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CONCURRENT SESSIONS
KEMPINSKI HOTEL CORVINUS

Wednesday 8:30 – 10:30
Erzsébet tér 7-8, Budapest V.

SALON BANDINI/MARZINO

9.3. EDUCATION OF QUALITY – QUALITY OF EDUCATION III. 8:30 – 10:30

Co-Organizer: Óbuda University

Session Chair: Gábor Veress, University of Pannonia, Hungary

8.50 Self Assessment according to EFQM Excellence Model as the Tool for Evaluation of University
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Self Assessment according to EFQM Excellence Model as the Tool for Evaluation of University

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Abstract.

Monitoring and measurement are the primary sources of information about quality of organisation and their products. The absence of monitoring and measuring brings the uncertainty both to product realization and to management of organisation..

We recognise the self assessment according to EFQM Excellence Model[®] (which is registered trademark) as the complex instrument for monitoring and evaluation of maturity of management system at VŠB- Technical University of Ostrava, Czech Republic.

Significant motivation for orientation VŠB-TUO to the complex quality comprehension was the Program of the Czech Republic National Quality Award, which was in year 2006 opened for non-profit organization and extended by two categories – based on the CAF Model and based on the EFQM Excellence Model[®].

The results of the implemented self assessment based on EFQM Excellence Model[®] at the VSB-TUO and participation in the Program of the Czech Republic National Quality Award are very positive. The orientation to the complex quality improved the university life, its processes and efficiency.

Based on evaluation of self-assessment report, followed by site visit of assessors from Program of the Czech Republic National Quality Award, the Faculty of Mechanical Engineering of VSB-TUO became „Czech Republic National Quality Award Winner 2007 – category public sector”. It was the first time in Czech Republic the university was awarded by this prestigious award.

Keywords

Self-assessment, EFQM Excellence Model, National Quality Award

1. Introduction

Currently the universities are situated at competitive environment. It is the principal reason why they have to identify as the organisations providing the services that satisfy the requirements of their customers. The satisfaction of requirement is currently recognised as the quality. ISO 9000 [1] defines the quality: "Degree to which a set of inherent characteristics fulfils requirements".

The quality of university and its evaluation is a complex issue. Many articles were written on this theme and many conferences dealt with it. The principal matter is identification of products of university and their customers followed by selection of proper method for evaluation.

2. Products of university and their customers

We can express the products of university and their customer in process models, see fig.1. The requirements and expectations are the inputs and are transferred into products - outputs.

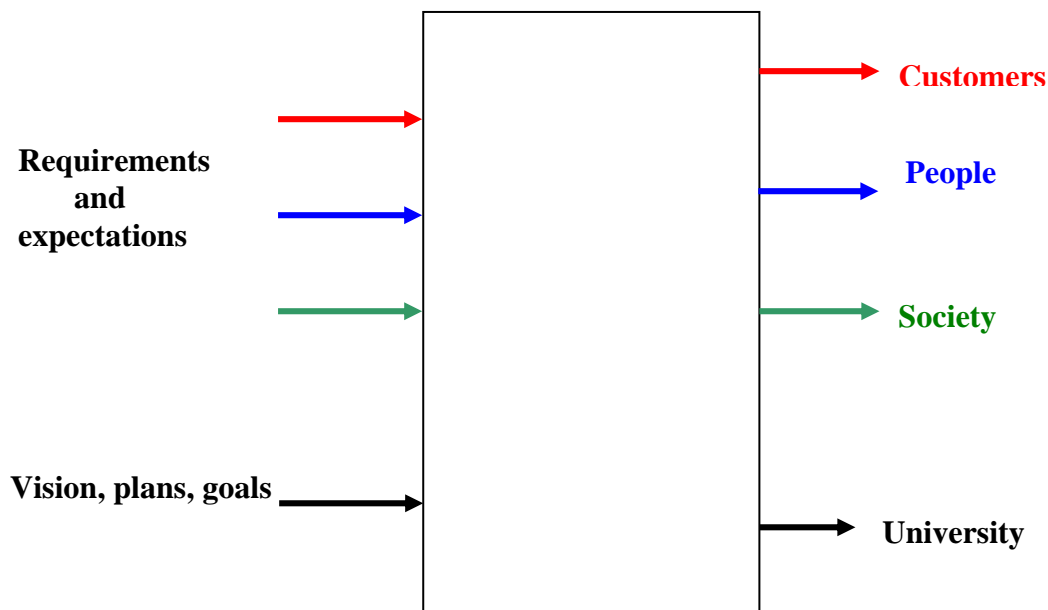


Fig. 1 Process model of university

The main products of university are expressed by red and are delivered to the customers. The main products of university and their customers are in tab.1.

Beside of the customers there are the next groups that receive other university products. **People** (academic and non-academic staffs) are one of them. It is expressed in fig. 1 by blue colour. People receive from university the salary and so called “internal university culture” (behaviour and communication with them, taking authority and responsibility ...).

The society receives from university so called “external university culture” (environmental behaviour, communication, support of some society's activities by university ...). It is expressed in fig. 1 by green.

The university itself (its founder and promoter) is also the recipient of university products (financial and nonfinancial results of university). It is expressed in fig.1 by black

Product	Characteristic	Customer	Customer expectations
Bachelor, master and doctoral university education	Obtained qualification	Students	Readiness in practice
		Employers	Performance capability
		Society	Conformance with development strategy
Life long education	Deepen knowledge, change of qualifications	Participants	Possibility to grow, change of career
		Employers	Planned fulfillment
R&D projects	Looking for new principles	Society (enterprises)	New principles, feasibility
Cooperation with public and business sector	Solving real problems	Enterprises	Applicable solution, effectiveness

Tab. 1. The main products of university and their customers

3. Evaluation of complex quality

The quality of any institution, university included, is evaluated through so called lagging indicator. **The lagging indicators (results)** evaluate what organisation reached in the past. The holistic approaches evaluate not only results in the past, but also the capability and potential for future development through so called **leading indicator (enablers)**.

The enabling criteria cover what organisation does, and the results criteria cover what organisation achieved. The time lag between the enablers and the results reinforces the connection that whatever action is taken, will ultimately impact of the performance and results of the organisation.

Lagging and leading indicators at the process model of organisation (inspired by EFQM Excellence Model[©]) are presented on the fig.2

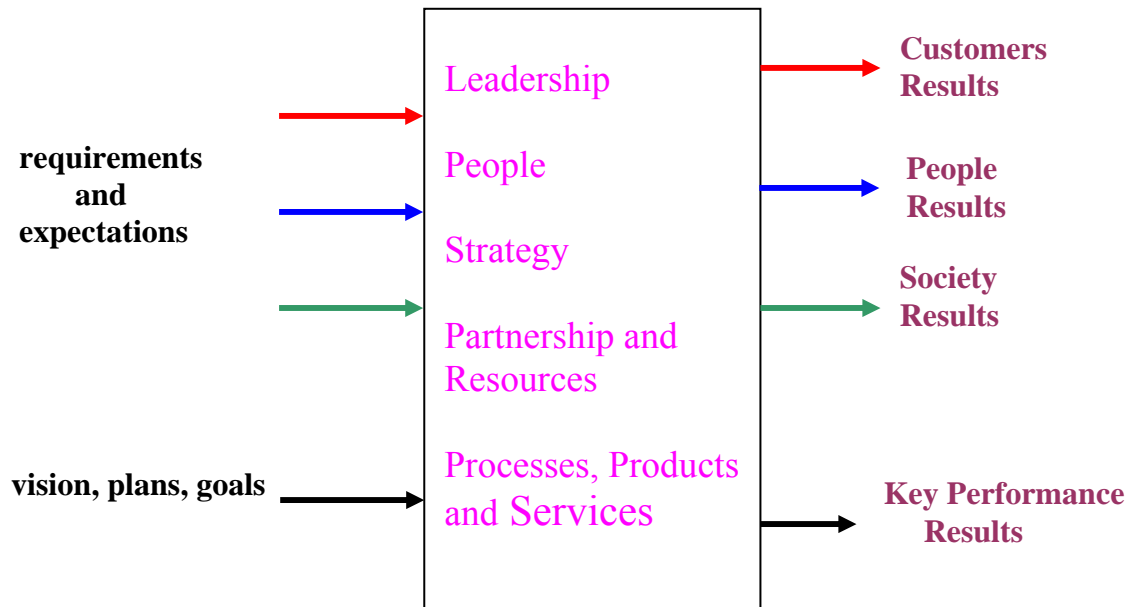


Fig. 2 **Leading indicators** and **lagging indicators** at process model of organisation

4. EFQM Excellence Model[®] as the framework for evaluation of universities

The European Foundation for Quality Management (EFQM) was created in 1988 by 14 leading European businesses. The EFQM was formed to recognise and promote sustainable success and provide the guidance to those seeking to achieve it.

This is realised through a set of three integrated components:

- The Fundamental Concepts of Excellence.
- The EFQM Excellence Model[®]: A framework to help the organisation to convert the Fundamental Concept and RADAR logic into practice
- RADAR logic: A dynamic assessment framework consists of following elements:
 - Results
 - Approach
 - Deployment
 - Assessment and Review

The EFQM Excellence Model[®] was formally launched in 1991 as an assessment framework for European Quality Award. The EFQM Excellence Model[®] was revised in 1999, and updated slightly in 2003. The model was also rearranged for education institutions [2], [3].

The last version of Fundamental Concepts of Excellence and EFQM Excellence Model from 2010 builds on years of experience and takes into the account the current and future challenges of an organisation.

Fundamental Concepts of Excellence (2010)

1. Achieving Balanced Results
2. Adding Value for Customer
3. Leading with Vision, Inspiration & Integrity
4. Managing by Processes
5. Succeeding through People
6. Nurturing Creativity & Innovation
7. Building Partnership
8. Taking Responsibility for a Sustainable Future



Fig. 3. The EFQM Excellence Model[©], (2010)

The Model shown in Fig. 3 is non-prescriptive framework based on nine criteria, with five “Enablers” and four “Results”. There are 32 criterion parts within the EFQM Excellence Model[©], 24 within Enablers and 8 within Results. These criterion parts pose a series of questions that should be considered during the self-assessment process. Within each criterion part is a list that contains possible areas to address.

5. Implementation of self assessment based on EFQM Excellence Model at VŠB-TUO

The 160 year history of VŠB-TUO is closely connected with the development of mining and metal extraction, which was the oldest industry in the Austro-Hungarian Empire. That is why the Emperor Frantz Josef I. decreed (1849) that a mining vocational school be set up in Příbram for the northern countries, and another in Leoben for the southern countries of the Empire. In 1904, the Příbram Academy was given the status of University – Vysoká škola báňská (VŠB). The President of the Czechoslovakia, E. Beneš, issued a decree No. 49 on the 8th of September 1945 by which the university was moved from Příbram to Ostrava. This ended the history of the Příbram campus and opened a new era in the history of the University in Ostrava, the centre of a widespread chemical, heavy engineering and mining industries region.

The 17th November 1989 was a historic event in the life of Czech universities and in the whole society. Significant changes have been made at VŠB-TUO. The reorganisation of all courses and the new provision of modern branches of study transferred VŠB-TUO to a modern polytechnic university.

VŠB-TUO currently consists of seven faculties:

- Faculty of Mining and Geology (since 1849)
- Faculty of Metallurgy and Material Engineering (since 1849)
- Faculty of Mechanical Engineering Faculty (since 1951)
- Faculty of Economics (since 1977)
- Faculty of Electrical Engineering and Computer Science (since 1991)
- Faculty of Civil Engineering (since 1997)
- Faculty of Safety Engineering (since 2002).

There are more than 23 000 students in bachelor degree, master degree and doctoral degree programmes in traditional, distance and combined studies, approximately 2000 staff (1000 of whom are teachers and R&D personnel). VŠB-TUO is the third largest university in Czech Republic.

Significant motivation for orientation VŠB-TUO to the complex quality comprehension was the Program of the Czech Republic National Quality Award, which was in year 2006 opened for non-profit organizations and extended by two categories – based on the CAF Model and based on the EFQM Excellence Model[©].

The Faculty of Mechanical Engineering was the pilot faculty where we started implementation of TQM philosophy. This faculty applied to the Program of the Czech Republic National Quality Award 2006 - part assessment based on EFQM Excellence Model[©].

Many analyses were done during the self-assessment process. The most significant weaknesses and threads were selected, analysed and activities towards their removal was quickly run. Many uncertainties were eliminated by new analyses by questionnaires for graduates, new students and unsuccessful students. The next important area which was omitted in the past was collaboration with suppliers; particularly collaboration with the high schools. The project called “Partnership with High Schools” was started at the end of year 2006 by the concrete offers for study support, such as special excursions to the faculty labs, university teacher lectures focused on actual technical problems and current events, and other real collaboration support.

Based on evaluation of the self-assessment report, followed by site visit of assessors from Program of the Czech Republic National Quality Award, the Faculty of Mechanical Engineering was awarded by - “Recognised for Excellence-2006” level. The feedback from the site visit was considered very useful. Other possibilities for improvement were identified.

The next step was the dissemination of TQM approach at next faculties. Some of them applied and took a part in the Program of the Czech Republic National Quality Award. The survey of achievements can be seen in Tab.2.

Year	Faculty	Award
2006	FME	Recognized for Excellence
2007	FME	Award winner
	FMG	Recognized for Excellence
2008	FMG	Prize winner
	FMME	Recognized for Excellence
2009	The whole VŠB-TU Ostrava	Recognized for Excellence

Tab.2 – The achievements of VSB-TUO
in the Program of the Czech Republic National Quality Award.

Faculty of Mechanical Engineering of VSB-TUO became „Czech Republic National Quality Award Winner 2007 – category public sector”. It was the first time the University was given this prestigious award.

6. Summary

The results of the implemented self assessment based on EFQM Excellence Model[®] at the VSB-TUO and participation in the Program of the Czech Republic National Quality Award are very positive. The orientation to the complex quality improved the university life, its processes and efficiency.

References

- [1] ISO 9000:2005 Quality management systems – Fundamentals and vocabulary
- [2] The EFQM Excellence Model- Higher Education Version 2003, Centre for Integral Excellence Sheffield Hallam University, 2003.
- [3] TRIS-EFQM model version 4.2, - Method for Quality Improvement of Higher Education, TRIS edition, KHKempen, Kleinhoefstraat 4, B2440 Geel, Belgium ISBN 9080779725, 116 p.
- [4] EFQM Excellence Model 2010, Brussels, EFQM. 2009, 32 p. (ISBN 978-90-5236-501-5)