

Decision Making about the Environmental Management Implementation – Incentives and Expectations

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Abstract—Environmental management implementation is presently one of the ways of organization success and value improvement. Increasing an organization motivation to environmental measures introduction is caused primarily by the rising pressure of the society that generates various incentives to endeavor for the environmental performance improvement.

The aim of the paper is to identify and characterize the key incentives and expectations leading organizations to the environmental management implementation. The author focuses on five businesses of different size and field, operating in the Czech Republic. The qualitative approach and grounded theory procedure are used in research.

The results point out that the significant incentives for environmental management implementation represent primarily demands of customers, the opportunity to declare the environmental commitment and image improvement. The researched enterprises less commonly expect the economical contribution, competitive advantage increase or export rate improvement. The results show that marketing contributions are primarily expected from the environmental management implementation.

Keywords—Environmental management, environmental management systems, ISO 14001.

I. INTRODUCTION

ORGANIZATIONS almost always generate, in terms of their activity, a certain impact on the environment, and unfortunately the impact is, as a rule, negative (harmful). Therefore all-society demands are emerging for minimization or complete reduction of such harm. This pressure is primarily reflected in legislative measures, formulating the constantly appearing new and stricter requirements aimed at the organization sphere in order to reduce its impacts on the environment. For the past ten years also the voluntary tools of environmental management have appeared.

Environmental management (EM) can be considered as a systematic approach to environmental protection in all aspects of enterprising. It includes goal-oriented activities, affecting the processes and products that have or can have an influence on the environment [1].

Among the particular tools and procedures of environmental management there are, for instance, various certificates, codifying the implemented environmental management system (EMS) - ISO 14001 or EMAS, then eco-labelling, Cleaner production concept, Best available techniques and many others.

Contemporary businesses can decide whether they shall

meet, in terms of their environmental performance, only the necessary (legislative) requirements, or whether they will implement measures beyond the legislation in order to increase the environmental protection. Particular measures and steps related to improving the environmental performance always involve different demands, investments but also benefits to an enterprise. Businesses always consider the costs and profits of the particular tools for improving the environmental profile, but also a kind and intensity of the pressure put on them by external stakeholders (clients, customers, business partners, state or public organs, interest groups etc.).

II. THEORETICAL BACKGROUND

From the most general point of view it can be observed that the organisational sphere's growing interest in the environmental measures is caused by the increasing pressure on businesses which is caused by several current trends – e.g. an increasing all-society environmental awareness, which is reflected in behaviour and conduct of customers. Specific effects might include a preference for eco-friendly production, boycotting the organizations that damage the environment etc. Further changes, which motivate to accept environmental management, can include energy and material costs or pressure on ecological waste disposal [2].

Edwards (quoted according to [3]) mentions the following reasons why a business should consider the environmental factors:

- Ethical motive.
- Economic motive – cost savings with resource and waste savings.
- Legislation constantly getting stricter, regulating the organisations in terms of the environmental protection.
- Commercial, business motive – more and more businesses, especially the large ones, control their environmental performance, expecting the same from their suppliers.

The economic and ethical motives, as two fundamental impulses for EM implementation, are mentioned also in [4]. The authors refer to the fact that these two incentives do not have to be necessarily in opposition, but on the contrary, they are often in mutual conformity. Other authors more or less expand on this view.

The efforts for environmentally aware enterprising is gradually becoming global. Large multinationals are putting pressure on their suppliers to implement the environmental tools. Developing countries are increasing the pressure by means of setting up the export conditions, where more and

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more requirements for a certain level of environmental performance are integrated.

The existing empirical solutions in the area of particular motives and incentives for environmental management implementation are focused on the motives for implementing ISO 14001, referring to some notable conclusions.

In the research of 308 organisations, it was found out that the most often incentive for environmental management implementation is the pressure by one or more stakeholders – this involves mainly the owners, local or state administration or employees [5]. Another study of two hundred Australian companies reveals the most influential subjects as management staff, state regulatory organs and employees [6].

The result of the research of 45 Lebanese companies is that one of the most significant pressures is the demand by customers and stakeholders in general. The author further determines four fundamental motives for the ISO 14001 certification implementation – efforts to follow the trend in a given area, improving the environmental performance, improving the company's image, and reducing the operating costs [7]. Three largest companies in the research described in [8] consider reasons for environmental management implementation to be the pressure by local and foreign customers, export growth and also the efforts to meet the laws and regulations. The managers from Alumax co. (a case study by [9] perceive ISO 14001 implementation mainly as an opportunity to expand on ISO 9002 and thus improve further the entire operation of the company, then as a chance to openly declare their commitment to protect the environment. Apparently, the managers expect from the regulation both competitive advantages (costs reduction, mishaps elimination) and environmental benefits (development and implementation of new environmental solutions in operation) [9].

The research, carried out in 721 companies, studying the factors of environmental management implementation showed that there is a positive relation between a degree of regulation in the field of enterprise, and adopting the implementation of Environmental management system according to ISO 14001. The authors also find out that among the first implementers of ISO 14001 there are large and eminent businesses which have the necessary resources available for implementing environmental activities, and in general being also quite much environmentally accountable. These businesses evince a quite high degree of innovativeness also in different areas, and they are intensively observed by public and media. The next implementers are represented by smaller businesses, in general less environmentally interested, being exposed to a higher degree of regulation as well as competition pressure. They have usually less financial resources for environmental measures [10].

The businesses' expectations from EMS implementation depend, among other things, as it is indicated above, on the business size. Large businesses (more than 250 employees) have the most positive opinion on EMS, while among those businesses which do not have a very positive opinion on EMS the prevailing number is represented by businesses of smaller size (less than 50 employees). Small and medium-sized

enterprises believe less that the EMS implementation will bring benefits for them in a short time [11].

The most often motives and incentives for implementing the environmental management proceedings, according to the existing studies and theoretical sources, can be summarized as follows:

- Clients' and Customers' requirement [8], [12].
- Opportunity to declare the environmental commitment [4], [13].
- Improving business image [7], [14].
- Achieving competitive advantage [10], [14], [15].
- Meeting the legislation [5], [6], [10], [16].
- Improving relations with public and state organs [9], [10].
- Transparent documentation [16].
- Growth of export opportunities [17].
- Improving environmental performance [6], [13], [14].
- Cost savings [7], [14].

It needs to be mentioned that the expectations presented by organisations in certain researches (e.g. [13], [16]) are not considered to be completely fulfilled by their managers, and examining the consequent benefits of EMS implementation generates mixed results.

III. METHODOLOGY

The aim of the article is to identify and characterize the incentives and expectations for the environmental management implementation to organizations.

The research was based on a sample of five businesses operating in the Czech Republic. A framework of a qualitative research was applied. For the selection of the sample a method of deliberate (purpose) sample selection was applied. The selection of respondents comprises members of businesses various in size, which have been operating in different business fields in the Czech Republic since 1990s. The respondents' positions in the businesses are similar, concerning their duties and responsibilities, to a care of environmental accountability of the organization. All the businesses have implemented EMS in accordance with ISO 14001.

Individual characteristics of the sample of examined businesses are summarized in Table I.

TABLE I
SAMPLE DESCRIPTION

	Objects of Business	Legal Entity	Number of Employees
1	Buying up and processing metal and secondary waste	Ltd	41
2	Brewing Industry	JSC	2300
3	Building Industry	Ltd	350
4	Logistics (especially foodstuff)	JSC	300
5	Artificial Fibre and Textile Manufacturing	Ltd	203

The data collection was carried out during a period of 2011 and 2012 in terms of questions used in semi-structured questionnaires and also by means of examination of relevant documents (web pages, annual reports and internal business documents).

When interviewed the respondents were asked by means of open questions such as what the major impulses there were for implementing the environmental measures into a business, and what the expectations of management were regarding their environmental proceedings implementation.

For the purpose of data evaluation the techniques of text coding, data categorizing and comparison of businesses were applied. By means of these techniques repetitive patterns were revealed and relationships among variables were identified.

The interview participation was always offered for respondents whose positions in the company are related to environmental management and therefore have decent knowledge of environmental activities and their outputs.

IV. FINDINGS

Based on text coding of businesses' case studies and the consequent search for similarities and differences, the following categories of motives for EM implementation were determined.

A. Opportunity to Openly Declare the Environmental Commitment

In the existing foreign researches on incentives to environmental management implementation the abovementioned motive does not occur so often. However, in five addressed businesses of the research sample *the opportunity to declare the environmental awareness appears to be a significant reason for EMS implementation*. The majority of addressed businesses give this motive explicitly, in two businesses it is given as the most significant motive. Nevertheless this involves an incentive to implement EMS according to ISO 14001, and not particular environmental activities. Businesses implement the certification in order to declare that they run their businesses fully in concord with the legislation, meeting all the further requirements posed on them. However, should the certification be an effective tool of declaration of a certain aspect of enterprise's activities it must meet two essential conditions:

- The meaning of the standard must be known to the general public or within the area, which the enterprise or its customers operate in.
- The standard must be perceived in a given area or by the public as trustworthy. It is not sufficient for the certification to be merely known, but also the fact of its possession should be appreciated, and the process of its awarding ought to be trustworthy.

B. Customers' Requirement

Contemporary businesses often declare that they perceive customers themselves to be the key stakeholders. The researched sample has shown that requirements and pressure by customers are, in four businesses, among the incentives to EM implementation. However, an explicit requirement for implementing EMS according to ISO 14001 is declared only by one enterprise, in the field of construction industry. In the other cases it is more or less an unwritten requirement of customers who perceive the certification mainly as evidence

that an enterprise is transparent, meeting all the requirements. The researched sample further clearly shows that *businesses, which supply their outputs to their customers, feel stronger pressure on environmental management implementation when compared with those businesses that supply the end consumers*. The reason might be in the fact that risks, related to purchase of an environmentally unacceptable product, are in most cases less significant for an end consumer than for a customer.

C. Business Image

In the available foreign researches available the business image is often primary or one of the key incentives to EMS implementation into a business, e.g. [7], [14], [16]. The conclusion above has not been fully verified in the presented research. *The businesses' representatives do not give the business image as a motive for EMS implementation, but still they give a whole range of incentives that are very closely related to the business image*. In other words these are causes or effects of improving the business image (especially declaring environmental accountability, meeting stakeholders' requirements, improving management and control of a business).

D. Economic Benefit

Only two out of four businesses explicitly mention the expectation of a financial benefit as the impulse for environmental management. Regarding the economic motive the following key conclusion can be observed:

The businesses expect to achieve financial benefits from particular environmental measures, not from the implementation of EMS according to ISO 14001.

The qualitative research has brought a significant conclusion that the businesses implement such environmental tools whose primary motive is the economic benefit itself. This prerequisite refers especially to measures that result in resource savings (e.g. buying up-to-date technology), reducing the amount of the waste production etc. As a rule, businesses implement these particular measures primarily in order to achieve the economic effect (reducing costs, generating profit). The environmental impact is then a secondary – nevertheless welcomed – side effect.

E. Improving Control and Management of Businesses

Improving businesses' control and management does not appear as an incentive to environmental management or EMS implementation in the existing studies, and this assumption has not been supported in the five researched businesses either. But yet this benefit occurs and seems to be quite important, businesses often mention a positive effect of already implemented EMS according to ISO 14001. The reason for this discrepancy can be found in the following fact:

- Businesses, when making decision about the certification implementation, are unaware of the benefit of the implemented EMS in terms of business's control and management improvement.
- Businesses do not consider the given benefit to be highly significant. In other words, in the phase before the

implementation they perceive the degree of potential improvement after the EMS implementation as low.

F. Policy Conformity with the Parent Company

The representatives of two addressed businesses give the effort to adapt to policy and philosophy of the parent company as a significant incentive to environmental commitment implementation. In both cases these are businesses that are owned by an important multinational. It is possible to formulate the following findings. *Businesses are motivated to environmental management implementation by their parent companies, while a degree of such motivation is dependent on an involvement degree of a parent company in its own environmental performance.*

Based on the data from the research sample it can be assumed that parent companies contribute to promotion of accountable enterprising. Owner's pressure on subsidiary companies is not as strong as it is the case with clients' pressure, and it rather takes place in terms of recommendation or gradual adopting the environmental accountability according to an owner.

Furthermore, it seems appropriate to mention also the incentives to environmental management implementation, since they are referred to in foreign researches, which however, have not been confirmed within the research of the five businesses. These aspects are as follows.

- Achieving Competitive Advantage – unlike in the foreign studies, the achievement of competitive advantage is not explicitly given in any business of the research sample as an incentive to ISO 14001 implementation. The only business that feels motivated by the chance to increase its competitive advantage by the certification implementing is a logistics company. However, this is true for integration of ISO 14001 and ISO 9001.
- Improving Environmental Performance – it is not a significant motive in the researched businesses to implement environmental measures, ISO 14001 certification especially. As an incentive to its implementation it is not given in a single case.
- Growth of Export Opportunities – this potential motive for EMS implementation has not been verified by any of the addressed businesses' representatives.

To conclude with, it should be stated that all the addressed respondents mention that the expectations, prior to the EMS and environmental measures implementation, have been fulfilled.

V. CONCLUSION

Based on the identification of various pressure degrees put on individual businesses in the area of EM or EMS implementing it can be concluded that the field specifics determine the degree of pressure on the environmental accountability of businesses in different fields. Enterprises of different business fields and different size face quantitatively and qualitatively different intensity of pressure on environmental management or EMS implementation. It seems to be appropriate to further research which field specifics play

roles in forming this pressure on environmental accountability of businesses, and what this pressure forming course is like.

The goal of the sample of five different businesses (concerning size and character of activities), operating within the Czech Republic, was to identify significant incentives and expectations to implement environmental management, with emphasis on the ISO 14001. The key motives to environmental management implementation in the researched sample are primarily the opportunity to openly declare environmental commitment, customers' requirements and other aspects relating to the marketing of businesses

The motives for implementing environmental tools are always related more or less to demands and requirements of business's stakeholders. In the research it has been clearly proved that the particular stakeholders, who play key roles in businesses in the Czech Republic, differ from the concerned parties which were identified as significant in the existing foreign researches. It appears that the Czech businesses' willingness to implement environmental management is less motivated by the requirements of the state and public sphere, but more motivated by the market motives.

In the addressed enterprises the most frequently mentioned stakeholders, who affected the environmental management implementations, are clients/customers and owners. Furthermore, the examination of the five businesses has shown that the incentive to implement environmental measures is not the end consumer. On the contrary, the customers who trade with the addressed businesses, using their outputs in their own productions, are the subjects that want their suppliers to have a given degree of environmental performance implemented. However, not even from these subjects usually comes explicit pressure on the abovementioned. This is appears more likely within a requirement for suppliers companies to be "in good order" (which implies transparency and documentation of processes), so that the legislative requirements are met, or in short, so that the quality, consisting also the environmental commitment, is provided.

Another stakeholder, initiating green management, is the company's management. In the research of five businesses, this has been supported in three of them. The reasons why the management put pressure on environmental steps are, in the researched sample, quite pragmatic ones (opportunity to enter public tenders, or efforts to set up a system approach to management).

On the other hand, the motives which have not been supported in this research are the improvement of competitive advantage and export opportunities. These motives were previously supported in some of the foreign studies. The reason for this change might be the fact that in recent years a certain level of environmental performance has become a standard (in some business fields, e.g. possession of the ISO 14001 certification). The implemented certification or a different – nowadays common – form of environmental management thus do not have to represent an advantage or entrance ticket to foreign markets, as this used to be the case at the times when the mentioned tool was owned only by a few in a given business field.

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