

FOREIGN EXPERIENCE ON THE IMPLEMENTATION OF A QUALITY MANAGEMENT SYSTEM

Khalilov Nurullo Khamidillayevich, Ph.D

Andijan Machine-building Institute, Associate professor Department of Accounting and Management, Uzbekistan

ARTICLE INFO.

Keywords: Quality management, industrial enterprises, quality management system, foreign experience, product competitiveness, quality.

Abstract

This article covers foreign experience in the implementation of a quality management system to improve the competitiveness of products in industrial enterprises. On the basis of foreign experience in the implementation of the studied Quality Management System, ways of developing the quality management system in industrial enterprises of the Republic of Uzbekistan have been developed.

<http://www.gospodarkainnowacje.pl/> © 2024 LWAB.

Introduction. The introduction of a quality system that meets international standards in industrial enterprises leads to serious positive results in the ratio of "quality price", allows you to develop and implement qualitatively new methods and approaches such as optimization of business processes, complex diagnostics and improvement in the theory and practice of management systems. the management system, which ensures the regular introduction of a quality management system to industrial enterprises of our country, allows you to optimize economic processes, reduce production costs of products (services) to a minimum. All this allows the enterprise to take advantage of its competitive advantage in domestic and international markets, achieve further diversification of exports, ensure the effectiveness of the strategy for the economic social, scientific and technical development of enterprises. The introduction of the ISO international standard of 9000 and 14000 series in enterprises ensures a high level of enthusiasm for work in employees, the responsibility of managers is distributed among employees responsible for a certain work process, the management system is very flexible.

The globalization of the world economy is causing consumer demand for products and services to increase. Due to the low quality of the product, the high costs spent on its elimination pose serious problems for the industry of world countries. In this regard, the improvement of the quality management system is of urgent importance in improving the competitiveness of industrial products. In the world, a number of scientific studies have been carried out on the implementation of international standards in the field of improving the quality management system in improving the competitiveness of industrial products.

Analysis of thematic literature. The issues of implementation and improvement of Product Quality Management in enterprises are discussed by many foreign scientists, in particular, I.Ansoff, Ye.Bem Bawerk, L.Valras, U.Jevons, D.Locke, CA.Menger, W. Pareto, P.Samuelson, F.Ejoort, J.Etinger, F.Crosby, F.U.Covered in the scientific work of the Taylors. Ya on the study of product competition-tolerance management as a weapon of Strategic Management.Cornay, R.Coons, P.Druker, F.Kotler,

B.Karlof, A.Strickland, A.Thompson, A.The scientific work of the ouens has become a classic work [1-9].

Quality management issues in the countries of the Commonwealth of Independent States G.G.Azgaldov, G.G.Belekchyan, V.G.Versan, G.I.Nemchenko, A.A.Bocharov, T.A.Khudyakova, S.A.Shevchenko, S.Yu.Bogatirev, P.V.Zabelin, A.N.Petrov, S.G.Svetunkov, D.V.Sokolov and V.V.Such scientists as Tomilov studied in their studies [10-20].

Republik of Izbekistan's scientists on the study of the general problems of improving the competitiveness of products and improving the quality management system in our country A.Abdullaev, T.M.Akhmedov, A. Sh.Bekmuradov, B.B.Berkinov, M.U.Badalova, Sh.N.Zainutdinov, M.A.Ikramov, N.Q.Yoldashev, A.F.Rasulov, D.N.Rakhimova, A.A.Sotvoldiev, B.T.Salimov, M.L.Tursunkhadzhaev, A.M.Kadyrov, S.Gulomov, Sh.J.Ergashkojaeva, M.Yusupov, and other scientists conducted scientific research [21-24].

Analysis and results. The set of product characteristics, which is important for the consumer and ensures that his specific needs are met, determines how competitive he is. When it is said that competitiveness in this case is understood as the ability of a product to meet the requirements of the emerging market for a certain period of time and its ability to quickly sell when it is adjacent to goods similar to it in the market.

Competitiveness of products of industrial enterprises is a set of certain characteristics of the product, these characteristics are intended to give the opportunity to more fully meet the urgent needs of consumers, compared with other enterprises (competitors), using technologies in production and minimizing production resources. The rapid transformation of scientific technical progress, the rapid saturation of markets and Mass competition among commodity producers necessitate the search for new organizational forms and methods of quality management.

Below we will look at the advanced experience of various schools abroad.

European School. It was formed around the European quality organisation (YeST), the predecessor of that organisation being the European Quality Control Organisation (YeSNT). The organization's annual sessions (of which 45 have already passed) and seminars, recommendation and a large body of literature have had a serious impact on quality management processes in Europe. In 1999, the European quality organization published a document entitled "quality problems in European view". It developed a modern quality concept. The European Foundation for quality management was established. As the most known and famous exponents of this school, one can mention Segetse, Cantarelli, Mezing, Conti, Nixon.

Documents (general market directives) on the development of these processes, as well as the European Organization for Standardization (fr. The Comité Européen de Normalisation, CEN) as well as another similar organization, the European Committee for standardization of Electrical Products (CENELEC fr: Comité Européen de Normalisation Électrotechnique) actively support the standards developed. Systems for certification of products, certification of experimental testing departments, covering most countries of Europe, actively work.

Based on the business improvement model, annual competitions are held to win the European Quality Award. In April 2017, the European Community celebrated the 25th anniversary of the award.

The most effective of the approaches to quality management was observed in the United Kingdom. In 1979, the British Standards Institution (BSI) published the BS 5750 "Quality System" standard. It forms the basis of a national campaign on standard quality, which was supported by Margaret Thatcher hukuumati.

The registry of UK companies certified in accordance with the quality system BS-5750 standard was established. Bora bora this standard was taken as the basis for the first version of the ISO 9000 series

standards.

European countries have effective management structures for the processes of ensuring product quality and safety. For example, within the framework of the Belgian Ministry of economic relations, the so-called general direction of “quality and security” is practiced. Its organizational structure is shown in Figure 1.

The “quality” section of this government structure includes three different services: accreditation, central laboratory and Metrology service.

The Accreditation Service is responsible for the development of the belsert (Belgian certification) and BELTEST (Belgian test) accreditation systems. These accreditation systems ensure that the quality of Belgian products and services is confirmed and that they are guaranteed to enter the international market. BELSERT is responsible for the accreditation of certification bodies certifying the quality system, products and personnel.

The central laboratory performs chemical analyses of food, textiles and petroleum products on behalf of the government. This laboratory is also responsible for the accreditation of experimental testing laboratories (BELSERT).

The scope of the obligations of the metrology service includes the implementation and maintenance of national Etalons and inspection of measuring instruments, as well as ensuring the quality of industrial products and scientific research developments. The metrology service includes the inspection service, the Central Inspection Service and the territorial Inspection Service.

In Austria, the issues of quality and safety are regulated by a number of federal laws, including the "Federal law on standardization", the "Federal law on Accreditation of Test Laboratories and certification bodies", the "law on measurements and weights", the "law on steam boilers", etc.

The Austrian Society for certification of quality and management systems (OQS), founded in 1988, plays a significant role in quality efforts. This society has 4 territorial administrations: East, Center, west, south. At the disposal of the society are qualified employees from all over Austria, 190 auditors. The OQS field of activity consists of Quality Systems, business and environmental management. OQS has issued about 4,000 certificates of conformity. OQS certificates and services are recognized not only within the country, but also internationally, due to the fact that OQS is considered a member of the Association of independent national organizations for certification – IQNet. More than 60 percent of the world's certificates are issued by organizations affiliated with this association. The goal set to create a high level of protection is achieved by ensuring high quality of the product. Along with the requirements for the creation of a single and high European level of quality of products and services, it is also envisaged that the following two goals should be implemented:

Improving competitiveness in the European industry, in particular, from the point of view of the requirements of the international market;

Conducting activities to create a mutual trust base in the relations of “producer and consumer” throughout Europe;

The tasks currently set out in the EU country harmonisation concept, in general, have been divided into solutions, and in 1999 the European quality organisation (EOQ) along with Finnish specialists (chaired by EU ga Finland in 1999) develop a document entitled “quality problems in European view”. This document developed a new concept in which the tasks of the quality sphere in today's time are defined. The document has been signed by prestigious European organizations operating in the economy, including UNICE (Union of Industrial and employee's Confederations of Europe), Uapme (European Association of Craft, Small and Medium Sized Enterprises), EUROCHAMBRES (Association of European Chambers of Commerce and Industry), EFQM (European Foundation for Quality Management), EOQ (European Organization for Quality), FMQ (French Movement for quality).

In Europe, ideas have emerged that are focused on the quality system as a means of ensuring the high quality of products and services. This refers to the transition to the production of quality products by retreating from the path of product certification in quality assurance and introducing a quality assurance system.

American school. It is one of the oldest within foreign schools, and its activities are built around the American Quality Association. His outstanding exponents Deming, Djuran, Feygenbaum, Harringtons had a serious impact on the development of ideas of quality management all over the world, primarily in Japan.

In the 70 80s of the last century, the US industry faced great difficulties in the conditions of sharp competition, primarily by Japan, in the sale of its products, not only abroad, but also in the United States itself [25].

By the end of the ' 70s these muaamos had encouraged U.S. companies to rethink their basic organizational structures, business processes and operations, and the government to reconsider their attitude to quality.

In 1980, the National Bureau of standards (NBC) would distribute a “white paper” across the country, which read the appeal: “as long as Japan is in its power, why not be in our power?” This had given the American public an idea of the Japanese methods of quality management.

Finally in 1981, L.Dobrins "book" as long as Japan is at hand, why don't we have a hand?" , the U.S. begins its struggle to gain a missed advantage after its release.

The U.S. government under President Reagan focuses on the problem of quality, the issue of increasing competitiveness through quality based on advanced technology. In 1988, the “General Law on trade and competitiveness” would be passed by the U.S. Congress. It provides for a sudden increase in the level of products and production technologies. With the entry into force of this law, a modern stage of further strengthening cooperation between federal, local and private structures in order to increase U.S. competitiveness on a global scale begins.

The program to increase competitiveness has become a national program. To promote these innovations, the media was attracted, training of personnel of all categories was carried out, special literature was published in large numbers. Nationwide quality conferences (congresses) were held each year.

A characteristic feature of the American school is the establishment of close ties between scientific technical societies, standardization systems, metrology and test experimental systems, technological centers, headed by the National Institute of Standards and technology. It should be noted in particular that another related case is formed, that is, the attitude of responsibility to test experimental work in the USA. It came from the MIL military standards. These standards are intended to put into the production of elements base, components and products, and to conduct their in-depth test experiment in their use. National cataloging is added to the system based on the results of testing experiments on components and products that are considered the object of the state order.

Japanese school. The formation of this school dates back to the 50 years of the last century. This school was formed under the influence of the US school. This school then goes through several stages of development. These stages include stages of general quality management, ranging from the application of statistical methods.

In Japan, the gross quality control (Total Quality Control) system has evolved extensively. It defines the responsibility, competence and interaction of all managers and employees of the enterprise in the field of quality[26]. The system would then take the name Total Quality Management () in Japan and other countries.

As characteristic features of the Japanese school in the field of quality, the following can be noted:
 reliance on standardization from country scale to enterprise scale;
 regular improvement of working condition (Kaizen);
 involvement of all employees of the enterprise in quality management with the help of quality circles;
 strict adherence to technological discipline.

The following methods are widely used as self-justifying management methods in Japan [27]:

Taylor cycle PDCA (Plan – Do - Check – Action);

seven analysis methods;

seven new quality assurance tools.

Currently, the method of planning the experiment (experiment) (Taguti method) is actively used. At the same time, the Japanese have been using the achievements in the field of quality, which since the early 90s have been achieved based on the 9000 series of the ISO international standard. In the field of quality, one can list Isikawa, Taguti, subaki, Shiba, Kume from the authoritative manifestations of the Japanese school.

In addition to the above three schools, schools from other countries have also been formed in the field of quality.

In the people's Republic of China, efforts to increase quality have become public. In 1993, the PRC law on the quality of products was issued, and it was revised in 2000. It notes that the state contributes to the development of scientific methods in the field of Product Quality Management. This law provides for the state support and assistance of enterprises implementing quality systems on the basis of international standards.

The issues of development, implementation and functioning of the quality system are considered on a systematic basis at scientific practical conferences and seminars on a universal and territorial scale, covered in media voositas.

Two community organizations operate in China, the China Quality Control Association and the ISO 9000 implementation Assistance Association [28].

Currently, the day-to-day relevance of the issues of quality management and standardization in the export of products produced in Uzbekistan and high position in foreign markets is encouraging our main attention to adapt this industry to the system of developed countries.

Currently, a legal framework has been created in the Republic of Uzbekistan in order to improve the quality of products and improve competitiveness.

Decree of the president of the Republic of Uzbekistan "on measures to organize the activities of the technical regulation agency of Uzbekistan under the Ministry of investment and foreign trade of the Republic of Uzbekistan" dated June 2, 2021 PQ-5133. In accordance with the "regulation on the technical regulation agency of Uzbekistan", the technical regulation agency of Uzbekistan is tasked with the extensive implementation of modern systems of Product Quality Management in exporting enterprises and certification of industrial products in accordance with international standards, within which the agency:

- state and economic authorities, together with local executive authorities, approve the tables for the implementation of modern quality management systems at enterprises and carry out control over ensuring their implementation;
- organizes certification work of export-oriented products in accordance with international standards,

including involving internationally recognized compliance assessment bodies;

- carries out extensive media coverage of the benefits of implementing quality management systems in accordance with international standards;

* maintains a list of enterprises that have implemented a quality management system.

The development and implementation of management systems is carried out by enterprises independently or by attracting a consultant with appropriate qualifications. In this case, the involvement of the consultant is carried out on an open competitive basis.

Certification of quality management systems is carried out by the bodies of certification of management systems accredited in the manner established by the State Unitary Enterprise" accreditation center of Uzbekistan " [29]

In the current regulatory legal acts of the Republic of Uzbekistan, a number of benefits are established for enterprises that have implemented quality management systems and have been certified. Tax credits are applied to these businesses and preference is given to tender sales.

The normative acts on standardization include, as well as the rules, norms of standardization, classifiers of technical and economic information.

Conclusion. Thus, each country has chosen its own methods of solving the problems of low quality and level of competitiveness, which implies that the enterprise and the state will act together, combining forces. The European School is based on the development and implementation of national quality programs with the serious support of the state (UK, Austria, Belgium, Germany). The US school uses such a method of quality management that, according to it, the state is practically not engaged in providing subsidies or setting certain strategies for the development of a quality system, but dynamically supports individual programs. Such an approach can be seen in the efforts to financially support the Malcolm Baldrige National Quality Award and increase public attention to it. The Japanese School of quality management, on the other hand, has clearly demonstrated that countries (Japan, South Korea) that perceive high quality as a key element of their economic strategy will achieve great success without having a large territory or natural resources.

The historical experience of the United States, Japan, the United Kingdom, China and a number of other countries indicates that progress has been made in the field of quality through the use of effective management systems. This is one of the supports that these countries have helped to achieve economic development, a solid place in the world market.

In most foreign countries with a developed market economy, over the past 15-20 years, there has been an increased focus on the creation, improvement and certification of Product Quality Management, a new management thinking has been formed in relation to quality. On the basis of this, gross quality management came into being. Such quality management is used not only in large industrial enterprises (firms), but also in medium and small enterprises.

The gross approach to quality management is based on the requirements of international standards. At the same time, it is envisaged that activities within the framework of quality management will satisfy the following requirements:

- a) meet the interests and needs of Product Manufacturing Enterprises. This can be done by the effective use of all the resources that the enterprise has at its disposal, in particular, human resources;
- b) meet the needs of product consumers. In this case, the manufacturer must have objective criteria of the requirements that consumers are putting in order to be confident that they have the opportunity to deliver a product of the quality level demanded by consumers.

The introduction of a quality management system that meets international standards with the study of foreign experience to the enterprises of our country also leads to an increase in productive competitiveness and an increase in efficiency.

List of literature used:

1. Production and Manufacturing Performance Improvement in Japan, UK, and USA 2004-2011. ESRC Centre for Business Research, University of Cambridge, Working Paper, 2012, №. 232);
2. Cauchik M. The Strategic Role of Quality Management in the Brazilian Auto Parts Industry: An Empirical Study. In Strategic Management of Manufacturing Value Chain. Ed. by Bititci U. Kluwer Academic Publishers, 2012, Norwell, MA. P.595-652.;
3. Кунц Р. Управление: системный и ситуационный анализ управленческих функций/ Р. Кунц, С. О'Донелл: пер. с англ. - М: Прогресс, 2001. -201с.;
4. Карлоф Б. Деловая стратегия. - М.: Экономика, 2003. - 198с.;
5. Оуэн А. Как осуществлять стратегию // Хрестоматия «Управление изменениями». - М: МЦДО «Лина», 2006. –149 с.;
6. Мескон М.Х., Альберт М., Хедоури Ю. Основы менеджмента –М.: Дело, 2012.–520 с.;
7. Фейгенбаум А. Контроль качества продукции.–М.: Экономика, 2014.;
8. Харринтон Дж.Х. Управление качества в американских корпорациях.-М.: Экономика, 2010.
9. Азгальдов Г.Г. Проблемы измерения и оценки качества продукции. -М.: «Знание», 2012;
10. Версан В.Г. Система менеджмента качества как целевая подсистема матричной структуры менеджмента предприятия // Сертификация, 2013, 2-6 б.;
11. Белекчян Г.Г. Исследование показателей, применяемых в управлении качеством продукции в производстве. Дис.на соиск. учен, степени канд.экон.наук. -Минск, 2011;
12. Дедекаев В.А. Вопросы совершенствования организации комплексной системы управления качеством продукции. Дис. на соиск. учен, степени канд.экон.наук. Львов, 2009;
13. Лапикус С.Т. Экономическая эффективность повышения качества продукции, дис.на соиск.учен, степени канд.экон.наук. -М.: 2011;
14. Мхитарян В.С. Статистические методы в управлении качеством продукции. -М.: Финансы и статистика, 2012;
15. Пьянков Б.В. и др. Интенсификация, качество, эффективность.-Л.:Лениздат, 2006.;
16. Сиськов В.И. Экономико-статистическое исследование качества продукции, -М.: Статистика, 2011;
17. Томилин В.Н. Управление качеством в условиях перехода к рыночной экономике. Стандарты и качество, 2013, №10;
18. Чайка И.И. Конкурентная борьба предприятий – это соревнование систем управления качеством. Стандарты и качество, -М.: 2016, № 12;
19. Управление качеством: Учебник для ВУЗов/ С.Д. Исьенкова, П.Д.Ильенкова, В.С.Мхитарян и др.: Под ред. д.э.н., проф. С.Ильенковой.–М.: Банки и биржи, ЮНИТИ, 2015, -199 с.
20. Бадалова М.У. Миллий иктисодиётда халқаро ISO 9000 серияли сифатни бошқариш тизимини жорий этиш хусусиятлари. Иқтисодий фанлар номзоди илмий даражасини олиш учун ёзилган диссертация автореферати. –Т.: 2008;

21. Расулов М.Н. Корпоратив бошқарувнинг иқтисодий механизмларини такомиллаштириш негизида корхоналар ривожланиш самарадорлигини ошириш (Ўзбекистон Республикаси саноат корхоналари материаллари мисолида).08.00.13 – “Менежмент ва маркетинг” ихтисослиги. И.ф.н. илмий даражасини олиш учун ёзилган дисс. – Т., 2010. – 161 б.;
22. Замоновий менежмент: назария ва амалиёт / Д.Н.Раҳимова ва бошқ. Ўзбекистон Республикаси Президенти ҳузуридаги Давлат ва жамият қурилиши академияси. – Т.: Фафур Ғулум номидаги нашриёт-матбаа ижодий уйи, 2009, 792 б.;
23. Саидова Г. Модернизация, техническое обновление и диверсификация производства, широкое внедрение инновационных технологий – необходимое условие выхода Узбекистана на новые рубежи на мировом рынке / «Жаҳон молиявий-иқтисодий инқирузи, Ўзбекистон шароитида уни баргараф этишинг йўллари ва чоралари» мавзусидаги Республика илмий-амалий анжуманидаги тақдимот материаллари. – Т., ТДИУ, 2009 йил 5 май;
24. Окрепилов В.В. Международные стандарты в управление качеством продукции.- Л.:Знание,1990.
25. Луцников В.С., Строщков А.Н. Мотивация работников предприятия в условиях действующих систем обеспечения качества. Стандарт и качество, 2013, № 4.
26. Харринтон Дж.Х. Управление качества в американских корпорациях.-М.: Экономика, 2010.
27. Khalilov Nurullo Khamidillayevich, Safina Nafisa Talgatovna, “Development of the quality management system of industrial enterprises the main factor of increasing the competitiveness of products”. “World Economics and Finance Bulletin”, 2022. [электронный ресурс] <https://www.scholarexpress.net/>
28. Khalilov N.Kh., Safina N.T. “Digitalization - as the main factor in the development of the quality management system of the textiles industry of the Republic of Uzbekistan”. BIO Web of Conferences 65, 03004 (2023) <https://doi.org/10.1051/bioconf/20236503004> EBWFF 2023 <https://doi.org/10.1051/bioconf/20236503004> © The Authors, published by EDP Sciences. This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0 (<https://creativecommons.org/licenses/by/4.0>)
29. О‘zbekiston texnik jihatdan tartibga solish agentligi rasmiy sayti ma’lumotlari. <https://www.standart.uz/page/view?id=41> [elektron resurs]
30. «Menejment tizimlarini sertifikatlashtirish tartibi to‘g‘risida»gi nizom.