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# PROSPECTS FOR IMPROVING PRODUCT QUALITY IN TEXTILE INDUSTRY ENTERPRISES BASED ON QUALITY POLICY SYSTEMS

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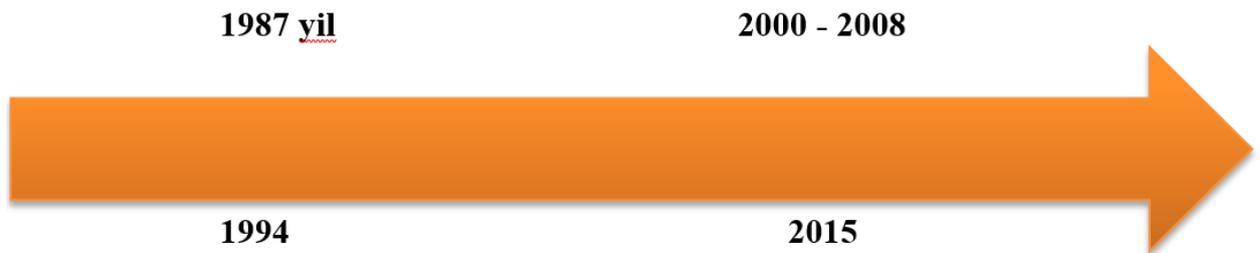
**Abstract:** The enterprises of the textile industry are not only the most important of the existing enterprises in Uzbekistan, but also help to develop this industry. therefore, the unsatisfactoriness of harmonization with the requirements of national and international standards in textile enterprises and the current unsatisfactory quality management systems in textile enterprises, as well as the import of products made in Uzbekistan to foreign markets, increasing the export potential and the quality and safety of products is an obstacle to increasing trust. Unveiling this potential, forming a textile network in our country that meets the requirements of the times is one of the priority directions of the development of the national economy. Therefore, it is obvious that it is necessary to introduce a quality management system recognized at the international level and meeting global requirements in the enterprises of the textile industry in Uzbekistan. In this article, we recommend establishing a quality policy based on the requirements of the quality management system (SMT, ISO 9000 standard) for textile industry enterprises and introducing modern quality system requirements. That is, it became clear that there are many problems and gaps in the implementation of the unique (SMT) quality management system of textile industry enterprises. Modern quality management system and electronic quality management system (EQMS) and PDCA cycle were developed for textile industry enterprises. As a first step, the scientific work carried out on quality policy was reviewed and the changes after the introduction of the quality management system to textile enterprises were thoroughly analyzed.

**Keywords:** ISO 9000, industrial enterprises, quality policy, standard, quality, SMT, product, procedure, cost, improvement, process approach, PDCA cycle.

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**Introduction.** Today, more than one million companies and organizations from more than 170 countries worldwide have been certified according to the ISO 9001:2015 international standard, which indicates the rapid growth of industrial sectors, the use of information and communication and resource-efficient technologies, and the widespread introduction of innovative developments. increases the need to improve quality management systems. In this regard, the use of methods and tools of the modern quality management system is considered important [1]. The initial research on quality policy began in the 20th century, and this quality management system consisted of the following stages [2]: - based on the Taylor system; - statistical admission and exit control; - incoming control; - third-party product certification; - certification of production and quality systems. Since the appearance of F. Taylor's system [3, 4] in 1905, the concepts of "higher" and "lower quality limits", "tolerance zone", "technical means of measuring tolerance" have entered into practice. This system made it possible to separate products into high-quality and defective (defect). Later, by the 1920s and 1930s, the concept of evaluating production processes to improve product quality entered the American system. Statisticians in Germany and America used statistical methods to analyze and control quality changes during product manufacturing. In 1924, Walter A. Shewhart of Bell Telephone Laboratories developed a statistical chart for the control of product variables in manufacturing, an innovative step that marked the beginning of the approach to quality known as statistical quality control. Shewhart later wrote a manual in 1939 called

Statistical Methods in Quality Control; his published work was recognized by both statisticians and engineers. Working with Shewhart and contributing to his ideas in the 1920s were H.F. Dodge and H.G. Romig, both of Bell Telephone Laboratories, who developed the field of acceptance sampling as a substitute for full product quality inspection.[5] During the 1930s and 1940s, statistics became the primary method of influencing the discipline of quality management. In 1938, Deming published a technical book and started courses in the use of his statistical methods. Deming's thinking focused on solving problems in process management when he proposed the Deming cycle (plan-do-check-action)[6]. ISO 9000 was first published in 1987 by the International Organization for Standardization (ISO), a specialized international agency for standardization composed of the national standards bodies of more than 160 countries[7]. This first iteration was all about documenting your processes and developed the concept of iteratively building business processes. For many businesses, this was a daunting task, but it at least provided a framework for reflection through documentation and training efforts. This initial version was a great place to start, but it was clear that there was a lot of room for continuous improvement.



**Figure 1.** Development history of the ISO 9001 standard.

The next real improvement to the ISO 9001 standard came in 1994 with the "say what you do and do what you say" approach. This change was an additional step in the transformation of many companies. Where previously companies only had to document their procedures, now they must also provide a management system to ensure that "do as you say" requirements are met. Quality measurement is simplified when the "say what you do" and "do what you say" metrics are handled manually. In the early 2000s, ISO 9001 incorporated the concept of continuous process improvement. Eventually, large enterprises saw the benefits of using ISO 9001 and began implementing their own quality programs. A few examples of these programs are: Deming/Juran/Crosby (Statistical Control, Pareto Principle, Zero Defects), PDCA (Plan-Do-Check), Toyota Production System, Six Sigma, and Lean. Continuous improvement of existing processes continued until 2008. Finally, in 2015, ISO 9001:2015 was released. By this time, a more complete and understandable approach to the integration of quality management systems into the core of business strategy and risk reduction is being implemented. The ISO 9001:2015 standard is less demanding (more tailored to each unique business) and more focused on achieving desired results. This increases the focus on process management with a focus

on results[8]. Today, the reasons for the shortcomings in the implementation of the quality management system in the activities of industrial enterprises, including textile enterprises, are diverse. we come to the conclusion that as a result of conflicts between these two systems, there are defects in the implementation of the quality management system. in solving these problems, we come to the decision that it can be solved only by applying the quality management system. quality management system covers the entire management system of the enterprise. By establishing smt management system, we can create a complete system[9].

**Methods.** In this article, it is important to consider the literature analysis as the main part of the research methodology. Therefore, in the design of the study, we aimed to use systematic approaches in selecting the literature for review. In general, a literature review is defined as the process of describing and critiquing relevant literature published by others on the same topic. To understand the literature and find literature related to quality management systems, we began our literature search by identifying the gurus and experts in the field and then reviewing their published work. Therefore, in this research, we have seen the work of Dominique Zimon and Dusan Malindzak, who argue that the quality management system can be traced back to the works of Crosby, Deming, Feigenbaum, Ishikawa and Juran, who were considered to be the most important people in the field of quality management system. Among other things, V.I. Siskov in his research defines quality as follows: "takes into account the quality-related aspects of production and consumption and emphasizes: "It is necessary to distinguish two sides of the problem: a group of product characteristics must be produced in accordance with the requirements of its technical conditions is formed in the process. This is the manufacturing quality of the product. The second group of characteristics is manifested in the process of product consumption. This is the consumer quality of the product." as well as Uzbek scientists. Raed Ibrahim Mohamad Ibrahim on the introduction of information technologies to quality management systems informed about the need to use information technologies in scientific research. As a methodology of this article, in a textile enterprise

- formation of quality management system;
- 9 steps for ISO 9001 quality management system development and certification;
- development of an improved model of electronic quality management system.

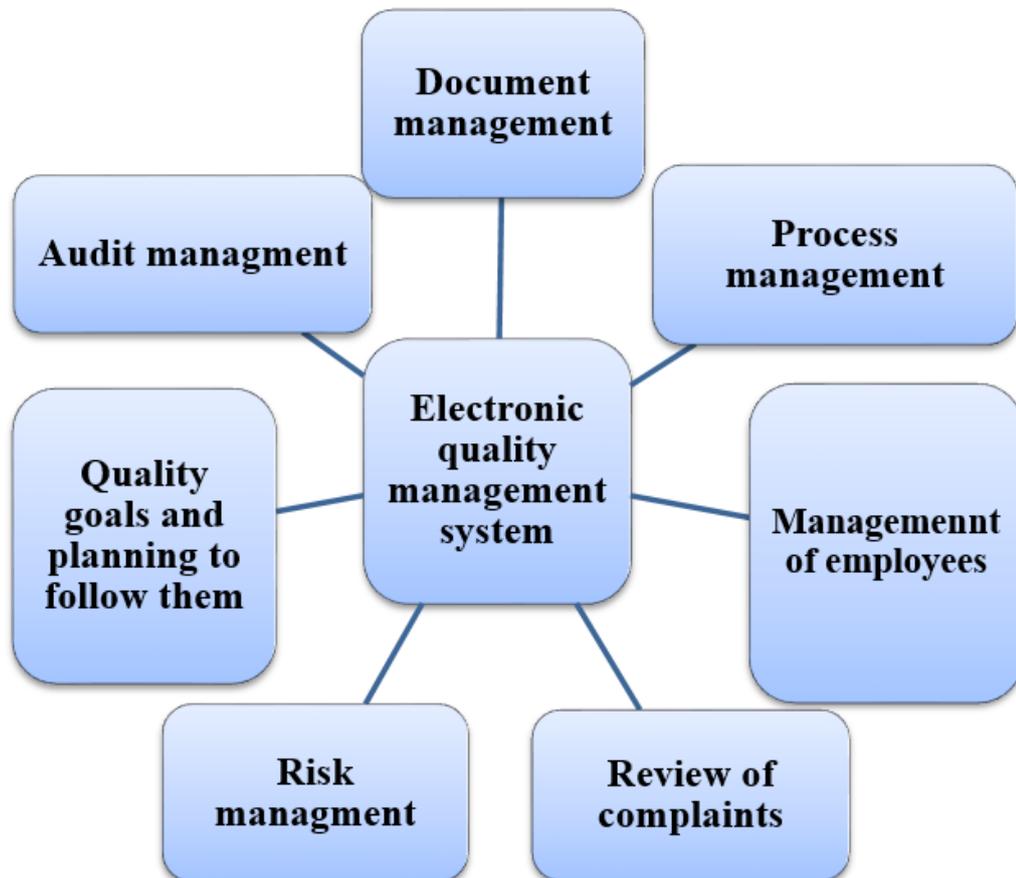
**Results.** Main SMT practices include periodic audits and quality monitors to assess compliance with regulatory requirements and enterprise-defined expectations. Quality practices and metrics are studied to ensure a quality management system at the pre-test, analytical and post-analytical stages. SMT includes measures to identify and evaluate errors, defects, incidents and other problems that may interfere with the development of quality products in textile enterprises. The formation of a quality management system in textile enterprises consists of 3 stages: (1) setting up a textile enterprise, (2) studying the existing international and national standards in a textile enterprise, (3) introducing a

quality management system, ( 4 ) 9 steps for development and certification of ISO 9001 quality management system and electronic quality management system were developed.

9 steps to ISO 9001 quality management system development and certification

We recommend these principles to any organization and enterprise that wants to be certified by implementing a quality management system.

- Appoint a project manager (i.e. an employee with at least 3 years of experience in this field).
- Identify key tasks within a business (organization or enterprise).
- Documenting business (organization or enterprise) processes
- Review the system for compliance with the standard
- Management approval
- Training
- Internal audit of the system
- Hold a management review meeting
- Involve a certification body



**Figure 2.** Electronic quality management system.

Engage a certification body to conduct a certification audit. Certification audit consists of two stages. The first step is to check if your documents meet the standard

requirements. The second step verifies that the business follows documented procedures and maintains appropriate records. The stages can be consecutive, but they can also be separated by certain time intervals[10]. We propose to implement it in any organization or enterprise that has acted consistently according to the principles of this scheme. Today, after the introduction of computer technologies into our lives, every industry began to transfer its paperwork to an electronic system, which made it possible to avoid paper clutter.

The program we offer is an electronic quality management system that allows any type of enterprise or organization to review and implement ISO 9000 international standards electronically. This system is an online system-based platform that authorized users can access from anywhere and at any time.

**Discussion:** The existing quality systems in textile industry enterprises and their role in management activities, the costs spent on quality and their coordination with the quality management system, the issues of quality improvement and assurance were considered. Quality is one of the main categories determining the way of life, it serves as a basis for the social and economic development of a person and society. In today's society, the quality system has become an ideological part of any production, including all stages of activity. The low level of implementation of modern quality management systems in textile industry enterprises is an obstacle to the release of local products to large foreign trade markets, increasing the export potential, and increasing confidence in the quality and safety of products. The quality management system is important for the successful development and existence of the enterprise in any country. The quality management system determines the position of the enterprise in the market in many ways, it is one of the important elements of the base on which the development of the enterprise is based [11]. It also became clear that any organizations and enterprises face a number of obstacles and problems in implementing the quality management system, and that there is a lack of qualified personnel for the development of the quality management system. We explained the principle of 9 steps to develop a system. i.e. it includes the following, in the first step, appoint a project manager (an employee who will help the organization or enterprise to implement SMT) in which the employee is required to have the following requirements. 1 - having at least three years of experience in this field. 2 - quick thinking and decision-making. 3 - enables the establishment, implementation and maintenance of processes necessary for the quality management system and promotes awareness of customer requirements throughout the organization. 4 - it is very important that they communicate well and have the respect of their colleagues. 5 - must fully understand the management system and be able to delegate tasks to appropriate management and staff. An international quality management system was developed for the NT holding company and problems in the implementation of the quality management system were resolved. Since information technologies are used in every field, we offered to develop a new version of the electronic quality management program produced by foreign scientists and Uzbek scientists for enterprises. By producing an electronic quality management system, we have created a platform for any

person or organization to get more information about this quality management system and get an understanding of the scheme.

**Conclusion:** This study allows us to ensure the quality of the products produced by our country in the conditions of a sharp increase in the demands and needs of the introduction of the international quality management system in textile enterprises, as well as in the conditions of increasing global competition in the world market. A detailed analysis of the guidelines for the implementation of the quality management system and the use of information is provided. This was followed by a review and comparison of broader issues related to quality policy regulation and management practices in textile enterprises. Nowadays, due to the sharp increase in the demands and needs of the population, as well as in the conditions of increasing global competition in the world market, it is of great importance to ensure their competitiveness in the domestic and foreign markets by increasing the quality of the products produced in our country. In order to export the products produced in Uzbekistan and gain a high position in foreign markets, he is pushing to adapt the issues of quality management and standardization to the system of the developed countries. Implementation of a quality system that meets international standards leads to significant positive results in the "quality and price" ratio, and it is necessary to create safe working conditions by optimizing business processes, ensuring the safety and reliability of the management system. The implementation of the quality management system creates a number of conveniences for the enterprise. allows access to foreign markets, management of documents and records.

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