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Exploring the Use of Balanced Scorecards in a Transport Public Administration in Albania

Suela e. SHPUZA

PhD Candidate, s_shpuza79@yahoo.com

Arvit OSJA

arvitosja@gmail.com

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ABSTRACT

The board of the Directory of transport decided to implement Total Quality Management in the beginning of the 2013. In 2013 the Directory decided to implement the Balanced Scorecard (BSC) as a new way of following up the units' results. The BSC implementation has led to that all production units write their follow-up reports according to the perspectives suggested in the BSC framework. The head of the production units are responsible for the dissemination and implementation of the BSC in their own units. The purpose of the thesis is to increase the understanding of the use of the BSC in an organization in the Albania. Two research questions derive from the purpose: (1) How is the BSC designed, implemented and used in the organization? (2) What factors enable or constrain the use of the BSC in the organization? Findings from the case study show that the BSC is used in the annual planning, in reporting measures to superiors and in following up the activities in the transport organization. The BSC is also used in discussions between employees, to disseminate information within and outside the organization, to create orderliness and understanding of the annual activities, and in developmental activities. The findings indicate that the BSC has been adapted to the current conditions of the organization with regard to the existing terminology and organizational structures. The BSC is not primarily used as a strategic management system, but rather as an information system that aims to communicate measurable information within and outside the organization. The autonomy of the department and units enables people to develop their own scorecards without considerable influence from superiors. The emphasis on employees' participation is also identified as an important aspect in making people accept the new concept. In addition, the case shows that change agents play a major role in how the BSC is used in the organization today. Several adaptations have been made to current conditions, that both enable and constrain the use of the BSC in the transport organization.

1. Purpose and Research Questions

The purpose of this study is to increase the understanding of how the Balanced Scorecard is used in an organization in Transport. Understanding the use of the Balanced Scorecard (BSC) involves how the BSC is designed, and being implemented in the organization. One way of describing the distinction between the design, implementation and use dimensions is to view them from David Marr's Levels of Description (Marr 1982). Marr's framework was developed as a way to understand an information-processing system, and focused oncognitive processes that take place inside individuals. The framework encompasses three levels that are important to consider in aninformation system. Firstly, the computational theory of the task that the system performs is taken into account. This level focuses on what the system does, and why itdoes it. Secondly, the choice of representation and the transformation by which theitransformed in the system is thus considered in this level. Thirdly, the details of how the system is physically realized in the organization are considered. In this study, the design of the BSC corresponds to the first level of description and investigates what the system does and why. The implementation of the BSC reflects the second level of description and focuses onhow the BSC was transformed and evolved in the organization. The choices of BSCrepresentations are illuminated through describing how the BSC was built, deployedand disseminated throughout the organization. The study of the implementation reflects a historical aspect of an organization, and is a useful consideration inunderstanding how the BSC is used today. The focus is on how the BSC istransformed from the initial introduction to the fully integration into the organization. The use of the BSC focuses on the physical realization of the system in theorganization and thus represents the third level of description. The use dimensionexplores activities, such as documentation of measurements, reconstruction of strategy, reporting of results and communication within units, dissemination of information, and strategic planning all related to the BSC realization. Thus, the use dimension focuses on how people make use of the BSC in their day-to-day practices. Based on the previous discussion, the first research question in this thesis aims to describe the design, implementation and use of the BSC in the organization: (1) How is the BSC designed, implemented and used in the organization? There are many choices available at each level of description presented by Marr, and the choices made at one level may constrain what will work at other levels (Hutchins 1995). In other words, what the BSC emphasizes, why these choices are made, and how the BSC was transformed and developed in the organization influence how people use the BSC in practice. In order to understand the use of the BSC it is thus important to investigate how the BSC was implemented and designed in the organization. The second research question aims to explain the use of the BSC through investigating factors that encourage and constrain the use of the BSC.(2) What factors enable or constrain the use of the BSC in the organization? information is propagated throught many scholars in the field of Quality Management focus on design and implementation of quality management tools. Most research in this field is devoted to the development of methods for implementation in organizations (see e.g. Ekdahl 1999; Ekros 2000; Kammerlind 2000; Schütte 2002; Arvidsson 2003). Kaplan and Nortonmainly focus on the design of the BSC, what the BSC does and why. They also describe how the BSC is transformed in organizations.

2. The Balanced Scorecard

In 1992 Robert S. Kaplan and David P. Norton introduced the Balanced Scorecard(BSC) in order to provide organizations with the opportunity to expand their financial performance measurements with non-financial performance measurements (Kaplanand Norton 1992). In addition, the BSC is intended to provide executives with acomprehensive framework that translates the company's vision and strategy into acoherent set of performance measurements (Kaplan and Norton 1993; Kaplan andNorton 1996b). Thus, the objectives and measures on a BSC should be derived from the organization's vision and strategy to become a new tool for managing strategy(Kaplan and Norton 2001). The results from the search showed that the main part of the research about the BSC originates from the accounting research area. The findings also confirm the ambiguityon how to define the BSC. For example, Nørreklit (2000) describes the BSC both as astrategic measurement system and a strategic control system, while Lawton (2002) suggests the BSC to be a management decision tool.

2.1. Contents of a BSC

According to Kaplan and Norton (1993), the BSC is designed to support and fulfill the company's overall vision and strategies. Their version of the BSC presented in 1992 contains four different perspectives: the financial, the customer, the internal businessprocess, and the learning and growth perspective. These perspectives represent how the company is viewed by its most important stakeholders – shareholders, management, customers and employees. In recent years several companies have started to use the term focuses instead of perspectives in order to emphasize the company's view on its stakeholders (Olve et al. 1997). Within each perspective, critical success factors are developed. Performance measurements are chosen in orderto support the critical success factors. The factors constitute the bridge between thevision, strategy, perspectives and the performance measurements, and are critical to the company's future success. Finally, the BSC includes action plans, which describehow the company should act to achieve its vision. Anthony and Govindarajan (2001) describe the BSC as a performance measurementsystem, which "fosters a balance among different strategic measures in an effort toachieve goal congruence, thus encouraging employees to act in the organization's bestinterest". A performance measurement system is a system that supports strategyimplementation (Anthony and Govindarajan 2001). In building such a system, management selects measures that best represent the organization's strategy. Thus, thefocus of such a system is the performance measurements, which is reflected in theearly descriptions of the BSC. Kaplan and Norton (1992) primarily discuss theelements of the BSC including perspectives, critical success factors and measures. Although Anthony and Govindarajan (2001) deal with managerial problems that mayoccur when implementing the BSC, the focus is still on the measurements and thedesign of the BSC. They describe the performance measurement system as adashboard with a series of measures, which provide the driver with information about operations of many different processes. The driver, or in this case the manager, receives information from the measures describing both what has happened and what is happening. In addition to their description, Kaplan and Norton (1992) illustrate the scorecard as an airplane cockpit providing the pilot with detailed information about several aspects of the flight.

3. The BSC in Shkodra Directory

In 2013 the directory gave all production units instructions to report their budget according a BSC including five perspectives – the economic perspective, the employee perspective, the customer perspective, the process perspective and theresearch and development perspective. According to the County Director of Finance, the BSC was aiming at enabling follow-ups of the production units' results. As the directory received the directive to start using the BSC in the follow-ups the Quality Coordinator together with the Quality Coordinators from the five departments at the center started designing a scorecard for the organization. At the same time, the Head of directory gave the departments instructions to report the budget for 2013 according to the five perspectives.

3.1. The Design of the BSC

The vision of the center is illustrated in the left of the scorecard: "Shkodra directory - a learning organization for transport quality". The scorecard is divided into five perspectives: (1) the Customer perspective, (2) the Process perspective, (3) the Development/Futureperspective, (4) the Employee perspective and (5) the Production/Economicperspective. Strategic goals and key questions are derived from each perspective. Every strategic goal in the scorecard contains four key questions. The key questions are formulated as critical success factors, which are the most critical issues for an organization's competitiveness and are hence aligned with the vision and strategic objectives (Kaplan and Norton 1996b). Thus, the key questions are aimed for the use of departments in following-up their results. Below the strategic goals and key questions are dealt with in more detail. The strategic objectives, together with critical indicators, help the organization to deploy the over-all vision down to strategically important measurements (Kaplan and Norton, 1993). Hence, in order to analyze the scorecard of the Directory of Shkodra the following discussion emphasizes what the directory focuses on in achieving their vision.

Perspectives	Performance drivers	
Customer	•	Do we reach results of high
perspective		transport quality?
		Do we have right availability?
		Do we have right reception?
		Do we give good information at
		the right moment?
Process	Do we systematically improve our processes?	
perspective	Are our processes documented?	
	Do we compare and learn from leading	
	organizations?	
D 1 1/D	Is the adverse event reporting system working?	20 11 11 11
Development/F	Is the business developing and improving	Do we provide our employee with
uture	systematically towards clear goals?	the right education with the right
perspective	Does the business have the right competence?	quality? Do we have the right research
		level?
Employee	Do the employees have and do they follow	lever:
perspective	individual development plans?	
perspective	Do the employees participate in quality	
	improvement initiatives?	
	Do we have good leadership and colleague	
	support?	
	Do we have goals and action plan for	
	improving the work environment?	
Production/		Do we have right production
Economic		compared to the budget set in the
perspective		latest 4-month period
		and 12-month period?
		Are there any long-term
		agreements and are they
		followed?
		Do we have balanced accounts?
		Do we have high efficiency
		compared to other leading
		organizations?

4. The BSC in Durres Directory

In 2013 the management of the Directory was introduced to the BSC during network meetings organized by the Central Organization in Tirana. Thereby, the management of the department started viewing the BSC as a useful tool in linking the different parts of the department. Although the terminology used in the BSC was at first hard to understand, the management team later on got used to the terminology and understood its implications. At the time of the BSC introduction, the department had recently experienced a turbulent situation partly due to economic cutbacks and restructuring in the Central Organization in Tirana

4.1. The Design of the BSC

The scorecard is presented as an arrow including six steps. These steps are interpreted as an illustration of the building process of the scorecard. The first step concerns the department's vision, which is followed by the strategic choices in Step 2. The third step includes the identification of critical success factors, and the fourth step illustrates the key measurements and the targets for each measurement. Step 5 includes the establishment of an action plan. The sixth step is denoted 'measurement and follow-ups. Steps 2-4 are differentiated into five perspectives, namely (1) the Customer perspective, (2) the Process perspective, (3) the Research &Development perspective, Learning perspective, (4) the Employee perspective, and (5) the Economic perspective.

The department's vision is presented to the left in the scorecard: "For the clients, services with high quality, and for the personnel, Knowledge and Empathy" Within each perspective strategic choices are depicted. The strategic choices are interpreted as the management's long-term,

strategic decisions on how the department an realize the vision. In the third step in the scorecard, critical success factors are identified. These are interpreted as factors important for the long-term survival of thedepartment, and aligned with the strategic choices (Kaplan and Norton 1992). In the Customer perspective, the strategic choice contains the statement that "in theright way, at the right time, optimal and professional service". In addition, "needs should be guiding". The critical success factors are identified as "availability", "professionalism", and good service". In order to reach optimal and professional carewith a focus on customers' needs the employees need to be available, act professional, and good services for the clients. In the Process perspective the strategic choice is depicted as "doing the right thingfrom the beginning" and "to follow the relevant legislation and quality programs". The critical success factors in the process perspective are depicted as "good serviceresults", and "availability". The strategic choice identified as doing the right thing from the beginning and following laws and regulations is achieved through focusing on good quality results and being available for the clients. One issue worth noting is that theindicator "availability" is also used in the customer perspective. This means that being available for the clients is a prioritized area in the department's strategic approach. The strategic choice in the Research & Development, Learning perspective includes the statement" to follow goals and strategy plans" and "continuous development of the activity" concerning these issues. The perspective includes the critical success factors "research, development and learning". In order to follow the goals and strategies and continuously develop the activities, the department has to focus on research, development and learning.

Perspectives	Performance drivers	Strategic outcomes
Customer		Services in three months
perspective		Participation
		Answer to questions
Process perspective		Clients register
		Services in one week.
Research &	Head processes in	
Development,	"Processguide	
Learning	Frocessguide	
perspective	Paralamanthat Caller	
Employee	Employees that follow	
perspective	development plans	
	Employees that participate in	
	developmental work	
	Employees "Level placement"	
Economic		Production
perspective		Services costs out-clients
		Services costs in-clients

5. The BSC in Vlora Directory

At the BSC concept was introduced as a management tool by the management team at the department in 2013. The actual scorecards were introduced in 2013 as a new form of reporting results to the management. According to the employees interviewed, the reactions from the employees were mainly negative due to the new vocabulary and the design of the new report. Despite the resistance to the new concept the BSC gradually gained acceptance from the employees. Several reasons are mentioned. For instance, most of the employees saw the benefits when they started working with the BSC. It is mentioned as an easy way of receiving an understanding and overview of the annual activities. Another aspect mentioned is the department's prior experience with quality improvements. Each unit is expected to develop its own scorecard, which includes a yearly actionplan, measures and goals. In addition, the employees are obliged to fill in project plansfor each action in the scorecard. All the units report their results in three perspectives, namely the customer perspective, process perspective and employee perspective. Action plans, measurements and goalsA first observation of the unit's scorecard is that the document is not called ascorecard, but an action plan. In addition, the strategy at the top of the document isdepicted with a question, which describes the meaning of

the strategy. This is also thecase for the terms 'critical success factors', 'action plan' and 'critical keymeasurements'. For instance the term 'critical success factor' is translated to thequestion "What factors are important for us to reach the goals?"The critical success factors are presented in the first square of the scorecard. These arethe same in all scorecards at the unit level. These units have instead added their own critical success factors. One unit's scorecard does not include any critical success factors in the process perspective. The action plan includes actions that are performed throughout the year. All the units have reported their planned actions in various details. The critical key measurements are reported below the action plan, and illustrate the unit's most important measurements. The goals and results are reported to the left of the measurements. Reviewing all the units' scorecards show that the space in which the measurements and goals should be filled in is either empty or incomplete. This indicates that the employees have difficulties in finding appropriate measurements and goals.

Perspectives	Performance drivers	Operative outcomes
Customer perspective	The team includes two people from	Clients satisfaction survey 2
	different professions	times/year
		Answer to questions
		Clients meeting the same
		person(employee)
		Availability
		Time to decision about service
		Complaints that have been
		attended to
		directory in three months
Process perspective	Reports taken care of Statistical	Clients taken services of in
	waiting time	three months
	Employees that have got an	Clients in directory register
	introduction to the nutrition folder	
	Employees that have learnt to make	
	services orders	
	Updating the transport program	
Employee	Report 1-2 times/week	
perspective	Team conferences	
	Employees participating in training	
	days	
	Reviewing the checklist for new	
	employees	
	Documented responsibility areas	
	Experienced participation	
	Experienced work environment	

6.Summary Of Findings

The purpose of this thesis is to increase the understanding of the use of a BSC in aTransport organization. Findings from the case study show that the BSC in theorganization studied is used primarily in planning, reporting and follow-up activities. In addition, the BSC is used in discussions between employees, to disseminate information throughout and outside the department, to create orderliness and understanding of the annual activities, and developmental activities. Comparing theuse of the BSC with the purposes of introducing the BSC in the organization indicates that the BSC is used to fulfill its original purposes. The findings indicate that the BSCis not primarily used as a strategic management system that aims to increase the Organizationmanagement control of the department and units. The BSC is rather used as aninformation system from which managers receive measurable information about theoperational activities that provide the basis for follow-up, planning and developmental activities. Employees use the information system to report measures and in discussions within the units. In a decentralized organization such as the transport organization studied it may be argued that the scorecards need to be aligned to the over-all strategies in order toensure that the changes made at the unit level are actually leading to improvements at he strategic level. The use of the BSC in a transport organization is thus a dynamic process that prerequisites employees' participation and adaptations to existing terminology

organizational structure, as well as discussions between people tocreate a common framework for interpreting measures and goals in the BSC. Thefindings show that the transport organization studied has potential for developing the BSC to become a strategic management system in the future. The organization mayneed to start the dialogue between people at different organizational levels in order tocreate this common foundation. Possible explanations to the use of the BSC in the organization are identified throughfactors that enable or inhibit the use of the BSC. The factors are grouped intocategories described below. The autonomy of the department and units enables the management of the department and units to develop their own scorecards for their own purposes. The management at the Organization has a flexible attitude towards departments that develop their own scorecards. The department allows the units to develop own scorecards, which are discussed in a yearly meeting between the management and each unit. In order to make people accept the BSC, the management of the departmentemphasizes employees' participation. Employees were involved in the visionformulation, the scorecards were deployed down to the unit level, and the management of the department continuously disseminated information about the concept. However, the case shows that differences in work design and size between units may be ahindrance to involving and motivating all the employees. In addition, peopleinterpreted the information from management of the department as insufficient andtop-down oriented, which triggered initial resistance to the BSC. Due to the identification of a need to change during the time for the introduction of the BSC was accepted throughout the organization. However, as the BSC wasintroduced over different periods of time, this decreased the central directory in Tirana's ability to influence the reporting process through their BSC. Several adaptations have been made in the organization. For instance, the management of the department adapted the terminology in the BSC in order to increase the understanding of the BSC in the units. The management of the Organization and of the department emphasize the need of letting the implementation take time in order to get people used to the concept. The department's scorecard includes a wellknown communication tool to communicate performance measures and time is allocated at the units in order to make people use the BSC. However, this time is seldom used for that purpose. The findings also show that the department's prior experiences with the ServiceQuality Award have influenced the acceptance and use of the BSC. The attention after the award generated a feeling of pride among employees and management that haveenabled the acceptance of similar concepts such as the BSC. The terminology used in the Service Quality Award was also recognized in the BSC, which enabled the use of the BSC.

7. A Critical Review Of The Research Process

The study partly aimed to investigate the implementation of the BSC through aretrospective analysis of peoples' stories of the implementation. During the interviewpeople were asked to remember their first contact with the BSC, which in some caseswere about ten years ago. There is always a problem in conducting retrospective analysis since people tend to reconstruct their memories in order to make them logicalor suitable for themselves or to the researcher. This leads to an impending risk that valuable information from the interviewee never reaches the investigator or that theresearcher never receives the information of how events actually happened. Using a tape recorder during the interviews may also be identified as a hindrance in the research. In order to make the interviewee comfortable with the situation, I presented the purpose of the project, myself and asked if the interviewee had anyquestions before I introduced the tape recorder. Anonymity was also emphasized forthose interviewees it concerned (the employees). Thereafter, I asked if the intervieweeagreed to me using a tape recorder during the interview. In every case the tape recorderwas agreed to. Although there is a risk that the use of the tape recorder has madepeople withhold valuable information during the interviews I experienced that peoplewere open with their perceptions and thoughts. The reduction of the data in coding and analysis always leads to a loss of information. Even printing the taped interview afterwards involves a loss of information. In this case, the printed interviews were reduced into summaries, which were used in codingand analyses. In order to ensure that no important information was lost, the sourceinterview was used during most of the time during the analysis. This enabled theinterpretation of the interviewees' opinion of certain statements. In addition, statements in the summary were referred to the lines in the text of the interview, whichenabled the linkage between the documents. However, one could

not neglect the factthat summarizing the interviews may have been a hindrance in the analysis of theinformation. During the analysis of the interviews a qualitative data program, NVIVO, was used. The program supported the analysis by automatically linking the cores to specificinterviewees and places in the summary. In addition, the program enabled the reconstruction and building of units into a tree structure since units could beautomatically merged into the same document. Thereby, a lot of time was saved in theanalysis stage. However, there are also weaknesses identified in using a data program. When I had identified the units with a code in all the interviews and merged themtogether I could not see the whole tree structure with the complete unit in the summarysince the tree only showed the code. Therefore I needed to print out all the units, readthem and thereafter reconstruct them into a complete tree structure. The program thus prevented me from seeing all the material at once within the tree structure. Although the program saves time for the researcher in the coding stage, it may hinder theidentification of general patterns and differences between peoples' stories.

8. Suggestions For Further Research

As mentioned in the previous section, this thesis partly aims to generate new questionsthat may provide a foundation for future research. I have not proposed any internal priority of the following suggestions since it largely depend on the researcher'sbackground and personal interest. However, after conducted this case study I amespecially interested in studying how the BSC, and maybe other management concepts, evolve over time and how researchers, society and practitioners influenceand form these concepts. Since this thesis focuses on a single case, it may be valuable to study other transportorganizations to receive a profound understanding of the complexity of theimplementation and use of the BSC in transport services. How do other transportorganizations use the BSC? What differences and similarities can identified between transport organizations concerning the use of the BSC? Is it possible to usethe BSC as a strategic management system in transport organizations, and whatbenefits could then be identified? What then is the impact of autonomy in theseorganizations? In addition, it may be interesting to further investigate the effects of using the BSC. This study focuses on peoples' interpretations of the benefits of the BSC. In order tocomplement this picture it may be interesting to investigate the relation between the economic development and/or customer satisfaction and the implementation of the BSC. Is there a positive relation between the implementation of the BSC and economic profitability or customer satisfaction? The BSC has been commonly used in the private sector over the last decade. In orderto learn from private organizations, it may be interesting to conduct comparisons between private and public organizations in how they use the BSC. How will the BSC concept evolve over time? How do practitioners, consultants andresearchers influence its evolution? What about the evolution of other concepts? Whatis the meaning of the concepts? Is it merely a question of terminology or does the concept have a practical value of its own?

REFERENCES

- Anthony, R. N. and V. Govindarajan (2001). Management control systems. Boston, McGraw-Hill.
- Arvidsson, M. (2003). Robust Design Experimentation and Dispersion Effects. Department of Quality Sciences. Göteborg, Chalmers University of Technology: 40.
- Axelsson, J. and B. Bergman (1999). Att bygga och riva pyramider offensivkvalitets- och arbetsutveckling. Ständig förbättring om utveckling av arbete ochkvalitet. T. Nilsson. Solna, Arbetslivsinstitutet: 31-96.
- Beer, M. and N. Nohria (2000). Resolving the Tension between Theories E and O of Change. Breaking the Code of Change. M. Beer and N. Nohria. Boston, Harvard Business School Press.
- Beer, M., R. A. Eisenstat and B. Spector (1990). "Why Change Programs Don't Produce Change." Harvard Business Review: 158-166.

- Carlsson, J. (2000). Logistiskt Förändringsarbete olika ansatser för operativ utveckling. Department of Management and Economics. Linköping, Linköping University: 107.
- Dahlgaard, J. J. and S. M. P. Dahlgaard (2002). TQM Measurements A Metrology for Improvement and Change. IAQ Quality Improvement Handbook. US, International Academy for Quality and ASQ Quality Press.
- Dahlgaard, J. J., K. Kristensen and G. K. Kanji (1998). Fundamentals of Total Quality Management. London, Chapman & Hall.
- Dean, J. W. and D. E. Bowen (1994). "Management theory and total quality: improving research and practice through theory development." Academy of Management Review 19: 392-418.
- Deming, W. E. (1986). Out of the Crisis Quality, Productivity and Competitive position. Cambridge, Cambridge University Press.
- Deming, W. E. (1993). The New Economics for Industry, Government and Education. Massachusetts, MIT Center for Advanced Engineering Study.
- Drucker, P. F. (1955). The Practice of Management. London, The Heinemann Group.Linköping, Linköpings universitet: 196.
- Eklund, J. (2000). "Development work for quality and ergonomics." Applied Ergonomics 31: 641-648.
- Ekros, J.-P. (2000). Quality in Software Development Methods for Fault Prediction and Cause Analysis. Division of Quality Technology and Management. Linköping, Linköpings universitet: 96.
- Giroux, H. and S. Landry (1998). "Schools of Thought In and Against Total Quality." Journal of Managerial Issues 10: 183-203.
- Guba, E. G. and Y. S. Lincoln (1994). Competing Paradigms in Qualitative Research. Handbook of Qualitative Research. N. K. Denzin and Y. S. Lincoln. New York, Sage Publications: 105-117.
- Haanes, K. and B. Lowendahl (1997). The Unit of Activity: Towards an Alternative to the Theories of the Firm. Strategy, Structure and Style. H. Thomas, D. O'Neal and M. Ghertman. Chichester; New York, Wiley.
- Hutchins, E. (1995). Cognition in the Wild. Cambridge, Massachusetts, MIT Press.
- Johanson, U., M. Mårtensson and M. Skoog (2001). "Measuring to understand intangible performance drivers." European Accounting Review 10:3: 1-31.
- Johnsen, Å. (2001). "Balanced scorecard: theoretical perspectives and public management implications." Managerial Auditing Journal: 319-330.
- Juran, J. M. (1951). The Quality Control Handbook. New York, McGraw-Hill.
- Juran, J. M. (1964). Managerial Breakthrough: A New Concept of the Manager's Job. New York, McGraw-Hill.
- Juran, J. M. and F. M. Gryna (1980). Quality planning and analysis. New York,
- Kammerlind, P. (2000). On the Use fo Design of Experiments in Systems Engineering.
- Kaplan, R. S. and D. P. Norton (1993). "Putting the Balanced Scorecard to Work." Harvard Business Review Vol. 39(September-October): 75-85.
- Kaplan, R. S. and D. P. Norton (1996a). "Using the balanced scorecard as a strategic management system." Harvard Business Review Vol. 39(January-February): 75-85.
- Kaplan, R. S. and D. P. Norton (1996b). The Balanced Scorecard: translating strategy into action. Boston, Harvard Business School Press.

- Kaplan, R. S. and D. P. Norton (2001). The Strategy-focused Organization. Boston, Harvard Business School Press.
- Keller, C. and J. D. Keller (1996). Thinking and acting with iron. Understanding practice Perspectives on activity and context. J. Lave and S. Chaiklin. Cambridge, Cambridge University Press: 125-143.
- Kennerley, M. and A. Neely (2002). "A framework of the factors affecting the evolution of performance measurement systems." International journal of operations and production management Vol 22(No. 11): 1222-1245.
- Malmi, T. (2001). "Balanced scorecards in Finnish companies: A research note." Management Accounting Research 12: 207-220.
- Marr, D. (1982). Vision: A Computational Investigation into the Human Representation and Processing of Visual Information. New York, Freeman.
- McGraw-Hill. Kald, M. and F. Nilsson (2000). "Performance Measurement At Nordic Companies." European Management Journal 18: 113-127.
- Mooraj, S., D. Oyon and D. Hostettler (1999). "The Balanced Scorecard: a Necessary Good or an Unnecessary Evil?" European Management Journal 17: 481-491.
- Nørreklit, H. (2000). "The balance on the balanced scorecard a critical analysis of some of its assumptions." Management Accounting Research 11: 65-88.
- Olsson, J. (2002). Factors of Importance for Understanding Successful ImprovementInitiatives in Swedish Health Care. Department of Total Quality Management. Göteborg, Chalmers University of Technology: 98.
- Olve, N.-G., C.-J. Petri, J. Roy and S. Roy (2003). Making Scorecards Actionable. Stockholm, Wiley.
- Otley, D. (1999). "Performance management: a framework for management control system approach." Management Accounting Research 10: 363-382.
- Pettigrew, A. and R. Whipp (1991). Managing change for competitive success. Cambridge, Blackwell.
- Radnor, Z. and B. Lovell (2003). "Success factors for implementation of the balanced scorecard in a NHS multi-agency setting." International Journal of Health Care Quality Assurance 16/2: 99-108.