Working Paper No. 23/03

The balanced scorecard and leadership: The system's (ir)relevance in an uncertain world

by

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SNF Project No. 7872: "Strategisk modellering og styring i Telenor"

THE ECONOMICS OF TELECOMMUNICATIONS

This report is one of a series of papers and reports on telecommunication economics published by the Institute for Research in Economics and Business Administration (SNF) as part of its telecommunication economics program. The main focus of the research program is to study the deregulation process of the telecommunication industry, and the economic and organizational consequences of changes in markets, technology and regulation. Being started in 1992, the program is now in its fourth period ending in 2005/2006. The program is financed by Telenor AS.

INSTITUTE FOR RESEARCH IN ECONOMICS AND BUSINESS ADMINISTRATION BERGEN, JUNE 2003

ISSN 1503-2140

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Abstract

Leadership is about handling change, and the balanced scorecard (BSC) is frequently seen as an important tool for this type of work. This paper studies the way in which the executives of the EDB 4tel corporation worked to handle a multitude of major changes taking place within and outwith their company, and how the BSC formed part of this work. The study demonstrates that the management's change-oriented work centred round their interaction with surrounding players in their effort to form the company's strategy, and that the BSC played no direct part in this process. Nevertheless, the BSC was important on an indirect level in that it established premises for their change-oriented work. This paper argues that while information which is of relevance to the strategy formation effort is embedded in the process of change, it is also a function of this process, and that consequently, the BSC is best utilized to provide information about the results of work on change, i.e. the current patterns of organizational action.

1. Introduction

How does the BSC work as a leadership tool? This question is central to the current development of the BSC, due to two intertwined trends. Firstly, leadership is about coping with change, and in recent decades the rate of change has been increasing due to technological progress, changing customer needs, fast flows of capital, deregulation, intensified international competition and a long list of other factors, which has meant that the need for leadership has escalated (Kotter, 1990). Secondly, at pace with the growing importance of leadership, it has become increasingly important to possess tools for supporting leaders work, and the BSC founders have increasingly been promoting the BSC as the very tool leaders need in their change-oriented work (Kaplan and Norton, 1993, 1996, 2001a).

The founders of the BSC are unambiguous about their system's significance: "Leaders who want to create dramatic change in their organization will find the balanced scorecard a highly effective management tool to motivate and accomplish the desired change" (Kaplan and Norton, 2001a:333). Kaplan and Norton's idea is that leaders can transform organizations by defining visions and strategies which describe a future organizational state, and by visualizing and communicating these visions and strategies through a top-to-bottom system of organizational measurement. Such measurement systems can be used to co-ordinate and motivate efforts on all hierarchical levels towards a common focal point, and thus drive the whole

organization towards the changes which are necessary for future organizational success (Kaplan and Norton, 2001a).

Kaplan and Norton argue that the BSC can be used not only to visualize and implement the strategic intentions of leaders, but to form the emerging strategies as well (Kaplan and Norton, 2001a, 2001c). The BSC should measure the strategically decisive factors, and leaders will, by interacting with the system, receive information on an ongoing basis about uncertain and emerging factors which may undermine the current strategy of an organization. This gives them an opportunity to discuss and shape the patterns as they emerge, and to re-formulate the current strategy at pace with events (Simons, 1995, Kaplan and Norton, 2001a, Schreyögg and Steinmann, 1987, Vaivio, 1999).

The link between leadership and the BSC, in terms of the leadership's moulding and implementation of strategies, is extensively described in Kaplan and Norton's writings. They emphasise that the building blocks of change-oriented BSCs are the conventional perspectives of finance, customer, internal business process, and learning/growth. Among other authors, the trend is to argue that change-oriented BSCs should constitute comprehensive systems which reflect every strategically relevant factor within and outwith a corporation. Not only should they incorporate the conventional perspectives, they should also measure dynamic factors such as competitors, technological developments, networks, and factors capable of generating external shock (Nørreklit, 2000, Kloot, 1997, Eccles, 2001).

Even though clear views have evidently been formed with respect to the link between leadership and the BSC, the relevant empirical material available is only limited (Kaplan and Norton, 2001b, Epstein and Manzoni, 2002). This paper studies the connection between change-oriented managerial work and the BSC in the EDB 4tel corporation. The paper describes the management's work to handle the significant changes which took place within and outwith 4tel over a three-year period, and how the BSC formed part of this work. The study is primarily based on open-ended interviews with 21 of the company's managers and controllers. These interviews were conducted in the period May 1999 - December 2000, and consequently cover the peak period of IT hype. Archive material, web pages, newspapers and observations complemented the interviews as important data sources.

The study shows that at the centre of 4tel's leadership was the managers' work to form emerging strategies. The BSC was not employed directly as part of this process, but functioned as a tool for delimiting, arranging and structuring the results of the strategy formation. In this way, the system constituted a useful premise and platform for future work to form strategies, and was thus of indirect use to the managers' work of strategy formation. The study suggests that BSCs are outperformed by interactive human beings when it comes to forming strategies; that dynamic factors such as competitors, networks and factors capable of generating external shock, are embedded in such interactions; and that BSCs should be restricted to measuring conventional perspectives which reflect current organizational patterns.

2. Leadership and the BSC

This paper focuses on the link between leadership and the BSC. Below is a summary of the arguments put forward in literature with respect to the ways in which leaders may make use of BSC systems as part of their change-oriented work, followed by a discussion on the nature of the BSC systems employed in this process.

The leadership processes of the BSC

The literature on leadership describes how leaders may generate change by developing a vision which determines the company's future direction, by communicating this vision, and by inspiring and motivating activities based on this vision (Kotter, 1990, Brown and Eisenhardt, 1995, Larwood et al., 1995). Kaplan and Norton argue that the BSC constitutes the natural core of this process: the system communicates a company's visions and strategies by setting specific measures for all parts of the organization. Also, the system works as a tool for setting goals, determining compensations, allocating resources, planning, budgeting, extracting strategic feedback, and learning (Malmi, 2001), and may therefore serve as a platform for managers' effort to inspire and motivate their subordinates (Kaplan and Norton, 2001a).

Leadership may be more concerned with the shaping of emerging strategies than with the implementation of the management's strategic visions and ideas (Mintzberg, 1994). Simons' studies and thoughts (1987, 1990, 1991, 1994), which were adopted by the founders of the BSC (Kaplan and Norton, 2001a), suggest that managers may direct their companies' change-oriented activities through interactive control. His studies showed that managers were continually involved in strategic dialogues, discussing strategic plans, assumptions and underpinnings. During these dialogues, managers were making interactive use of selected control systems, thus turning the attention and energy of the organization towards its most important strategic uncertainties. The consequential organizational exploration generated new insight, ideas and dialogue throughout the organization, and this process shaped the managers' strategic dialogue and control.

Simons' emphasis on managerial dialogue as a tool for directing organizational activities is a trend of the times (Jönsson, 1998, De Haas and Kleingeld, 1999, Langfield-Smith, 1997, Kloot, 1997). However, it is not a foregone conclusion that systems like BSC mediate between managerial dialogue and organizational exploration. Many argue that direct dialogue between managers and other members of the organization is the best way to foster change-oriented organizational activities (Amabile, 1996, Kotter, 1990), and the quality of these talks may well differ from the quality of Simons' system-based dialogues. For example, one of the most prominent

studies of managerial processes (Mintzberg, 1973, see also Carlson, 1951) describes the managerial dialogue as an independent activity utilized by managers in order to respond to and initiate an overwhelming and continuous flow of processes and information. By taking part in current, specific and well-defined activities, managers kept continually updated on this flow and their work was characterized by brevity, variety and fragmentation. In comparison, Simons sees the managerial dialogue as a more structured device in that the talks serve as input or extensions to relatively well-structured processes and systems.

The BSC system of leadership

Which perspectives and dimensions are important to measure in order to provide support for leaders' work to handle change? Kloot (1997) argues that change-oriented tools, in addition to current internal information on costs and revenues, should incorporate non-financial and prospective data, and that they should measure dimensions such as customers, competitors, and governments. This line of argument is in line with Nørreklit's stance (2000). She criticizes the original version of the BSC, which incorporates the financial, customer, internal business process, and learning and growth perspectives, arguing that this approach fails to monitor technological developments, competition and networks, and factors that may generate external shock, and disapproves of its failure to include the perspectives of suppliers and public authorities.

In the literature there is a tendency for the BSC to develop into an all-inclusive tool for integrating and measuring every strategically relevant dimension (Eccles, 2001, Nørreklit, 2000, Ittner and Larcker, 2001). BSC systems are thus in the process of taking on a character which differs from the one normally associated with performance measurement systems, which have traditionally been characterized by order, clarity, consistency and rationality. The introduction of competitors, technological development, networks and potential external shock-generating factors means that the BSC is in the process of acquiring the qualities which Hedberg and Jönsson (1978) argued, more than 20 years ago, that change-oriented systems should have. They argued that such systems should be characterized by "....ambiguity, inconsistency, multiple perspectives, and impermanency...." (p. 60), thus enabling them to contribute to the unlearning of obsolete knowledge and behaviours (see also Woodman et al., 1993, Hedberg et al., 1976).

There is reason to expect that the way in which managers make use of the BSC in their change-oriented work will determine the strategic relevance of the system and its various dimensions (Neely, 1998, Simons, 1995). There is every possibility that change-oriented work is conducted through direct talks between managers and other players (Amabile, 1996, Kotter, 1990), and that BSC plays no part in this process. It is also possible that managers use the BSC as an interactive control tool in their work to form strategies. According to Simons, managers' discussions of strategic plans, assumptions and underpinnings are at the centre of this control process. The

discussions may vary from having no focus, to being focused on the premises on which their plans are based, or on milestones, and the nature of the focus will determine the nature of the requirements in terms of system design and content (Schreyögg and Steinmann, 1987). A further possibility is that BSC may be used to implement the managers' visions. In such case, the nature of the vision will determine the nature of the information required: the vision may well describe future patterns, far removed from current action patterns, but may alternatively reflect today's reality (Kotter, 1990, Larwood et al., 1995).

This paper infers that knowledge of how leaders work with change is essential for understanding what qualities BSCs should have to support this work. It is founded on the premise that the way leaders handle change – in terms of which processes they attach importance to (direct interaction, interactive control, or the implementation of the leaders' strategic intensions), and the quality of these processes (e.g. what is the focus of the interactive control?) – are decisive to which qualities change-oriented BSCs should have. This means that certain qualities of BSCs, such as the degree to which they constitute comprehensive systems which incorporate dynamic environmental factors, are neither good nor bad per se. In order to identify BSCs which are useful to change-oriented work, it is necessary to understand what leaders do, and how they make use of the BSC. This is the topic of this paper.

3. Methodology

This paper is about leadership and BSCs, both of which are multi-dimensional concepts with a capacity to describe a wide array of empirical phenomena about which only limited knowledge is available. A clear-cut a priori definition of leadership and BSC may thus cause a failure to capture the most important aspects of the empirical content of these concepts (cf. Mintzberg, 1994, Langfield-Smith, 1997, Dent, 1990). This study thus follows the advice of Eisenhardt (1989), who argues that researchers who try to build theory from case studies should restrict the focus and scope of their study (with reference to existing literature), while trying not to consider or get entangled in specific variables, relationships and theories at an early stage.

The open and probing approach of this study does not imply that it captures all aspects of leadership and BSCs. Human beings invariably construct their representations of reality by means of language (in a wide sense), and all use of language involves systematic exclusion, inclusion and framing of parts of reality (Derrida, 1982, Kuhn, 1970, Kahneman, 1986). Consequently, omitted variables and perspectives are inherent in all research projects and papers, and the task facing the researcher is not to capture all aspects of reality, but to identify and use the perspectives and dimensions which are required in order to describe and make sense of a certain phenomenon.

The enacted dimensions of reality are a result of choices made by researchers regarding factors such as overall design, perspective, and methods for collecting and

interpreting data (Pentland, 1999, Starbuck, 1994). This study is based on a data-driven approach, and describes how the BSC forms part of the managers' work through the narratives they impart. These narratives embrace the perspectives, concepts, and language of the agents involved in leadership and BSCs, and they reflect how the managers made sense of this phenomenon. Using Bal's (1985) language, this means that the actors and focalisors are managers working to cope with change, and the resulting story was extended through the interpretation that emerged in dialogue between the managers and the researcher during the research project.

The interviews were conducted over the period May 1999 - December 2000. A total of 21 people were interviewed, of whom 17 were managers and 4 were working as controllers or held similar positions within different company divisions. The entire senior management (the President, the Vice President, plus the heads of the various divisions, 8 in total) were interviewed, and in addition, 9 managers from the next managerial level were interviewed. Some of the interviewees were interviewed more than once, and e-mails and telephone calls were used to wind up loose ends and obtain additional information as necessary. Each interview lasted for 1.5 - 4 hours. In total, more than 30 meetings were held between the researcher and representatives of the company. Interviews with controllers were primarily intended to obtain factual information about the company and were conducted prior to the manager interviews. The manager interviews were open-ended, and even if the themes varied according to the interviewee's position and background, all questions were asked to provide insight into the ways in which the managers worked to handle strategic change, and how the BSC and other information systems formed part of this work.

In line with Spradley (1979), various types of field notes were used. During the interviews, the interviewer concentrated on writing condensed accounts of the managers' narratives, endeavouring to use their own language. Immediately after each interview, an expanded account was written up, elaborating on the topics in the condensed accounts. In addition, provisional records of analyses and interpretations were kept on an ongoing basis. Due to the sensitive nature of the questions, no tape recorder was used.

In parallel with the interviews, data was gathered from a number of other sources of evidence, covering the period 1998-2000 (see Appendix for further details). The company's archives and documents were examined, and special attention was given to minutes of management meetings, strategy development and deployment documents, and to all control and evaluation documentation. The relevant annual reports were also studied. In addition, the group's web page, two traditional newspapers and one Internet-based newspaper were monitored, and in June 2000 one week was spent studying the business from within - observing activities, taking part in the natter, having lunch with the staff, and spending time in the corporate library.

The content of this paper gradually emerged through the "between methods" triangulation (Denzin, 1978:302) of the managers' narratives and data from other sources of evidence, and the application of different perspectives. At the start of the

project, it was considered important to acquire as much data as possible about the company; nevertheless the interviews generated a need for further data and necessitated the use of other perspectives. The data collection process consequently turned into an iterative process, switching between interviews, reviews of other internal and external sources of evidence, and analytical deliberations intended to make sense of the collected data. In the last part of the project (end of 2000), a provisional version of the project end report was presented to the company's Financial Director and Quality Manager, and the ensuing discussion resulted in a number of changes to be incorporated in the report. The updated version was then submitted and presented to the senior management, provoking a lively debate which indicated broad consensus that the report reflected the managers' experiences from the period 1998-2000.

The final outcome of the study is a description of leadership and the BSC within one particular company, with the inevitable accompanying risk of idiosyncratic findings and a need to check the external validity. However, the validity of the concepts used in the study was heightened by the fact that the researcher was scrutinized by "reality" just as much as vice versa, and consequently depended on using concepts which were meaningful in the studied context (Czarniawska, 1998). Also, the triangulation of multiple data sources means that the concepts are based on a rich array of methods rather than being a product of the chosen method (Webb et al., 1966, Jick, 1979). The reliability of the study was enhanced by field notes which enable us to track and review what happened in the field, and by the ample access to other sources of evidence (Appendix).

4. The context

To examine how managers handle change, and how the BSC forms part of this work, we need to study a company and context in transformation. The company studied in this paper, EDB 4tel, was a corporation in the midst of radical strategic change in continually shifting settings. This is illustrated in figure 1, which summarizes some important strategic events and processes which took place over the three-year study period.

The company's environment was characterized by the fact that the telecom industry was being internationalized, while digitalisation and the use of IP (Internet Protocols) technologies meant that the telecom, IT and media industries were about to converge. These developments gave rise to high expectations of future growth and profitability, and ample access to capital fuelled the changes and restructuring of the environment.

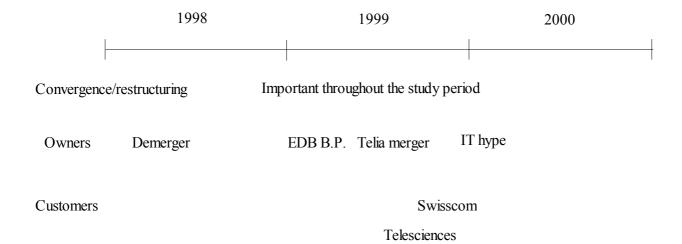


Figure 1 Important strategic events and processes in the course of the study period.

These major strategic changes in 4tel's environment meant that the company was required to transform its business: it was made a separate subsidiary after demerging from the dominant Norwegian telecom company, Telenor, in May 1998. In 1999 a new listed company, EDB Business Partner, was established through a merger of 4tel, four other IT units within Telenor, and the listed company EDB ASA. Following the merger, EDB Business Partner had a staff of more than 2,000 employees and a turnover in excess of NOK 3 bn. 4tel was one of the group's subsidiaries.

The demerger from Telenor, and the ensuing merger with EDB ASA, meant that the company was internationalized and moved away from being a sole supplier of software to Telenor to becoming an international supplier of sophisticated software to a range of telecommunication companies. During the late part of the study period, the company employed approximately 900 staff¹, and in addition to their activities in Norway, they were running businesses in Philadelphia, Denver and San Diego in the US, and in Dublin and Paris. The organization comprised 7 divisions, of which Sales and Marketing, and Finance and Administration, concentrated exclusively on support activities (figure 2).

In 1999 4tel's largest owner and customer, Telenor, negotiated a merger agreement with the most dominant telecoms player in Sweden, Telia. This merger would have been the biggest ever in Norway, and would have resulted in a company with more than 50,000 employees and a turnover of approx. NOK 80 bn². For 4tel, the implications of the merger would have been substantial, and some of them were

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¹ At the start of the study period the staff was just over 600, a considerable proportion of which were temporary (the proportion hovered round 20% throughout the study period).

² Based on the figures published in the respective corporations' annual reports for 1999.

incorporated in the company's strategic plans in the course of 1999. When the agreement negotiated between Telenor and Telia was cancelled at the end of 1999, this came as a shock and parts of 4tel's strategy had to be revised.

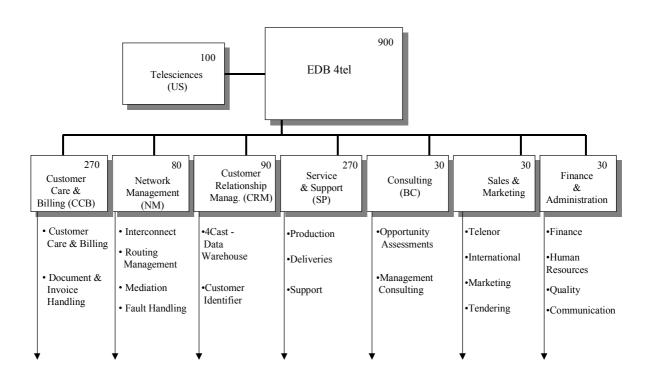


Figure 2 4tel's organization and products³.

The stock market was highly volatile throughout the three-year study period (figure 3). From the beginning of June 1999 till the peak was reached in March 2000, EDB Business Partner's share price increased by more than six times its base value, only to fall back to approximately half its all-time high⁴. The most boisterous fluctuations took place in the beginning of 2000, when IT shares were hyped (cf. the ITX graph in

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³ The figures to the top right of every box are staff number estimates. These include permanent as well as temporary staff. Some of the most important products and services are listed under each division. During the study period, Telesciences never constituted a separate division.

⁴ In the beginning of June 1999 the share price was NOK 31.3, while at its peak in March 2000, it was NOK 195.72. This is shown indirectly in the chart, as it gives standardized values that were calculated by dividing share prices at different points of time (multiplied by 100) by the share price at the beginning of the period. Similarly, the index values were standardised by dividing index values at different points of time (multiplied by 100) by the index values at the beginning of the period.

figure 3) and willing investors were virtually queuing up. According to analysts, the volatile situation was to a large extent caused by the fluctuating value of 4tel. During the period of IT hype at the beginning of 2000, 4tel's estimated value peaked at NOK 10 bn, yet immediately before and after the hype, its market value would normally hover between NOK 2.5 and NOK 4 bn. This development provided an opportunity to raise capital for the acquisition of competitors, competence or customers (for examples, see Karvè, 2000), and thus radically change the competitive setting.

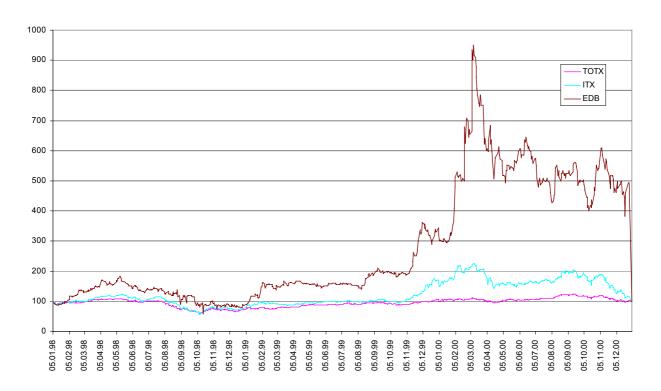


Figure 3 The development of the total index (TOTX), the IT index (ITX) and EDB Business Partner ASA between 1998 and 2000 (standardized).

4tel's customers (of which Swisscom is a prime international example) were decisive to the company's strategic position throughout the study period. Potential customers were organizations with complex business processes and technologies, and getting properly to grips with these was both time-consuming and costly. 4tel's customers therefore influenced the company's build-up of expertise, which in turn determined what contracts the company was in a position to take on. This situation was reinforced by the fact that 4tel's track record had a decisive influence on the company's chances of being awarded future contracts. The company delivered IT systems which were critical to the customers' business operations, and if 4tel had already successfully developed and delivered similar systems, this would boost the

confidence of potential customers that 4tel would have a stable delivery record over time, and that they would be able to solve any problems that might arise⁵.

5. Leadership in EDB 4tel

4tel's main challenge was to attract customers who would generate the desired competency and provide references within segments in which the company wanted to be in the future. This was explicitly stated in the company's business plan for 1999 - 2003:

"The development of 4tel will be made in two main stages: 1) by taking existing competence and products into new markets to build the customer base, and 2) by building on knowledge from the customer base and develop and enhance products continuously".

This strategy meant that 4tel concentrated on using products rooted in Telenor as leverage for attracting new customers, making use of these as a source of learning and for developing new products and customers:

"By having more customers, EDB 4tel will be able to learn and gain new knowledge and experience, which again will enable us to improve our current products and to develop new and better products. This will result in more satisfied customers and references, which is important in our market to get more new customers. This is a circle that will polish 4tel as an uncut diamond."

4tel tackled the challenge of attracting new customers in a number of ways. One approach was to buy customers. In 1999, 4tel bought the US company Telesciences for NOK 106 million. Network management constituted Telesciences' main activity, but even if the company's expertise to a certain extent complemented 4tel's existing competency within this area, the most important aspect of the acquisition was to gain access to the company's customers and market competence.

Another approach was to target traditional sales initiatives at new customers (e.g. Swisscom was acquired in this way). In 4tel, sales efforts and price levels were dictated not only by short-term profitability, but by the contract's strategic importance. The company typically gave a high priority and low prices to assignments which could open up markets with great future potential (e.g. IP), and which provided

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⁵ An example may help to illustrate the importance of this point. In 1999 Telenor delivered 18.7 bn minutes over 3.1 million telephone lines (wired networks). Customer Care and Billing provide subscribers with the services they order, the system monitor these services, it records the services and volumes consumed by each subscriber, and it issues invoices. This sort of volume and complexity means that even relatively minor errors would have far-reaching consequences for the telecom companies' systems and their customers' confidence in them.

an opportunity to build up expertise in areas where there was or would be a high demand.

One particular challenge for 4tel, was that the most important competition parameters often turned out not to be traditional dimensions such as price, quality and time. The Head of Sales and Marketing put it this way:

"The properties of the product, such as functionality and 4tel's lead time, are often of little significance. All suppliers who take part in the negotiations obviously say that they can meet the customer's requirements, and if a certain supplier's product does not already have the functionality the customer is asking for, he will simply reply that this can be developed".

The introductory sale was therefore often reduced to a question of credibility and legitimacy, and the challenge was to establish these sentiments. This task was closely connected with the company's relations and networks. The Vice President of 4tel described it like this:

"Primarily, our customers want a supplier they are confident will be able to solve their problems. This really means that what we sell, is confidence. To a great extent, confidence is generated and made visible through references from previous contracts and collaborating partners".

The networks' role in providing opportunities and restrictions was an ever-recurring theme in my conversations with the 4tel managers, constantly reappearing under different headings:

"One of our most important challenges is to attract more customers and to accelerate our growth. To a certain extent, our strong affiliation with Telenor has an adverse effect in this respect " (President).

"When we work as subcontractors to major projects, the main contractor is often responsible for similar projects for other customers. In this way the main contractor can work as an entry ticket to many other projects" (Head of CRM).

"It's easy to get into either vicious or good circles. References and networks trigger new orders, which in turn provides references and partners" (Vice President).

Because the networks influenced ownership and takeovers as well as access to customers and partners, thus moulding the managers' freedom of action, they emerged as a decisive source of realized strategies in 4tel.

The strategically decisive networks, which 4tel's managers termed "clubs", were complex and dynamic, with varying participants and roles. Telia provides a good

example. This company started out as Telenor's competitor, but became a close partner through the 1999 merger agreement. Once the merger was cancelled, this situation was reversed, and subsequently Telia took over Telenor's most important competitor on mobile networks in Norway (Netcom). Also, the company entered into a partnering agreement with one of Telenor's largest competitors on wired networks (Enitel).

The challenge facing 4tel's managers was to interact with these complex and dynamic networks, trying to identify, understand, influence and adapt to forces and players important to the future competitive position. The nature of this work was clearly social:

"Acquiring strategically valuable information is largely a social skill. In my daily interaction with customers, partners, employees, owners and others, I develop a gut feeling for what is strategically important. I take these feelings and intuitive ideas further and test them through my internal and external networks" (the President, describing how strategies are formed).

"An important part of our strategic work is all about being curious as to what is happening, about networking, and about mediating information" (Head of CCB).

The managers' understanding of the contextual patterns emerged from their daily social interaction. They had to be constantly prepared to utilize this knowledge in order to initiate and deal with unpredictable and swift changes which were decisive to the company's future competitive position:

"It is important to understand reality, so that you're prepared to seize the opportunity when it arises. Our perception of reality emerges from working with our history, and by engaging in a continuous dialogue with customers, competitors and staff" (Head of NM).

"Our customers, competitors, technologies etc. are in continual change, and opportunities constantly arise which need to be exploited " (Head of SP).

The acquisition of Telesciences in 1999 serves as a good illustration of the managers' strategic work. The Head of NM gave this comment on how the acquisition process started:

"We were negotiating with Alcatel, and their sales representative was so good, I hired him myself. It turned out that one of his mates was working for a company called Telesciences, and this is how we first learnt about this company".

The Head of NM was actively involved with the company's operative processes, thus gaining access to players and networks with knowledge of Telesciences. At the same

time, she was on constant lookout for strategic opportunities, and in this particular instance, her talks with other operative players were progressed through talks with 4tel's president, who initiated the process which was brought to its conclusion through the acquisition of Telesciences. Consequently, the acquisition of Telesciences resulted from the strategic opportunities that emerged through social processes inherent to the managers' operative work, and from the fact that both the Head of NM and the President were constantly alert to, and willing to, exploit such opportunities.

The IT hype experienced over the spring of 2000 is another example which provides insight into managers' strategic work. For a few months, investors were willing to pay extremely high prices for IT stock. This brief spell thus provided excellent opportunities for gaining access to capital for funding the purchase of strategically important factors such as expertise, customers, technology and partners, thereby restructuring the company and its context in the process. A number of 4tel's competitors were on the alert and exploited these opportunities (see Karvè, 2000, for some examples), and 4tel's leaders were deeply engrossed in discussions about their relationship with EDB Business Partner and the capital market throughout this period.

6. The BSC

The managers' main challenge as they went about their strategic work was to continually interact with players such as owners, employees, partners and customers, and to be sufficiently vigilant to realize the strategic potentials that presented themselves through these networks. The company's realized strategy thus emerged from the interaction between its leaders and other players, and from the leaders' ability and willingness to exploit the strategic opportunities arising from the networks. The continual process played out between the managers and potential customers makes a good example:

"It is extremely important to get access to customers, and to further develop the customer relations. As soon as the relationships have become robust, we move the company's infrastructure accordingly" (Head of CCB).

Customer relations provided insight into the company's options. If these displayed good potentials and the foundations were sound, the company's infrastructure would be altered so as to be targeted at the options. This could come about through the establishment of a new project (e.g. the Swisscom contract) or a new business unit (e.g. Telesciences) within the company. In this way, the company's action patterns were being shaped through a continual process of customer interaction and associated managerial initiatives.

The managers' work to create strategic change was primarily based on relationships; systems barely came into the process. The company's BSC was a comprehensive system for defining visions, strategic objectives, KSFs, measures, and vital activities

(see figure 4) for the organization's various business units, and it was seen by managers to be the result of strategic change more than the cause of it:

"The managers' role is to mould the activities that BEST4tel tries to depict. We do this by living with the players around us, not by living with the system. Through this interaction, good managers develop a holistic understanding of the company and its environment. Through BEST4tel we try to express this understanding in an idealized picture. Our staff may use this picture to understand 4tel's strategy and how they may contribute" (Head of CCB).

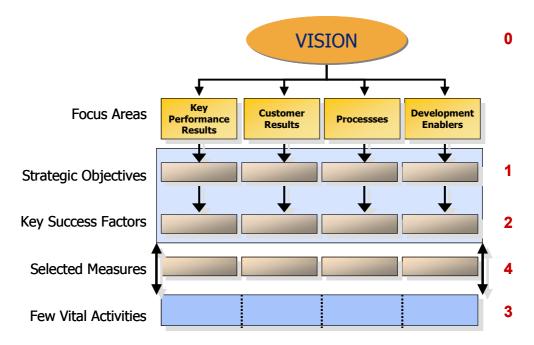


Figure 4 The structure of BEST4tel.

The importance of relationships and personal dialouges with respect to strategic change, was underlined by virtually every manager interviewed, while the BSC and the company's conventional and financially oriented control system, Agresso, were both considered systems for other purposes than generating change:

"Systems like BEST4tel and Agresso are primarily suited for planning and evaluating activities. If I need to bring about changes, I communicate directly, usually informally, through e-mails or meetings" (intermediate CCB manager).

"When you try to make an introductory sale, enthusiasm and dialogue are essential ingredients, and you need to ensure that your message is continually adjusted to the response. The system-generated reports are not

capable of doing this, and you don't walk around with them on you" (Vice President).

The company's customers, suppliers, partners, technologies and other strategically important factors emerged from the managers' relations-based work to cope with change. As these factors were about to be realized, they were delimited and arranged, and thus structured, with the aid of BEST4tel and Agresso. For example, 4tel's managers worked hard to acquire Swisscom and Telesciences, and the moment Swisscom was about to becoming a customer, and Telesciences was about to becoming part of 4tel, they were introduced to the company's control system as separate control objects. This meant that two uncertain strategic options were converted into clearly defined responsible centres, and they were incorporated in the hierarchical structures of which the control systems consisted.

The hierarchical structures of the control systems defined the formal relationships between various players within 4tel, such as who should report to which managers, as well as the format and topics for formal reports. Delimiting and arranging 4tel's employees and information flows in this way, helped structure the flood of contextual patterns and information to which managers were exposed. For instance, the Head of NM spent much time and energy on introducing a product-oriented organizational hierarchy and new reporting routines in her division, and she described the consequences in this way:

"Each employee is currently part of a group which, to a greater extent than before, shares common interests. The needs, energy and competency of every employee within each group are more focused and forceful, and can be included in discussions and negotiations about future product portfolios, markets, resource distribution, and operative issues".

The control systems gave a framework which fuelled the managers' work on change, and made up an important foundation for the managers' relationship-based work to create strategic change. The control systems were thus input for the strategic changes that emanated from the managers' interaction with other players, while at the same time emerging as the outcome of the same process. Expectedly, the management considered the systems to be useful tools:

"The development of strategy and control systems is an important part of my job. They constitute an important framework and structure for the work carried out by my staff, and the structure gives me an opportunity to interact with the whole organization" (President).

7. Discussion

This paper is based on an assumption that in order to understand how BSCs work as a leadership tool, it is necessary to understand how leaders work with change. The characteristics of the change-oriented work within 4tel, and the links to the BSC, indicate that Mintzberg's (1973) old argument, that we are inadequately concerned with what leaders really do, is still valid.

Simons focuses on the link between managerial dialogues and control systems. He argues that managerial dialogue is an important tool for turning the organization's attention towards the strategically most important uncertainties through interactive use of selected control systems. Simons consequently assumes that leaders ex ante know what uncertainties and change-related tasks carry most strategic importance, and that they are able to direct the change-oriented tasks through interactive control (Gray, 1990). At 4tel, the strategic importance and constituents of factors such as technology, industries, customers, owner constellations etc. often changed overnight, and the leaders' most important challenge was to identify and prioritize the strategic uncertainties. Simons thus seems to miss the most important challenge which faces leaders working in an uncertain context, and the study of 4tel suggests that Simons' ideas have limited validity as the level of uncertainty increases.

Also, Simons argues that the leaders' interaction with control systems will be decisive with respect to which changes emerge within the corporation. The study of 4tel indicates that direct human interaction outperforms control systems in that respect, and that changes are embedded in such interaction: at 4tel, change was a continual process in which a number of different players within the industry took part, and events and information inherent in the process were never important or unimportant per se – they were shaped through the very process. For example, the acquisition of Telesciences was initiated at an every-day meeting with a customer, during which the 4tel Manager's proactive encounter with a skilful negotiator later turned out to end up with a strategically important acquisition. The strategic changes were, in other words, a product of interaction between the different players, a function of the process itself.

At 4tel, leadership and change were primarily about human interaction, while the BSC was about the outcome of the change-related work - about the system: From the managers' interactive work to handle their changing context, emerged the company's customers, suppliers, partners, technologies and other important factors, and the BSC was used to delimit and arrange factors that were in the process of being realized (cf. Swisscom and Telesciences). The system structured the sizeable flow of players and information with which the management had to interact continuously, and in this way the system fuelled and directed the managers' work to cope with change. Consequently, the system was by no means irrelevant to leadership at 4tel; its relevance however, was found in its capacity to visualize the outcomes of earlier change-related work, and the fact that this constituted an important premise for future change-oriented work.

This indirect link between leadership and the BSC at 4tel illustrates the importance of understanding what leaders do if we are to design useful BSC-systems for executives' change-oriented work. At 4tel, direct human interaction outperformed the BSC with respect to the change-oriented work, a fact which was reflected in the BSC-system: It included none of the dynamic perspectives or measurements which are often related to leadership (e.g. competitors, technological development, networks, and factors capable of generating external shock). Rather, the system was a tool which visualized the patterns emerging from earlier change-related work, and this was indirectly useful to the leaders' work to handle change.

The conclusion – that the BSC played no direct part in the leaders' change-oriented work, but was useful in that it visualized the outcomes - is of consequence to the choice of which elements to include as parts of such systems. If we consider it a fact that direct human interaction outperforms the BSC as a tool for handling and generating change, the challenge is no longer to develop visions and their corresponding measurements ahead of current organizational action, and to focus and motivate change-oriented work towards a vision of future organizational patterns. Rather, the challenge will be to develop systems which reflect the outcomes of the leaders' change-related work, i.e. the current organizational action, to ensure that leaders are continually informed of the premises for future change-oriented work. In practice, this means that factors which are inherent in the leaders' dynamic work to handle change, e.g. competitors, networks, and factors capable of generating external shock, are defined as leader responsibilities and excluded from the BSC, whereas changes which are in the process of being realized, and which consequently will constitute a premise for future change-related work, are incorporated in the BSC.

The findings at 4tel indicate that the BSC has no comparative advantage with respect to change-oriented work. The managers' primary challenge was to identify decisive factors in a reality crowded with innumerable factors in constant change, all of which were potentially strategically important. They had to keep an open mind throughout this strategic surveillance, taking in the full range of events within and outwith the corporation. Strategically interesting factors could not be defined and structured ex ante; they emerged through interactive processes between different players. Information which might be useful to the leaders' change-related work could thus never be inferred from pre-determined visions and strategies; the information had to be identified en-route, during the process. This means that the BSC, with its visions, strategies, and hierarchical structures of measurements, does not appear to be a particularly appropriate tool.

The connection between leaders' work to handle change, and the BSC, is probably an idiosyncratic phenomenon. The findings from 4tel constitute a basis for further work to research this connection. The study provides an insight into the nature of this connection within an organization which was exposed to considerable levels of uncertainty and change, and it may well be that the conclusion – that the BSC is irrelevant as a direct tool for change-oriented work, but relevant at an indirect level –

is valid only in an uncertain context. The (ir)relevance of BSC is contingent not only on leaders' use of the system, but on the context in which it is set to work. Future research should aim to move away from the presumption that the BSC is a universal management tool capable of meeting most needs in most organizations, and to increase our insight into the contingencies and appropriateness of a system of considerable potential.

Unobtrusive data

Key documents from the company's archives

Minutes of management meetings. 4tel was set up as an independent company in May 1998, and from this point until mid 1999, managers met once a week. Minutes were kept of all meetings. In the second half of 1999 and throughout 2000 management meetings were held on a monthly basis, and minutes were kept of all meetings. Weekly status meetings were also held in this period (some in the form of telephone conferences), some of which were minuted in the second half of 1999, none of which were minuted in 2000.

Strategy development documents. Number of participants, procedures, and topics varied from year to year over the three-year period, and this was reflected in the documentation. The agendas for the strategy development meetings constituted the most significant documentation, with the summaries of results and conclusions. These summaries were often recorded in the form of key words for use at the meetings. In addition, there were presentation transparencies, strategic analyses, summaries of internal evaluations and surveys (e.g. EFQM surveys and interviews with the senior management conducted in preparation for the meetings), and some other documentation. The strategy that was developed, was described in "Business plan for EDB 4tel 1999-2003", which was studied with the corresponding document for the 2000-2003 period.

Strategy deployment material. The deployment process was headed by a number of facilitators from the company's staff, and the most important documentation was the transparencies used by these facilitators as they were heading the deployment work.

Documents relating to budgets and evaluation. Miscellaneous documents relating to budget preparations, such as the budget manual and various documents explaining the budget structure and performance targets for the various parts of the company; selected evaluation reports generated by the accounting system for the various parts of the company. The information available in the BEST4tel system was reviewed.

Miscellaneous reports. E.g. at regular intervals the consultancy part of the company submitted a research report to the management. These reports were generally about analyses of markets and competitors, technology trends (IT), and business models within the telecom sector. Also, reports drawn up in connection with various development projects constituted significant documentation.

Documents in the public domain

Televerket, annual reports for the 1980-1993 period

Telenor, annual reports for the 1994 - 1999 period.

Telenor R&D, annual reports on research achievements for the period 1995 - 1999.

EDB Business Partner, annual report for 1999.

External media

Http://www.edb.com. The group's home page, which describes the group and its subsidiaries, providing corporate news and press releases.

Http://www.nettavisen.no

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Oversikt over publikasjoner innen teleøkonomi i perioden 1992-1997 fås ved henvendelse til tonje.skaar@snf.no, telefon 55 95 95 00.