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An overview of environmental excellence models

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Abstract: Companies use many managerial frameworks that ensure desired development. Some of these frameworks are quality-oriented, others are financially-oriented but only a few of them are environmentally-oriented. The aim of the paper is to delineate selected environmental excellence models on account of their comparison. The main motive for the selection of the paper's topic were researches conducted by various authors who have dealt with environmental excellence models, respectively with self-assessment based on existing environmental excellence models. To fulfil the aim of the paper, secondary research is to be conducted. Based on the methods of analysis, comparison and selection, the most frequently occurring criteria of analysed environmental excellence models are to be identified. As a main finding may be considered that three of four environmental excellence models consist of various criteria, while most of these criteria are similar. However, criteria based on another important principles are not included in more than one of mentioned environmental excellence models. This obliges to further research aimed at developing an integrated environmental excellence model consisting of the most important criteria.

Keywords: business excellence, environment, quality, model, environmental excellence models.

JEL codes: N50, Q56

1. Introduction

Quality is important issue in every company. Companies use various models, frameworks and standards to reach the best results in terms of quality. This is confirmed by many researches in the field of quality management (Houston and Dockstader, 1997; Jankal, 2009; Jankalová, 2009; Strenitzerová, 2012; Bartošová and Bieliková, 2012; Mittelman, Rentková and Rievajová, 2013; Bartošová and Hrašková, 2015; Nicolaides, 2015). As the development moves forward, companies move from fundamental approaches such as ISO and TQM to a relatively new approach referred

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to as business excellence. However, existing research has shown that ISO, TQM and business excellence have much in common (Ashton, 1997; Adebanjo, 2001; Paulová and MÍkva, 2005; Ionica and Baleanu, 2010; Jankalová, 2016). Besides an importance of quality in companies, quality of life is also important so the next level of companies' development is represented by environmental excellence. According to Kondev (2014: 39), "development of economic and social systems and their sustainability is linked increasingly to achievement of environmental excellence." Achievement of environmental excellence should be prior objective for both countries and companies because development and successful implementation of environmentally friendly policies and strategies is a key element in the activities of companies all over the world. Corbett and Klassen (2006: 8) claim that all good operations inside the company can lead to environmental excellence. According to them, there is a fundamental linkage between TQM and environmental management which is based on ISO 14 001 certification. To recognize such linkage, definition of ISO 14 001 reads as follows (ISO, 2015: 2): "It helps organizations improve their environmental performance through more efficient use of resources and reduction of waste, gaining a competitive advantage and the trust of stakeholders." Environmental excellence is based on outstanding environmental achievement of companies, organizations, communities and individuals that have gone above and beyond required environmental legislation. They work to enhance and protect our environment by using innovative and unique approaches to reduce their impact on the environment (Ministry of the Environment and Climate Change, 2016). Environmental excellence is defined as "a cohesive organizational policy and culture that embeds sustainable thinking into all of the activities of the company." It is characterized by recycling, reuse, reduction and lower costs revenue which deliver tangible benefits. It also delivers intangible benefits such as increased brand equity, enhanced corporate reputation and new intellectual property. It is interesting to state that stakeholders have become empowered to prioritize efforts to maximize the tangible and intangible benefits that can be harvested from sustainability initiatives as outlined previous definition of environmental excellence (Atos Origin, 2009: 15). Environmental excellence drives operational excellence and can improve financial performance. It can also engender financial success and contribute to the overall complexity (Corbett and Klassen, 2006: 8-9). Environmental excellence is a major change and implementation of such a change is necessary. On the other hand, it is impossible without moral commitment of company management with the principles of sustainable development and environmental management (Kondev, 2014: 39).

The aim of the paper is to delineate selected environmental excellence models on account of their comparison. The paper is divided into following four parts: introduction, methodology, results, conclusion. Introduction represents input to the problem. It also includes theoretical definitions of related terms. Methodology describes paper's creation process and methods used to fulfill the aim of the paper. Results part delineates selected environmental excellence models. Comparison of these models is also included in this part. Conclusion evaluates the results in relation to fulfilling the aim of the paper.

2. Methodology

The aim of the paper is to delineate selected environmental excellence models on account of their comparison. The main motive for the selection of the paper's topic were researches conducted by various authors who have dealt with environmental excellence models (Corbett and Klassen, 2006; Askerov, Abbasova and Gahramanova, 2012; Mohammadfam, Saraji, Kianfar and Mahmoudi, 2013), respectively with self-assessment based on existing environmental excellence models (Jensen, Johansen, Waehrens and Shewan-Ul-Alam, 2013; Kondev, 2014). At the beginning, it was necessary to understand the interpretation of quality, business excellence and environmental excellence. The next step is pursuing a secondary research which includes analysis, comparison and selection methods. Based on these methods, the most frequently occurring criteria of analysed environmental excellence models are to be identified. Also, connections and differences between these models are to be found.

3. Results

The first environmental excellence model to be presented is Baldrige Criteria for Performance Excellence (BCPE). According to Pojasek (2000: 91), BCPE provides a mean to both progress measurement and continuous improvement of the company. In addition, BCPE provides a great mean for looking at environmental excellence. "Progress towards excellence is tracked and trended by the scores on a 1 000 points system. The scoring system and the feedback reports are important tools for companies to use in their environmental excellence programs." BCPE was created by National Institute of Standards and Technology (NIST). NIST (2015: 2) defines BCPE as

a framework which helps the company – no matter its size, sector, or industry – to explore how it is accomplishing the most important tasks. BCPE (Figure 1) consists of seven critical aspects of managing and performing as the company: leadership; strategy; customers; measurement, analysis, and knowledge management; workforce; operations; results.

Figure 1. Baldrige Criteria for Performance Excellence

Source: NIST, 2015: 1.

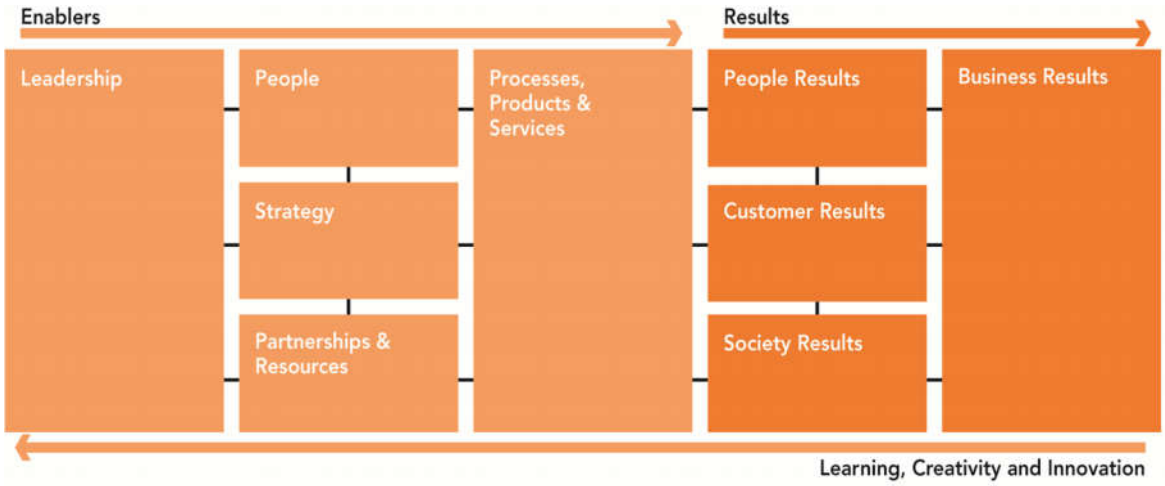
Besides BCPE, EFQM Excellence Model is another business excellence model which is applicable for looking at environmental excellence. EFQM Excellence Model is the most used management framework for self-assessment in Europe. An important reason for the major revision of the model in 2010 is the recognition of strong trends of innovation, risk management and sustainability (Samardžija and Kralj, 2010). Another revision of EFQM Excellence Model in 2012 confirmed that not only quality and stakeholders are important issues, i. e. social responsibility and environmental management have found their place in the model. EFQM Excellence Model is based on eight fundamental concepts of excellence (EFQM, 2012: 3):

- adding value for customers;
- creating a sustainable future;
- developing organizational capability;
- harnessing creativity & innovation;

- leading with vision, inspiration & integrity;
- managing with agility;
- succeeding through the talent of people;
- sustaining outstanding results.

Criteria of EFQM Excellence Model (Figure 2) are divided into two parts – enablers and results. Enablers are: leadership; people; strategy; partnerships & resources; processes, products & services. Results consist of these four criteria: people results; customer results; society results; business results (EFQM, 2012: 4).

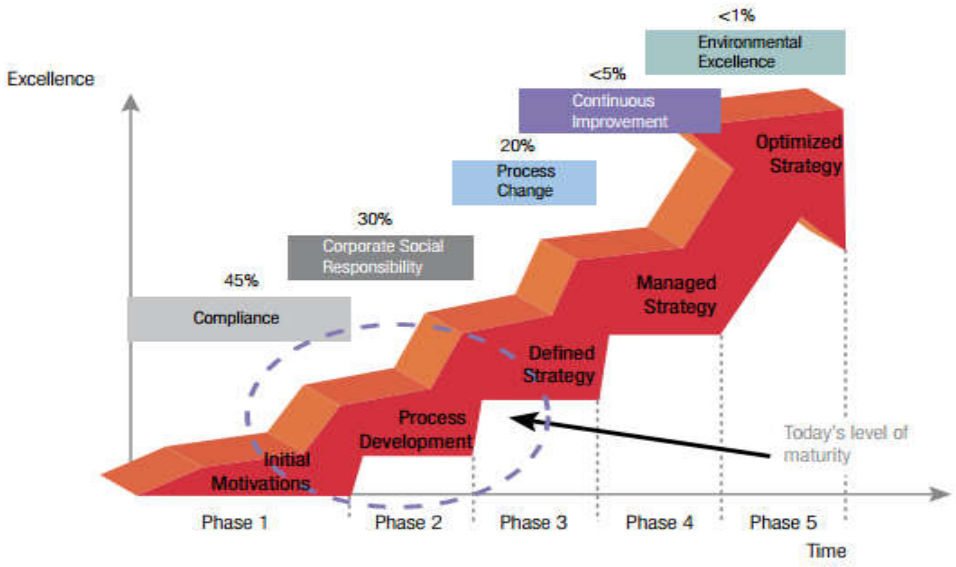
Figure 2. EFQM Excellence Model



Source: EFQM, 2012: 4.

As stated by Atos Origin (2009: 19), "evidence of positive business results is affirming but the path to achieving environmental excellence is transformative and incremental." It is important for companies to understand the stages of their progress towards environmental excellence by self-assessing their current state. It is also important to understand the effort and reward for driving maturity of companies. Environmental Excellence Maturity Model (EEMM) illustrates a maturity model for how companies move towards environmental excellence. EEMM (Figure 3) does not consist of specific criteria, it is divided into five phases of environmental excellence maturity.

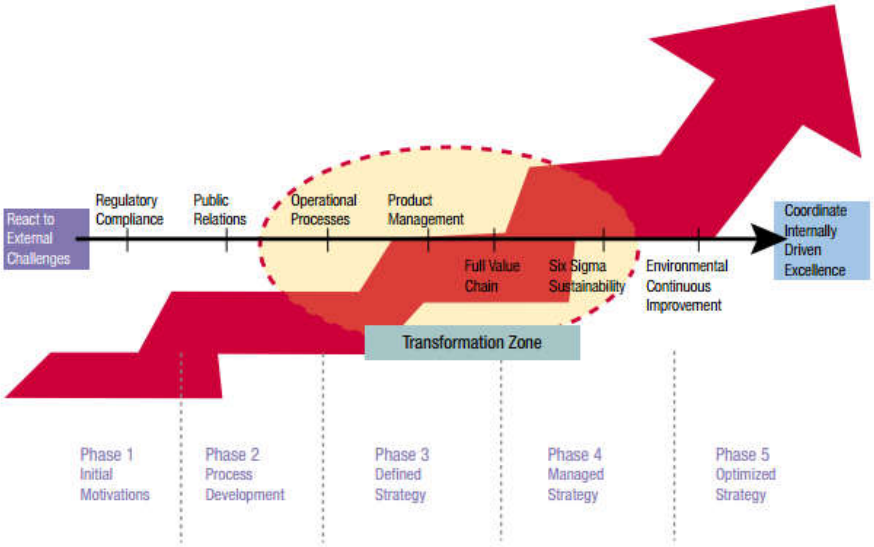
Figure 3. Environmental Excellence Maturity Model



Source: Atos Origin, 2009: 19.

Figure 4 illustrates transformation where companies make the transition toward an optimized environmental strategy. "Companies not making an effort to move toward this stage of maturity risk putting themselves in a position of severe competitive disadvantage (Atos Origin, 2009: 20-21)."

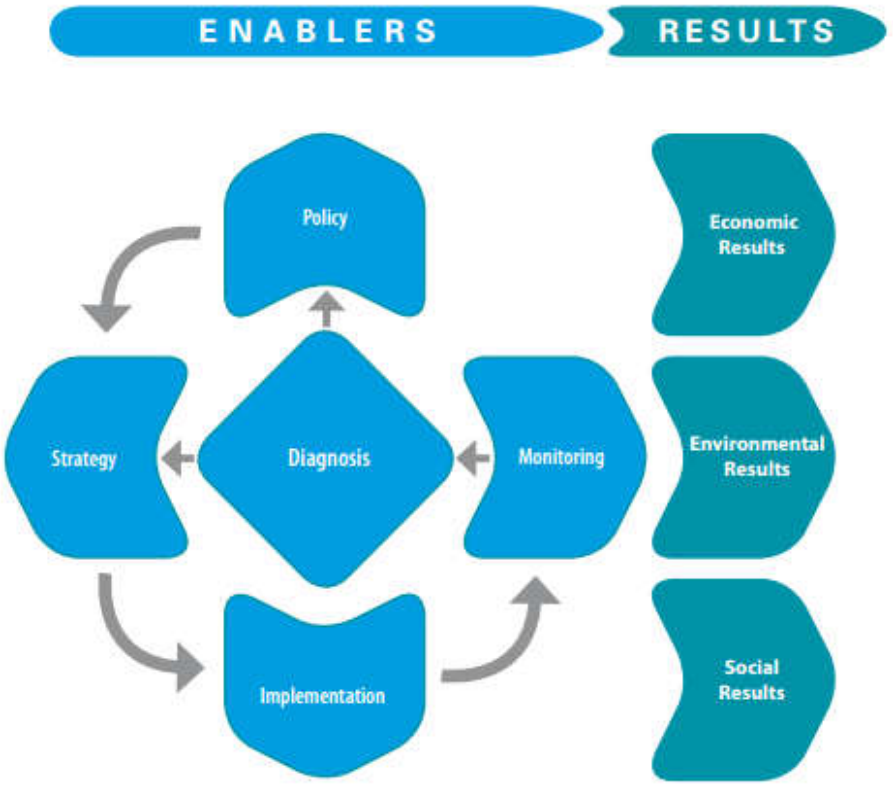
Figure 4. Transformation Path with Environmental Excellence Maturity Model



Source: Atos Origin, 2009: 20.

The last environmental excellence model to be described is Cleaner Production Excellence Model (CPEM). CPEM is a framework based on eight criteria whereas five of these are and the other three are results. CPEM is based on the premise that "excellent and sustainable environmental, economic and social results are achieved by applying CPEM in a systematically mode which implies the development and establishment of a diagnosis, a policy and a strategy, the implementation of CPEM options and the monitoring of results." CPEM (Figure 5) consists of these criteria: policy, strategy, implementation, monitoring, diagnosis, economic results, environmental results, social results (Sustainable Business Associates, 2007).

Figure 5. Cleaner Production Excellence Model



Source: Sustainable Business Associates, 2007: 5.

As already mentioned above, there are four relevant environmental excellence models. Three of them consist of criteria, with two of them being divided into enablers and results. However, one of

mentioned environmental excellence models is based on transitioning through the various phases. To see connections and differences between these models, Table 1 serves as the summary.

Table 1. Comparison of environmental excellence models

Environmental excellence models	BCPE	EFQM	EEMM	CPEM
Criteria				
Leadership-based criteria	leadership	leadership	managed strategy	policy
Strategy-based criteria	strategy	strategy	defined strategy	strategy
Processed-based criteria	operations	processes, products & services	process development	
Results-based criteria	results	people results, customer results, society results, business results		economic results, environmental results, social results
Monitoring-based criteria	measurement, analysis, and knowledge management			monitoring diagnosis
People-based criteria	workforce	people		
Other criteria	customers	partnerships & resources	initial motivations optimized strategy	implementation

Source: Author's own elaboration based on: NIST, 2015: 1; EFQM, 2012: 4; Atos Origin, 2009: 19; Sustainable Business Associates, 2007: 5.

According to Table 1, it is possible to find these connections between mentioned environmental excellence models:

- criterion based on leadership principles (BCPE, EFQM, EEMM, CPEM),
- criterion based on strategy principles (BCPE, EFQM, EEMM, CPEM),
- criterion based on processes principles (BCPE, EFQM, EEMM),
- criterion based on results principles (BCPE, EFQM, CPEM),
- criterion based on monitoring principles (BCPE, CPEM),
- criterion based on people principles (BCPE, EFQM).

On the other hand, what differentiate mentioned environmental excellence models are criteria based on such important principles as customers, partnership, motivation, optimization and implementation.

4. Conclusion

Development of quality management and environmental management is constantly improving. Actually, companies realize that it is not enough to be good because excellence is a new goal. But such as achievement of the business excellence status can help the company, environmental excellence can improve not only the company but even the general public. So environmental excellence really is a very important issue. The aim of the paper was to delineate selected environmental excellence models on account of their comparison. These environmental excellence models were selected for the further delineation: BCPE, EFQM Excellence Model, EEMM, CPEM. As a main finding may be considered that three of four environmental excellence models consist of various criteria, while most of these criteria are similar. To summarize, environmental excellence models are mostly composed of criteria based on principles of leadership, strategy, processes, results, monitoring and people. So when the company decides to support its environmental policy by using one of the mentioned environmental excellence models, it depends on its criteria, how will environmental policy of such company be improved. For example, some models may ensure that environmental principles of the company will be embodied in its strategy and management, as well as in the processes. Other models are also focused on monitoring of the implementation of environmental policy because it is the only way to evaluate the results. Actually, there are models focusing on embedding of environmental principles among employees. However, criteria based on such important principles as customers, partnership, motivation, optimization and implementation should also be included because when the company wants to be responsible for its activities in the environmental field, it must pick environmentally responsible partners and such philosophy must also be promoted to its customers. But still, the results of the paper have shown that there are only a few environmental excellence models which contain all these important criteria. This obliges to further research aimed at developing an integrated environmental excellence model consisting of the most important criteria.

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Przegląd środowiskowych modeli doskonałości

Streszczenie

Przedsiębiorstwa wykorzystują wiele narzędzi zarządzania, aby zapewnić osiągnięcie pożądanego celu. Niektóre z tych narzędzi są nastawione na jakość, inne mają charakter finansowy, ale tylko nieliczne z nich mają na uwadze aspekt środowiskowy. Celem artykułu jest opisanie wybranych środowiskowych modeli doskonałości w celu ich porównania. Podstawowy motywem przyświecający wyborowi tematyki artykułu stanowiły badania przeprowadzone przez różnych autorów, którzy mieli do czynienia z owymi modelami, a także samodzielna ocena istniejących modeli. Aby zrealizować cel artykułu, przeprowadzono badania wtórne. W oparciu o metody analizy, porównanie i selekcję, zidentyfikowano najczęściej występujące kryteria opisywanych środowiskowych modeli doskonałości. Jako główny wynik badań można potraktować fakt, że trzy z czterech środowiskowych modeli doskonałości składają się wprawdzie z różnych kryteriów, które są jednak do siebie podobne. Jednakże kryteria bazujące na innych ważnych zasadach nie są ujęte w więcej niż jednym ze wspomnianych modeli. To obliguje do dalszych badań mających na celu rozwój i integrację środowiskowych modeli doskonałości składających się z najważniejszych kryteriów.

***Słowa kluczowe**:* doskonałość biznesu, środowisko, jakość, model, środowiskowe modele doskonałości