Trends and experience of preparing Russian enterprises for certification for compliance with ISO 9000 standards

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Abstract. The aim of the work is to summarize and systematize the factors of positive and negative motivation for the implementation of ISO 9000 standards in the quality management systems of Russian companies. The task is to develop recommendations that help reduce organizational resistance to the introduction of the philosophy of total quality management and the ISO 9000 standards based on it. The hypothesis of the study is that cases of lack of real benefits from the implementation of ISO 9000 standards are usually caused by a formal approach when to a certain extent, the letter is observed, but the philosophy of standards is not perceived. The study used the following methods: analysis of literary sources, collection and analysis of data on the implementation of standards of ISO 9000 series in specific enterprises. Results achieved: an analysis was made of the organizational resistance to the implementation of individual provisions and the philosophy of ISO 9000 standards, arguments of opponents of using these standards (based largely on the negative experience of their implementation: bureaucratisation of quality management, lack of real benefits, etc.) were systematized, and recommendations that increase the loyalty of the internal environment of the organization in the process of introducing standards were proposed (additional training of personnel, their material incentives and introduction of positive experience).

1. Introduction

Competition between producers of goods and services necessitates the functioning of an effective quality management system at each enterprise. In addition to its main function, the quality management system has some additional functions, in particular, it ensures that a certain level of quality is observed for partners and consumers. The presence of this guarantee is often actually a pass to the world market, and also makes it possible to receive a state order. This guarantee is more durable if the quality management system of this enterprise is certified for compliance with the requirements of ISO 9000 series standards. This standard has, in many ways, a framework character and practically any enterprise quality management system can be adapted to its requirements. However, not all companies have such a useful certificate of conformity. A significant proportion of those who have this certificate are dissatisfied with the ratio of benefits and costs that accompanied the receipt of this certificate. As it is easy to guess, one of the reasons for this conflict is the formal attitude to the requirements of ISO 9000 series standards, the unwillingness to make profound changes to the quality management system and management in general when preparing Russian enterprises for certification. These aspects are discussed in detail in this scientific work.
2. Basic research part

It is known that the implementation of ISO standards faces a number of difficulties of a different nature. One of the reasons for the complexity of introducing ISO 9000 standards, as well as the principles of total quality management, becomes clear if we try to justify the need to follow these new approaches for many enterprises on clear criteria of economic expediency [1]. It turns out that there is no clear guarantee that the implementation of ISO standards will have a direct economic effect, although the costs in the form of costs for organizational changes, retraining of personnel, and, possibly, from the disruption of economic activities, will be necessary. These factors need to be carefully considered, and their degree of seriousness is underlined by the fact that there are quite a few opponents of ISO 9000 [2]. These views are partially confirmed in practice. Thus, 80% of organizations did not receive the expected effect from the introduction of ISO standards in 1994 [3]. You can analyse the reasons for this dissatisfaction, which indicates that some goals were not achieved. In general, a correctly set goal should somewhat exceed the current level and at the same time be achievable [4]. To achieve the goal, it is necessary to carry out specific activities. Interestingly, the goal of a separate event should obviously be achievable. For example, no one expects that managers, after completing the course on studying ISO 9000 standards, will know them by heart, although it would probably be useful. The management plans that managers will be guided in these standards, know their content and quickly find the necessary information there. At the same time, the total synergistic effect of several measures allows to achieve a previously inaccessible level. Consequently, those enterprises that were unhappy with the effect of the implementation of ISO 9000 standards did not implement all the necessary measures for this.

According to opponents of ISO 9000:
- there is a negative effect from its introduction for the economy as a whole as a result of imperfect standards. At the same time there are many examples of building successful QMS that are not directly related to ISO 9000 standards;
- ISO 9000 standards have led to the emergence of numerous controlling organizations; whose activities ultimately inhibit economic activity;
- ISO 9000 standards limit the freedom of quality engineers, regulate and bureaucratize their activities. However, supporters of ISO 9000 indicate that the standard does not require the implementation of a certain system of documents, but documentation [3]. Thus, the preparation for certification for compliance may be the impetus for the revision of the workflow system and even to reduce bureaucracy.

If we talk about the economic effect in the case of the successful implementation of ISO 9000 standards, it is both in increasing revenues and in reducing costs.

In general, the increase in revenue is achieved by increasing customer loyalty. The reasons for this are as follows: satisfaction with the level of quality and improvement of its stability, and positive experience of personal communication with the staff of the enterprise.

At the same time, there is a reduction in costs as a result of the improvement of the production process and the prevention of errors. However, in order for measures related to the implementation of ISO 9000 standards to produce an economic effect and a transition to a new level of quality, it is often necessary to spend tangible funds to improve the technology and purchase new control equipment (figure 1) [5].

The second reason is the difficulty of accounting for both the positive and negative effects of activities related to the implementation of ISO standards. For example, in accordance with the requirements of the standard [6], an enterprise conducts staff development in connection with the modernization of the machine park. The positive effect of this event is indisputable, although it is rather difficult to estimate, and the costs are quite tangible. If training takes place during working hours, this will be a reduction in the number of employees at workplaces with a corresponding decrease in output, and if training goes on in their free time, then the result will most likely be loss of loyalty and sabotage by staff.
The reasons for the fact that in many companies the implementation of ISO 9000 standards is limited to a declarative approach and, at best, the observance of formal attributes, become clear if one takes into account such factors as the internal culture (soft structure [7]) of an organization. This category exists besides the organizational structure and can act with it either jointly or in antiphase. This is a common situation when any significant changes meet with resistance from enterprise personnel.

It is known that the main goal of any business is to achieve profit; enterprise staff also thinks mainly in material categories. However, if company managers do not consider it necessary to use other types of motivation other than material, such a company will find it difficult to work on a complex multi-level task that requires a long-term solution. It is easy to understand that the introduction and compliance with new standards is one of these tasks. An additional complication lies in the fact that ISO 9000 standards have a framework character, they are suitable for any enterprise, but require adaptation for specific conditions. If this is not done, the implementation of the standards of ISO 9000 series will be limited to formal actions and the soft structure will most likely resist this, since compliance with any additional rules limits freedom, and the benefits from their application have not yet been obtained.

Attempting to achieve this goal, relying only on the organizational structure, suppressing the internal attitudes of the personnel and the traditions existing in the organization, can have a side effect - the apathy of the employees, the lack of initiative, the decrease in the motivation to work effectively [8].

Formalism in the implementation of ISO 9000 standards is a multidimensional phenomenon and manifests itself as follows:

- misunderstanding of the fact that only long-term efforts and a strategic course of development in this direction can lead to lasting success. The implementation of ISO 9000 standards and subsequent certification should work towards achieving the organization’s long-term goals, including, in addition to improving product competitiveness, ensuring positive profit dynamics [3], increasing capitalization and even reducing management costs;
- the reluctance of top management to ensure the development of the company, achieving the goal of improving quality, striving to replace this goal with a simpler one - achieving financial success;
- reduction of quality management to the level of technical control, lack of understanding of the benefits of total quality management;

Figure 1. The dependence of the cost of quality assurance on its desired level. 1 and 2 show the ratio of "quality/cost" before and after the implementation of standards of the ISO 9000 series.
focus on the fact of obtaining a certificate of conformity. However, it is well known that the very fact of successful certification is not yet a guarantee for the release of quality products, because certification is mainly to verify the documentation of the most important procedures and their actual implementation. In other words, only the potential possibility of producing quality products is confirmed [8]. On the other hand, a formal solution to the certification task deprives a chance for real improvements in the QMS. The author of one of the works [3] calls a similar focus on obtaining the desired certificate “a strategy of extremely limited results”; the perception of the introduction of standards as a kind of temporary company with a beginning and an end, which naturally contradicts the provision of the standard [9] that “successful organizations are constantly aimed at improvement”; purely psychological reluctance to look for problem areas in management and pay attention to them [10].

The authors of one of the articles [7] use the term "productive culture", indicating the positive, useful character of internal culture. In order to stimulate it, the correct principles should be spelled out in the company's mission, and the company's management should put them into practice. In this case, ISO 9000 standards play the role of road signs on the highway. They become a statement of natural laws, remind of the principles of proper management and begin to play their main role, namely: the organization’s declaration of commitment to observe the rules in all areas of its activities.

Let us assume that the medium-sized enterprise management has decided to introduce the standards of ISO 9000 series into the activities of the QMS and further certify it. In order for the soft structure of the organization to help in this task, the following approaches could be used:

- to conduct appropriate training of managers for several weeks during working hours with the possibility of organizing field courses for those who wish. Upon completion of training, an assessment of knowledge is carried out and those who successfully pass the exam receive a tangible salary increase;
- to organize managers' excursions to enterprises that have already successfully implemented ISO 9000 standards;
- to hold meetings of all employees of the enterprise, explaining the essence of the upcoming changes and benefits from the implementation of standards;
- to announce that with the successful implementation of standards, which should be confirmed by independent experts, the salary of all employees will increase by some amount.

Another difficulty faced by the implementation of the quality management standards of ISO 9000 series is the lack of practical experience in effectively and successfully using these standards. Thus, the implementation of standards of ISO 9000 series often encounters various resistances. This resistance is mainly caused by the inertia of the management, lack of experience and motivation to use these standards as an effective tool for the development of the enterprise. The exceptions are those cases where the introduction of standards is a prerequisite for obtaining a contract, i.e. has a quick positive effect.

3. Conclusion
This paper summarized both the factors that prompted management to make a positive decision on preparing for certification for compliance with ISO 9000 standards, as well as factors that impede movement in this direction. However, we have to take into account that even if the company’s management and managers are aware of the objective need for certification of compliance, there is a possibility that the training will be conducted mainly “on paper”. The loser in this case will be the enterprise itself, which does not use the opportunity to improve and modernize the quality management system. Preparation for certification for compliance with ISO standards also contributes...
to raising the standard of production and, undoubtedly, on a national scale, can contribute to GDP growth.

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