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Using the EFQM excellence model to the process assessment

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ABSTRACT

Purpose: The aim of this paper is showing the EFQM Excellence Model approach. In this paper it was introduced the usage of the EFQM Excellence Model not only in the whole organization but also in the selected processes in the company.

Design/methodology/approach: In the frames of own research it has been assessed the selected production process according to the criteria of the EFQM Excellence Model.

Findings: The investigated company used the EFQM Excellence Model as a diagnostic tool for assessing the selected process. The best result was obtained in the criteria: Customer Results and the worst in: Society Results. Through this approach the organisation is better able to balance its priorities, allocate resources and generate realistic business plans.

Research limitations/implications: The EFQM Excellence Model is a practical tool that can be used in a number of different ways, also as a tool for the process assessment.

Practical implications: Own research clearly showed, how to conduct self-assessment in the selected process. Originality/value: The paper provides steps in self-assessment methodology for all who wish to measure achievements and strengths and also identify improvement opportunities in the process.

Keywords: Quality management; Quality improvement; The EFQM Excellence model

1. Introduction

At present organizations and enterprises search many ways and opportunities to improve, maximalize strong and to minimalize weak sides of their activity. As the practice shows, the managers seek the tools to strategic management basing on wellknown principles of the PDCA Circle - Plan, Do, Check and Act. The EFQM Excellence Model is one of such tools. This is an advanced tool for improvement of organization based on the principles of the Total Quality Management (TQM). The EFQM Model defines the guidelines and requirements which must be fulfilled in each area of functioning organization, by what it states

the special example of the excellence to which one should aim. Simultaneously it is a tool for self-assessment of the organization giving the picture of its strong sides and potential to improvement [1,2].

Organizations need to establish an appropriate management system regardless of sector, size, structure or maturity, to be successful. The EFQM Excellence Model is a practical tool to help organizations do this by measuring where they are on the path to excellence, helping them understand the gaps, and then stimulating solutions [3-5].

The aim of this paper is showing the usage of the EFQM Excellence Model not only in the whole organization but also in the selected processes in this organization.

2. The EFQM model approach

The EFQM Excellence Model was introduced at the beginning of 1992 as the framework for assessing organisations for the European Quality Award. It is now the most widely used organisational framework in Europe and it has become the basis for the majority of national and regional Quality Awards (also Polish Quality Award) [2,5-6].

The EFQM Excellence Model is applied by thousands of European organizations to improvement of their management systems. It covers all the most important areas of functioning the organization and it defines exactly, what requirements should be fulfilled in these areas. Thanks to this, the Model serves as a complex tool of self-assessment and simultaneously the example of excellence to which should aim undertaking the suitable activities in every of distinguished areas. Self-assessment informs the organization about its strong sides as well as permits to identify areas which should be improved [7].

The EFQM Excellence Model is a self-assessment framework for measuring the strengths and areas for improvement of an organisation across all of its activities. The term "excellence" is used because the Model focuses on what an organisation does, or could do, to provide an excellent service or product to its customers, service users or stakeholders [8,9].

The EFQM Excellence Model permits on many ways of approach to achieve the permanent excellence in all aspects of the organization activity.

The EFQM Excellence Model is based on the accepting and consistent realizing in everyday practice "Eight Basic Rules of Excellence" - that is adapted to the European conditions, the principles of the Total Quality Management (TQM), which implemented in the strategic management process guarantee the success of the enterprise, its development and strengthening of the market position (Fig.1) [10,11].

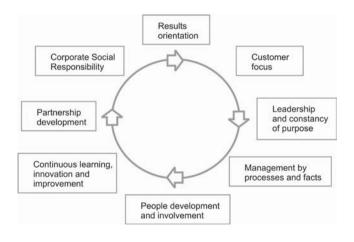


Fig. 1. Eight Basic Rules of Excellence [11]

Eight Basic Rules of Excellence are [12,13]:

 Results orientation - excellence is achieving results that delight all the organisation's stakeholders (customers, workers, suppliers etc.);

- Customer focus excellence is creating sustainable customer value. Enterprises should make the analyses' of needs both present, as and potential customers;
- Leadership and constancy of purpose excellence is visionary and inspirational leadership, coupled with constancy of purpose;
- Management by processes and facts excellence is managing the organisation through a set of interdependent and interrelated systems, processes and facts;
- People development and involvement excellence is maximising the contribution of employees through their development and involvement;
- Continuous learning, innovation and improvement excellence is challenging the status quo and effecting change by continuous learning to create innovation and improvement opportunities;
- Partnership development excellence is developing and maintaining value-adding partnerships;
- Corporate social responsibility excellence is exceeding the minimum regulatory framework in which the organisation operates and to strive to understand and respond to the expectations of their stakeholders in society.

The EFQM Excellence Model is based on 9 criteria. Five of these are "Enablers" and four are "Results". The "Enabler" criteria cover what an organisation does. The "Results" criteria cover what an organisation achieves. "Results" are caused by "Enablers" and "Enablers" are improved using feedback from "Results". The arrows emphasise the dynamic nature of the Model. They show innovation and learning helping to improve enablers that in turn lead to improved results (Fig.2.) [5].

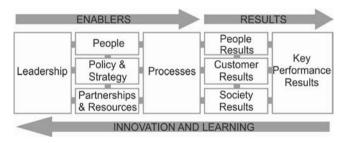


Fig. 2. The Excellence Model [5]

EFQM gives equal weight to "enablers" and "results". They are both valued at 50%. All nine criteria have different weights:

- Leadership 10%
- People 9%
- Policy & Strategy 8%
- Partnerships & Resources 9%
- Processes 14%
- People Results 9%
- Customer Results 20%
- Society Results 6%
- Key Performance Results 15%

The Model, which recognises many approaches to achieving sustainable excellence in all aspects of performance, is based on the premise that excellent results with respect to Performance,

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Customers, People and Society are achieved through Leadership driving Policy and Strategy, that is delivered through People, Partnerships and Resources, and Processes [14,15].

3.0wn research

Own research have been carried out in the selected Polish company of the machine industry. The EFQM Excellence Model was used to assess the selected process in this company.

During these research it was worked out the questionnaire with nine criteria of the EFQM Model, which was used to assess and measure the company performance in the selected process. The scale in the questionnaire was: from 1 (the worst) – 10 (the best) defining the degree of fulfilment through the enterprise the concrete criterion in the process. Nine criteria of the EFQM Model were as follow:

- [1] Leadership (max. 100 points) -> how leaders develop and facilitate the achievement of the mission and vision, develop values required for long-term success and implement these via appriopriate actions and behaviors, and are personally involved in ensuring that the organization's management system is developed and implemented.
- [2] People (max. 90 points) -> how the organization manages, develops, and releases the knowledge and full potential of its people at an individual, team-based and organization-wide level, and plans these activities in order to support its policy and strategy and the effective operation of its process.
- [3] Policy & Strategy (max. 80 points) -> how the organization implements its mission and vision via a clear stakeholder-focussed strategy, supported by relevant policies, plans, objectives, targets and process.
- [4] Partnerships & Resources (max. 90 points) -> how the organization plans and manages its external partnerships and internal resources in order to support its policy and strategy and the effective operation of its process.
- [5] Processes (max. 140 points) -> how the organization designs, manages, and improves its process in order to support its policy and strategy and fully satisfy and generate increasing value for its customers and other stakeholders.
- [6] People Results (max. 90 points) -> what the organization is achieving in relation to its people.
- [7] Customer Results (max. 200 points) -> what the organization is achieving in relation to its external customers.
- [8] Society Results (max. 60 points) -> what the organization is achieving in relation to local, national and international society as appropriate.
- [9] Key Performance Results (max. 150 points) -> what the organization is achieving in relation to its planned performance.

Then each criteria was assessed by managers and workers. All received points in the questionnaire were multiplied by the weights of each criteria given in the EFQM Model. Adding all points it was received the total result – 714.4 points (table 1.). It is necessary to remember that the total result is related to the selected process, not to the whole enterprise.

Table 1. The results of the questionnaire (points) and weights of each criteria in the EFOM Model.

The EFQM Model Criteria	The results of the questionnaire (points)	Maximum points in the EFQM Model	Weights in the EFQM Model	Multiplication results (points by weights)
1)Leadership	66	100	1.0	66
2)People	64	90	0.9	57.6
3)Policy & Strategy	72	80	0.8	57.6
4)Partnerships & Resources	74	90	0.9	66.6
5)Processes	80	140	1.4	112
6)People Results	66	90	0.9	59.4
7)Customer Results	72	200	2.0	144
8)Society Results	82	60	0.6	49.2
9)Key Performance Results	68	150	1.5	102
Total				714.4

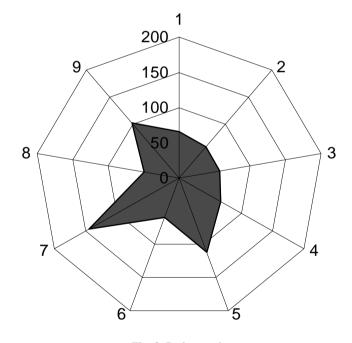


Fig. 3. Radar graph

On the basis of the multiplication results (received points by weights) it was done the radar graph, which shows the layout and importance of each criteria in the analysed company (Fig. 3.).

4. Conclusions

The EFQM Excellence Model is a framework for organisational management systems, promoted by the European Foundation for

Quality Management (EFQM) and designed for helping organisations being more competitive.

The EFQM Excellence Model is a practical tool that can be used in a number of different ways [5,15]:

- As a tool for self-assessment:
- As a way to benchmark with other organisations;
- As a guide to identify areas for improvement;
- As the basis for a common vocabulary and a way of thinking;
- As a structure for the organisation's management system.

The investigated company used the EFQM Excellence Model as a diagnostic tool for assessing the selected process. The best result was obtained in the criteria: Customer Results and the worst in: Society Results. Through this approach the organisation is better able to balance its priorities, allocate resources and generate realistic business plans.

Self-assessment by using the EFQM Excellence Model enables a structured review of overall performance, measuring achievements and strengths and also identifying improvement opportunities. This paper showed how to conduct self-assessment in the selected process [13,15].

Using the EFQM Excellence Model gives many benefits as:

- gives attention to impacts through the "Results" criteria;
- it makes links between what an organisation does and the results it achieves, highlighting how they are achieved;
- the possibility of continuous improvement.

References

- [1] J. Michalska, D. Szewieczek, The improvement of the quality management by the activity-based costing, Journal of Achievements in Materials and Manufacturing Engineering 21/1 (2007) 91-94.
- [2] S.K. Ho, TQM an Integrated Approaching Implementing Total Quality through Japanese 5S and ISO 9000, Kogan Page, London, 1996.

- [3] T. Karkoszka, D. Szewieczek, Risk of the processes in the aspect of quality, natural environment and occupational safety, Journal of Achievements in Materials and Manufacturing Engineering 20 (2007) 539-542.
- [4] J.J. Dahalagaard, K. Kristensen, G. Kanji, The basis of Quality Management, PWN, Warsaw, 2005 (in Polish).
- [5] M. Urbaniak, Quality management–theory and practice, Difin, Warsaw, 2004 (in Polish).
- [6] M. Dudek-Burlikowska, Quality research methods as a factor of improvement of preproduction sphere, Journal of Achievements in Materials and Manufacturing Engineering 18 (2006) 435-438.
- [7] H.J. Harrington, Business Process Improvement: The Breakthrough Strategy for Total Quality, Productivity, and Competitiveness, Mc Graw-Hill Inc., New York, 2000.
- [8] T. Karkoszka, M. Roszak, Quality and environmental aspects in the technological process management, Proceedings of the Conference "Projecting & Managing of the realisation of the production" Zielona Góra, 2005, 63-68 (in Polish).
- [9] J. Łańcucki, Basis of Total Quality Management, AE, Poznań, 2001 (in Polish).
- [10] J. Michalska, Quality costs' analysis in the selected production process in material engineering, Materials and Technologies 3, PTM Gdańsk, (2005) 137-140 (in Polish).
- [11] J. Whitmore, Coaching for Performance, Nicholas Brealey, London, 2000.
- [12] J. Michalska, Factors creating quality management in the company, Proceedings of the Conference INTELLECT 2005: "Intelectual capital as a chance to improve the quality management in the global circumstances" UMCS, Lublin, 2005, 187-191 (in Polish).
- [13] R.S. Kaplan, R. Cooper, Costs and effectiveness management, ABC, Cracow, 2000 (in Polish).
- [14] M. Dudek-Burlikowska, Quality estimation of sale process with usage of quality methods in chosen company, Journal of Achievements in Materials and Manufacturing Engineering 20 (2007) 531-534.
- [15] G. Sochacki, J. Michalska, EFQM Model used in the selected production process, Silesian University of Technology, Gliwice (2007) 85-90 (in Polish).