

## SIGNIFICANCE OF THE SWOT ANALYSIS FOR MONITORING THE IMPROVEMENTS OF APPLICATIONS THE ISO 14001: 2015 STANDARD

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### Abstract

*Due to the need for responsibilities considering the environmental protection at the global level, the international standard ISO 14001 has been created with the aim to set an acceptable framework for the development of the Environmental Management System (EMS) and to use it to increase the environmental awareness. An updated version of the ISO 14001: 2015 standard was published in September 2015, and contains only those requirements that can be objectively verified in accordance with the latest trends and ensures compatibility with the other standards. The work presents an example of the SWOT analysis in order to properly identify the risks and opportunities in the context of the organization. The environmental performances can be improved by implementing the Environmental Management System.*

**Keywords:** ISO 14001:2015, SWOT analysis, risk, opportunity

### 1 INTRODUCTION

Preservation and protection of the environment does not bring the same results everywhere and they are not given the same importance, so it was necessary to define an international framework that will regulate these issues. Responsibility at the global level has created a unique, generally accepted set of requirements aimed at setting the framework for creating a proactive system that will manage the environmental risks. Due to the need for responsible action of economic entities, the ISO 14001 standard was created with the aim to set an internationally acceptable framework for the development of the Environmental Management System (EMS) and to use it to increase the environmental awareness. With its requirements, the ISO 14001 standard contributes to expanding the business of organizations to the areas not only related to the customer and suitability of products/services, but also to the environmental impacts, reduction of pollution, waste, energy consumption, use of renewable energy sources and similar effects.

The ISO 14001 is an international standard that specifies the requirements for efficient and effective management of risks significant from the environmental aspect and thus sets the framework for the development of the EMS organization. This standard is a generic standard for management systems, which means that it can be applied to all organizations regardless of their size, activity and sector in which they operate.

The ISO 14001 standard was first published in 1996 by the International Organization for Standardization (ISO) and is one of the most widely used ISO standards. A new, updated version of the standard was released in September 2015. The ISO 14001: 2015 standard contains only those requirements that can be objectively verified, which means that the fulfillment of these requirements must be documented. The ISO 14001: 2015 standard

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provides an answer to the latest trends and ensures compatibility with the other management system standards such as ISO 9001.

## **2 ISO 14001: 2015 MEASURES FOR RISKS AND OPPORTUNITIES, DETERMINATION (WORKS) OF THE ORGANIZATION CONTEXT - SWOT ANALYSIS**

The ISO 14001:2015 standard contains a requirement to understand the context of organization itself but also the environment in order to the best manage risks, with a greater emphasis on leaders in the organization who need to promote the environmental management. In addition to the above, the new version of standard has made progress towards improvement the performance of environmental protection, instead of improvement the management system [1].

The top management of the organization can effectively address the risks and opportunities by integration the environmental management into the organization business processes, strategic direction and decision making aligned with the other business priorities and integrating the environmental management into the organization overall management system [2].

Today, the SWOT analysis is most often used in the strategic planning and management in the theory and practice as an instrument for planning technique. It helps managers to identify the current and future opportunities and threats from the environment, and the strengths and weaknesses of the company. It is desirable that the SWOT analysis is performed by the managers who know the organization well; with this analysis the management of the organization identifies the critical factors of (failure) [3, 5].

The SWOT analysis was devised by Edmund P. Lirnd, C. Roland Kristinsen, Kenneth Andrews, and William D. Buk in 1960 in his book *Business Policy, Texts, and Cases* (R.D. Irvin, 1969). It allows organizations to reconsider their positions in a unique way. The result of the SWOT analysis is accurate data that can be used to create a thorough action plan to address weaknesses and threats, as well as to highlight and harness the strengths and opportunities.

The purpose of the SWOT analysis is to enable organizations in terms of business to identify the internal and external effects and primarily to help the organizations identify all factors, both positive and negative, that can affect the strategic planning and decision making. This can be applied to almost any industry. Although the SWOT analysis was originally conceived as an assessment technique, and thanks to its successful results, it is going to be an invaluable tool in the project management.

The SWOT analysis focuses entirely on the four items of its acronym, allowing organizations to see the benefits that affect the strategy, action, or initiative. Knowing the positive and negative items can help organizations for better look at the parts of the plan that should be worked on. Making the SWOT analysis usually involves sketching a table of four columns in which, for comparison, each of the four elements is represented next to each other. The advantages and weaknesses will not necessarily coincide with the stated opportunities and threats. However, they should still be connected in a certain way, since they already exist as a whole.

The first two letters in the acronym, S (strengths) and W (weaknesses), refer to the internal factors, which refer to the resources and experience that are directly at its disposal. Some examples of considered areas are: financial resources (financing, sources of income and investment opportunities), physical resources (location, facilities and equipment), human resources (employees, volunteers, etc.), availability of the natural resources, current processes

(employee training programs, department hierarchy and software systems). Clear observation of both good and bad factors is very important for establishing a detailed SWOT analysis.

The external factors affect every organization and individual, whether they are directly or indirectly related to an opportunity or threat, it is important to take them into account and document each of them. The external factors most often refer to things that the organization does not control, such as: market trends (new products and technologies or changes in the needs of the target group), economic trends, funding (e.g., donations, legislation and other sources), demographic factors, relationships with suppliers and associates, political, environmental and economic regulations [4].

Based on the requirements and context of the organization, the external and internal issues that are relevant to achieve the planned results of the environmental management system may not be identified and identified. Such issues include the environmental conditions that affect or may affect the organization to address the risks and opportunities when planning an environmental management system. Therefore, it is necessary to consider the points of the ISO 14001:2015 standard, questions from 4.1; requirements of 4.2; scope of its environmental management system; and identify the risks and opportunities, in relation to the environmental aspects (6.1.2), compliance obligations (6.1.3) and other issues and requirements that are not covered and identified. Based on the report obtained, a compliance with clauses 6.1.1, 4.1 and 4.2 can be performed and risks and opportunities are covered and identified in accordance with the organization context. Accordingly, a description of the necessary measures for the identified risks and opportunities should be given.

One way of the SWOT analysis can be to survey the management and employees. Table 1 provides an example of the SWOT analysis showing the internal and external factors that may be beneficial or detrimental to an organization.

The report was formed on a survey of management and staff, and in order to document the basis for reviewing and improving the performances, based on the average ratings (given in parentheses) for: strengths and opportunities with a score greater than 4.20 and possible weaknesses and threats with a score less than 3.30. Label: \*\* refers to the average scores of managements and staff for the same issues, \* only from staff, and without the label is the average score of management.

Based on the analysis of completed questionnaires and SWOT analysis, the opportunities were identified in terms of the sustainable context of the organization: promoting the idea of environmental protection and environmental awareness, providing the guidelines for assessment and reduction the environmental risks, providing the guidelines for identifying the relevant environmental aspects. Improvement of the environmental protection on the basis of documented records is recognized as an opportunity to further improve the environmental management system at the organizational level and provides an opportunity to turn these opportunities into quantified goals.

On the basis of documented records and analysis of the completed questionnaires and SWOT analysis, the risks have been identified that may affect the environmental management system due to the following identified weaknesses: collective awareness of the need for continuous EP and interest in changes involving EP. Lack of organizational awareness and/or application of proven methods to improve the collective awareness and interest in changes, involving the environmental protection, has not led to the quality performance of operational activities. Based on that, it is necessary to determine the program and plan at all levels of an organization and conduct the professional training of employees in the form of trainings, educational workshops, webinars, symposia, etc. to improve the collective awareness and interest in changes involving the environmental protection.

**Table 1** Example of the SWOT analysis

	Useful	Harmful
<b>Internal factors</b>	<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>01. Modern and quality equipment sustainable impact on EP <b>**</b>(4.86/4.17)</li> <li>02. Application of modern methods and devices (4.86)</li> <li>03. Working conditions - collective environment for realization the operational activities <b>**</b> (4.79/3.67)</li> <li>04. IMS Certification (4.71)</li> <li>05. Management competence (including EP) <b>**</b> (4.50/3.71)</li> <li>06. Established hierarchy (4.36)</li> <li>07. Cooperation with customers – customer satisfaction (4.29)</li> <li>08. Work experience (4.29)</li> <li>09. Commitment to the management of human resources for EP (4.29)</li> <li>10. Understanding of work obligations by The associates <b>*</b>(4.22)</li> <li>11. Precisely defined vision and mission (Including EP) (4.21)</li> <li>12. Continuous monitoring and improvement of the measurable EP indicators (4.21)</li> </ul>	<p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>01. The effect of superiors on stress reduction <b>*</b>(2.74)</li> <li>02. Prevention of “burnout at work” <b>*</b>(2.77)</li> <li>03. Relationship of superiors towards emotional protection <b>*</b>(2.94)</li> <li>04. Commitment to eliminate inclinations peer gossip (3.07)</li> <li>05. Attitude of superiors towards mobbing <b>*</b>(3.14)</li> <li>06. Interest in change (including EP) (3.21)</li> <li>07. Collective awareness of the need for continuity EP <b>*</b>(3.22)</li> <li>08. The effect of superior manager on calmness and non-confrontation <b>*</b>(3.25)</li> </ul>
<b>External factors</b>	<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>01. Improvement of production process (4.57)</li> <li>02. Maintaining the integrity of an organization through partnership (4.29)</li> <li>03. Acceptance of good new business models (4.29)</li> <li>04. Customer satisfaction with products and services (4.21)</li> </ul>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>01. Economic situation in the country (3.21)</li> <li>02. Financial support and subsidies for EP (3.21)</li> <li>03. Climatic conditions - Influence of extremes weather conditions (3.21)</li> <li>04. External assistance in the emergence of the new environmental incidents in the surroundings (3.29)</li> </ul>

### 3 CONCLUSION

The application of the ISO 14001: 2015 standard reduces the risks of possible penalties for violating the requirements of laws and other regulations, improves the efficiency of an organization, which leads to a reduction of its negative impact on the environment and mitigation of potential adverse effects on the organization. By harmonizing the operations with the requirements of this standard, the impact that business activities, products and services have on the environment is constantly improved by implementation the appropriate programs for realization the general and specific goals. The SWOT analysis helps the organization to more easily identify the internal and external factors through the strengths, weaknesses, opportunities and threats, to capture and identify the risks and opportunities in accordance with the context of organization and to describe the necessary measures for improvement. The organization itself determines the pace, scope, and timeframes for measures that support a continuous improvement.

### REFERENCES

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