ASSESSMENT OF QUALITY MANAGEMENT IN ACCORDANCE WITH ISO 9001 FOOD INDUSTRY IN ENTERPRISES

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Abstract

The aim of the study was to evaluate the quality management according to ISO 9001 in enterprises of the food industry in the province Podkarpackie. Quality management in the food industry is closely associated with compliance with food hygiene rules set. This is to ensure the safety of its products and the protection of consumer health by ensuring proper functioning of the company and the high level of quality products and services. The study shows that the most important reason that encourage companies to implement ISO 9001 was to increase the prestige and quality of products and services, as well as and increase customer confidence. The most common difficulty in the implementation was the need to organize additional training for employees and raise awareness. Most significant positive change observed in the company after the implementation of the system was an increase in the quality of products and services and to improve communication with external partners.

Key words: ISO 9001, quality, the company

INTRODUCTION

In Poland, like in the European Union regulations have been introduced on the production and marketing of food, including regulations implementing the mandatory implementation and application of quality management systems. These actions are intended to ensure the health safety in food production, increasing the productivity of enterprises and improving the quality of the products [4].

Fast-growing market and intensively increasing competition force businesses to constantly improve quality. For this purpose quality management systems are implemented. Compliance with the rules laid down by them increases efficiency and ability to meet the ever changing customer needs. The quality management system is for enterprise a source of many benefits but also contributes to the difficulties and constraints as a consequence of changes in order to adapt operations to the requirements of the standard. An example might be a lack of commitment by employees, resistance to the implemented procedures and the need for organizing additional training and expanding their knowledge. In spite of that, its implementation and use influences increase in the quality of products and services and the prestige of the company, streamlining document flow, improving communication with customers and attracting new markets. This promotes more efficient and more effective implementation goals. Quality management in the food industry is closely linked to the respect of rules on food hygiene. This is to ensure the safety of its products and protect the health of consumers by ensuring a proper functioning of the company. This requires a comprehensive approach to the management system starting from knowing the expectations and requirements of customers, through appropriate management of core processes and ending with obtaining the complete satisfaction of customers [3], [5]. The quality management systems in enterprises are divided into mandatory, which
must be implemented in any establishment engaged in the production of food and non-compulsory, the use of which is voluntary and does not result of legislation [1]. The implementation of quality management systems confronts the entrepreneurs with the necessity of conducting organization according to the procedures contained in the standards. This involves additional costs, making changes in the company, training of staff and conducting special documentation [2].

The aim of the study was to evaluate the quality management standard ISO 9001 in the food industry enterprises in the province of Podkarpackie, PL. The scope of work included:

1. Identifying the reasons for the implementation of ISO 9001 in the food industry enterprises,
2. Identifying difficulties encountered during the implementation of ISO 9001 in enterprises,
3. Presentation of the benefits of the introduction and application of ISO 9001.

MATERIALS AND METHODS

In order to analyze the quality management standard ISO 9001 in the food industry enterprises in the Podkarpackie province at first the current state of knowledge in the field of quality management with special emphasis on ISO 9001 was analyzed. Based on the literature, the importance of ISO 9001 in food processing enterprises and problems related to the implementation of the scheme and the benefits resulting from its use were identified. This made it possible to develop an interview questionnaire, which consisted of 18 closed questions. In the first part of the questionnaire questions were related to the study of the company, in particular organizational and legal form, scope of influence, date of creation, type of business. The questions in the second part were related to quality management standard ISO 9001. It was important to identify the causes of implementation and the difficulties and benefits of the system. In the second stage of the study was carried out in the period from March to December 2014. 20 companies from the Podkarpackie Province were surveyed. In the third stage, analysis and presentation of results using computer program Excel was made.

RESULTS AND DISCUSSIONS

The study involved 20 randomly selected food businesses located in the region of Podkarpackie. All of the selected companies have certified quality management system that complies with the requirements of ISO 9001. The size enterprises was determined based on the number of workers in their employment and distinguished micro, small and medium-sized organizations. The largest group were small businesses, employing from 9 to 49 employees (55%), then the medium with 50 to 249 employees (30%) and micro-enterprises consisting of 1 to 9 employees (15%).

Among the surveyed companies bakeries (35%) were the most. Then 25% concerned enterprises producing confectionery. Successively, companies engaged in the manufacture of prepared meals and confectionery production were represented with 20% equally. 15% of companies equally dealt with the production of meat products and wholesale groceries. Firms engaged in the production of mineral waters and soft drinks, fruit and vegetable processing, manufacturing delicatessen products and other activities comprised 10% of the entire group. The smallest part were companies producing dairy products (5%).

Analyzing the reasons that led the company to implement ISO 9001 quality management system (Figure 1). Most companies considered increase in customer confidence (18.9%), raising the prestige of the company (13.5%). At the level of 12.2% was the improvement of work organization and improvement in the quality of products and services. No less important reason was the desire to improve the flow of documentation and information in the company (10.8%). Quite often were also: gaining new markets (9.5%), increased range of products (6.8%) and external requirement to have a quality management system imposed by law (6.8%).
Only 1.4% of companies have introduced ISO 9001 in order to reduce incurred costs. Difficulties arising during the implementation of the quality management system are often a common cause of delays in the certification of ISO 9001 (Figure 2). The respondents most often pointed to the need to organize additional training for employees to expand their knowledge about the system (23.7%). Other frequently occurring difficulties were lack of commitment on the part of employees (16.9%) as well as failure to comply with the guidelines contained in the procedures and instructions (15.3%). The smallest part of the companies surveyed (6.8% each) mentioned the difficulty of language of the standard and financial barriers related to costs of implementing the system. None of the interviewed respondents specified the lack of commitment from management as obstacles in the implementation of ISO 9001.

Companies that decide to implement a quality management system are counting on the emergence of the positive effects resulting from the application of the guidelines contained in the standard. The study shows that the introduction of a quality management system according to ISO 9001 contributes to favorable changes in the company (Figure 3). Companies in particular are guided by the desire to increase the prestige of the company, increasing consumer trust and raising the quality of products and services. These aspects are very important for companies that apply for co-operation with consumers, for which ISO 9001 certification is a confirmation of the high quality of our products. According to the companies surveyed, introduction of ISO 9001 caused fulfillment of suggested aspects. On a scale of 1 to 5, where 1 meant a negligible change, and 5 very important, respondents rated the highest as positive changes associated with an increase in the quality of products and services (4.7), improved external communication with partners (4.6) and an increase in the company's prestige (4.5). Improvement of internal communication (4.05), reduced employee turnover (4.2) and streamlining document flow (4.4) were average positive changes. In contrast, the respondents mentioned a reduction in costs as the least significant of favorable modifications (3.15).

![Fig. 1. Reasons for implementation Source: Own calculations based on studies](image-url)
Fig. 2. The difficulties associated with the implementation of system
Source: Own calculations based on studies

Fig. 3. Benefits of system implementation
Source: Own calculations based on studies
CONCLUSIONS

Quality Management System according to ISO 9001 is one of the not mandatory quality management systems implemented in enterprises of the food industry. Improving quality by adjusting activities to the procedures and instructions contained in the standard has a positive impact on the growth of the prestige and quality of offered products and services, streamlining document flow, an increase in competing for contracts, and improve internal communications. Due to the internal and external benefits resulting from the operation of a quality management system compliant with ISO 9001, it can be classified as effective tools for competitive advantage.

Analysis of the results obtained from the research allowed the development of proposals for evaluation of quality management in food industries enterprises according to ISO 9001. Reasons for the implementation of quality management system according to ISO 9001 most often cited by enterprises are: increase customer confidence, increasing the company's prestige and the quality of products and services, as well as improving work organization, while the reduction of costs was the least decisive factor.

The most important motives that prompted the company to introduce a system were both internal and external causes: the prestige of the company, increasing customer trust and improving the quality of products and services. Barriers and obstacles encountered during the implementation of ISO 9001 resulted mostly from the need to organize additional training for employees to expand their knowledge and a lack of commitment and failure to comply with the guidelines contained in procedures and instructions. Understanding the language of the standards and costs associated with implementation of the system were the smallest difficulty. This means that the staff is very skeptical to make changes in the company and is not prepared to adapt activities to the requirements of the standard. It can be concluded that by the time the first appearance of the economic benefits arising from the introduction of new rules, additional responsibilities for completion of the mandatory evidence are imposed employees, hence such a negative approach to any concept to modifying the scope of the tasks performed by them. It may be concluded that companies that implement a quality management system should attach more importance to training that help employees understand the ISO 9001 standard which contributes to improving the implementation of the system and helps prevent errors that might arise during the design phase of the system.

The positive aspects resulting from the introduction of ISO 9001 can include a significant increase in the number of regular customers, which is associated with the acquisition of their trust, and the gradual decrease in the number of complaints filed, which we can associate with an increase in quality of products and services. Very significant changes observed in the company after the introduction of the system include improving the quality of products and services and improving the external communication with customers. One can conclude that having ISO 9001 certification improves the company's prestige by what is perceived as a reliable and competent partner to do business. The study also shows that ISO 9001 is more profitable to implement in larger companies, which employ more workers. Medium-sized enterprises are the most satisfied with the effects of introducing a system.

REFERENCES