THE ROLE OF STANDARDIZATION IN THE FOOD INDUSTRY

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Abstract

Standardization and the implementation of standards are vital in the food industry and ensure safe and quality products, increasing the customers' loyalty. Furthermore, the process has a great role in the promotion of economic stability. The standards implementation process enables safer food products, improved operational efficiency and greater accountability within the food industry. As the global food supply chain becomes more complex, the importance of these standards is greater. The most common standards implemented in the food industry are ISO 22000, HASSP, GMP, etc. By introducing these standards, organizations improve their food safety practices, but also meet the needs of the customers.

Standardization is a legal requirement, builds trust in food products and increases market stability. Standardized products save time, energy and money, and increase competitiveness and consumers' loyalty.

Key words: *standards, food, quality, safety*

INTRODUCTION

Standardization is the process of establishing and implementing technical standards to ensure consistency and quality between services, processes and products. The introduction of standardization achieves the creation of goods of the same type that comply with a common standard, allowing those goods to share basic characteristics and quality. Standardization and the development of the standards are based on consensus between various stakeholders, including various organizations, regulatory bodies and users.

The main objective of the standards is to increase safety, efficiency and effectiveness by improving the quality of products and processes, and to reduce the costs of production and services. Standardization and the introduction of standards reduce the occurrence of risks associated with products and services, especially in industry, and ensure uniformity in quality by meeting specific criteria for them too. It also provides easier and more efficient management of processes and facilitates domestic and international trade by increasing profits of manufacturers, with the guarantee that products meet common, generally accepted international standards.

With the standard implementation provides standardized sizes and specifications for elements, which facilitate assembly and competence in the production process, while standards in the food industry ensure food quality and safety with precisely defined permissible values of additives and other food components.

STANDARDS IN FOOD INDUSTRY

The standards in the food industry ensure quality and safe food products starting from food production, processing, packaging and distribution by introducing basic regulations and guidelines established by international organizations and bodies. The standards cover all

aspects of food production from starting raw materials to the final product, its packaging and its distribution.

The introduction of standards is essential, because the primary goal is to protect consumers from consuming contaminated food, and thus from disease. By adhering to standards, the food industry reduces the risk of developing epidemics that can seriously lead to serious health problems. Compliance with food safety standards help organizations avoid legal consequences, and their non-compliance can lead to large fines and impaired consumer confidence, and even the closure of the industry, large fines, lawsuits and damage to reputation. The very introduction and compliance with standards by the organization increases consumer confidence, making them more likely to trust them and buy their products.

The most common and widespread standards used in the food industry are ISO 22000 (a standard that describes the requirements of a food safety management system), HASSP (a system for hazard analysis and critical control points that identifies potential hazards in food production and establishes critical control points), Good Manufacturing Practice (a standard for increasing the safety of all processes in the production of products under desired conditions and systems for the production of products that directly affect human health), etc.

IMPACT OF STANDARDS ON FOOD SAFETY

The introduction of standards minimizes the diseases transmitted by contaminated food and that stands for one of its basic principles. By establishing guidelines for the safe handling, processing and storage of food, standards help minimize the risks of contamination. Food safety standards contribute to better public health and economic stability. By reducing the level of foodborne diseases, these standards ease the burden on the health system and improve its productivity.

Furthermore, safe food increases consumers' confidence since standards build trust in food products, essential for market stability. Consumers are more likely to buy products from brands that foster the safety of their products, which increases consumers' satisfaction and brand loyalty.

The compliance with food safety standards is not just a best practice, but it is often a legal requirement. Failure to comply can lead to serious consequences, including fines and product recalls. The financial burden of a food safety violation can be significant, affecting the company's overall result and its long-term sustainability. Standards also facilitate international trade by ensuring that products meet safety requirements across borders.

Adherence to standards and standardization for food safety opens new markets for an organization, especially in international trade. Many countries require compliance with specific safety standards for imported food products, which increases a company's competitiveness in the global market, allowing them to reach a wider range of customers. The implementation of food safety standards often leads to improved operational processes. Businesses that adopt these standards typically streamline their operations, reduce waste, and improve overall efficiency. All of this results in cost savings and better resource management.

The introduction of standards provides traceability throughout the food supply chain, i.e. if a food safety problem occurs, it is easier to find the source of contamination through standard operating procedures (SOPs). In order to introduce standards, and thus achieve the required level of quality, it is necessary to define and standardize the course of activities with a standard operating procedure or procedure. Standard operating procedures and standards are essential components of effective organizational management and each of them has different, but also interconnected roles. Standard operating procedures are detailed and written instructions that describe how to perform specific tasks or processes within the organization. They aim to ensure consistency, quality and efficiency in operations. Improved

traceability not only helps in the effective management of recalls, but also holds organizations accountable for their practices, fostering a culture of accountability.

CHALLENGES IN IMPLEMENTING STANDARDS

Implementing standards is very useful and essential, but it also it brings several challenges. The process often requires significant investments in equipment, machinery, processes and training. For small businesses, these costs can be prohibitive, making it difficult to achieve compliance. The complexity of standards requires understanding them and can vary depending on the type of industry, its size and the type and quantity of products. Managing standards can be a problem, especially for small businesses without trained and dedicated compliance teams.

Moreover, some organizations, especially the smaller ones, may not have enough employed staff to implement the standards and to ensure their compliance with food safety standards, which is a problem that leads to gaps in knowledge and practice. Employees and management in organizations can also resist changes to already established processes, especially if they think that the introduction of new standards is difficult, and therefore training and effective communication are needed. Food safety standards are constantly updated to respond to new research and technologies, so continuous investment in training, education and adaptation is necessary. Gaps in supply chains can compromise the entire system, making it essential for businesses to thoroughly check their suppliers, and thus ensure that suppliers also meet the standards.

Standardization and standards themselves require extensive and extensive documentation and time-consuming record-keeping, which is particularly time-consuming for smaller operations with limited administrative resources. Some organizations may lower their cost compliance thresholds in order to create an uneven playing field in highly competitive markets, and this can put pressure on businesses to compromise on standards in order to remain competitive. Of course, the most important thing is that while the challenges of implementing food standards can be significant, the benefits often outweigh the difficulties, so through strategic planning, training and investment, organizations can improve their food safety practices and ultimately protect their consumers and their products.

FUTURE TRENDS

The introduction of standards and standardization allows for the harmonization of food standards and allows for an increased focus on sustainable practices within them. Standards are developed to promote sustainable sourcing practices in order to reduce carbon pollution by raising environmental awareness and increasing demand for plant-based foods, safety and quality standards are adapted to this type of food in order to satisfy consumers.

With the increase in health awareness among consumers, there is a trend towards stricter food labelling and declaration, therefore the standards themselves will need to be developed in that direction in order to address issues of overall nutritional value. Also, functional foods, i.e. foods that provide health benefits beyond basic foods, are increasingly present on the market.

As trade and commodity prices develop and global trade grows, steps will be taken to harmonize food safety standards across countries to ensure consistent safety measures. Future standards will focus on clearer declaration practices that include the origin of ingredients as well as production methods in order for organizations to be more transparent to consumers.

Climate change or pandemics pose new threats to food safety, and therefore quality standards in the future need to be flexible and responsive, and this includes greater education of consumers about food standards.

CONCLUDION

The implementation of standards is crucial for the development of organizations and for gaining consumer confidence. By investing in standards, organizations can grow and be competitive in the market. The implementation of standards in the food industry is a strategic move that improves product sales, but also guarantees their safety and quality. Implementation enables continuous improvement, which improves both processes and the quality of their outcome. Standardization enables consistency in meeting the established standards and continuous fulfillment of tasks, which enables process compliance and quality maintenance. Standards in the food industry set quality, define product safety and are of vital importance for greater consumer confidence. As the food industry develops and modernizes, the importance of introducing standards will increase, because there cannot be an industry without established standards that guarantee safe and quality products.

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