

# Implementation of the environmental management system in order to build the image and increase the competitiveness of the company

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**Abstract:** Based on the research studies of several authors who perceive the environmental management system as a tool that helps to increase the competitiveness of the company, the main goal of the contribution is the identification of barriers in the framework of building the corporate image and increasing the competitiveness of the company through the implementation of the environmental management system according to the requirements of the ISO 14001 standard in selected company. By applying a structured guided interview with the managers of a specific department of a multinational food company, based on their answers, we investigated the current situation and limitations within the framework of building the company's image and increasing competitiveness through the implementation of the environmental management system.

The result of the work is the finding that the implementation of the environmental management system in the selected company does not go through the entire organizational structure of the company, and managers in a specific department identified many reserves in the framework of building the corporate image and competitiveness. Based on the above, the managers of a specific department in the company do not perceive the implementation of the company's environmental management system as a tool that contributes to building a positive image and competitiveness of the company.

**Keywords:** environmental management system, ISO 14001, ISO, company, corporate image, competitiveness

**JEL Classification:** L15, L22, Q50

## 1 Introduction

Climate change is a constantly inflected term. According to Durán Romero et al. (2020) it represents a growing threat to our society that requires collective action. According to Lemkowska and Wiśniewska (2021), the impact of man on the state of the environment has been troubling humanity for centuries, and it was the arrival of the 20th century that brought awareness of the irreversibility of environmental changes and encouraged humanity to take steps to protect it. The aforementioned attention of society towards climate change is also mentioned by Barrow (1999), who also talks about the need for an integrated approach full of proactivity to environmental issues. According to Thabit (2021), this is considered one of the most important elements, thanks to which civilization was created. In addition, according to the author, it also contributes economically, by providing natural resources that also serve as production factors. Therefore, in recent years, according to Abid et al. (2021) to monitor the increasing number of new laws or policies for those sectors in the country that are directly responsible for the protection, but also the destruction of the environment. Attention is also directed towards business, which, according to Ociep-Kubicková, Desková and Ociepová (2021), must be carried out hand in hand with care for the environment. According to Thabit (2021), several procedures are emerging, the aim of which is to preserve and protect the environment or strive for sustainability. The solution is various environmental programs, which, according to Sam and Song (2022), stand out as a tool that complements the control process and makes it possible to reduce environmental pollution through procedural changes, redesign of products and packaging, or through innovation of control technologies. According to Arocenao, Orcos and Zouaghi (2023), environmental management and the environmental management system become a central topic in companies.

Karkalíková (2017) refers to the environmental management system as a business management system, which, according to Uberoia (2003), is implemented in a complex, formal, planned, documentable way, and in addition, according to Murmuraová et al. (2018) also in a systematic way. Gazoulitová and Oubal (2021) consider the environmental management system also a management tool and add that it allows organizations to control their impact on the environment. Murmuraová et al. (2018) state that the environmental management system forces companies to perform regular audits. Uberoi (2003) also claims that the environmental management system must go into the organizational structure, be a part of planning, but only its implementation is not enough, it must also be maintained.

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Arocena, Orcos and Zouaghi (2023) argue that several certifiable environmental management standards have been developed to help minimize negative environmental impacts. ISO 14 001 is according to Bashir et. al (2022) one of the most frequently issued and, according to Arocena, Orcos and Zouaghi (2023), also one of the most important certifications in the environmental field. According to Sam and Song (2022), it continues to grow and is widely adopted by organizations around the world. The ISO 14 001 standard was, according to Murmurová et al. (2018) published on September 1, 1996, by the International Organization for Standardization (ISO) as added in their works by Sam and Song (2022) and Ociepa-Kubicková, Desková, Ociepová (2021). It provides a kind of basic framework for the creation of an environmental management system on an international scale, say Murmurová et al. (2018). According to Sam and Song (2022), ISO 14001 is a voluntary program, which, according to Turk (2009), is an internationally recognized system enabling the continuous improvement of environmental behavior at the organizational level, which is carried out through the minimization of harmful environmental impacts and also continuous improvement. According to Rin and Salvador (2017), the ISO 14001 standard, with its full title Environmental management systems: requirements with instructions for use, was developed with the intention of helping to find a balance between financial and economic interests and environmental impacts, while this effort was directed to organizations and businesses. In addition, Bashir et al. (2022) add that it is aimed at providing various management practices or necessary principles necessary for the development and implementation of the environmental management system in organizations. Arocena, Orcos and Zouaghi (2023) also confirm the assistance to companies in the implementation of environmental impact management systems. However, they also add that the adoption of ISO 14 001 signals companies' commitment to environmental protection, which can help polluters or companies from developing countries overcome the legitimacy deficit. According to Cañón-de-Francio and Garcés-Ayerbe (2009), the international standard ISO 14 001 allows to increase the awareness of interested parties that the given organization applies an environmental management system, and at the same time it is a tool for promoting legitimacy.

According to Karkalíková (2017), the ISO 14 001 standard allows companies to differentiate themselves from their competition, because it improves the image of the company, helps increase market share, create better working conditions, but also expands awareness of the organization, which is ultimately reflected in the growth of the number of new customers, namely those who are more aware in the field of environmental protection and thus have higher demands. López-Gamero, Molina-Azorín (2016) mention "green customers" who increase the demand for sustainable products and appreciate the environmentally conscious behavior of companies. Environmental investments can have a positive effect on the competitive advantage and the performance of the organization itself, as claimed by Molina-Azorín et al. (2015). According to López-Gamero and Molina-Azorín (2016), companies with proactive management focused on environmental protection can benefit from a premium price, and thus, according to Molina-Azorín et al. (2015) benefits not only the company, but also the environment.

The result of the research of Irald, Test and Frey (2009) is the following finding: in order for the ISO 14 001 standard acceptance certificate in the organization to act as a competitive advantage, the environmental management system must be implemented in the company to the extent that it permeates the entire organizational structure. According to the authors' research, the competitive advantages associated with the adoption of the ISO 14001 standard are often poorly perceived in the market. This is because companies do not adequately communicate the information that they hold the ISO 14 001 standard acceptance certificate to the external environment, i.e. to customers. In order for the ISO 14 001 standard to serve as a tool for competitive advantage in the organization, the authors suggest that organizations strengthen external communication and also suggest increasing customer awareness of environmental guarantees through various public communication campaigns.

As part of the research, we decided to obtain primary data from Nestlé Slovensko, s.r.o., which is considered the largest food manufacturer and distributor in the Czech Republic and the Slovak Republic. The company Nestlé Slovensko, s.r.o. is a holder of ISO 9001:2015, EN ISO 14001:2015 and ISO 45001:2018 certificates.

## **2 Methods**

The main goal of the contribution is the identification of barriers within the framework of building the corporate image and increasing the competitiveness of the enterprise through the implementation of the environmental management system according to the requirements of the ISO 14001 standard in the selected enterprise. By applying a structured guided interview with the managers of a specific department of a multinational food company, based on their answers, we investigated the current situation and limitations within the framework of building the company's image and increasing competitiveness through the implementation of the environmental management system.

We decided to carry out the research activity in the form of a structured interview with two managers in the infant nutrition department at Nestlé Slovensko, s.r.o. In recent times, we have observed an increased level of interest of companies in Slovakia in the environment for these products, mainly due to the fact that manufacturers are replacing

product packaging with packaging that has less impact on the environment. In addition to the environmental interest of the companies themselves, we also observe a higher level of environmental awareness among current mothers who are thinking about the sustainability of products.

When creating the questions for the structured interview, we were inspired by the research by the authors Irald, Test and Frey (2009), who claim that the implementation of ISO 14 001 provides benefits in terms of not only environmental but also economic performance. Karkalíková (2017) claims that thanks to ISO 14 001, the company can increase its market share, expand awareness of itself, which, according to her, leads to an increase in new customers. The advantages are also mentioned by the authors Molina-Azorín et al. (2015): improving relationships with stakeholders, where we can also include customers. However, some studies according to Iraldo, Testao and Frey (2009) revealed that the mentioned benefits are not always possible to quantify. Therefore, the authors decided to test the effects of adopting an environmental management system on environmental and competitive performance on a sample of companies. The goal of their work was to identify and evaluate the impact of the environmental management system on competitive performance.

The structured interview consisted of ten questions, while these questions are divided into areas oriented to market performance, innovation performance, resource efficiency, questions focused on the intangible side and orientation to environmental performance itself.

Based on the research of the authors Iraldo, Testa and Frey (2009), the questions of the guided interview were as follows:

a) *aimed at **market performance**:*

- Has your organization achieved higher customer satisfaction thanks to the environmental management system?
- Has your organization gained an increase in market share thanks to an environmental management system?

b) *aimed na **innovation performance**:*

- Has your organization improved its capacity for technical innovation thanks to the environmental management system?
- Has your organization improved its ability to innovate its organizational or management structure thanks to the environmental management system?

c) *aimed at **resource efficiency**:*

- Has your organization experienced cost savings through reduced resource use, reuse or recycling as a result of the environmental management system?
- Has your organization experienced cost savings through waste reduction thanks to an environmental management system?

d) *aimed at **intangible side**:*

- Has your organization achieved greater employee motivation and participation thanks to the environmental management system?
- Has your organization perceived an improvement in image and reputation thanks to the environmental management system?

e) *aimed at **environmental performance**:*

- How has the environmental behavior of your organization changed in recent years?
- How does your organization's environmental performance compare to other organizations in your sector?

As part of the actual implementation of the interview at Nestlé Slovensko, s.r.o. we personally approached two representatives. Key account manager for the infant formula division focusing on the modern and traditional market and key account manager for the infant formula division focusing on the medical environment. The addressed managers are the only managers responsible for the infant formula division at Nestlé Slovensko, s.r.o.. For this reason, we consider their opinions to be representative. Both managers gave us answers to questions at a personal meeting that took place in person on March 14, 2023 in the ROSUM building, Bajkalská 19B, 821 01 Bratislava.

We subjected the received answers to analysis and then comparison with the aim of formulating proposals for improving the current situation.

### **3 Research results**

The company Nestlé Slovensko, s.r.o. realizes that the quality of food products is extremely important and is an instrument of trust between customers, consumers and the company itself. The company has been building this trust since its inception, precisely by setting high requirements for the quality of its products. Ensuring the quality or safety of products is the second most important point that the company has determined in its ten "Principles of Business". It is precisely with this principle that Nestlé Slovensko, s.r.o. it makes a promise to consumers that the product the company sells is safe and also meets high quality requirements. In addition to the fact that the company aims to offer only products that meet the expectations and preferences of customers, the company also complies with all food safety requirements, whether internal or external, quality and regulatory. In all the countries in which Nestlé operates, it maintains safety standards in the production, distribution and sale of food because it believes that quality is a responsibility. Nestlé has also developed a Nestlé Quality Policy document, as part of its Business Principles, in which it informs about its "Good Food, Good Life" concept ("good food for good life"). They do it by providing food or drinks of the highest quality. In addition to the aforementioned documents, Nestlé Slovensko, s.r.o. has also own internal system for quality management. This system consists of three parts: the management cycle and its continuous improvement, the management system based on processes and the most important part, which is the quality standards - various requirements, based mainly on the local legislation and regulations of the country.

The findings within the individual areas, resulting from the implementation of a guided interview with the managers of the selected company, are as follows:

#### **3.1 Orientation to market performance**

From the point of view of focusing on market performance and because, according to de Fonseca (2015), the ISO 14 001 standard makes it possible to increase the satisfaction of companies' customers, we were interested in whether it is possible that thanks to the implementation of the environmental management system, i.e. the ISO 14 001 standard, customers can be of Nestlé Slovensko, s.r.o. really more satisfied in the field of infant formula.

However, the manager of key customers focusing on the medical environment first informed us of the fact that he does not have the data available from his position, thanks to which he could clearly answer our question. However, if he had such data, and if he could see a data-supported connection between the implementation of the ISO 14 001 standard and the satisfaction of customers of Nestlé Slovensko, s.r.o.'s infant formula products, he would certainly include them in communication with customers.

However, the manager of key customers with a focus on the modern and traditional market is convinced that the majority of customers in general, as well as customers of Nestlé Slovensko, s.r.o., already take into account factors such as price and quality during their purchase, as well as many others, while environmental. According to her, the area is one of the most frequented. This is also why, according to her, the company's customers appreciate the fact that they are made in a company that has recently devoted itself very intensively to the topic of environmental protection. At the same time, he believes that, thanks to the environmentally conscious approach of Nestlé Slovensko, s.r.o., customers of infant formula also have reason to be more satisfied.

As part of the market performance, we were also interested in whether the company's market share in the field of infant formula increased thanks to the implementation of the environmental management system, while we found that the growth or decrease of the market share in the category of infant formula products has an impact a wide range of factors, but at the same time, as a result of the implementation of the ISO 14 001 standard, the company gains prestige and a good name on the market, which ensures trouble-free trading, especially with customers such as retail chains. We have found that it is very difficult to quantify the effect of the implementation of the environmental management system at Nestlé Slovensko, s.r.o. on the change in market share, or its increase. The company does not have direct evidence of the extent to which the implementation of the environmental management system can increasing market share in the field of infant formula. However, he believes, on the basis of consumer research, that it is possible to confirm the opinion that, in general, the implementation of an environmental management system increases market share in the field of infant formula.

#### **3.2 Orientation to innovative performance**

Innovative performance is a very important component in companies, and that is why we were interested in whether Nestlé Slovensko, s.r.o. was able to improve its capacity for technical innovation in the field of infant formula thanks to the adoption of the ISO 14 001 standard. We found that not only the infant formula division, but also the entire Nestlé organization is subject to constant technological changes and innovations, while both managers involved in the survey could not unequivocally confirm or deny the fact, if Nestlé Slovensko, s.r.o. was able to improve its capacity for technical innovation in the field of infant formula by adopting ISO 14 001 without evidence based on concrete data. Although the

field of technical innovation is affected by a combination of factors and one cannot be separated from the other, the ability of technical innovation is also very closely connected with the environmental management system in the company.

### **3.3 Orientation to resource efficiency**

Among the main advantages of the ISO 14 001 standard by Murmurová et al. (2018) and Karkalíková (2017) also consider more effective cost management and their reduction. For this reason, we were interested in whether Nestlé Slovensko, s.r.o. has also seen cost savings through reduced resource use, reuse or recycling thanks to the environmental management system, specifically in the area of infant formula. Here we learned that the managers contacted by us do not receive information about the amount of cost savings or even about the existence of cost savings as a result of the adoption of the ISO 14 001 standard, and monitoring this is not the content of their work. However, they are aware that recently recycled materials have been increasingly used, especially packaging materials, but they also do not know the percentage of how much packaging has been replaced with new, recyclable or recycled ones. However, according to them, this does not mean that there are cost savings. In general, they believe that the introduction of an environmental management system in a company does not even equate to cost savings.

In addition, we were interested to see if they had experienced cost savings through reduced infant formula waste due to the environmental management system adopted by the company. We found that the managers we contacted do not have such information and add that even in this case it is true that, according to them, it is not an equation of two unknowns and they believe that waste reduction is not directly related to cost savings.

### **3.4 Orientation to intangible side**

We were interested in whether the infant formula department of Nestlé Slovensko, s.r.o. thanks to the implementation of the environmental management system, improving the image and reputation of the company. We learned that between the implementation of the ISO 14 001 standard, i.e. the implementation of the environmental management system and the improvement of the company's reputation or image, it is mainly in the field of infant formula, but rather as a result of the already mentioned various innovations that the company adopted thanks to the certification of the ISO 14001 standard. The consumer base of baby food products in the company changes logically approximately every 3 years, therefore they monitor this area in the company, and thus they can clearly confirm that consumers are very sensitive to the topic of the environment and the certificate on the implementation of the ISO 14 001 standard should be a guarantee for consumers quality, and even more so when it comes to such unique products as infant formula.

### **3.5 Orientation to environmental performance**

In terms of environmental performance, we were primarily interested in how the environmental behavior of Nestlé Slovensko, s.r.o. changed. in recent years in the field of infant formula. Nestlé is the largest food company in the world and is all the more aware of the impact of its decisions. Therefore, it approaches the fulfillment of obligations connected with the environment with all seriousness, including through the environmental management system. The manager of key customers with an orientation to the medical environment mentioned to us specific examples of changes, namely the change in the composition of products to reduce the use of palm oil, which, according to him, the company replaced with more ecological variants. In addition, he also mentions again the change of packaging materials, where the company is aware of the highest carbon footprint, and therefore replaces these packaging with recyclable ones. Here, the manager of key customers with an orientation to the modern and traditional market adds that Gerber brand infant formula, which falls under Nestlé Slovensko, s.r.o. is the first of its kind to use packaging made of mono material, which significantly simplifies recycling. The managers also mention the change in the form of ending the production of those infant formula products that were too difficult to produce, even from the point of view of the environment.

Since the topic of the environment is increasingly in the foreground and the main advantage, and at the same time one of the goals of the ISO 14 001 standard is mainly to reduce the burden of companies on the environment, at the end of our structured interview we were interested in whether the company Nestlé Slovensko, s.r.o. make constant efforts in the environmental field to maintain or improve the company's position on the infant formula market. The manager of key customers with an orientation to the medical environment answered our question absolutely unequivocally, namely that Nestlé Slovensko, s.r.o. in general, and not only in the field of infant formula, it must and wants to make constant efforts to maintain its market position or improve it, as it is aware of its impact on the environment, but also its impact on the public. The manager of key customers with an orientation to the modern and traditional market mentions Nestlé's philosophy here, which is continuous improvement, and according to her, the environmental field is no exception. He claims that the company is taking all steps to make progress in the field of infant nutrition, and commitments to the environment are a challenging but important part of that.

## 4 Conclusions

From the structured interview, it follows that the company in the field of infant formula monitors and evaluates the impact of the implementation of the ISO 14 001 standard only to a very small extent, which causes that the advantages that, according to several authors, the environmental management system should bring in organizations, are perceived by managers from the department of infant formula very poorly, although they are aware of the importance of implementing the ISO 14 001 standard. The structured interview does not show that the implementation of the ISO 14 001 standard in Nestlé Slovensko, s.r.o. in the area of infant formula products could increase the company's competitiveness on the market. In this case, managers in the field of infant formula mainly lack concrete data from which they could evaluate the benefit or effect of adopting the ISO 14 001 standard. One of the managers' answers shows that they do not even communicate to customers the fact that Nestlé Slovensko, s.r.o. holds the certificate of acceptance of the ISO 14 001 standard. This indicates that the company in the field of infant formula does not inform its customers about the fact that it holds this certificate in a sufficient way.

The result of our structured interview is that Nestlé Slovensko, s.r.o. in the field of infant formula, it does not adequately communicate to customers that it holds a certificate of acceptance of the ISO 14 001 standard. This is mainly due to the fact that the Nestlé company does not investigate and evaluate the impact of the implementation of this standard on the company's competitiveness. Managers do not have relevant information that they could communicate to customers in order to build a positive image of the company.

We believe that, as in the research of Iraldo, Testa and Frey (2009), the environmental management system must be implemented in the company to such an extent that it penetrates through the entire organizational structure. If it is insufficiently communicated to customers, it will not help build the corporate image, nor will it act as a competitive tool for the company's capabilities. Also, if the company does not provide customers of infant formula products with information that the company holds a certificate of acceptance of the ISO 14 001 standard, it cannot then evaluate the contribution of this standard to the company's competitive ability, and thus not even provide specific data to its managers.

According to Tourani (2022), organizations should communicate with their customers in order to better understand their needs, but also in order to better satisfy these needs and for this reason we decided to propose to Nestlé Slovensko, s.r.o. for the infant nutrition department, a communication strategy oriented towards the external environment.

For Nestlé Slovensko, s.r.o. we suggest to improve internal and external communication, by designing and implementing a suitable communication strategy in retail chains on the packaging of the products themselves, by designing and implementing a suitable communication strategy on the website and on social networks. The company Nestlé Slovensko, s.r.o. should, in our opinion, focus on the communication of the fact that it holds the certificate of acceptance of the ISO 14 001 standard, primarily on the packaging of the infant formula products themselves. In this way, the company communicates with the BEBA brand that the packaging and the measuring cup are made of renewable bioplastics. We believe that, in addition, the company should also state on the packaging that it holds the certificate of acceptance of the ISO 14 001 standard.

The company Nestlé Slovensko, s.r.o. together with Nestlé Česko, s.r.o. has created a website specifically for mothers called Nestlé Baby & me, on which the company promotes its infant formula products, but mothers can also find useful advice and become members of the club Nestlé Baby & me (Nestlé baby & me). In our opinion, this page is a suitable tool that can be used to improve internal and external communication of Nestlé Slovensko, s.r.o. about the fact that the company holds a certificate of acceptance of the ISO 14 001 standard. We suggest that the company prepare an informational article and then publish it on the mentioned Nestlé Baby & me website.

According to Tourani (2022), social media is one of the types of communication channels that companies currently use to support their communication strategies. According to Tourani (2022), the use of social media leads customers to easier access to information that social networks allow to spread quickly and efficiently. We suggest the company Nestlé Slovensko, s.r.o. to communicate the information that it holds the ISO 14 001 certificate through its accounts on social networks about their infant formula, regularly, in the form of creative graphic processing of the information and through the use of third parties that closely work with the company they collaborate on the promotion of infant formula products.

Not only communication towards customers is important, but also the communication of the company towards the managers of key clients, who subsequently have to communicate with these key clients and also other employees of the company. The company Nestlé Slovensko, s.r.o. we propose to organize internal trainings, educational courses, seminars and webinars for managers and other employees in the infant formula division, through which they will learn about what the ISO 14 001 standard, respectively the environmental management system, means on a theoretical but also a practical level and will also be familiar about the benefits of the implementation of the ISO 14 001 standard for Nestlé Slovensko, s.r.o. overall, but also to the infant formula department.

The company should also make an effort to improve the communication strategy in the form of internal trainings regarding the development of human resources. Last but not least, we recommend that the company develop and implement a methodology to start monitoring the benefits of ISO 14001 implementation in the infant nutrition department.

We suggest that the company uses several methods for the objectivity of the results, namely consumer surveys, monitoring of financial and economic indicators after the implementation of communication strategies in business chains, on websites or social networks. We also propose to develop a methodology for evaluating the impact of the implementation of the ISO 14 001 standard on the market position in the field of infant formula products.

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