UDC 338.2:006.015.5

Yu. I. Norenko,
The graduate student
A. I. Momot,

Dr. Hab (Economics), Donetsk National Technical University

WAYS TO INCREASE THE COMPETITIVENESS OF ENTERPRISES BY USING MODERN QUALITY MANAGEMENT TECHNOLOGIES

Formulation of the problem. Competitiveness of any company, regardless of its size, in today's business depends primarily on the quality of its products and its price commensurate with the quality offered. Increasingly important to the concept of Total Quality Management, the main principle of which remains a strategic focus on the consumer. Quality management based on modern technologies of enterprise management, as well as on the quality control of production and quality of work as a whole enterprise, and individual employee.

Analysis of the latest research and publications. The problems of increasing the competitiveness of enterprises through correct pricing, product quality and other such factors given enough attention in the foreign and domestic literature. This is the subject of P. Drucker [1], M. Meskon, M. Albert, F. Hedouri [2], J. Adler, I. Aronov, I. Shper [3] and many others. At the same time of the study of impact on the competitiveness and efficiency of the enterprise modern management techniques in domestic practice studied to a much lesser extent. Such a practice is considered in some Ukrainian publications (for example, the monograph "The economic mechanism of quality management" [4]).

The Objectives of the article. The purpose of this study is to investigate the introduction of modern quality control technologies, which also include modern quality management system, the activities of foreign and Ukrainian companies.

Statement of the basic material. In the present competitive new technologies appropriate to implement a quality management using an integrated approach. Although in itself a separate new technology could theoretically be a unique and effective method, which is the result of thought, accumulated over a period, but it is applied in practice alone is ineffective. Only in conjunction with other modern technologies can achieve the maximum effect.

Currently, it is important to ensure not only the introduction of new technology as some of the technical process, but it is more important to introduce the philosophy of this new technology in people's minds. And it is much more difficult because you have to break stereotypes over the years in the subconscious thoughts, change the way of life, etc.

The scheme, which can be adopted in the implementation may include the following steps [Figure 1]:

Step 1. The new philosophy of quality management. First of all, should be accepted concept (philosophy) of continuous improvement – TQM (Total Quality Management).

Step 2. Implementation of international standards of governance. Implementation of the new philosophy should be done through the development and implementation of basic ISO 9000 family of standards (or industry QS 9001), and then the other – ISO 14000; ISO 18000 etc.

Step 3. The introduction of new technologies and methods of quality management, including: Business Process Reengineering (BPR); Lean Production; System 5 S; Total Productive Maintenance (TPM), Benchmarking, Self-assessment, etc.

TQM system is characterized by the fact that, along with the quality of products, pursue other outcomes, including such as the long-term commercial success, the benefits to society and customer satisfaction. Thus TQM affects all methods of enterprise management, and not just those related to quality management. TQM is a new way of doing business, which is a revolution in the philosophy of quality.

In Ukraine the general principles and rules of the organization for the creation, implementation and certification of quality management systems define the introduction of International and national standards DSTU ISO 9000; DSTU ISO 14000, DSTU, ISO 18000 etc. The latest version of international standards ISO 9001:2008 has been developed the latest requirements of the market and is based on the principles of TQM. These principles are included in the new standard as the basic requirements to be met by the organization applying for a certificate of quality.

The introduction of modern management helps create:

- Effective management system;
- The achievement of strategic objectives;
- The growth of business performance;
- Improve the overall manageability of the organization;
 - Decrease in the proportion of defects

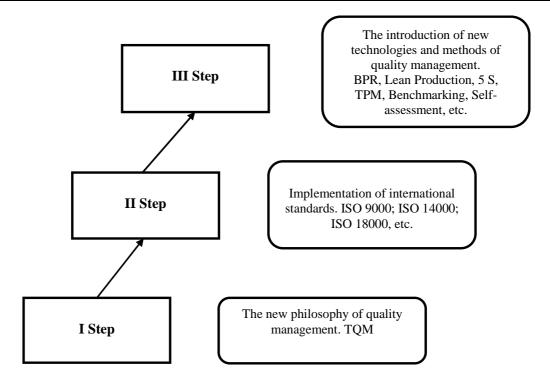


Fig. 1. Steps of the implementation of new quality Management technology

Elements of modern management quality are:

- 1. Reengineering of the enterprise in question, which helps to create a system that, provides a gradual increase in business performance.
- 2. A clear division of responsibilities and increasing participants. The quality management system is focused on the one hand, to identify the action of workers, and on the other can avoid duplication of functions. This increases the overall manageability of the organization.
- 3. Phased quality control at all stages of the life cycle. According to statistics, in the implementation of quality management systems is a decrease discard rate of 25%.

Quality management methods are based on management relations that affect the organization and the elements of the production process to achieve the quality objectives. Along with individual methods are highlighted represent a combination of complex methods [5, 6], as well as theoretical foundations, concepts and systems. In contrast to the complex methods, concepts and systems involve not only the use of a specific set of methods, but the reform of the approach to the management of the organization.

Individual methods can be classified by object effects: information, social systems, and equipment. The latter are associated with the features of a specific production process, including measurement techniques, settings, and other social systems management is usually

divided into economic, organizational, administrative and socio-psychological methods [7].

The economic methods include the creation of certain conditions that encourage employees and groups of enterprises, departments systematically raise and provide the necessary level of quality. At the same time, the development of market relations require greater use of economic methods of quality management, as part of which may be:

Funding of quality management;

Economic calculation in units of quality management system;

Economic incentives for production;

Pricing of products and services tailored to their level of quality;

Application of the system of wages and material incentives;

The use of economic measures to influence the suppliers;

Business planning of new and upgraded products and services.

Organizational and management methods are based on the implementation of mandatory directives, orders, directives, and other management measures designed to improve and ensure the necessary level of quality:

Regulation (functional, official, structural);

Standardization;

Regulation;

Instruction (explanation, interpretation);

a status effect (on the basis of orders, directives, regulations, etc.)

Social and psychological methods impact on social and psychological processes that take place in the workforce, to achieve the quality objectives [7]. In the field of quality to them are the following:

Moral incentives for high quality work results;

Methods of improving the psychological climate in the team (elimination of conflicts, selection and provision of psychological compatibility of employees);

The psychological characteristics of the workers' collective;

Forming motifs work staff to achieve the required quality;

Preservation and development of traditional businesses to ensure the required quality;

Ways to improve self-discipline, responsibility, initiative, and creativity of each team member.

The aim of modern quality management is not only an increase in customer satisfaction (primarily through quality products), but also to achieve this, the most economical way. Depending on the characteristics of the organization may use different methods to increase its efficiency [8]: TPM, 5S, BPR etc.

TPM program is based on the use of human factors. It is on the staff of his interest will depend on the effectiveness of implementation of TPM, the main factor of success is the training of personnel. TPM system efficiency is achieved through the complete elimination of all losses. The practice of the system TPM over the years and allowed to calculate the approximate cost of its implementation. Thus, during the first two years of a 10-20% increase training costs and about 15% will increase the cost of service, provided that the first year will cover 10% of the company's equipment (and 20% – for the second year) [4].

"System 5 S" was created, as well as the TPM program at the turn of the 60-70's at the enterprises of Japan. It included the establishment of order, cleanliness, better discipline and creating a safe working environment, with the participation of all staff. The system of the "5 S" was not the only major independent tools of modern management, but also the basis for the deployment of a higher level – TQM and TPM [9, 13]. This system allows almost without attracting capital costs not only increase productivity, reduce losses, reduce defects and injury, but also to create the necessary initial conditions for complex and costly production and organizational innovation, to ensure their high efficiency, primarily due to the radical changes in staff attitudes to their work.

The structure of complex methods includes Reengineering, Benchmarking, Self-assessment, etc.

Reengineering – is an approach to management that allows you to make a "breakthrough", provides a dramatic increase in productivity and efficiency of the company. The order of events on reengineering involves three stages: 1) analysis, 2) design, and 3) implementation. And we mean the development and introduction of new business processes [1].

Benchmarking – a method of using other people's experience, the advanced achievements of the best companies, divisions of their own company, individual professionals to improve efficiency, production, improvement of business processes based on the analysis of results, and use them in their own activities.

Self-assessment is a comprehensive, systematic and regular review of the organization's activities and results, and they meet certain criteria, led by the organization itself. The company can develop its own methodology and its own criteria for self-assessment.

Conclusions. The theory of quality management continues to grow, including in the framework of international standardization. The set of quality management methods gradually enriched experience of successful practical implementations. Among the major developments in modern management are Lean Production, BPR, Information technology, Quality Management System, Benchmarking, Self-assessment, Humanization of production etc. This is the direction in which to develop tools and techniques of quality management in the near future.

В то же время в Украине, использование новых технологий должно основываться на глубоком анализе, необходимо выбирать из них лишь те особенности, которые могут быть использованы в условиях рыночной экономики.

At the same time in Ukraine, the use of new technologies should be based on a thorough analysis, you need to choose from among them, only those features that can be used in a market economy.

References

1. Друкер Питер Ф. Информация, которая действительно нужна руководителю / В кн. Измерение результативности компании: Пер. с англ. – М.: Альпина Бизнес Букс, 2006. – 220 с. 2. Мескон М. Х., Альберт М., Хедоури Ф., Основы менеджмента: Пер. с англ. – М.: Дело, 2002. – 704 с. 3. Адлер Ю. П., Аронов И. З., Шпер И.З. Что век текущий приготовил? Менеджмент XXI века — продолжение краткого обзора основных тенденций// Методы менеджмента качества. 2004. № 1. – С.10 – 11. 4. Момот А. И. Экономический механизм управления качеством / Министерство образования и науки Украины. Дон-НТУ. – Донецк: Норд-Пресс, 2005. – 383 с. 5. Ефи-

мов В. В. Средства и методы управления качеством. М.: КНОРУС, 2007. 6. Управление качеством продукции. Инструменты и методы менеджмента качества: уч. пос./ С. В. Пономарев, С. В. Мищенко, В. Я. Белобрагин, В. А. Самородов, Б. И. Герасимов, А. В. Трофимов, С. А. Пахомова, О. С. Пономарева. М.: РИА "Стандарты и качество". 2005. 7. Томохова И. Н., Рыжова Н.А. Классификация средств и методов управления качеством// журнал "Сервис plus". — 2008. — № 4. 8. Кане М. М., Иванов Б. В., Корешков В. Н., Схиртладзе А.Г. Системы, методы и инструменты менеджмента качества: Учебное пособие. СПб.: Питер, 2008. 9. Дерябин П. М. Почему нужно внедрять систему "Упорядочение" // Методы менеджмента качества. — 2004. — № 2. — С. 13 — 16.

Норенко Ю. І., Момот А. І. Шляхи підвищення конкурентоспроможності підприємств на основі використання сучасних технологій управління якістю

У статті запропоновано концептуальну модель підвищення конкурентоспроможності підприємств на основі використання сучасних технологій управління якістю. Розроблено етапи її послідовного впровадження шляхом поширення нової філософії управління якістю, системи ТQM, розробки міжнародних стандартів менеджменту якості у.т.ч. ISO 9000, ISO 14000, ISO 18000 та ін., упровадження на основі українських особливостей нових технологій управління: BPR, Lean Production, 5 S, TPM, Benchmarking, Self-assessment. та ін.

Ключові слова: нові технології управління якістю, методи, конкурентоспроможність, впровадження, філософія якості, міжнародні стандарти, ефективність, самооцінка.

Норенко Ю. И., Момот А. И. Пути повышения конкурентоспособности предприятий на

основе использования современных технологий управления качеством

В статье предложено концептуальную модель повышения конкурентоспособности предприятий на основе использования современных технологий управления качеством. Разработаны этапы ее последовательного внедрения путем распространения новой философии управления качеством, системы ТQM, разработки международных стандартов менеджмента качества в.т.ч. ISO 9000, ISO 14000, ISO 18000 и др., внедрения на основе украинских особенностей новых технологий управления: BPR, Lean Production, 5 S, TPM, Benchmarking, Self-assessment и др.

Ключевые слова: новые технологии управления качеством, методы, конкурентоспособность, внедрение, философия качества, международные стандарты, эффективность, самооценка.

Norenko Yu. I., Momot A. I. Ways to Increase the Competitiveness of Enterprises by Using Modern Quality Management Technologies

Conceptual model for enterprise competitiveness through the use of modern technology for quality management. Developed stages of its consistent implementation by extending the new philosophy of quality management systems, TQM, the development of international standards for quality management ISO 9000, ISO 14000, ISO 18000, etc., based on the introduction of new technology features of Ukrainian Management: BPR, Lean Production, 5 S, TPM, Benchmarking, Self-assessment, etc.

Key words: new technology quality management methods, competitiveness, implementation, quality philosophy, international standards, efficiency, Self-assessment.

Received by the editors: 18.08.2012 and final form 20.11.2012