

# VALUE ADDED BY QUALITY MANAGEMENT DEVELOPING A MODEL DESCRIBING THE MECHANISMS AND A PROCESS APPROACH FOR INTRODUCTION

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Introduction paper  
UDC:111.4;65.012.32;17.023.35

**Abstract:** *Quality Management is an essential part of successful organisations. But the effect of it is mostly not directly visible. The effects are more indirect, and have a time lag till results appear. In today's challenging times, all activities of an organisation have to proof their ability to add value. While Value Based Management is more focussed on financial value, other concepts and models like EFQM Excellence Model and Kaplan and Norton's Balanced Score Card also point on values that are the basis and driver for financial success. Quality Management has to proof its effects on company values, and therefore the transacting mechanisms have to be identified and procedure to manage the process of Value Adding Quality Management has to be developed.*

**Keywords:** *Quality Management, Value Based Management*

## 1. CHALLENGES FOR BUSINESS SUCCESS

The markets are being subjected to an epochal change, similar to the transition from agricultural to industrial society.<sup>1</sup> Nefiodew supports this hypothesis through the analysis of the long waves of economic activity. Accordingly, we are at the beginning of the sixth Kondratieff. This long-wave phase is, in the opinion of Nefiodew, marked by the key skills of cooperation, commitment as well as technical and methodological expertise as the basis of the information and knowledge society.<sup>2</sup>

Töpfer and Frost see four changing conditions for business success:

1. Geographic competition
2. Technology and solution-based competition
3. Competence and customer-driven competition
4. Time-based competition

The globalization of markets leads to global competition and, for medium-sized companies, international competitors arises.

The technological and solution-based competition marks the second influence on the success of the company. Recent economic structures are broken open through the

convergence of technologies and industries towards system offers. Here, some completely new formations are created. Companies can lose their leading position with their target customers if they fail to recognize change and to react. In the worst case, the existence of the company is threatened.

Changing business models in response to these factors characterize the third factor. Companies are focusing on core competencies and core processes and connect to the virtual enterprise networks, because individual companies are hardly in a position to supply all the required technological solutions on the level required to master them. To survive as a virtual alliance of companies on the markets, the core competencies and core processes of the partners must fit together and, above all, each partner must be able to realize the high level of quality that is demanded.

These changes are compounded by the immense time pressure. Competitors imitate successful companies so that competitive advantages are only temporary. The adjustment of the company must be faster than the market and environmental changes.<sup>3</sup>

For enterprises, the capital market situation has changed fundamentally through the introduction of new lending guidelines. Since the beginning of the year 2007, companies that

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<sup>1</sup> Cf.: Sihm 1992: Ein Informationssystem für Instandhaltungsleitstellen

<sup>2</sup> Cf.: Nefiodow 2001: Der sechste Kondratieff:

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<sup>3</sup> Cf.: Töpfer, Frost 2002: Von der Qualitätssicherung über TQM zu Business Excellence - Überblick und Einordnung der Beiträge

take credit are rated under the provisions of the New Basel Capital Accord (Basel II). This means that either the bank or a credit rating agency (CRA) evaluates the organisation. The rating leads to classification in a credit class, which in turn, determines the credit terms and financing costs. The worse a rating is, the more expensive the credit, hampering a company's ability to deliver value to its customers in a competitive market and, therefore, adversely affecting their performance<sup>4</sup>. The current worldwide financial crisis is increasing the hurdles for companies to obtain new and affordable credit. Many companies see the credit crunch as one of the main problems in 2009<sup>5</sup>.

Many companies try to meet these market requirements with value-oriented corporate governance. Specifically, large enterprises describe and commit to Value Based Management (VBM) in their annual reports and investor relations. This VBM-approach is based on the financial performance indicator referred to by various authors as EVA (Economic Value Added)<sup>6</sup>, CVA (cash value added)<sup>7</sup> or TKVA (ThyssenKrupp Value Added)<sup>8</sup>. Companies are using this concept to focus on the capital market and on investors as the basis of this approach is shareholder-value.<sup>9</sup>

## 2. VALUE BASED MANAGEMENT

In a broad context, the shareholder value concept goes back to the publication "Creating Shareholder Value" by Alfred Rappaport<sup>10</sup>. The objective is to increase the value of equity to offer the investor a reasonable return<sup>11</sup>. The shareholder value concept places the interests of capital at the heart of management strategy. To demonstrate the value added, net present value methods are used, such as the "Free Cash

Flow"<sup>12</sup>.

Städler, Bircher and Streiff are critical, insisting that only the economic aspects of value are considered in Value Based Management. Intangible value is hardly considered<sup>13</sup>. For long-term sustainable business success, it is not effective to focus purely on financial values<sup>14</sup>. Rather, a multi-perspective "values-based" management approach is required.

Töpfer sees Company Value as broadening and strengthening of shareholder value. Holistically, the company's value consists of the following five influences and design fields (see also Figure 1):<sup>15</sup>

- Shareholder Value
- Market Value
- Customer Value
- People Value
- Future Value

The overarching goal of the approach is to manage the interests of the company and its shareholders. The entrepreneurial activity is both a return on capital and future investments, the continued existence of the enterprise. This is described by the shareholder value. The company achieves a high market value if it establishes deep market penetration and reaches the targeted market share. To ensure a high Customer Value is achieved, it is necessary to focus on the customers. The ordinary needs of the customer must be met as much as possible. The People Value takes into account all the concerns/needs/demands of employees and is an essential basis for Market Value and Customer Value, and hence, Shareholder Value. The future matters, that ensure survival of the enterprise, are achieved through innovation and progress. They are the driving force for the Future Value of the company. These five have sometimes conflicting values with respect to the Company's Value.<sup>16</sup>

In the context of increased competition and the clear orientation of many companies towards the "value added", Quality Management must be reviewed regarding the added value that it creates, and, where appropriate, be redefined and refined.

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<sup>4</sup> Cf.: Hanker 2003: Keine Angst vor Basel II; KWG vom 09.09.1998

<sup>5</sup> Cf.

[http://www.welt.de/welt\\_print/article3009425/Kreditklemme-groesste-Gefahr-fuer-Investitionsgueter-Industrie.html](http://www.welt.de/welt_print/article3009425/Kreditklemme-groesste-Gefahr-fuer-Investitionsgueter-Industrie.html) ; 12.01.09

<sup>6</sup> Cf.: Allianz AG 2006: Wertorientiertes Management

<sup>7</sup> Cf.: Bayer AG 2006: Performance indicators

<sup>8</sup> Cf.: ThyssenKrupp AG 2006: ThyssenKrupp Value Added

<sup>9</sup> Cf.: Velthuis 2007: Value Based Management

<sup>10</sup> Cf.: Rappaport 1998: Creating shareholder value

<sup>11</sup> Cf.: Löhnert 1996: Shareholder Value - Reflexion der Adaptionsmöglichkeiten in Deutschland

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<sup>12</sup> Cf.: Bischoff 1998: Das Shareholder-Value-Konzept

<sup>13</sup> Cf.: Barnes Städler 2000: Der Begriff "Wert" im Management

<sup>14</sup> Cf.: Kaplan, Norton 1997: Balanced Scorecard

<sup>15</sup> Cf.: Töpfer 2000: Die Fokussierung auf Werttreiber

<sup>16</sup> Cf.: Töpfer 2000: Die Fokussierung auf Werttreiber

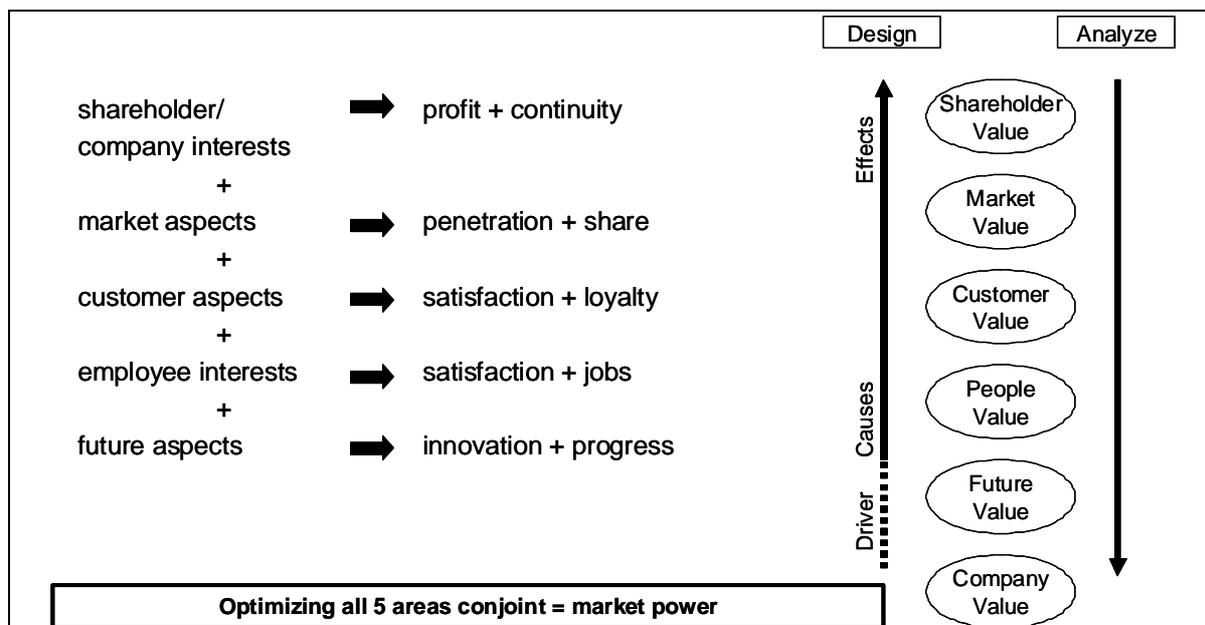


Figure 1: Levels of Value Based Management (Töpfer 2000, p.32)

Quality Management is, in the view of most companies and literature, understood as a support function for the primary and secondary business processes<sup>17</sup> and not as a core value driving function. According to the guidelines of Business Process Management (BPM), support processes should be reduced to the minimum required level. On the other hand, companies that see quality as the core of corporate philosophy and strategy (e.g. Toyota, Haier, Viessmann), are successful in the world markets. This suggests that quality can be more than a mere supporting role. Quality Management can be a design and control element of the enterprise. This requires Quality Management in a real management sense, which involves the „plan“, „control“, „coordinate“ and „monitor“ aspects be an integral part of the total quality of the company. Furthermore, quality must be a strategic consideration, and not only an operational one.

An integrated model, which describes the mechanisms of effect of Quality Management to the company's value, is still missing from the available methods. This thesis will eliminate this deficiency and should lead to an adequate model of the effect relationships combined with an implementation procedure. The objective of the thesis is to identify the positive direct and indirect effects of a proactive quality management on the value of

the company, to transfer it into a model and to develop an introductory concept for this model.

To implement a value-added-orientation to the management system, it is necessary to identify control parameters that drive the values of the different stakeholders. Töpfer distinguishes between value drivers, success factors and value generators. Value drivers are the internal causes of substantive customer and market-related effects in the external success. Both are strategically and operationally oriented. Together, they lead to the financial results set. These value generators (internal / external) are the elements that define the free cash flow and, therefore, shareholder value<sup>18</sup>.

### 3. BENEFIT OF QUALITY MANAGEMENT

The motivation for this thesis, supported by the above problem, is also based on the studies of entrepreneurial success factors (ExBa)<sup>19</sup>, the EFQM Excellence Model<sup>20</sup>, and the ISO 10014:2006 (E) "Quality management - Guidelines for Realizing financial and economic benefits"<sup>21</sup> published in 2006.

<sup>18</sup> Cf.: Töpfer 2000: Die Fokussierung auf Werttreiber

<sup>19</sup> Cf.: Sommerhoff 2005: Das Qualitätsmanagement - Schadet's nur nicht oder nützt es auch?

<sup>20</sup> Cf.: European Foundation for Quality Management et al. 2003: Excellence einführen

<sup>21</sup> Cf.: ISO 10014:2006(E)

<sup>17</sup> Cf.: Schmelzer, Sesselmann 2006: Geschäftsprozessmanagement in der Praxis

The Excellence Barometer (ExBa) is a benchmark study of the performance of the German economy. A central issue is an empirical study of entrepreneurial success which, therefore, addresses the question of what makes companies successful. In 2005, a special study on Quality Management was conducted. The aim of the study was to question the importance of Quality Management and to identify whether a link between importance, image and success of Quality Management exists. The survey covered 400 QM Officers and executives/managers. The study shows that Quality Management in German companies has a steady or growing importance. In less successful companies establishment of Quality Management System is just based on outward motives. Successful businesses rely on holistic quality management, which is oriented on its own objectives, such as improvement of performance and processes. In successful companies, Quality Management is understood as an internal consulting function, both by the quality officers as well as the managers. A model for the implementation of the Total Quality Management philosophy (TQM) is the Excellence Model of the European Foundation for Quality Management (EFQM). The EFQM Excellence Model (Figure 2) is a

framework that addresses nine criteria. Four of these are 'Results'-oriented and five are related to the 'Enablers' of Quality Management. The achievements of an organisation are covered by 'Results' criteria, what an organisation does by 'Enabler' criteria. "Excellent results with respect to Performance, Customers, People and Society are achieved through Leadership driving Policy and Strategy, that is delivered through People, Partnerships and Resources, and Processes."<sup>22</sup> Thus, the 'Enablers' are the drivers of the 'Results' while, through the feedback of the 'Results' on the 'Enablers' in the form of innovation and learning, an improvement cycle within the meaning of the PDCA cycle (Plan-Do-Check-Act) (Deming circle) is executed.

The RADAR logic is at the heart of the EFQM model. RADAR is the acronym of the methodology for assessing the criteria in the form of Results, Approach, Deployment, Assessment and Review. The EFQM model is based on the following basic concepts: Result Orientation, Customer Focus, Leadership & Constancy of Purpose, Management by Processes & Facts, People Development & Involvement, Continuous Learning, Improvement & Innovation, Partnership Development and Corporate Social Responsibility.

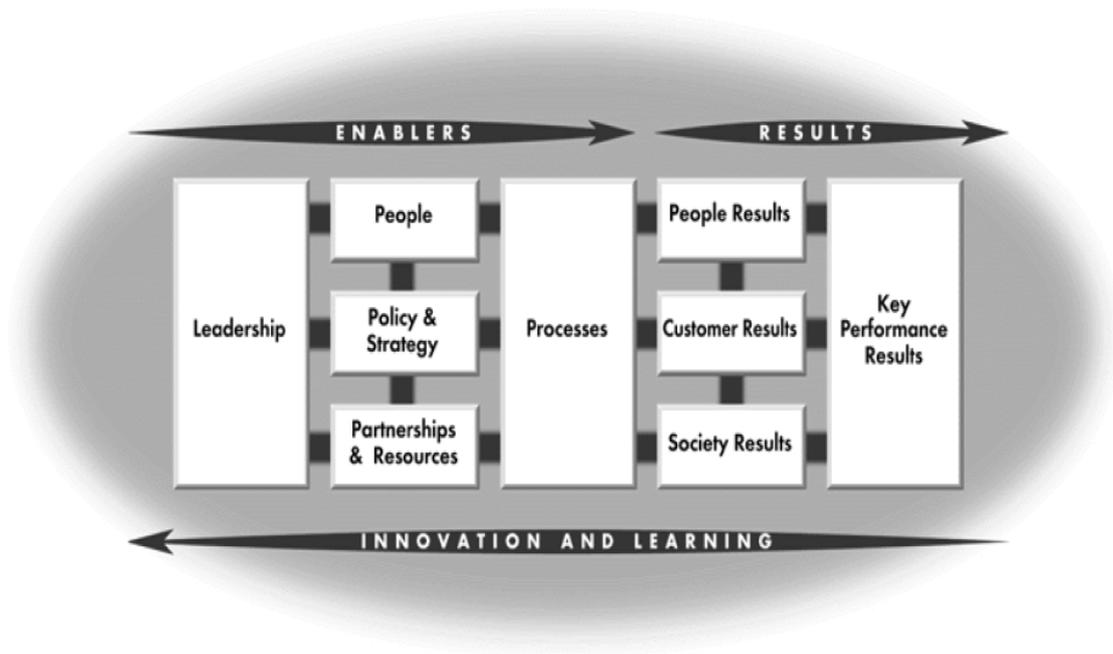


Figure 2: EFQM Excellence Model (EFQM, 2003)

<sup>22</sup> <http://www.efqm.org/Default.aspx?tabid=35>

The EFQM Excellence Model is a basis for this thesis. The quality of the enablers determines the company's results and thus the company's success and the value of the company.

The launch of the new standard ISO 10014:2006 (E) "Quality management - Guidelines for Realizing financial and economic benefits" shows that Quality Management must also come up with its contribution to the financial and economic results.

For each of the eight interrelated management principles:

- a) customer focus
- b) leadership
- c) involvement of people
- d) process approach
- e) system approach to management
- f) continual improvement
- g) factual approach to decision making, and
- h) mutual benefit supplier relationships

the achievable benefit is listed in form of a PDCA cycle. For each of the four steps (Plan, Do, Check and Act) methods and tools are indicated as supportive of that stage. The assessment is based on maturity through self-assessment.<sup>23</sup>

The Excellence model and ISO's QM Guidelines for Realizing financial and economic benefits study demonstrate the need to examine the added value of Quality Management and support the development of a model that facilitates the "value-add" concept through Quality Management. This model should be feasible and easy to implement within companies and will, therefore, be supported through a process model.

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<sup>23</sup> Cf.: ISO 10014:2006(E)

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CIP - Каталогизација у публикацији  
Народна библиотека Србије, Београд

005 . 6 ( 082 )

006 . 83 ( 082 )

**INTERNATIONAL Working Conference Total  
Quality Management – Advanced and Intelligent  
Approaches ( 5 ; 2009 ; Beograd )**

Proceedings / Fifth International Working  
Conference Total Quality Management -  
Advanced and Intelligent Approaches, May 31st  
- June 4th, 2009. , Belgarde, Serbia ; edited  
by Vidosav D. Majstorović ; [ organized by  
Mechanical Engineering Faculty, Laboratory  
for Production Metrology and TQM ] . - Belgrade  
: Mechanical Engineering Faculty, Laboratory  
for Production Metrology and TQM, 2009 ( Novi  
Sad : Fakultet tehničkih nauka, Graphic  
Engineering and Design ) . - XXV, 558 str. :  
ilustr. ; 30 cm

Tiraž 400. - Str. III-V : Preface from Editor  
and Conference Chair / Vidosav D.  
Majstorović. - Conference Detailed Program :  
str. VI-XIX. - Napomene i bibliografske  
reference uz tekst. - Bibliografija uz svaki  
rad.

ISBN 978 - 86 - 7083 - 660 - 0

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додатног текста ], 1952- 2. Mechanical  
Engineering Faculty ( Beograd ) . Laboratory  
for Production Metrology and TQM  
а ) Менаџмент тоталним квалитетом -  
Зборници б ) Стандарди - Зборници  
COBISS . SR - ID 158466060