towards them; 3) dramatization of fragments of the story; 4) possible dramatization of the work in the framework of extracurricular activities.

The psychophysiological mechanism of reading is an analytical-synthetic process of extracting information from a text based on the recognition of visual complexes of a certain size. Domestic and foreign scientists methodologists have a similar opinion regarding the types of reading. According to the classification of S.K.Folomkina, reading is: introductory, studying, viewing and searching. Further study of this issue has shown that the real art of reading implies flexibility in acquaintance with

information, depending on the nature of the text. Reading fiction requires the use of an emotional and artistic code that allows you to preserve its aesthetic component. The correct reading of literary texts is considered to be one in which visual perception and semantic processing of all elements of the text are provided without gaps with an understanding coefficient of at least 80-85%.

During the observation, it was noted that almost complete comprehension of what is being read occurs

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as a result of a preliminary lexico-grammatical and even stylistic analysis of individual fragments of the text, which is at the same time a stage of text-based work. Partial translation is helpful at this stage. Exercises for reading with a certain preliminary speech setting provide for the development of word usage mechanisms (multiple repetition). Content identification exercises promote the development of conscious activity in reflection tasks. Owing to this activity, the appropriation of speech experience of a higher order occurs, for it includes a number of complex methods of mental activity, such as analysis, synthesis, comparison, and the establishment of cause-and-effect relationships. Careful reading and execution of the exercises easily allowed students to extrapolate the idea and meaning of the works to modern times. The cyclical nature of repetition of characteristic exercises in each lesson contributed to the adaptation of students to the implementation of

communicative activities with greater activity in subsequent lessons.

Working with organized material on reading foreign-language prose showed the potential of this aspect of learning for the development of creative thinking and imagination of students and the formation of traits of a “secondary linguistic personality”, capable of meeting the requirements of a natural language situation.

The author of the article understands that the results of point experimental training can only serve as a prerequisite for serious research, which should be based on various parameters for determining the potential of reading fiction for the formation of both speech and personal characteristics of students. The idea of the shortage and necessity of research on the issue of compulsory reading of fiction in foreign language teaching finds its confirmation in an article by other Uzbek researchers.

References:

1. Bim, I. L. (2011). Chto novogo privnosit lichnostno-orientirovannaya paradigma v obrazovanie podrastayushchego pokoleniya. *Inostrannye yazyki v shkole*, № 10, pp. 2–7.
2. Bondarevskaya, E. V. (2007). Cennostnye osnovaniya lichnostno-orientirovannogo vospitaniya. *Pedagogika*, №7, pp.44–53.
3. Gal'skova, N. D. (2000). *Sovremennaya metodika obucheniya inostrannym yazykam*. (p.165). Moscow: ARKTI-Glossa.
4. Gez, N. I., & Frolova, G. M. (2008). *Istoriya zarubezhnoj metodiki prepodavaniya inostrannyh yazykov*. (p.256). Moscow: izd.centra «Akademiya».
5. Inozemceva, K. M. (2017). Analiz sovremennyh trebovanij k vladeniyu inostrannym yazykom specialistami inzhenerno-tehnicheskikh profilej. *Obrazovanie i nauka*, T.19 № 6, pp.71–90.
6. Karaulov, Yu. N. (1987). *Russkij yazyk i yazykovaya lichnost'*. (p.260). Moscow: Nauka.
7. Nigmatov, Z. G. (2016). Gumanisticheskaya priroda pedagogicheskoy deyatel'nosti. *Kazanskij pedagogicheskij zhurnal*, № 5(118), pp.62–67.
8. Nurieva, N. S. (2016). *Short Stories by the North-American Writers / Korotkie rasskazy Severoamerikanskikh avtorov*. (p.160). Moscow: Flinta.
9. Folomkina, S. K. (2005). *Obuchenie chteniyu na inostrannom yazyke v neyazykovom vuze: uchebno-metodicheskoe posobie*. (p.253). Moscow: Vysshaya shkola.
10. Haleeva, I. I. (1989). *Osnovy teorii obucheniya ponimaniyu inoyazychnoj rechi (podgotovka perevodchika)*. (p.238). Moscow: Vysshaya shkola.
11. Shakirova, L. Z. (2008). *Pedagogicheskaya lingvistika: koncepcii i tekhnologii*. (p.271). Kazan': Magarif.
12. Shchukin, A. N. (2002). *Metodika obucheniya inostrannym yazykam. Kurs lekcij*. (p.288). Moscow: izd-vo URAO.
13. Shchukin, A. N., & Frolova, G. M. (2015). *Metodika prepodavaniya inostrannyh yazykov*. (p.288). Moscow: Akademiya.
14. Al Alami, S. (2016). The Power of Short Stories, Novellas and Novels in Today's World. *International Journal of Language and Literature*, Vol. 4, No. 1, pp. 21-35.

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2	Volkova, Galina Yurievna	LLC TsPOSN «Ortomoda» Moscow, Russia	Doctor of Economics, Professor
3	Blagorodov, Arthur Aleksandrovich	Institute of Service and Entrepreneurship (branch) DSTU	

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4	Bordukh, Dmitry	Institute of Service and Entrepreneurship (branch) DSTU	
5	Shcherbakov, Danil Sergeevich	Institute of Service and Entrepreneurship (branch) DSTU	
Scopus ASCC: 1600. Chemistry.			
6	Yurchenko, Oleg Ivanovych	Kharkiv V.N. Karazin National University	PhD, Full Professor of Chemical Metrology Department
7	Chernozhuk, Tetyana Vasylivna	Kharkiv V.N. Karazin National University	PhD, Associate Professor of Inorganic Chemistry Department
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Contents

		p.
4.	Blagorodov, A. A., & Volkova, G. Y. On the effectiveness of the union of «lean economy» and smart quality management of manufactured products, which have priority and preferences among consumers in the regions of the Southern Federal District and the North Caucasus Federal District.	101-149
5.	Nasibova, J. N. Linguistic, typological features of infinitive and compound infinitive Sentences in English and Azerbaijani languages.	150-152
6.	Draguleasa, I.-A. Tourism in protected natural areas. Case study: Iron Gates Nature Park.	153-171
7.	Ruzibaeva, D. A., & Baykhanova, N. A. Developing the writing skills of students in non-linguistic universities.	172-174
8.	Ochilov, N. N. Analysis of international and local standards of information protection in modern operating systems.	175-179
9.	Al-Hameedawi, A. M. S., & AL-Malikshah, Z. R. J. Influence of peels root Berbers extract, CuSO ₄ and irrigation, on improve storability fruits of fig cv. Iranian.	180-187
10.	Muzaffarova, Z. Z. Potential of original fiction as a means of forming foreign language communicative competence of students.	188-191

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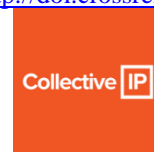
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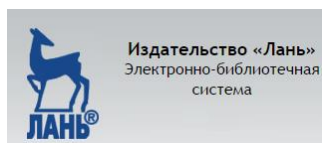
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