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Leadership and the Inflection Point

A Longitudinal Perspective

LEADERSHIP AND THE INFLECTION POINT

– A Longitudinal Perspective –

Leiderschap en het inflectiepunt

– Een longitudinaal perspectief –

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Foreword

Writing a doctoral dissertation on major change after spending twenty-five years advising firms on major change is a process fraught with challenges. The author, it must be presumed and hoped, has a lot of experience to offer, which has to be encapsulated in a few hundred pages. The same author has not been exposed to academic analysis, thinking and writing. Challenges thus to the author, challenges to his reviewer. Hence, this was not an easy project . Not for the author, and not for the supervisors.

This study can be seen as an inflection point in professional learning. I am grateful for the seeds that were sown by my many, eminent teachers – professional seniors, university and school instructors, friends and family elders. On my own, I was fortunate to benefit immensely from three superb consulting teachers who taught me logic and clarity of thinking: Stephen Hargreaves, Prafulla Gupta and Kamal Saad. Without them, I would not have been the strategist I am, nor would I have enjoyed it as much as I do.

In the academic effort, my godfathers were Henk Volberda and Harry Commandeur, without whose insight and patience this study would have not been completed, and never in the depth it was. The study also owes a lot to the senior managers of the five publishing companies who took the time to tell and retell me about their experiences of the internet inflection point. I can mention Herman Spruyt ,Herman Bruggink and Derk Haank, originally all at Elsevier, Rob Pieterse and Caf van Kempen, originally of Wolters Kluwer, Hans Swart and Hans Elekan of De Telegraaf, Jan Houwert, Peter Nientker and Joachim Driessen of Wegener, and,finally, Peter Tordoir and Ed Penninx, originally of VNU.

A lot of work had to be done to turn awkward, unsubstantiated phases bereft with typographical errors and poor graphics into the readable papers that follow. If there ever was a Sancho Panchez to this Don Quichote fighting the windmills of strategy theory, it was Frans Swarttouw who was tireless in searching the library for the latest theories. Jean Bovenberg was my support in turning my awkward prose into legible and elegant intelligence. And finally the graphics of this document owe their correctness and esthetics to the tireless efforts of Ingeborg Vonk, Lucy van Erkel and Mariese Kleiwegt in Rotterdam, Jerene Kelly in Santa Monica and, last but not least, Pien Dermois in Leiden

The Monks of Clervaux (Luxemburg), in particular frère Bernard, should be thanked for providing the author with a place for contemplation and work. Finally in her special role in my life, Klaske would not appreciate it if I dwelt on my gratitude to her. Suffice to say that an explanation would be, and is, a story without end.

To K.E. and K.P.

1 Introduction: Perspectives on the Inflection Point

1.1: Introduction: The Age of Discontinuity

One can claim that strategy as a business and academic topic had its heyday in the second half of the last century. Fundamental work was undoubtedly carried out before that time, witness the seminal writings on economic growth and entrepreneurship by Schumpeter (1928) that show business strategy as a much older intellectual process. But the wave of academic publications on business strategy (particularly Chandler (1962), Ansoff (1965) and Porter (1980)) and the growth of strategy as a business function took place in the 1960s. By the end of that decade, the strategy methodology, the planning function and strategy were well established in most of the larger corporations and as an academic research topic. At that time, strategic management philosophies could be classified into three main schools:

1) Management by control of performance (after the fact), which was adequate when change was slow,
2) Management by projection, when the future could be predicted by extrapolation from the past, and
3) Management by anticipation, when change was slow enough to permit timely anticipation and response to discontinuities.

Igor Ansoff, who developed this classification in 1984, already perceived the emergence of an era of rapid, discontinuous change by identifying a fourth strategy philosophy:

4) Management through flexibility and rapid response to environmental change in which many significant challenges develop too rapidly to permit timely anticipation

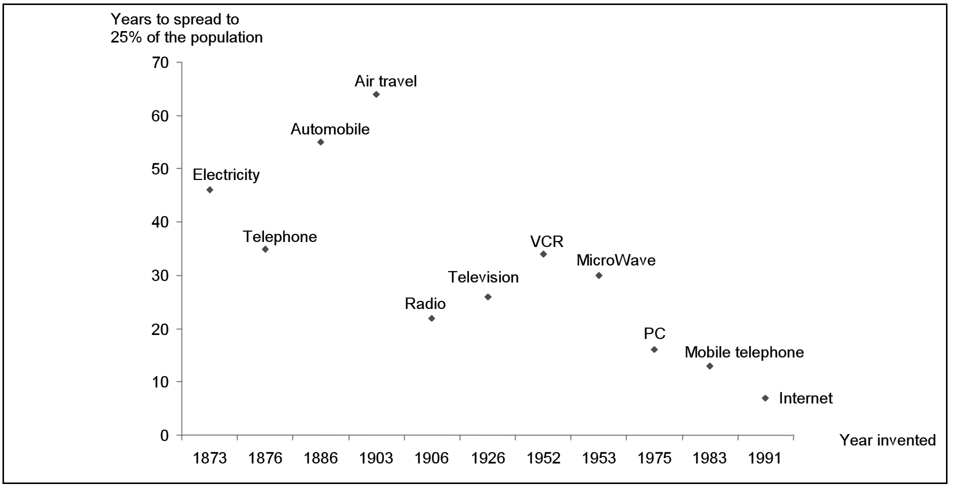
Ansoff thus identified abruptness as an important strategic issue, without exploring the strategic response in any depth (Ansoff, 1984).

From 1980 onwards, business managers also began to see their world as an arena moving from a position of relative stability, through periods of chaos and unrest, to new and unpredictable equilibrium points. It must however be noted that as early as 1942 Schumpeter stated that "as rare and irregular events in any industry, innovations appear that command a decisive cost or quality advantage and that strike not only at the profits of existing firms, but at their foundations and very existence."

What are the underlying reasons for this new way of strategic thinking? One reason may be the apparent decrease in the stability of the economic and technological trends that underlie business. International boundaries seem to have disappeared, resulting in the globalization of many businesses; capital has become amply available and flexible; and the application of post-war technological concepts in fields like chemistry, engineering, physics, biology, information and communications seems to have accelerated. By the early 1990s, new technologies, deregulation and globalization (or market integration) were generally acknowledged as the main causes of increasing market discontinuities (Tushman et al., 1986). Firms now had to search for "new combinations" of resources to make sure that they could continue to successfully create wealth (Guth & Ginsberg, 1990).

There indeed are indications that the innovation speed of major "frame-breaking" products has increased over the last decades. For example, figure 1.1 shows how the dissemination of products to a quarter of the population appears to have accelerated over the last century. In particular, the introduction period of electronics and related (communications) products has been reduced from about 30 years for VCRs in the 1950s, to 7 years for Internet today. The Internet revolution and the emergence of "new economy" thinking in the late 1990s are but the last incidents in a trend towards less stability in our strategic environment.

Figure 1.1: Penetration of Products to a Quarter of the Population



Source: Federal Reserve Bank of Dallas

These long-term trends did not fail to impact the strategy process: The ever-shorter introduction times of revolutionary new products and processes have diminished the effectiveness of traditional planning approaches. Strategists, becoming aware of the risk of "getting stuck" in their old skills, developed the concept of the competence trap (Levitt & March, 1988; Levinthal & March, 1993), and of their core rigidities (Barnett, 1994), which were not only internal, but also included outdated inter-organizational linkages (Hermans, 2001).

Sometimes these strategic traps develop slowly, and sometimes they come as a surprise. In 1942, Schumpeter noted that "industry innovations may appear that strike not at the margins of the profits and outputs of existing firms, but at their foundations and their very lives" (Schumpeter, 1942). In more recent years, the focus of these rapid changes has been on technological discontinuities that are characterized by a dramatic advance of an industry's price versus performance frontier (Anderson & Tushman, 1990).

As a result of this turmoil, the existing frameworks for developing strategy, which often are based on extrapolation of historic trends, no longer appear to work. These include most traditional methods of strategy development, ranging from portfolio models (propagated by consultants like McKinsey, the Boston Consulting Group and Arthur D. Little) to competence thinking (which looks at either the current position of a firm to predict the best takeoff position into the future, or tries to extrapolate developments from the past). In 1994, Henry Mintzberg wrote a book entitled *The Rise and Fall of Strategic Planning*, in which he openly questions the causal linkage between logical planning processes and effective strategy (Mintzberg, 1994). In the same period, Michael Porter lamented that "management tools such as operational effectiveness and benchmarking have taken the place of strategy" (Porter, 1996, p61).

The traditional extrapolative techniques were thus gradually replaced by a way of strategic thinking that relies more on intuition and leadership rather than on analysis for making strategic decisions (Stopford & Baden Fuller, 1994). From the second half of the 1990s onwards, many corporate strategy departments were disbanded or merged with M&A or communications units. The academic world, responding to the need, started looking at adaptive concepts with new advances made in flexibility thinking (Volberda, 1999), chaos theory (Kauffman, 1995; Brown & Eisenhardt, 1998), disposable organizations (March, 1995), hypertext forms (Nonaka & Takeuchi, 1995) and networking (Davidow & Malone, 1992)

From 1980 onwards, the above-mentioned factors stimulated the thinking about strategy as the skill of managing discontinuous major change. We mentioned Tushman & Romanelli (1992) and Kanter, Stein & Jick (1992), but can add at least eleven other sources of thought on the topic (figure 1.2).

Figure 1.2: Inflection Points and Related Concepts

Precipitating Events	Quinn	1978
Strategic Surprises	Ansoff	1984
Architectural Innovations	Abernathy & Clark	1985
Frame-breaking Change	Tushman, Newman, Romanelli	1986
Identity Change	Kanter, Stein & Jick	1992
Turning Points	Fombrun	1992
Dual Strategies	Abell	1993
Breakpoints	Strebel,	1994
Discontinuous Change	Nadler, Shaw & Walton	1995
Strategic Dissonance	Burgelman	1996
Inflection Points	Grove	1996
Revitalization	Volberda	1996
Spasmodic Innovation	Scott Morgan, et al.	2000

Discontinuity – be it technological, regulatory, demographic, or otherwise – thus appears to have become a mainstream characteristic of the business environment. And the way in which firms can cope with such discontinuities appears to attract increasing attention from the research community, as we saw above. Some see discontinuity as a temporary disequilibrium. Tushman & Romanelli called the temporary period of unrest a "punctuation," a form of temporary disequilibrium. March (1991) saw corporate innovation as an iteration of exploration and exploitation, which implies discontinuity as a result of exploration. Abell (1993) formulated the rules by which management could simultaneously innovate/adapt and consolidate, via a dual strategy track that straddles the implicit discontinuity of this framework.

This study does not focus on discontinuity as a temporary interruption in a continuing process of gradual development, but rather hones in on major, abrupt and environmentally caused discontinuities themselves, which we have called inflection points. These discontinuities can be characterized by the major impact they have on the firm (amplitude), by the speed and suddenness with which they occur (abruptness), and by the fact that they are at least perceived to come from outside the firm (externality). Metaphorically, they can be seen as one type of economic or technology regime giving way to another, one set of industry dynamics replacing another, and the change of one winning strategic formula to another.

At the start of this study the topic appeared to be timely, as waves of technological accomplishments in the area of electronics and software swept the information processing and communications industries. As the research built up, we realized that the "e-business" wave was but one of a seemingly increasing number of abrupt industry changes. The most dramatic discourse on these major, abrupt and environmentally caused discontinuities was Grove's 1995 book, *Only the Paranoid Survive*, which propagated the metaphorical word *inflection point*, without providing either a complete description of the point or conclusive suggestions as to how managers could survive it. This study aims to make a contribution in both subject areas.

1.2: The Issue and Relevance of the Study

In the work done in the area of strategy development in times of discontinuity, a gap seems to exist in our thinking about what the leadership of firms does and can do in guiding their organizations through an inflection point.

In specific terms, this study aims to provide answers to the following questions:

1) *What* from a strategic perspective is the most effective description of an Inflection Point?
2) *How* can the leadership of a firm approach an Inflection Point?
3) *When* is each of the leadership approaches appropriate?

In general terms, the overriding question is

4) *Why* the leadership of those firms that successfully pass through an inflection point appears to vary its leadership style through time.

The subject is relevant to today's business environment because we have seen that management can no longer afford to think in terms of evolutionary continuums that can be planned through extrapolation, but fares better by seeing the world as equilibrium punctuated by major environmental changes that redefine the rules of the business game. Factors like technology shifts, deregulation and business globalization require – more than ever – a flexible strategy; a strategy based on classical extrapolation techniques simply does not work. At one time, leadership had the means and opportunity to consider the tradeoff between adaptation through incremental innovation, by exploiting present opportunities (a strategy posture that has been coined “Austrian entrepreneurship”) and adaptability through radical innovation directed at future opportunities (called Shumpeterian entrepreneurship) (Weick, 1982). In a fast-moving business world, this choice is not always available, particularly if the changes are imposed from outside. Purely intuitive approaches that rely heavily on the experience of the leadership are also risky, because this experience base loses its value as the markets shift. These viewpoints imply that the leadership of a firm has a choice of attitude when their operation enters and passes through an inflection point. We will see in this study that leadership attitudes are not an endogenous function of the external environmental trends.

At the same time, a significant amount of theoretical work has already been done in the area of strategy development in times of rapid environmental change; consider the work of Tushman & Anderson (1990) on the success of firms during multiple inflection point shifts, or of Paul Strebel in analyzing the behavior of firms at the breaking point (1994). A few viewpoints, however, have been underrepresented in these analyses, thereby giving this study a modicum of distinction and relevance. None of these analyses used changes in the outside environment as a starting point for a strategic redirection of the firm. What happens when the firm is “surprised” by an event that unexpectedly arrives at their doorstep from beyond its boundaries? Structure, processes and people have not had an opportunity to adjust to the new rules. This contrasts with innovation that originates within the organization, in which case there has usually been time to redirect the firm in order to cope with the new product or process. Utterback (1995), for example, provides a comprehensive view of the dynamics of change that we will later use in the framework for our research. But he does not differentiate between major change sourced from outside or inside the firm.

Secondly, none of the studies to date has viewed the inflection point through the leadership lens, looking at what the leadership – i.e., management at the boardroom level – can do to help the firm pass through an inflection point. Many studies take either an industry-wide (Tushman et al., 1986) or firm-wide (Strebel, 1994, Utterback, 1995) perspective. This study develops and tests three leadership approaches to rapid change: directive, conditional and ecological. Our way of looking at inflection point dynamics enables us to see that these three leadership approaches have their applicability in different phases of the inflection point.

The longitudinal perspective, which regards the inflection point as a dynamic event, is the third differentiating element of this study. Through this perspective, we view the firm as it passes through an inflection point. In the existing literature this has also been done, albeit usually in relatively imprecise terms. For example, mention is made of major organizational change as a sequence that includes a period of “unfreezing,” transition, and “refreezing”, terms first used by Lewin (1947). One of the few researchers who studied industrial change through a longitudinal lens was Utterback (1994), whose approach will be discussed and applied later in our analysis. Following his framework, we are able to segregate the business inflection point into its main development phases. We will see that the leadership can modulate its style to reflect differences in its business outlook, and that management approaches thus shift as the firm passes from one inflection point phase to the next. Again, this process-oriented, or longitudinal, view provides a new perspective on how the leadership of a firm can cope with rapid environmental transitions.

1.3: The Scope of our Work

In writing this book, we have limited the scope of our work to (1) strategy for a (2) multi-business unit firm. Regarding the first limitation, our focus is on the strategy deployment side of inflection point management. Obviously, there are many other dimensions, like organizational aspects, competence and technological dimensions, financial considerations, and legal issues. An interesting organizational element, for example, are the barriers to change that are often found in organizations that face major change, including inflection points. These organizational barriers to change have been the subject of numerous studies. Similarly, a careful assessment of the stakeholders and their interests, and a determination of how the leadership will serve these interests and make the necessary tradeoffs in serving these interests, is a crucial function. In varying degrees, each of these factors will come into play, but only as elements in the process of strategy deployment. Also, since we are researching the dynamics of the inflection point, our focus is on the process and context of strategy as well as on the content.

A second point of emphasis to be made relates to the number of business units involved in our consideration of both the firm and the industry in which it operates. Most larger firms today consist of multiple business- or profit units. In our leadership perspective, we thus consider the firm's leader as a person who supervises a number of these units, which are each lead by a local manager. This study discusses how the inflection point impacts the firm as a family of units, and the overall supervision that is exercised. Extensive work has been done on the development of simultaneous, differing strategies by business units. For example, in a group of units, a number of these may go through an adaptive evolution, while others focus on radical change (e.g., Weick, 1982). This analysis will regard the firm as relatively homogeneous, which in our case means that a major challenge to one of the units is, by definition, also a major challenge to all the other units. There is also a choice of levels in setting the scope: one can examine the firm, the industry, and the meso-level between the two (Commandeur, 1999, Lewin & Volberda, 1999).

In this study we have also chosen to limit ourselves to changes caused by factors that are external to the firm and the industry in which it operates. In this sense, there are a number of options: One can study inside-out changes (including innovation), or outside-in approaches (including the inflection point). This study opts for an outside-in perspective on the firm, in order to focus the analysis and avoid a discussion about internal innovation and internal communications, which are topics of considerable interest that warrant studies in their own right.

A scope restriction also follows from our leadership perspective. Since we want to focus on the role and strategies that the leadership can adopt, we have set this managerial perspective as a scope boundary around our area of analysis. We make the point of identifying an inflection point in terms of externality and abruptness – factors that management can not influence.

Undoubtedly, major innovations that either have been conceived inside the firm, or changes that are identified and countered in an evolutionary sense, over a long period of time, are worthy of serious study. By setting most of the inflection point outside the area of managerial control, we hope to come to a clearer analysis.

Our study also leans towards the processual side of strategy. The content side will also be given consideration, when we look at the tools that the leadership can use to analyze its condition. As consequence of this focus, the context dimensions are taken into account when and where relevant to explain the processual approach. The content side will also be given consideration when we look at the tools that the leadership can use to analyze its condition.

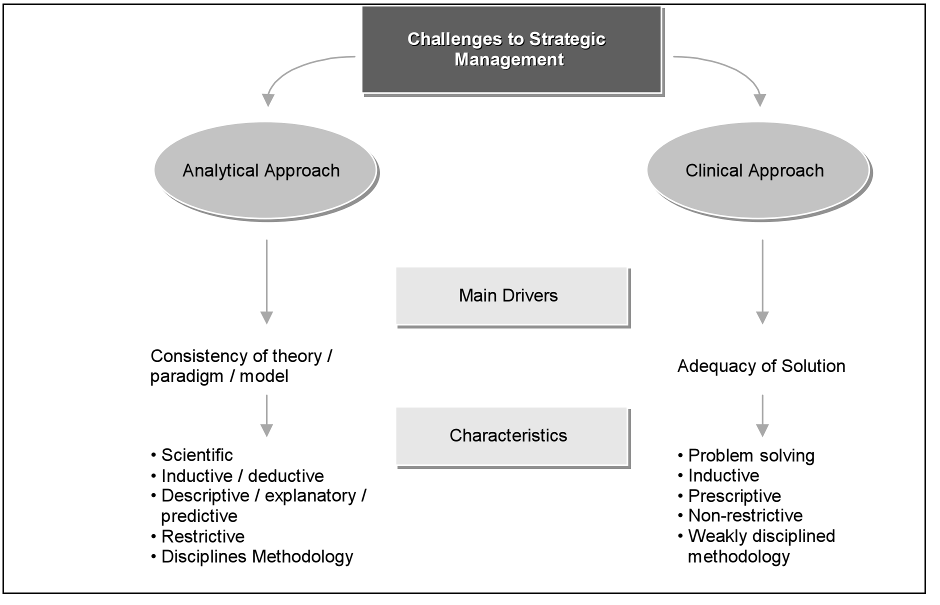
Finally, note that there is an interesting juxtaposition of strategy as reactive management process aimed at improving the structural position of the firm in a changing environment, and strategy as proactive forward-looking analysis seeking to position the firm to capitalize on opportunities ahead. As we will see, the second viewpoint, which tends to lean on projection techniques, is less effective in inflection point management, in which abruptness and externality are defining elements. When an event or process is initiated externally and is abrupt, the chance that it will be a surprise to management is high. Only a few prediction techniques work well in inflection point environments, and we will not attempt to develop a viewpoint on techniques to predict the timing and nature of an inflection point. We will thus focus on strategy as a process of fundamental change.

1.4: Approach to the Issue – Concepts and Cases

There are two philosophical approaches to conducting research in strategic management. The first – that has been called the analytical approach – strives for a theoretically sound and consistent framework. It seeks to develop theory based on observation and measurement. The second – called the clinical approach – tries to deliver the most adequate solution possible to the questions posed by management. Much more problem-oriented, it seeks to develop prescriptive, practical knowledge in the form of do's and don'ts for the strategist (figure 1.3). Each approach has its own advantages and disadvantages, depending on the circumstances in which it is used (Volberda, 2001).

This study is above all pragmatic: its inspiration and underlying hypotheses were the thoughts of a practitioner, Andrew Grove, and observations made him and by others in the marketplace. It is inductive, and clearly tries to translate a set of findings from theory and case research into a framework describing how the leadership of firms operates under inflection point conditions. As such, the study can be categorized as an analytical approach, since it uses available theory to describe and explain a business phenomenon. At the same time, however, this work does not aim for the detail in systematic measurement that characterizes many analytical studies. It also has a number of clinical (i.e., problem-solving) elements, particularly where our description of leadership approaches could be used to develop problem solutions and proscriptive rules.

Figure 1.3: Research Approaches in Strategic Management



Source: Volberda, 2001, adapted

In this chapter, we have made a start in answering the four questions about the "what". "how", "when" and "why" of inflection point leadership.

First, we discussed the models and theories on this and related topics, with the objective of distilling the relevant experience elements. This review supplied us with a first grounding for our description of the inflection point and its phases, as well as for our identification of the options that the leadership can "play" when entering the inflection point.

Secondly, we have developed or identified out of this theoretical base three descriptive building blocks – the first to identify the inflection point, the second to classify leadership approaches, and the third to segment the development phases of the inflection point.

The first building block addresses the *"what"* question. The starting point of our study is the description of the inflection point, which we will later characterize in three dimensions:

- *amplitude* i.e., survival is only possible by redefinition of strategy, process capabilities and resources of the firm as a whole,
- *abruptness* i.e., the event that takes place is dynamic and within a limited time period, thereby often surprising management and requiring rapid reaction,
- *externality* i.e., the event is perceived by the firm as a shift in its environment and of forces outside its control.

The second building block addresses the "how" question: Based on a review of theoretical work done, and after verification in the field, three conceptual leadership approaches to the inflection point were identified:

- the *directive* approach, in which the immediate influence of the leadership, acting in a top-down fashion, is predominant. In the directive sense, the leadership has a number of strategic tools at hand. Foremost is its power to assemble the portfolio of businesses, processes and competencies that it considers appropriate to meet the challenges of the inflection point.
- the *conditional* approach, in which the leadership of the firm creates conditions under which the local managers can themselves cope with the inflection point. There are many conditional approaches that can be identified. In the course of this analysis we have selected five to be of particular relevance: setting the structure and imposing the appropriate strategic processes come first, followed by improvement of the flexibility, innovation and learning abilities of the firm.
- the *ecological* approach, which stresses the inability of the leadership to impose effective solutions when an inflection point occurs. The management adopts a *laissez faire* attitude to the development and execution of strategy, which therefore either emanates from lower levels and/or through trial and error, or relies on ex-post accountability to verify to what extent its (ultimate) demands are met.

The third building block addresses the "when" question: An inflection point is not a single unified event in terms of the impact on and reaction of the organization. In our fieldwork, we recognize different phases in the reaction and strategy evolution as the months pass after the first announcement of the event, and we see how leadership approaches change as the firm enters and passes through this period of revolutionary change. For a suitable classification of phases of an inflection point, this study leans heavily on Utterback's description (1995) of three phases:

- the *fluid* phase, in which a great deal of change happens at once and in which the outcomes are highly uncertain in terms of product, process, competitive leadership, and the structure and management of firms,
- the *transitional* phase, in which the market starts to accept the new products, a dominant design emerges and the focus of the firms shifts from the inventors' workbench to the factory floor,
- the *specific* phase, in which products or services become highly defined, and production focuses on volume and low cost.

Out of these three building blocks we can deduct a fourth; when we know the what, how and when, we have the elements to answer the *"why"* question, which seeks the logic behind the shifts in the behavior of leadership as it successfully guides the firm through the inflection point. To develop and test these building blocks, we have selected two units of analysis. The first is the passage of firms through the inflection point. The second is the role of the leadership of a firm.

Finally, five case studies to test and refine these approaches in a real-life context will be discussed. These were directed at five Dutch publishing companies that all had to cope with Internet as an inflection point. We looked at five major multinational publishers: Reed Elsevier, VNU, Wolters Kluwer, Wegener and De Telegraaf. This object was useful in the sense that this industry had a relatively stable development until a major, abrupt and outside challenge of large amplitude posed itself in the form of the Internet revolution.

1.5: The Structure of the Study

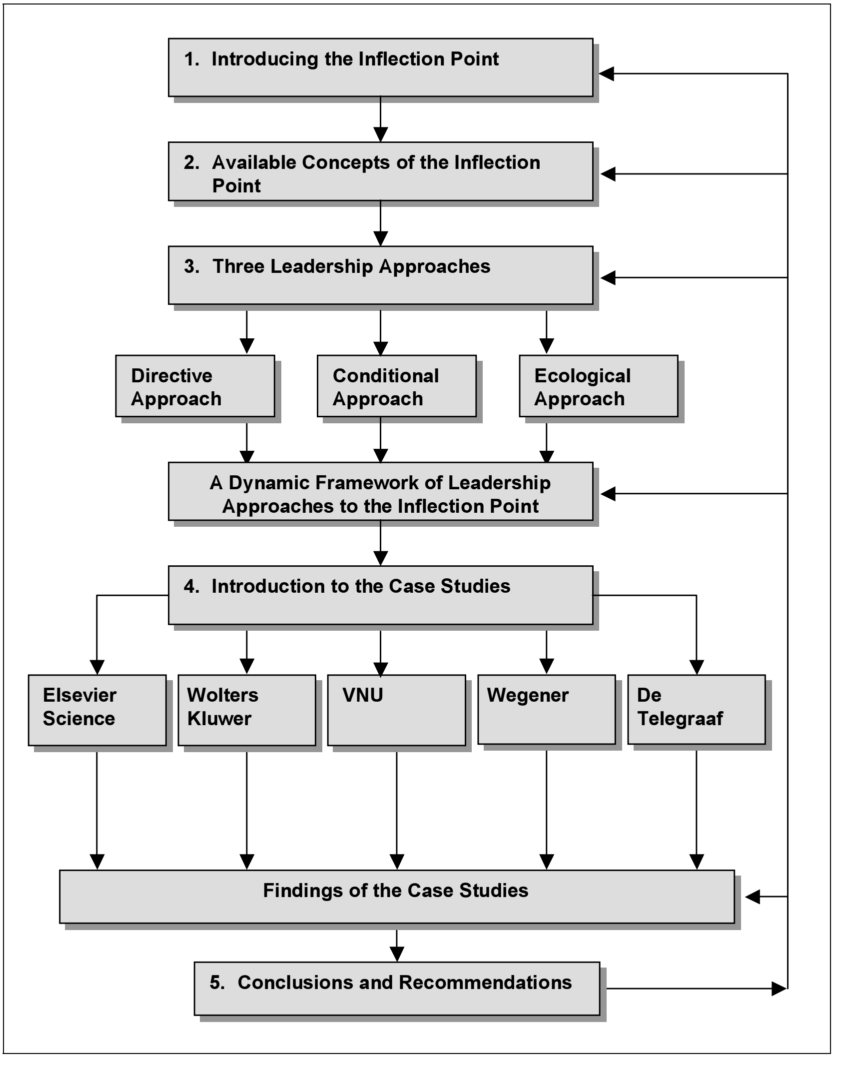
The chapters of this study thus build up from literature review to framework development and to field tests. Chapter 1 lays down the main questions of the study as well as its boundaries and scope. Chapter 2 defines and explores the three dimensions – amplitude, abruptness and externality – of the inflection point.

Chapter 3 develops the main framework and reviews the relevant theory. The first paragraphs are devoted to exploring relevant management concepts that have been developed in the literature over the last twenty years and using these to identify and substantiate our leadership approaches – the directive, conditional and ecological approaches. We will also see that although a number of writers have covered these approaches, there appears to be a knowledge gap in both evaluating the leadership perspective and understanding management behavior in the longitudinal process of the inflection point. Subsequently we review, successively, our three major approaches, and discuss under what conditions and in which way they are most effective. Finally, we explore the development of a framework that guides our field analysis and synthesis.

Chapter 4 tests the framework in practice, in the form of a case review of five publishing companies introducing e-business concepts. First, the fieldwork is introduced, and the five individual case studies are presented in individual segments relating to, respectively, Elsevier Science, Wolters Kluwer, VNU, Wegener, and De Telegraaf. These field reviews are then discussed in the concluding pages of this chapter.

Our study comes to a close in Chapter 4, where we draw our conclusions of the work done. Figure 1.4 shows the structure of the study.

Figure 1.4: The Structure of this Study



2 Describing the Inflection Point - Available Concepts

2.1: Introduction: Describing the Inflection Point

Chapter 1 introduced the phenomenon *Inflection Point* and the questions that we will address. The next step in our quest is to see in more specific terms which management concepts have been generated in the literature through the years to describe how firms to cope with major environmental upheavals (Chapter 2.2). This review considers the proposals on major change of ten writers; these we have grouped into two groups. The first group, which we will call holistic studies, considers major change to be mainly disequilibrium between the firm in its entirety and its environment. These studies tend to search for generic and leadership-oriented solutions. The second group, which we will call the specific studies, tries to identify specific (functional) causes and solutions for major changes that the firm experiences in the environment. Based on this review, we will identify and describe three determining dimensions of inflection points that contribute to our further purpose of analysing leadership behaviour (Chapter 2.3). These dimensions are:

1) Amplitude – survival is only possible by a redefinition of the strategy and activities of the firm.
2) Abruptness – the event is dynamic and unforeseen, and requires rapid reaction.
3) Externality – the event is initiated from outside the firm.

Since an inflection point is a dynamic event, we also need to find a way to examine the time dimension. For this purpose we found a framework in Utterback's analysis of major industrial changes (Utterback, 1995), which identifies three phases in a turnaround:

- A fluid phase
- A transitional phase
- A specific phase

After we analyse how this time-phasing fits with the dimensions and characteristics of the inflection point, we will be able to use these frameworks in the subsequent analysis of leadership approaches and the fieldwork (Chapter 2.4).

2.2: Grounding Theories of the Inflection Point

Holistic Studies of Major Change

Some authors describe major change as an important disequilibrium or disconnect of the firm with its environment, a state that can be readjusted through a repositioning of its resource capabilities and/or management. These writers generally describe this imbalance in holistic and relatively abstract terms, including incongruence with stakeholder needs, inappropriate linkages with the marketplaces in which the firm operates, and an architecture that no longer functions. Their solutions are phrased in terms like replacement of management, adjustment of power balances, and redefinition of structure, which at times are supported by a reference to the relatively generic and effective "five forces" model of Porter. In this group we will discuss four writers with a theoretic focus – Abernathy & Clark, Kanter et al., and Quinn – and three writers with a background in business practice: Grove, Abell and Scott-Morgan.

An Inspiring Practitioner: Andrew Grove

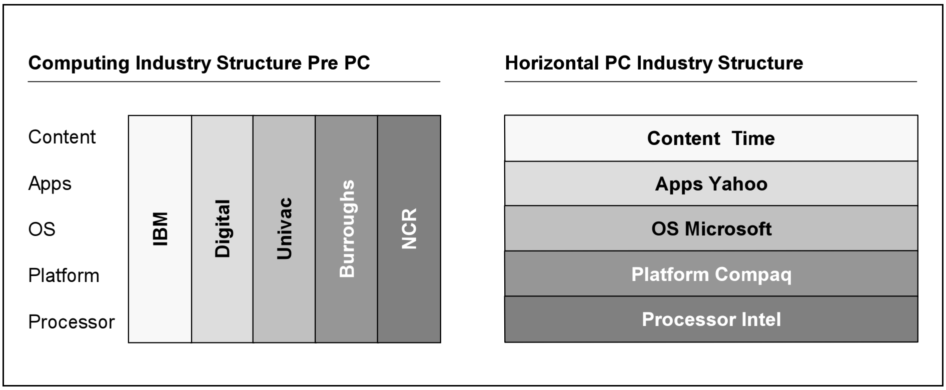
Andrew Grove, who popularised the word *"Inflection Point"* in his narrative of the ups and downs of Intel in "Only the Paranoid Survive" (1996), was the inspiring start of this study. Grove described an inflection point as "a time in the life of a business when its fundamentals are about to change", adding the statement that the size of change is of a "factor 10x". At a later stage, this was expanded to include the shift from one type of industry dynamics to another, the change of one winning strategy to another, the replacement of one technological regime by another (Burgelman & Grove, 1996). In analysing the inflection point and the possible reactions of management, Grove refers to the five forces model of Porter (Porter, 1980), without elaborating or adding to this framework. Given the nature of these five forces – customers, suppliers, competition, substitutes, and new entrants – Grove's focus is on external forces that impose the inflection point.

In his book, Grove describes two case studies of inflection points, both relating to Intel (the company of which he was legendary CEO). The first relates to the rapid penetration of Japanese and Korean suppliers of the DRAM computer memory business, which was the original core business of Intel. By mobilising their low-cost capital and labour, and by focusing entirely on sales, at the expense of immediate profits, these producers were able to undermine Intel's position in a business in which dramatic product innovation was giving way to process optimisation as key success factor. It was late, and nearly too late for Intel, when the firm found out what the rules of the new game were, and decided that it had no chance in memory circuits, a business that it promptly exited in order to focus on the more complex and profitable microprocessors, a segment that it has since dominated. In our terminology, this moment, with its three characteristics of abruptness, amplitude and externality, was clearly an inflection point for Intel.

The second case provided by Grove was Intel's entry into the consumer market. Until 1990, Intel's customers included a limited number of PC producers, and the firm used a typical industrial marketing approach. Gradually, however, the company found out that competitors like AMD and Micron were able to emulate the processor designs of Intel and to introduce competing products with decreasing time lags. One of the strategies that Intel adopted to counter this competitive threat was to launch a marketing campaign towards the PC buyer with the motto "Intel Inside". This campaign was quite successful, as distributors and producers found themselves confronted with customers asking specifically for PCs with Intel processors. The strategy backfired with the introduction of the Pentium processor in 1994. Initial production batches of this processor were found to have a minor design flaw that resulted in errors with complex floating point calculations used both in advanced scientific and games applications. Instead of taking calls from a limited number of understanding PC producers, Intel found in itself accountable to hundreds of thousands of naive consumers calling for simple remedies or replacement. Again, this was an event that could be considered as life threatening, and forced the company to rethink all its major processes and functions. In the terminology of this study, the Pentium recall case certainly shows the characteristics of abruptness and amplitude. But one can argue that positioning Pentium as a consumer product was an internal innovation, although the leadership clearly turned out to be unprepared to cope with the consequences of this innovation.

At a later moment, in early 1997, Grove expanded his views on the inflection point at a speech in Davos, using examples from the personal computer and telecommunications business. Regarding the personal computer business, Grove argued that the industry structure had changed from a "vertical" assembly (which included integrated companies like IBM, Digital Equipment and Univac) to a horizontal structure in which each function in the supply chain was delivered by an independent set of producers. In the new personal computing world, content was provided by news publishers like Time, or scientific publishers like McGraw Hill, Elsevier, Wolters Kluwer, as we will see in our case analysis. The applications were served by AOL or Yahoo, the operating systems were provided by Microsoft, Linux and Apple, platforms by Dell and Compaq/HP and the processors by Intel and Micron (figure 2.1). And, of course, Grove could not foresee the major breakthroughs in (broadband) communications that would form yet another inflection point for the industry.

Figure 2.1: An Inflection Point in the Computing Industry



Source: Intel, 1997

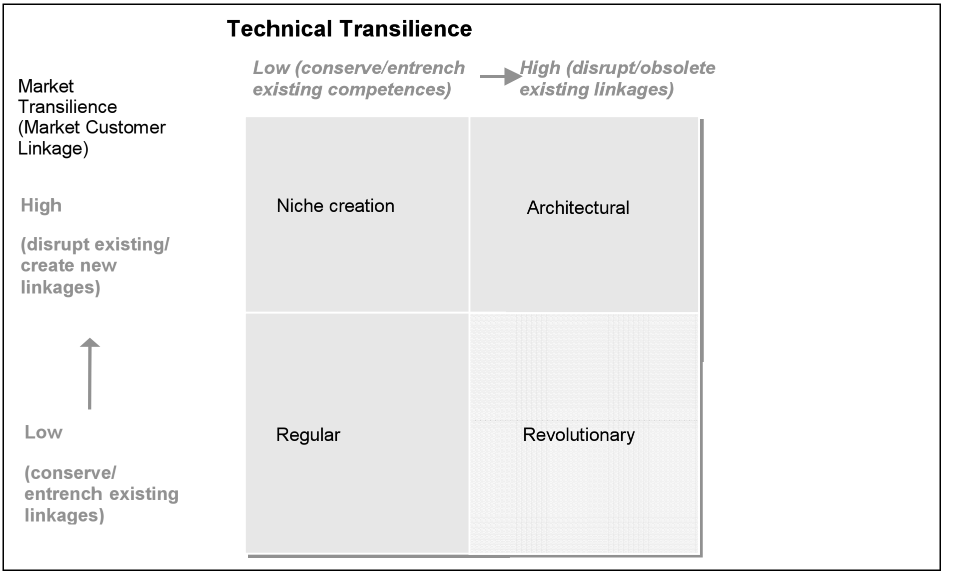
The theoretical scope of Grove's work went beyond the Porterian analysis mentioned above. And in adapting to the event, he leaned heavily on learning organisation concepts – for example, by stressing the value and need of mental models at the leadership level about the future, and by his view of the ideal organisation being a combination of debate (chaos reigns) and determined march (chaos reined in) (Grove, 1996).

Three Holistic Theories: Abernathy & Clark; Kanter et al.; Quinn

The work of Abernathy and Clark (1985) is relevant for a better understanding of the concept of major change. When the authors talk about *architectural innovation*, they refer to changes that depart from established systems of production, that open new linkages to markets and users, that are characteristic of the creation of new industries as well as the reformation of old ones. These innovations are called architectural because they lay down a new architecture (i.e. the broad framework in which competition occurs and develops).

Architectural innovations are associated with strong forms of technological and market transilience, which they define as the capacity of an innovation to influence established systems of production and marketing.

Figure 2.2: A Transilience Map of Innovations



Source: Abernathy & Clark (1985)

Abernathy and Clark discuss amplitude rather generically as a departure from established systems of production and new linkages to markets and users. Their concept of technological and market transilience addresses not only these linkages but also the competency set of the firm. In this sense they do address the operating environment of the firm, and give us a valuable perspective on innovation as an internal process. They do not study, in any detail externally imposed change and abruptness (figure 2.2)

A second holistic theory on major change is provided by Kanter et al. (1992), who use the term *identity change* as the most fundamental of three change patterns (the other two being internal coordination change and external political change). They characterise this identity change as a reformulation of the relationship of an organisation with its environment, including the assets it owns, the markets it approaches, the niches it occupies, the relationships it has to its customers and to the organisations that fund it, supply it, and confer legitimacy to it. In their view, the organisation derives its identity from the ties it has with its stakeholders and from the identities of its stakeholders. When a firm's relationship with these stakeholders are altered in every aspect, the identity of the firm undergoes a fundamental adjustment.

Kanter et al. suggest that the reformulation of the relationship between the firm and its stakeholders is the defining element of the inflection point. The result of this redefinition is a restructuring, repositioning and redefinition of the boundaries of the firm, and thus the reestablishment of a new equilibrium between the firm and its environment. These identity changes are most likely to arise when the environment shifts abruptly. Dramatic and highly visible to all parties concerned with the firm, these changes also alter the viability of existing stakeholder ties and create the potential for new ones. Identity changes therefore appear to be acute, and there is a short timeframe for the transition of one set of business concepts to the other. Most often, these changes appear forced or constrained rather than voluntary; natural adoption would have resulted in evolutionary change, identity change reflects more than internal innovation, and the change is imposed from the outside or from the top.

Kanter et al. give us a view of a firm that thrives when it has created an equilibrium with its stakeholders, and runs into deep trouble when this equilibrium is disturbed. The trouble ends only through a redefinition of the business that enables a new equilibrium, conceivably with new stakeholders.

Quinn (1978) covers major change from a number of dimensions. His views are encompassed in the theory of logical incrementalism. In this theory, the leadership combines the contributions of rational analysis of the firm and its environment into a framework of conscious, purposeful and proactive management. In Quinn's model, firm's position of equilibrium is seriously disrupted by *precipitating events*, which Quinn describes as external or internal events over which management no longer has control, and which precipitate urgent, piecemeal, interim decisions, with inexorable impact on the company's future. Quinn cites a few examples of precipitating events, such as the impact of the '73-'74 oil crisis on General Motors, and the Arab petroleum nationalisations of the same period on Exxon. He also mentions major internal innovations such as the commercialisation of xerography by Xerox (and its predecessor, Haloid) and float glass by Pilkington.

Quinn states that the leaders of these corporations did have some, albeit limited, means to foresee and prepare for these major changes, including good information on historical markets (Exxon), or a strong set of company values (Pilkington), but he also observes that none was able to foresee the timing (which we will call abruptness), severity and nature (amplitude) of these changes. When the events occurred, time constraints and a lack of resources and information hindered them from being able to analyse all options and their consequences. But the early decision made at that time led to new initiatives or lost opportunities that were difficult to reverse later.

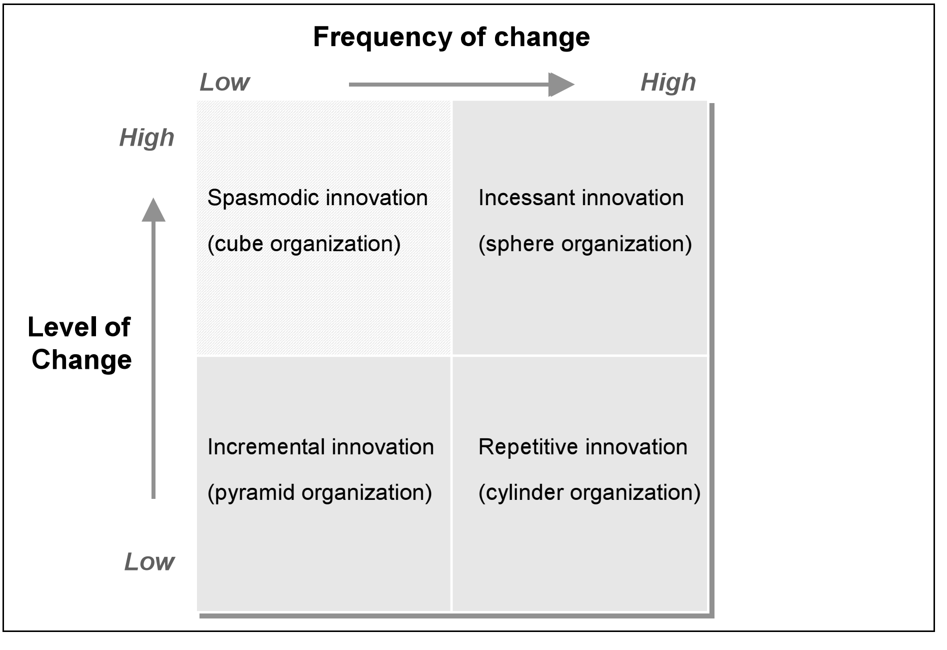
Quinn's concept of precipitating events takes us a long way in describing the inflection point. His idea of suddenness and unexpectedness clearly lies in the domain of abruptness. His referral to the early decisions that were taken (or avoided) by management, that "inexorably shaped the company's future strategic posture", leading to developments or lost opportunities that were difficult to reverse later, paint a vivid picture of existential aspects of major change. Where Quinn differs from our concept of inflection points is in his acknowledgement of external and internal events as characteristic of precipitating events, and the examples that he uses to substantiate or illustrate his points are mainly external. In this respect he differs with our description of the inflection point.

Holistic Practitioners: Abell and Scott Morgan et al.

The views on the differentiated roles of leadership in facing a strategic surprise, first explored by Ansoff, were expanded by Abell (1993) who proposed that the best way to approach major change is to segregate the management of the existing business from the preparation for the new environment. In doing so, Abell recognises the phenomenon of revolutionary change, in which the classical Porterian standards of customer satisfaction, bases of competition, key success factors and the way in which these are to be met are redefined. He also states that these shifts usually constitute the most rapid form of business change (abruptness), and recognises that they contain elements of surprise, suddenness and rapidity, without expanding on those concepts.

A somewhat longitudinal and structural approach was adopted by Scott-Morgan et al. (2001), who categorise change processes into four groups (figure 2.3).

Figure 2.3: Innovation Map According to Scott-Morgan et al.



Source: Scott-Morgan et al., 2000

Of these, *spasmodic change* combines a high level of change (presumably amplitude, although the nature of this change is not explored in great detail) with a low frequency (i.e., non continuous), and therefore comes closest to the concept of the inflection point. Scott-Morgan et al. state that spasmodic innovation (their terminology) is called for when organisations undergo a surge of change as they shift from one form to the other. They metaphorically describe the organisation best able to undergo this form of change as a cube. The temporal characterisation of "short, efficient bursts" shows overlap with the element of abruptness of the inflection point.

In order to maintain a modicum of stability (according to Scott-Morgan et al.), it is desirable that the organisation that undergoes a spasmodic innovation tries to keep as many things constant as possible. First of all, the dominant structure should be kept constant, including its power structures, feedback mechanisms and performance measures, which would enable the organisation to effect the desired radical change within a matter of days. Success of a spasmodic innovation depends on understanding the process, and possessing the flexibility to cope with the (external) unknown in the course of the process.

An essential difference between a spasmodic innovation and the other theories on major change is the thesis that basic structures can and should remain unchanged (whereas nearly all other writers on the topic stress the necessity of adjusting fundamentals, all the way up to stakeholder relations and leadership (Kanter & Jick)). Also, Scott-Morgan et al. are not concerned with the source of the change. Accordingly, they do not discuss externality or the alternatives thereof.
Figure 2.4 summarizes the viewpoints of the holistic studies regarding the three descriptors of the inflection point.

Figure 2.4: Holistic Views on Major Change

	1) Amplitude	2) Abruptness	3) Externality
Holistic Views			
Inflection Points			
Grove, 1996	10x change		
Architectural Innovations			
Abernathy & Clark, 1985	Depart from existing production systems		New industry architecture
	Link to new market users		
Identity Change			
Kanter, Stein & Jick, 1992	Alter viability of stakeholder ties or create opportunity for new ones	Abrupt shifts	Environment shifts
Precipitating Events			
Quinn, 1978	Shape the strategic posture of the firm	Require urgent interim decisions	(External or internal events)
Revolutionary Change			
Abell, 1993	Nature of doing business changes	Sudden confrontation	From new directions
		Rapid change	
Spasmodic Innovation			
Scott Morgan et al., 2001	One-time change, big pulse through the organization	Low frequency	

Specific Studies of Major Change

Specific studies of major change try to list discrete, functional, causes for the change to occur, and specific, discrete, management actions to remedy a possible negative impact on the firm. Causes listed typically include technological change, globalization of markets and competition, and government (de)regulation. The management measures that are identified are reorganisations of the business (Ansoff, 1984), and the generation of new capabilities (Nadler et al., 1994). In this group, we review the writings of four theoretists: Tushman et al., Ansoff, Nadler et al., and Strebel.

Tushman et al. (1986) were among the first to focus on discontinuous change from a firm, rather than an industry, perspective. Their basic proposition about punctuated equilibrium is that companies experience long periods of incremental change, and then go through major restructuring that forces them to make painful discontinuous system-wide shifts. These shifts transform not only the enterprise, but also the competitive environment or "industry" into something significantly different from what it was (Stopford & Baden Fuller, 1994). Tushman et al. refer to these shifts as *"frame-breaking change"* and characterise them as sharp and discontinuous adjustments in strategy, power, structure and controls. Frame-breaking changes are abrupt, painful to participants and often resented by the old guard.

In the view of Tushman et al., frame-breaking changes occur in response to, or in anticipation of, environmental changes, which can only be accommodated through more than incremental adjustments. In their view, discontinuous changes spring from one or more of the following causes:

- Industry discontinuities (i.e., sharp shifts in the technological political or legal conditions that reformat the bases of competition)
- Product life cycle shifts that lead to important adjustments in the bases of competition. This is caused by the fact that the competition rules change dramatically as a product moves from embryonic to mature stages of development. Typically, embryonic products compete on performance and innovativeness, whereas for mature products, cost, volume and efficiency become dominant.
- Internal company dynamics that create internal breaking points (see Strebel). Typically, new technologies or a new scale of operations require new management designs.

In effectuating the necessary adjustments to the firm, the leadership has, according to Tushman et al., four sets of tools, each implying a discontinuity with the traditional way of working. These include:

- A reformed mission and core values
- An altered power and status framework: some individuals and groups lose in the shift, while others gain,
- Reorganisation, involving a redefinition of structure, systems and procedures,
- Revised interaction patterns: people will have to adapt new ways of working together,
- New executives, usually brought in from outside the organisation and placed in key positions of influence.

Tushman et al. stress that the most successful transitions of frame-breaking change are effectuated by executives who recognise the need and nature of the change at an early stage, and acted decisively. Tushman and Anderson, for example, talk about major restructuring and system-wide shifts that are characterised as sharp and discontinuous adjustments in strategy, structure and controls – omitting key specific factors like resources, competencies and culture.

One of the first to comprehensively describe sudden major change was Ansoff, who coined the concept of *Strategic Surprises* in 1984. Ansoff states that, whereas the management of change has been the raison d'etre of management as far back as one can remember, there is an increasing incidence of turbulence originating from unaccustomed and unfamiliar sources, like foreign technologies, foreign competitors and governments (externality). Some of these changes arrive suddenly and unexpectedly, thereby becoming strategic surprises (i.e., abruptness). Although these strategic surprises cannot be handled by normal systems and procedures, failure to respond implies either a major financial reversal or the loss of a major opportunity (amplitude). The changes arrive, requiring an urgent and prompt response; they pose novel problems in which the firm may have little prior experience.

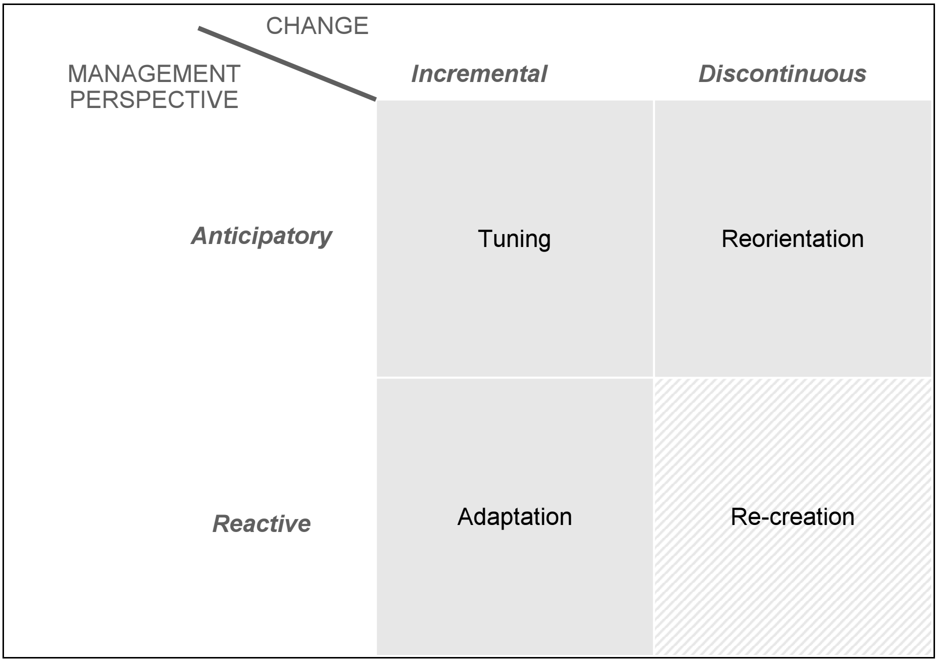
Ansoff also states that the combination of these factors creates major managerial problems. The leadership, finding that previous strategies and plans do not apply, is also confronted with a wealth of new, often fragmented information that is difficult to process and synthesise. The suddenness of the change and the prospects of a major loss, often widely perceived throughout the organisation, create the danger of widespread panic.

Ansoff gives the leadership a key role in confronting a strategic surprise. He suggests that top management repartition its responsibilities into three groups, one to control and maintain organisation morale, the second to assure continuance of the traditional business with a minimum of disruption, and the third to take charge of the response to the surprise. In doing so, he precedes the thinking of Abell, who has elaborated further on the concept of multiple strategies.

A comprehensive view of externally initiated major change is provided by Nadler et al. (1994), who classify *destabilising events* into six categories: shifts in industry structure or product class life cycle, technological innovation, macroeconomic trends and crises, regulatory and legal changes, market and competitive forces and, finally, growth. Nadler et al. make an immediate linkage to the capabilities that the firm needs in order to perform in the post-event environment by stating that the rate of depreciation of intellectual capital increases as the rate of change goes up. This means that the firm needs to gear itself toward generating new capabilities that are more relevant to the new environment.
A destabilising event is characterised by the fact that it creates life-threatening business issues, affects the entire organisation rather than individual parts or subsystems, and alters the core of what the organisation represents to its customers and members (amplitude). Such an event requires a whole new configuration, with a new strategy, new work patterns and new formal organisation arrangements. In some situations, the immediacy of change may not permit maintaining continuity with the past: re-creation often changes and may even destroy existing core values (abruptness).

An important differentiator of a destabilizing event (as described by Nadler et al.) and the inflection point lies in the segregation made between anticipatory and reactive discontinuous change. The first bases itself on sufficient understanding upfront of the impending change, which more often than not means that it has been internalised, either as an internal innovation or as a gradual absorption of know-how. The latter – dubbed reactive discontinuous change – calls for re-creation of the firm structure, and comes closest to the inflection point. Nadler et al. make note of the fact that in re-creations the changes are more sudden – abrupt (figure 2.5). It also can usually be traced to external factors, such as those explained above.

Figure 2.5: Management Perspective on Change

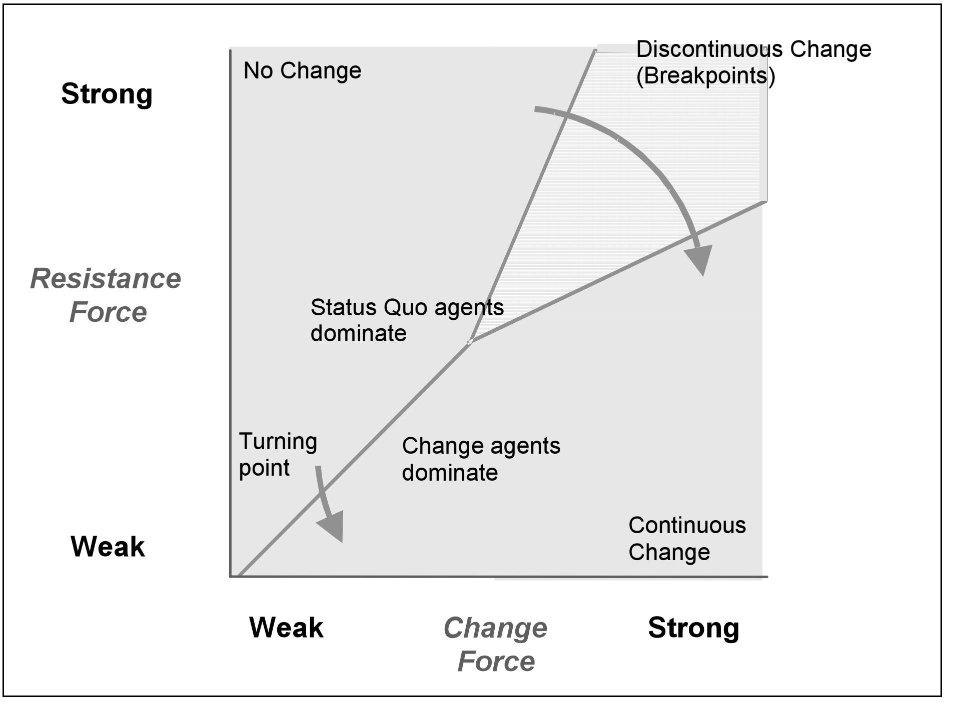


Source: Nadler et al., (1994)

Nadler et al. are amongst the few that have to some extent considered the longitudinal, managerial aspects of major change when they state that management should first recognise discontinuous change ahead of time, then make the appropriate choices when the change occurs, and finally manage the change in the organisational sense.

In his 1994 book *Breakpoints*, P. Strebel covers many of the elements of the Inflection Point. Strebel defines breakpoints as sudden radical changes in the rules of the business game that can shape the course of an industry or business. A breakpoint is also quick, and difficult to foresee and deal with (figure 2.6).

Figure 2.6: Discontinuous Change



Source: Strebel (1994)

Strebel identifies divergent and convergent breakpoints. The first occur when product variety proliferates abruptly, typically in the embryonic (or fluid) stage of an industry or in product rejuvenation. Convergent breakpoints are associated with dramatic improvements in processes and systems, and typically in the transition of an industry from embryonic to exponential growth. Examples are the standardisation of production systems, or the introduction of market standards (e.g. in consumer electronics). Although Strebel pays a lot of attention to internal breakpoints (in-company innovation), he also mentions "industry breakpoints", which are, for example, caused by a new revolutionary product that transforms the rules of the competitive game, or fundamental changes in process (like the adoption of lean production methods by the Japanese car industry) or distribution processes, such as the launching of direct insurance services.

Since internal innovations are an important source of breakpoints, Strebel spends considerable time discussing the role of leadership in preparing for an adequate exploitation of the event. He stresses the ability of management to learn from breakpoints, to take advantage of them, and to create competing breakpoints. And, since a breakpoint is often much less of an

unavoidable surprise than the abrupt externality of the inflection point, it pays for a manager to be aware of the pace and forces of change, and of the resistance against change. The more internal and gradual nature of a breakpoint enables a much more proactive management approach.
Figure 2.7 summarizes the relevant findings of the specific studies in the area of rapid external change:

Figure 2.7: Specific Views on Major Change

		1) Amplitude	2) Abruptness	3) Externality
Structural Studies				
Frame-Breaking Change	Tushman et al., 1990	Requires more than incremental adjustment like new mission, organization or new executive		Response / anticipation of major environmental change
Strategic Surprises	Ansoff, 1984	Failure to respond means major reversal or loss of opportunity	Suddenly, unanticipated	Novel problem, firm has no previous experience
Desta-bilizing Events	Nadler et al., 1994	Capabilities deteriorate rapidly Life threatening to entire organization	Immediate change needed	Caused by industry structure, macro-economics (de)regulation, market forces (also innovation)
Break-points	Strebel, 1994	Radical shifts in the rules of business impacting business, competitive or corporate performance	Sudden radical change	

2.3: First Conclusions: Views on the Three Dimensions

These descriptions lead us to conclude that our central theme of major change is a polymorph phenomenon. Notwithstanding the variety of terminology, most authors appear to converge on capabilities (broadly defined) as a central theme, although that word is not always used. These include the capability to develop and maintain the necessary resources and competencies, the capability to create the right structure, architecture and posture (Quinn 1978) both within the firm and with the outside stakeholders (Kanter et al., 1992), and the capability to start off with the right mission and values (Tushman et al., 1986).

The inflection point occurs at the moment when all these factors are no longer aligned with the needs of the environment, and when the capabilities to align them appear to be lacking. This lack of alignment is revealed in lagging performance and lost opportunities (Ansoff 1984). Market and operational performance suffer first, followed by financial performance (Strebel 1994). And lagging performance leads to a life-threatening business condition (Nadler et al., 1994).

In our analyis, we apply this convergence to the phenomenon of major "10x" change (Grove 1996), and we can use the list of parameters outlined above to give a first impression of what we mean by amplitude, a concept that we will describe in more precise terms later.

The passage of time has an important impact of time on the variety of parameters that make amplitude. This impact can be stated in terms of preparation. If the timing is good, then all the capabilities, resources and other amplitude factors are there when needed. If the timing is not good, then they are not there. Timing thus means preparedness. If we want to use this concept of unpreparedness in a leadership context, we arrive at our two other descriptors of inflection points: abruptness and externality. Abruptness implies not only that the firm is unprepared when it enters the inflection point, it also implies that the leadership probably is (too) late in becoming aware of the amplitude of the shock that is underway and in planning the necessary measures to counter this shock. In order to focus the discussion on leadership attitudes once the inflection point has arrived, we have adopted externality as third descriptor. Both are supported by the literature, in particular by the structural theoretists, as we will see later.

We have thus arrived at an operational set of three descriptors for an inflection point (amplitude, abruptness and externality); these will provide the backdrop against which we will develop our framework.

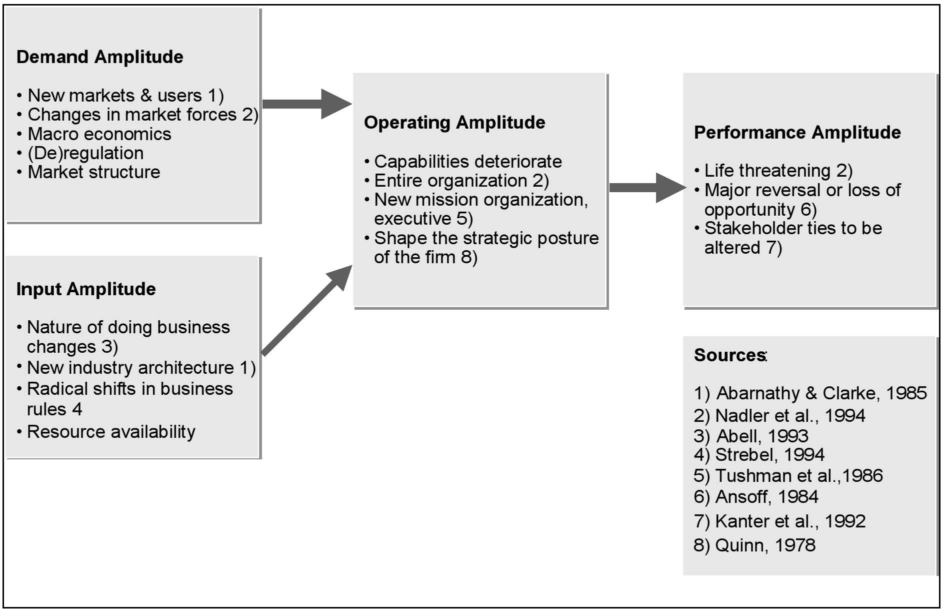
Our literature review of 2.2 shows that amplitude is the only dimension that is mentioned and discussion in any depth by all the authors. Most of them also mention the abruptness of the strategic change, but few discuss externality in any specificity – with exception of Ansoff and Tushman et al. On the contrary, most writers tend to focus more on internally generated changes (innovation), like Abernathy and Clark, and to a lesser extent Strebel. Ansoff and Kanter et al. thus are the only ones to explicitly identify all three characteristics.

From our literature review, *Amplitude* emerges as a multi-faceted dimension. These many facets share one common ground that was already indicated by Grove when he wrote his book introducing the inflection point. He called it a "10x" and life threatening event, and it appears that all researchers agree that an inflection point – or overlapping concepts like break-points and frame-breaking changes – have an important impact on the way the firm operates and on its performance. Quinn talks about "events that inexorably shaped the company's future", Most of the writers take a relatively pragmatic view on amplitude, conceivably because they usually focus on the strategic actions that are necessary to counter the inflection point or major change that often is the starting point.

Ansoff mentions a major financial reversal or loss of a major opportunity. These statements all seem to point to the fact that performance threatens to deteriorate (i.e. threatens to show a wide (often negative) amplitude). And, as said before, performance can be defined in terms of stakeholder satisfaction. The most concise definition of operations amplitude covers customer satisfaction, bases of competition and key success factors (Abell), and, at a more detailed level, products, processes and systems (Strebel).

This performance amplitude is not enough to define the inflection point. We also have to consider the fact that a performance amplitude is the consequence of one or more operating amplitudes: sales must go down, costs must go up, inventories must built, beds or seats must remain empty, experienced people must leave before profits go down. And these operating amplitudes are caused by external amplitudes: people stop buying product or services; inflation drives costs up, etc. We can categorise these into two sub-groupings: demand amplitudes affect the demand for the products and services that are delivered (like economic cycles, demographics, technology affecting product or service performance, competition and fashion), and input amplitudes (like labour cost, supplier economics, production and technology). The hierarchy of amplitudes can be illustrated by figure 2.8, which shows how different sets of input and output amplitudes, cause operations amplitudes which in turn lead to performance amplitude.

Figure 2.8: Four Aspects of Amplitude



This hierarchy of four aspects of amplitude (figure 2.8) is covered by the literature. When Abernathy & Clark (1985) talk about new markets and users emerging, this is an example of demand amplitude. The same can be said about Tushman et al. (1986) when they discuss changes in markets, macroeconomics, regulation and industry structure. Strebel (1992) and Abell (1993) talk about radical shifts of the business and the nature of doing business, whilst Abernathy & Clark (1985) provide a more forward-looking description when they talk about departures from existing systems and links to new markets and users; they all discuss what we call input amplitude. The identification of demand and input amplitudes carries in it the element of externality, thus touching on the third dimension of the inflection point.

The operating amplitude of the inflection point is described by Nadler et al. (1994), who discuss the acceleration of the traditional capabilities of the firm, and the need to create a new capability set. Tushman et al. (1986) call for a new mission, organisation or executive. As result of these external, industry-wide structural changes, the performance position of the firm suffers: Ansoff (1984) states it in relatively undramatic but concrete terms when he talks about a major reversal or loss opportunity, which can readily be translated into very specific market terms (like market share) or financial terms (like revenues).

Abruptness encompasses the time dimension of the inflection point, and positions the inflection point as a discontinuity in a longitudinal routine of business activities through time. As is the case with amplitude, abruptness can be seen from an environmental (ie., external), or from an internal firm perspective. In taking the external perspective, one can talk about sharp shifts in the conditions of the industry (Tushman et al., 1986), or about sudden changes in the rules of the business game (Strebel 1994). A breakpoint is quick, difficult to foresee and to deal with (Strebel 1994). And when the phenomenon is called a precipitating event, we may conclude that the general nature of the contingency may have been anticipated, but that the timing and severity could not possibly have been foreseen (Quinn 1978). Environmental abruptness thus has an element of surprise. Abruptness also relates to the time period that the leadership has to effectuate the necessary adjustments, and the necessity to take early decisions with major impact (Quinn 1978).

Abruptness can thus be described in terms of pre- and post-inflection point abruptness. Ansoff (1984), and Kanter et al. (1992) talk about the suddenness with which the Inflection point is precipitated – a suddenness that bears a strong element of surprise. Ansoff probes the effect of this surprise in his discussion on the abundance of new information, and the inability of the traditional leaders to cope with this information. Apparently, the cognitive capabilities of management threaten to fall short of the requirements posed by the new situation (Cyert & March 1963). And after the inflection point has occurred, there is an urgent “abrupt” need for change, as is stressed by Nadler et al. (1998) and Abell (1993). Quinn (1978) talks about the requirement for urgent interim decisions.

Finally, we have in this study opted for *Externality* as a differentiating characteristic of an inflection point in order to focus the analysis on the outside world as the crucial and often unknown strategic driver of the business: a shift in the environment is a far more serious threat to the firm than major internal adjustments like the loss of key individuals, since internally initiated changes and replacements of these individuals can be more readily realized than an overall redirection of the entire organisation (Teece et al., 1997). We thus avoid the terrain relating to why the leadership does not always understand and react to what is happening within its own company, which points to the complexities of internal innovation and internal communications. These important topics warrant studies in their own right.

Externality thus refers to an event or a trend that is new for the firm and its leaders. In most business sectors, a firm is part of the larger segment – with the exception of one-firm monopolies – and we can thus in most instances talk about generic events affecting the entire segment in which the firm operates. Inflection points can thus be segregated from external events are firm specific (except, as mentioned, in monopolies) and from internal events (which we have called innovations), and fall outside the scope of analysis.

The main consequence of externality is the loss of control that the leadership experiences in the inflection point, which forces it into a reactive role. However there is such a thing as "proactive reactivity" (Quinn 1978) in that constructive, early decisions and measures taken as soon as the inflection point is noticed can have a major impact on the eventual success of the firm through its transition, as we will see later.

Alongside the loss of control comes the externally imposed need for restructuring, repositioning and redefining the business boundaries that alters the viability of stakeholder ties or creates the potential for new ones (Kanter et al., 1992).

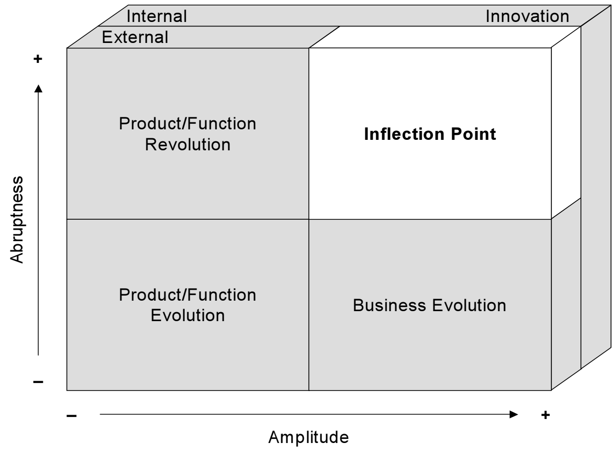
The redefinition of boundaries may express itself in opportunity, or need, for networks and alliances which complicate the description of externality: what should the leadership of the firm consider to be "inside" and "outside" its organisation? One obvious step is to define an externality as anything that originates outside the borders of the firm – which was described in Chapter 1 as a single strategic unit, being subject to unified strategic decisions. But one should realise that the increasing intensity of alliances and networks of the last decades makes the boundaries of the firm less discrete.

Externality has been defined in the objective terms of the environment (Tushman et al. 1990) or industry (Abernathy & Clark 1985) or novelty, originating from new directions (Abell 1993). Nadler et al. (1994) describe these in more precise terms when they talk about four external causes of upheaval, including industry structure, macroeconomics, (de) regulation and market forces. They also cite innovation, which of course can have an internal origin. Externality can also been seen in more subjective terms, as a novel problem with which the firm has no previous experience (Ansoff).

Externality has become a more complex concept as companies and researchers have started to realize that alliances can be a valuable way of leveraging the capabilities of the firm in the different markets in which it operates (Dyer & Sigh 1998). This interest in the question "what is external" has, if anything, increased exponentially in recent years with the arrival of internet (Bell 2000).

We can show the convergence between these three characteristics into the inflection point by plotting them into a three-dimensional matrix (figure 2.9).

Figure 2.9: Three Dimensions of the Inflection Point



On the foreground of the cube, we show externally imposed change. Here again, both amplitude and abruptness can be low (-) or high (+). Low amplitude and low abruptness show up as gradual evolution of the firm. Here, the introduction of e-business or the euro in production companies is a good example. When many functions are affected in a serious way, amplitude goes up (+), and we can talk about a gradual restructuring of the firm: railroad privatisation, or the introduction of the euro in currency banking are good examples. When only one or a few products/functions are affected in an abrupt way (+), we can talk about a functional revolution, like the outsourcing revolution in production. And, finally, when both amplitude and abruptness are high (+), we end with an inflection point, which we will analyse for e-business in publishing.

On the background of figure 2.9, we show the internal world of innovation, which for the purposes of this study we describe as an internal process. When the amplitude of innovation is low (-), this means that only a few functions of the firm are affected: we call this product- or functional innovation. Product/Functional innovation can be gradual (-) (taking place over a relatively long time period that allows for careful preparation – a typical example would be the introduction of the Boeing 707 and 747 jetliners by the launch airline), or abrupt (+) (when it takes place with dramatic speed – for example, the introduction of e-ticketing by its pioneers). When many functions or products are affected, and the amplitude of innovation becomes high (+), we can say that the entire business is changed. This change can take place either with relatively low (-) abruptness (like the networking strategy of many PC and software producers that promises to transform entire companies to network-based software suppliers), or with high (+) abruptness (in which case we end up with radical business innovation).

2.4: Three Phases of the Inflection Point

In order to determine how the leadership of a firm should position itself in a inflection point, we first have to gain a better understanding of how this inflection point evolves. If we regard this as a longitudinal event, we find that the characteristics of the environment of our firm change quite dramatically from the moment of first abrupt occurrence of a "major externally-caused amplitude" to the final restabilization of the external environment. The easiest way to analyze these changes in the external environment through the inflection point is by segmenting the latter into phases, and by seeing how key variables shift as the business, and thus the firm that is part of this business, moves from one of these phases to the next. In doing so, it is of course important to look at these phases from a leadership perspective, which is an important "lens" of this book. In our search for an appropriate model of these three phases, we found that the passage through the inflection point closely parallels the innovation phases that were identified and described by Utterback in his "Mastering the Dynamics of Innovation" of 1995. In specific terms, Utterback talks about:

- The *fluid* phase. This encompasses the initial period of the innovation of an industry, in which a great deal of change happens at once and in which the outcomes are highly uncertain in terms of product, process, competitive leadership, and the structure and management of firms,
- The *transitional* phase is this second phase of industry innovation. The market starts to accept the new products, a dominant design emerges and the focus of the firm shifts from the inventor's workbench to the factory floor,
- The *specific* phase is the third and final phase in industry innovation. Now, products or services become highly defined, and production focuses on volume and low cost,

Figure 2.10, derived from Utterback (1994), shows how a selected number of functions of a firm change as they pass through the three phases of the inflection point

Figure 2.10: Characteristics of Three Phases

Subject	**Phases**		
	Fluid →	***Transitional*** →	***Specific***
Innovation	Frequent major product changes	Frequent major process changes	Incremental changes
Offerings	Diverse customized designs	One or more stable designs	One standard
Business processes	Flexible and inefficient	Becoming rigid	Efficient and rigid
Cost of change	Low	Moderate	High
Competition	Few, diverse, growing	Many	Few: oligopoly
Organizational control	Informal	Project and task groups	Structure, rules and goals

Source: Utterback (1994)

Use of Utterback's classification, which was originally intended to describe industry innovation processes for inflection points, is justified by the overlap between the two concepts. Both innovation and inflection points show high levels of amplitude. Many – albeit not all – innovations are abrupt because they penetrate the entire industry within a limited time period, and surprise many of the industry participants. For many of the firms that make up an industry, in particular those that are established, an innovation comes across as an external. Undoubtedly, a number of innovations are internal to a given firm (with a given leadership), and may also be a one-company affair. But Utterback's classification fully covers the type of innovation that we have called inflection point. One should note that, whereas Utterback looks at the transition phases through an industry lens, this thesis focuses on the viewpoint of the leadership and their perception of the industry.

The case reviews provided in chapter 4 will demonstrate how these descriptors of the three phases of innovation apply to the inflection point. There however are a few notable exceptions. The most notable of these are the organizational and control mechanisms used in the transition, in which Utterback emphasizes the use of project- and task groups, and we emphasize the hands-on control by the leadership. We will discuss these commonalities and differences in more detail at the end of chapter 4 (figure 4.24)

The phases of Utterback show their relevance when we look at the three defining dimensions of the inflection point – amplitude, abruptness and externality – in each of the phases, and see how their function changes. The transition through the inflection point expresses itself in a different emphasis on each of the three defining dimensions of the inflection point. The fluid phase, as seen from a leadership perspective, is abrupt. The situation created outside of the firm is dynamic, unclear, and unpredictable; the knowledge and capability levels necessary to succeed in the new environment are still (very) limited. Nonetheless, the firm's internal organization and functions usually do not yet experience the full impact of the inflection point and continue under the momentum of the old, pre-inflection point whilst the pressure for some form of adjustment action starts to build regime. Therefore, the amplitude of (internal) change is still low, but increases rapidly.

In the transitional phase, the amplitude, speed and complexity of the readjustment build up to a high level. The timing, however, is more controlled and predictable – which translates into moderate abruptness. Here, the leadership has gained certain knowledge of the issues and, if only because of the high amplitude – many functions experience major challenges – is under strong pressure to take rapid and incisive action, bypassing local management. Strategy and capabilities are internalized, and the driving events are no longer all external.

Finally, in the specific phase, amplitude and abruptness gradually decrease as the leadership brings the firm under control under its new strategic direction. However, since all the functions now feel the impact of adjustment, the amplitude is still moderate. The knowledge base and capabilities to succeed under the new circumstances have permeated through the organization, which means that local management can play an important role in managing the strategic transition. The following figure 2.11 illustrates the trends.

Figure 2.11: Three Dimensions in the Phases of an Inflection Point

Dimensions	Development Phases		
	Fluid →	***Transitional*** →	***Specific***
Amplitude	Low/increasing	High	Moderate/ declining
Abruptness	High	Low	Low
Externality	High	Moderate	Low

Having thus explored the differences between the three phases, we must ask ourselves a final question: how do we know whether a firm, or a group of firms (this being highly dependent on the segmentation of the business sectors), is experiencing a fluid, transitional or specific phase of the inflection point? Fortunately, Utterback's framework is quite pragmatic, and many of his variables can be readily observed from the outside. We can thus base our rating criteria on his topic list as discussed in figure 2.10. One exception in Utterback's listing is his "cost of change", which we omitted because it is very difficult to measure in practice, particularly when we talk about investments in people and capabilities. The other is organizational control, which to a large degree is included in our conditional leadership approach and will thus be discussed later under that header. With minor adjustments to render Utterback's classification pragmatic, we thus come to the following characterization of the three phases of the inflection point (figure 2.12), as a pragmatic derivative of Utterback's figure 2.10.

Figure 2.12: Observable Characteristics of Inflection Point Phases

Subject	Phases		
	Fluid	***Transitional***	***Specific***
Product/Service Changes:	Frequent →	Regular →	Rare
	Local	Firm-wide	
Designs/ Standards:	Local	Firm-wide	Firm-wide
	Flexible	Multiple	One
Business Processes:	Flexible	Becoming rigid	Rigid
	Bottom-up	Top-down	Top-down
Competition:	Few and Growing	Many and Declining	Oligopoly

2.5: Conclusion: Literature Supports the Three Dimensions of the Inflection Point

Our analysis leads to the conclusion that the literature supports the three dimensions in which we capture the inflection point.

Amplitude is noted by all the writers. As we have seen, major change has over the last decades become an important topic, and it is not surprising that major shifts in the outside world, and the resultant major shifts inside firms, have been discussed with a certain frequency and intensity. We have seen that "major change" can be defined in many different ways and at varying levels of specificity.

Abruptness is touched on by many writers dealing with major change, but is generally not defined in precise terms: when people talk about "surprises", "suddenness" or the need for "immediate decisions", the focus is on the consequences, not on the cause or nature, of the abruptness. It remains a core ingredient for the inflection point and related concepts if only because it permits a sharper delineation of amplitude, the phasing of the inflection point, and the shifts in leadership attitudes.

Externality is the least covered, if only because the student of major change can to some extent ignore it and in he/she includes it in both external and internal changes in his analysis. This widening of scope does, however, mean that internal innovation is included, which in turn means that a range of issues and problems are added to the list of research. Most of these relate to the fact that an innovation, being internal, by definition can be managed proactively, whereas a rapid major change from the outside always forces the leadership into an (initially) reactive posture. Examples of questions that would have to be added:

- Why was the leadership unable to manage the innovation in an evolutionary way, thereby countering the life-threatening side of amplitude?
- How can an innovation be used proactively to change the architecture of the business, in such a way that the firm improves its position, as is discussed by Strebel and others?

In our view, combining internal innovation with external inflection points into one framework risks increasing imprecision in describing the actual framework and process of inflection point transition.

We were, however, able to use the framework developed by Utterback to describe the different phases that the firm passes through the inflection point. We noted that these phases are compatible with the three dimensions of the inflection point in the sense that these dimensions play a different role in each of the phases. This will enable us to develop a dynamic framework of leadership approaches, and verify this in practice.

Our literature review leads to two other findings. The first is that, to date, nobody has consistently adopted the leadership lens. Many researchers have thought about the organisation as a whole, and, for example, stated that the appointment of a new leader is an effective way of moving through an inflection point (e.g. Kanter et al., 1992, and Tushman et al., 1990). Others have analysed the division of tasks in the leadership (Ansoff, 1984, Abell, 1992), or the conditions to be created to enable innovations to succeed, like Abernathy & Clark (1985), with their transilience map. But a systematic review of what the toolset is with which a (renewed) leadership can "attack" the inflection point is only available in fragmented form, from different sources (e.g., Strebel, 1994).

The second key finding is that a longitudinal view on inflection point transition has not been explored in any detail by any of the authors to date, and thus will benefit from further discussion. From the literature, a long list can be developed of ideas to improve the position of the firm in inflection point conditions. The problem, however, is that in the initial stages of the unfolding of the inflection point, the management rarely has the necessary insight to design a complete improvement program (see Ansoff 1984 on information overload and Cyert & Marsh 1963). Later on, the leadership gains experience in the new environment – and thus the ability to correctly select, interpret and synthesise information from the new marketplace(s), but also finds that the organisation has a different pace in absorbing the new rules, and that the old structures and rules no longer suffice. This leads to a shift in the use of leadership tools. In a third stage, the firm learns to cope with the new environment, which again facilitates the use of other leadership tools.

For the first time, therefore, we can regard the process of guiding the firm through an inflection point as a series of successive leadership postures – i.e., a longitudinal perspective.

A question that has relevance to the student of inflection points in general, and particular relevance to our fieldwork, is which characteristics we can observe in industry developments that will qualify these as an inflection point. When we go back to our three dimensions and the descriptions provided above, we can hypothesize that amplitude should show in the threats to the market position of the firm that risks losing a major part of its customers due to its inability to respond to new demands. Conversely, we should observe a risk of serious financial losses, and a willingness to make major financial investments simply to catch up with the newly required capabilities. The last statement can also be made about competencies and skills: we should observe heavy recruiting or training of personnel with the newly required qualities, and conceivably an exodus of "old-timers".

Regarding abruptness, we should observe in the actions of management a sense of urgency, a feeling that there is only a limited time period to make the necessary adjustments. Acquisitions are a typical action of management that feels it has run out of time. And pronouncements in annual reports and the press provide another indicator of management sentiment.

Externality can be verified through the contribution that the firm has made or has not made to the development of technologies and capabilities that characterize the competitive environment after the inflection point. When the firm has developed the capabilities that cause or facilitate the environmental turnaround, the event may be an innovation, but not an inflection point, according to our characteristics.

3 Three Leadership Approaches to the Inflection Point

3.1: Introduction: The Leadership Perspective

This chapter shifts our focus from the inflection point itself to the actions that the leadership can take to guide the firm through the period of rapid change. First we will discuss the seven schools of thought – our grounding theories – that have guided us in identifying three different styles of leadership behavior. Each of these seven schools has its own perspectives on the inflection point. Subsequently, we arrange the leadership attitudes described in these seven schools along two important criteria of relevance for an inflection point. The first of these criteria is the nature of the strategic redeployment enacted by the leadership, which can be adaptive or selective. The second is the speed of strategic redeployment, which can be radical or incremental (section 3.2). We will then see how these seven grounding theories indeed end up supporting the three dominating leadership approaches to an inflection point – the directive, conditional and ecological approaches (section 3.3). Subsequently, we test the practical validity of our approaches in five key managerial areas of interest (or anchor points), and we see how this test against managerial practice helps us further describe and delineate the three approaches (section 3.4). Figure 3.1 illustrates this process.

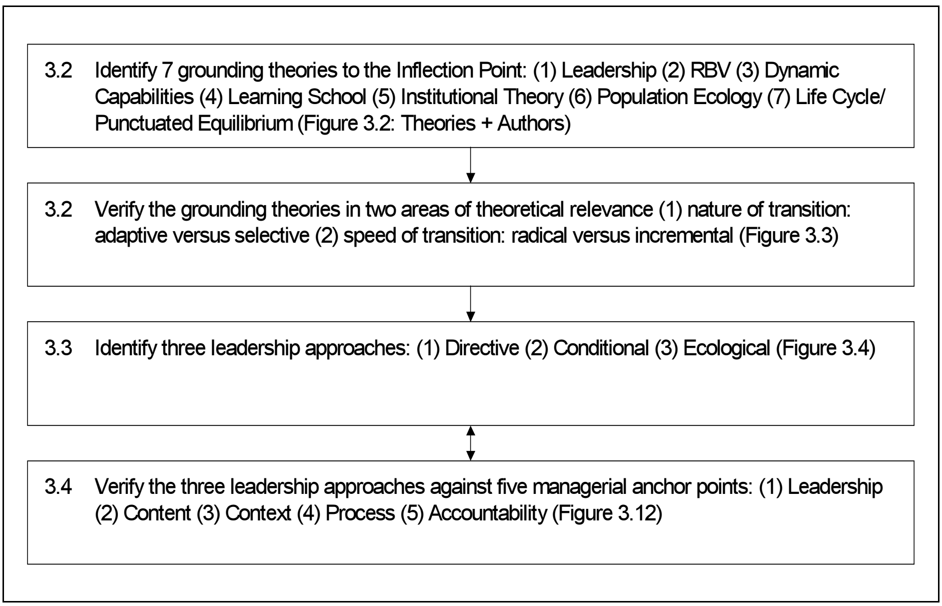


Figure 3.1: Conceptual Underpinnings

3.2: Grounding Theories of the Analysis

In our search for the most appropriate theoretical underpinnings of strategy development through the inflection point, we required theories that would both illuminate the actions that the leadership can take in an inflection point, and help us understand and explain two important essential characteristics of strategy deployment. The first is the choice between an adaptive and a selective management perspective that we will observe in the leadership of firms that pass through the inflection point. Selective perspectives regard the (internal) renewal capabilities of the firm in an inflection point as being restricted by factors like resource scarcity, dominance of industry norms, and structural inertia. Adaptive perspectives, on the other hand, suggest that firms can and do change, overcoming their rigidities: their successful transition of the inflection point is due to their ability to learn different behaviors and to explore new competencies (Volberda, Baden Fuller and Van den Bosch, 2001). The second essential characteristic is the choice the leadership has between an incremental and a radical management style. The incremental style is compatible with the existing structure of a firm and is reinforced over a period of years. Radical, frame-breaking changes involve simultaneous, sharp shifts in strategy, power and controls (Tushman et al., 1994).

Based on our preference for theories that address these two perspectives in rather specific terms, we have selected seven theories, listed in Figure 3.2. We have also named the most important authors for the different schools of thought.

Figure 3.2: Grounding Theories of the Analysis

Theory	Authors
Leadership	Schumpeter (1934); Barnard (1938); Selznick (1957)
Resource-based view	Penrose (1959); Learned et al. (1969); Wernerfelt (1984)
Dynamic Capabilities	Teece, Pisano and Shuen (1997); Eisenhardt and Martin (2000)
Learning School	Argyris and Schon (1978); Weick (1979); Lindblom 1960; Senge (1990)
Institutional School	DiMaggio and Powell, (1983; 1991); Greenwood and Hinings (1996)
Population Ecology	Hannan and Freeman (1977; 1984); Aldrich and Pfeffer (1976)
Life-Cycle/Punctuated Equilibrium	Miller and Friesen (1984); Tushman and Anderson (1986); Romanelli and Tushman (1994)

The Leadership School

The source of the leadership perspective of this book goes back a long way: Schumpeter was the first to regard the leader/entrepreneur as more than a mere administrator of ongoing affairs. In the 1920s he already saw the leader/entrepreneur as being occupied with the "incessant creation of new plant and equipment embodying new technologies", as "thinking and acting beyond the ordinary course of business routine," and as "doing things that are already being done in a new way" (Schumpeter, 1928).

In the postwar period, the organization increasingly was seen as a cooperative system, with management and employees as members. In its purest form, the leadership was considered to be granted by the subordinates. The mission of the latter, being subject of a (implicit) contract with the members of the organization, was seen to maintain this system of cooperative effort (Barnard, 1938). Within this philosophy, the leadership can discharge its mission through three tasks:

- by developing and maintaining a system of communication
- by securing the personnel that together form the organization
- by formulating the purpose and objectives of the organization

This school of thought, which strongly influenced management thinking in the 1950s through 1970s, does not leave the leadership a lot of freedom to serve the shareholders and other stakeholders of the firm, or to set dramatic new directions that may not be in the immediate interests of the employees.

A more current view on leadership regards management as responsible for the creation and maintenance of distinctive competencies in the firm and for realizing an appropriate fit between the internal state of the firm and external expectations (Selznick, 1957). Furthermore, the leadership is expected to maintain ultimate control and consciousness of the firm: in this school, the CEO or general manager – i.e. the leadership – should be the only strategist of the firm (Andrews, 1997). Accordingly, there is a close linkage between entrepreneurship and patterns of resource deployment, as well as the creation of new capabilities of positioning in markets (Stopford and Baden Fuller, 1994).

Stopford and Baden Fuller (1994) listed the directions that the leadership can take to effectuate major change in three dimensions, of which the first two will be discussed in this book:

- Creation of a new business – which parallels our proposed directive approach
- The transformation or renewal of existing organizations – which follows our conditional approach
- Changing the "rules of competition" for the industry, which is outside the scope of our analysis, since this proactive action towards the environment is not consistent with the inherently reactive/environment-dependent character of an inflection point.

In assessing these theories, we can state that the leadership school is radical in nature, due to major changes to which the leadership has to respond. The leadership of a firm must adjust the firm to survive these major changes and avoid drifting into a downward spiral.

Resource-based Views

Resource-based theories view the firm primarily as a portfolio of resources and competencies (Penrose, 1959; Grant, 1997). In a formal and limited sense, a firm's resources at a given point in time can be defined as those (tangible and intangible) assets that are tied (semi) permanently to the firm (Caves, 1980). Resources can be classified into three distinct groups: physical/capital resources, human capital resources and organizational resources. In order to be a source of sustained competitive advantage, resources must meet four criteria: they have to be valuable, rare, imperfectly imitable and non-substitutable (Barney, 1991).

The resource-based school maintains that the firm's purpose is to use these productive resources to produce and sell goods and services. Thus, from a managerial perspective, the firm is more than an administrative unit; it also is a collection of productive resources. Disposal of these resources, between different uses and over time, is decided by the administration (Penrose, 1959), which in this context refers to the leadership. When facing the inflection point, this "bundle of tangible and intangible resources and tacit know-how" must be identified, selected, developed and deployed to generate competitive advantage (Learned et al., 1969).

The resource-based view of the firm is incremental in nature, due to the embeddedness of skills in the organizational routines. Furthermore, the resource-based view of the firm is adaptive; the firm seeks to identify and select, develop and deploy resources as it strives for competitive advantage.

Dynamic Capabilities

Dynamic capabilities are the fundamental drivers behind the creation, evolution, and recombination of resources into new sources of competitive advantage (Henderson & Cockburn 1994; Teece et al., 1997). These abilities are the antecedent of organizational and strategic routines by which managers alter their resource portfolio to generate new value-creating strategies (Grant, 1994; Pisano, 1994). Capabilities can be segregated into the skills and knowledge base, the technical systems, the managerial systems and the values and norms of a firm (Leonard-Barton, 1992).

Dynamic capabilities theory sees the transition through the inflection point as a renewal process of a firm that is effectuated through the firm's abilities to "integrate, build, and reconfigure internal and external competencies to address rapidly changing environments" (Amit & Schoemaker, 1997). Although it appears that this theory allows a measure of strategic freedom, managers must take path dependencies into account. The dynamic capabilities of a firm at a certain point in time and their counterpart, its core rigidities, limit its options ahead.

Dynamic capabilities can be useful to a firm only when they increase its revenues or reduce its cost base. This can be considered as an overriding driver behind the Schumpeterian creation, evolution and recombination of resources into a new basis of competitive advantage through the inflection point (Henderson & Cockburn 1994; Teece et al., 1997). The link between dynamic capabilities of a firm and the stage of industrial development, in which an inflection point is a punctuating event, was laid by De Boer, Van der Bosch and Volberda (1999).

Baden-Fuller and Stopford (1994) developed a typical leadership model for inflection point transition that leans heavily on capabilities to rejuvenate the firm. This rejuvenation is seen as a four-step management process. First, galvanize the organization into action; then, simplify by removing unnecessary complexity. Subsequently, build the necessary new capabilities; finally, leverage to maintain momentum and stretch the advantage. Dynamic capabilities are thus adaptive in nature because they seek to alter, renew or adapt the firm's competence base. These alterations will have only an incremental impact on the firm, because path dependencies limit the firm's freedom of the competence base.

An important test of the importance of dynamic capabilities is done by looking at the *a contrario case*, which can be coined *core rigidities* (Leonard Barton, 1992). When a gap develops between the requirements of a rapidly changing environment (e.g., in an inflection point) and the existing capabilities of the firm (including its values, skills, managerial and technical systems), the result is a shortfall in the performance of the products and services it seeks to provide in the marketplace. These deeply embedded knowledge sets thus actively create serious and mounting problems, unless the leadership takes energetic steps to fundamentally recreate a more appropriate set of capabilities.

The Learning School

The successful passage of a firm through the inflection point can also be regarded from the perspective of the mindset, attitude, knowledge and experience of the organization as well as the leadership that runs it. Learning can be defined in terms of an individual or organization obtaining know-how to solve specific problems based on existing premises, and to create new premises (Argyris & Schon, 1978 and 1974; Bateson, 1973).

One should note, however, that there is a difference between individual and organizational learning. Though individual learning is important to organizations, organizational learning is not simply the sum of each member's learning (Fiol & Lyles, 1985). Learning enables organizations to build a common understanding of their environment and to begin assessing viable strategies (Daft & Weick, 1984; Starbuck et al., 1978). This learning process results in a changed mental map shared by the members of the organization.

The translation of learning concepts to a corporate setting was made by Lindblom (1960, 1968) who considered policy setting as a "never-ending process of successive steps in which continual nibbling is a substitute for a good bite". Learning thus also is the process by which existing organizations adjust and adapt to their environment (Fiol & Lyles, 1985).

It is intriguing to note that if the leaders of a firm are well-tuned to each other and share common objectives, they can be expected to have a shared sensitivity as to the outside threats (like inflection points) that may present themselves as barriers to the realization of these objectives. Accordingly, a "learning organization" should be capable of adjusting, at least to some extent, to the inflection point once it occurs.

Learning can be segregated into the following (Argyris & Schon, 1978):

- single-loop learning, in which the detection and correction of errors permits the organization to carry on its present policies and achieve its current objectives,
- double-loop learning, in which the norms, values, policies and objectives are altered, and
- deutero learning, consisting of inquiry into the learning system proper

A parallel but different way to look at these is to identify *adaptive* learning, which concerns coping and *generative* learning, which is about creating (Senge 1990). An inflection point calls on both skills. Those organizations that have limited learning systems are only capable of single-loop learning. Undoubtedly, transition through an inflection point requires at least double-loop learning: in this respect, learning theory borders against institutional and ecological philosophies that are critical or negative about the ability of the organization to adjust.

The role of management in a learning process is indirect. Learning cannot be imposed, it can only be stimulated, and at times initiated. The role of the leader (or his advisor) is therefore to map the problem as the organization perceives it, to test it, to contribute/stimulate the generation of solutions, and finally to support the implementation (Argyris & Schon, 1978).

As shown above, learning is adaptive in nature, as it seeks to realign the firm with its environment due to changing environmental conditions. Additionally, the realignments through learning within the firm are incremental (Quinn, 1980).

The Institutional School

Institutional theories maintain that the passage through an inflection point, which is a renewal journey, is governed by a powerful set of industry norms by which the firm has to play. The result of coercive, normative and mimetic isomorphism, this passage is achieved by maintaining congruence with shifting norms and shared logic within an industry once it has established itself (DiMaggio & Powell, 1983). As such, institutional thinking is not a theory of institutional change, but rather seeks to explain the isomorphism (relative uniformity) and stability of organizational arrangements in a given population of organizations. The institutional context may provide templates for the post inflection point organization forms, and institutional pressures lead organizations to adopt the same organizational form (DiMaggio & Powell, 1991).

The first two forms of isomorphism mentioned above relate to, respectively, political influences – such as regulations – and the need for legitimacy (coercive isomorphism), and the influence of uncertainty that may cause organizations to mimic each other (mimetic isomorphism): Organizations tend to model themselves after similar organizations that they perceive to be more successful. This, of course, is a relevant factor in an inflection point. Normative isomorphism follows from the ambition of the members of an occupation to define the conditions and methods of their work and to establish a cognitive base and legitimization for their occupational autonomy (Larson, 1977; Collins, 1979).

In institutional theory, the environment is very selective through the three forms of isomorphism. Firms that do not follow the industry standards and regulations risk being selected out. These mimetic processes that take place in organizations are bound to be incremental, because of the difficulties that stem from mimicing behavior. Institutional theory can encompass both incremental and radical change processes.

The Population Ecology School

Population ecologists such as Hannan & Freeman (1977) express their "doubt that the major features of the world of organizations arise through learning or adaptation". Rather, the ecological school concludes that firms basically are not capable of making the radical changes in strategy and structure that are required by the inflection point. Moreover, managerial intent can be expected to have little or no impact on adaptation (Lewin & Volberda, 1999). The basic premise of the population ecology school is selective – environments use resource competition and scarcity to select their appropriate organizations. This theory leans heavily on Darwinian concepts developed by biologists.

Population ecologists state that true strategic decisions, such as major investments in plant or production facilities, lead to sunk costs. Coping with the inflection point is based on and limited to accumulation of structural and procedural baggage through retention processes (Hannan & Freeman, 1977 & 1984; Aldrich & Pfeffer, 1976). Changes within those organizations, if at all possible, will be incremental, due to structural inertia.

Population ecologists maintain that the strategic role of the leadership is quite limited, since they regard the organization as incapable of major adjustments. The strategy function is therefore relegated to a higher stakeholder level – starting with the holding company if that level exists. There, the leadership has leverage in the resources (capital, manpower etc.) that it can allocate or withhold from the business.

Life Cycle Theory/Punctuated Equilibrium

Punctuated equilibrium theory depicts organizations as evolving through relatively long periods of stability (equilibrium periods) in their basic patterns of activity. These stable periods are punctuated by relatively short bursts of fundamental change (revolutionary periods) (Romanelli & Tushman, 1994). Periods of stability breed adaptation and are followed by periods of selection during the revolutionary periods. The model has been used in a number of social and physical science disciplines, such as biology, sociology and psychology. Gould (1980; 1982) is the founder of the concept of punctuated equilibrium and has successfully tested this model in a biological setting.

In periods of stability, the current structures, systems, controls and resources are elaborated and enhanced; in periods of discontinuous change, they are transformed fundamentally. Tushman & Anderson (1986) studied the impact of technological breakthroughs in the minicomputer and airline industries. They found that competence-destroying discontinuities are initiated by new firms and are associated with increased environmental turbulence; competence-enhancing discontinuities are initiated by existing firms and are associated with decreased environmental turbulence.

This theory have a dualistic perspective on change over time. Periods of radical selective change are followed by periods of incremental adaptive change.

Linking the Theories: Finding the Areas of Relevance

We can now move towards an effective typology of leadership approaches by plotting the seven grounding theories against the two all-important classifications of speed (radical vs. incremental) and nature (adaptive vs. selective) of strategy deployment that were presented at the beginning of this chapter.

Of the theories presented, only leadership school can be classified as completely radical, because this theory involves radical change by searching for new business ideas. The learning, resource based, dynamic capabilities, institutional and population ecology theories are incremental in nature because they build on the existing structures of the company in an evolutionary mode. The life cycle/punctuated equilibrium faces periods of incremental change that are followed by periods of radical change and can therefore be positioned in the middle of this continuum.

In the other dimension – the nature of strategy deployment – population ecology and institutional theories are selective because they reflect a process of renewal in a world that is highly constrained in terms of resources, industry norms and structural inertia. And leadership, resource based, dynamic capabilities and learning are typically adaptive because they reflect a belief that firms can and do overcome their rigidities and change. The life cycle/punctuated equilibrium alternates between periods of adaptation and periods of selection and can therefore not be placed in a fully selective or adaptive mode. We will now map these theoretical approaches on the two axes, as can be seen in Figure 3.3.

Figure 3.3: Plotting the Grounding Theories against the Nature and Speed of Strategy Deployment

		Speed of strategy deployment/transition[1]	
		Radical	***Incremental***
Nature of strategy deployment/ transition [2]	***Adaptive***	Leadership	Dynamic Capabilities Resource-based view Learning school
	Selective	Life-cycle/ Punctuated Equilibrium	Institutional theory Population Ecology

Sources: *(1) Tushman & Romanelli (1986)*
(2) Volberda et al. (2001)

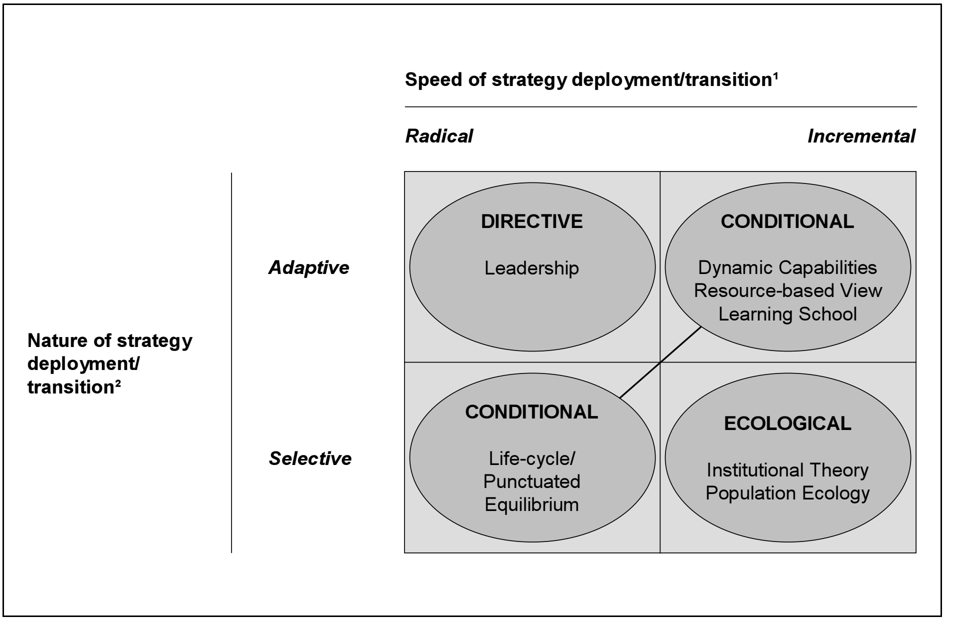
From the seven grounding theories summarized above, we can deduce a rich variety of approaches that can be applied by the leadership to an inflection point. To come to a workable model, we will need a synthesis.

3.3: Towards a Typology of Leadership Approaches

Figure (3.3), presented in the previous section, shows us that the seven grounding schools inspire different leadership approaches: where a manager follows the leadership school of thought, he or she will end up approaching the inflection point with a radical change process that is adaptive in nature. Conversely, resource-based views and the dynamic capabilities school will steer the leadership to adopt a posture that leads to a more incremental and adaptive change process. The institutional and population ecology theories stress both an incremental and selective approach to change. And, finally, the life cycle/punctuated equilibrium school may lead to a radical and selective leadership style.

We can now translate the schools of thinking into three management approaches that cover the quadrants of our matrix (figure 3.4)

Figure 3.4: Grounding the Three Leadership Approaches



Sources: *(1) Tushman & Romanelli (1986)*
(2) Lewin & Volberda (1999)

The first approach, which we shall call the directive approach, is grounded in the leadership schools. It considers the way through an inflection point as subject to one or more direct leadership decisions. Under the directive approach, the leadership takes and enacts the decisions destined to lead the firm through the inflection point. Subordinates may be allowed to provide input and analysis, but leadership retains firm control of the resulting strategic actions that provide the adjustment to the inflection point challenges. These directive decisions lead to changes in the configuration of the firm and typically relate to either the portfolio of assets of the company, or to key appointments, or otherwise to the boundaries that are set to its operations – in short, the decisions about what the firm should do. Directive decisions do not require (conceptual) inputs from lower levels of management, nor do they concern themselves with the capabilities of the people and managers within the operations to consider, develop and implement their own solutions to the inflection point. And because they do not need these inputs or adjustments, they are capable of rapid and dramatic strategy redeployment. They thus are radical and adaptive.

At the opposite end of the spectrum is the ecological approach. This third main line of leadership thought is inspired by the population ecology and institutional schools, which stress the limited ability of even a strong leader or strategist to effectively comprehend and respond to both the multiple dimensions of an inflection point, and the complexities involved in adapting to the new circumstances. The firm is what it is, and the capabilities, characteristics and resources it has acquired over time – consciously or unconsciously – determine whether or how it will survive the transition. This viewpoint can be taken of the corporation as a whole, as "environmentalists" typically do. The role of the leader of a given firm is thus limited to the question whether that leader should extend his or her given commitment after a reasonable reporting period – which translates into a form of (near) binary accountability that is executed ex-post (i.e., after the inflection point occurs). This approach can also be interpreted as a transaction model: "I (or my predecessors) have given you resources, you give me results, or I'll dissolve my contract with you".

In between these two extremes lies the *conditional* approach, which finds its theoretical grounding in the resource-based and dynamic capabilities views, on one hand, and the punctuated equilibrium theory, on the other. It takes the capabilities of local management and staff to consider their situation and their inflection point as focal point of strategy and action, and thus focuses on creating conditions in the company that enable the people within it to develop and implement their own solutions. These conditions can be the structure of the corporation, or processes for predicting, planning, and innovating for inflection points, or the flexibility with which an organization reacts to outside impulses. We maintain that these also include the targets set by the leadership for the firm and its units. This introduces a seemingly directive element in this approach; the conditional approach emphasizes delegation (i.e., giving the local management the freedom to make their own choices within a given framework), whereas the directive approach emphasizes decisions and actions without delegation. At the top of the firm, leadership behavior tends to be selective and may be radical (the bottom left-hand quadrant). At the local level, management behavior tends to be more adaptive and incremental (the top right-hand quadrant).

Conditional leadership looks at the longer-term continuum in which the inflection point is an interruption in a life cycle. During this interruption, the speed of strategy deployment can be radical, and the firm can experience selective pressures. At this point, the firm's position can best be described as a punctuated equilibrium. Thus, conditional leadership is compatible also with life cycle and punctuated equilibrium theories. Conditional leadership concerns itself with the question *how* the leadership of a given firm can structure its organization and processes to weather the changes.

We have thus identified the three basic approaches that the leadership can take when considering strategy development for inflection points: directive, conditional and ecological. This selection is based on the way in which the leadership exerts its power to form and implement the strategy of the firm, and on the freedom that is left to the local managers who run the units and functions within the firm to set their own strategic course.

3.4: The Leadership Approaches and the Anchor Points of Management Practice

Introduction

Figure 3.4 deduced from theory the three leadership approaches to leadership in an inflection point. Each of these approaches has its characteristics, upon which we will elaborate in the following chapters. Before doing so, it is important to verify the value of this classification of three approaches in management practice, if this analysis is to have any value in the management world. For this, we have to identify five managerial anchor points, which are areas that the leaders of a successful firm – identified by sustained performance from the perspective of its stakeholders – have to master. Many of these areas can be considered for this list. For this analysis, we have identified five groups of managerial anchor points relating to, respectively, (1) leadership; (2) strategy development/content; (3) environment/context; (4) organizational structure & processes; and (5) performance & accountability. This choice was predicated on the importance of each of these anchor points for inflection point leadership, and for management in general. From the first criterion, the choice of leadership as an anchoring point was an obvious one, as was the choice for strategy development and environmental alignment: these topics are all centerpieces for any firm that tries to pass through an inflection point. The last two anchor points – structure and accountability – were added because they are crucial differentiators between the three leadership approaches that we have identified. In explaining our selection:

A: *Leadership* relates to the role that management plays in periods of rapid change, either at the top of the organization – leadership direction, or in the field – in the form of local entrepreneurship.

B: *Strategy development/content* deals with the thought- and action processes employed by the firm seeking to adjust to changes in the environment. Here, the anchor points are the emergence of a consistent set of capabilities, and the speed of adjustment of the business portfolio.

C: When looking at the *environment and the context of strategy*, the crucial test is to what extent there is scope for alignment and fit with the changes in the outside world.

D: In the area of *organization and processes* we have identified two managerial anchor points, one relating to the complexity of structure and processes, the other to knowledge creation and integration.

E: Finally, in examining *performance and accountability*, we have taken *accountability* as the main anchor point.

Before proceeding with the actual discussion of each of the anchor points, we will explain how we verified their selection against existing management practice. Our source is the framework for analysis provided by Burgelman in 1994, and later used by him in developing the inflection point concept. In his work, he identified five dynamic forces that shape a company's evolution and the emergence of strategic dissonance, and that help managers find a way through the period of uncertainty:

- the first dynamic source identified by Burgelman is *Corporate Strategy*, which in his interpretation reflects the beliefs that the leadership has about the basis of the firm's current success and the changes to be anticipated. In our terminology, this covers many elements of our concept of leadership.
- *Strategic Action* is Burgelman's word for strategy deployment – what the firm actually does strategically matches the content side of strategy development,
- The *Basis of Competitive Advantage* is grounded in Porter's five determinants of industry attractiveness (Porter, 1980): bargaining power of customers and suppliers, the nature of rivalry among incumbents, and the threats of new entrants and substitution. Technological change, legislation or government regulation can affect these elements and their relative importance. These elements are descriptors of the environmental anchor point.
- *Distinctive Competence*, which encompasses the competencies that have made it possible to develop a competitive advantage and survive, which are based on structure and processes.
- The *Internal Selection Environment*, which links strategy and action to competencies and competitive advantage, and is comprised of processes (like resource allocation rules) and cultural elements, and as such fits closely with our concept of performance and accountability.

Figure 3.5 shows graphically the fit of the five dynamic forces determined by Burgelman with our five managerial anchor points.

Figure 3.5: Fit of the Managerial Anchor Points with the Burgelman Framework

	Anchor Points				
	A	***B***	***C***	***D***	***E***
	Leadership	*Strategy Dev./ Content*	*Environment Context*	*Management of Structure and Processes*	*Performance & Accountability*
Five Dynamic Forces:					
Corporate Strategy	°	(°)			
Strategic Action	(°)	°			
Basis of Competitive Advantage			°		
Distinctive Competence				°	
Internal Selection Environment				(°)	°

When we test our three leadership approaches against these managerial anchor points, we will see that together they cover them very well, but in totally different, and to a large extent mutually exclusive ways. Where an approach is less effective or even ineffective in addressing an anchor point, this is compensated by the (full) effectiveness of the other two leadership approaches, with at times the third in a supporting function. We will identify one or two characterizing elements of each of our anchor points, and test how these elements are expressed in each of the three leadership approaches. The characterizing elements were selected because they were differentiating against other anchor points (i.e., they describe unique characteristics of the anchor point) and because they were operational (i.e., they enabled a "hard" and unambiguous test of the leadership approaches).

For the leadership anchor point, we selected leadership direction and local entrepreneurship because the first of these two elements represents the top-down element of leadership, and the second the local input. In talking about strategy development, we took one characteristic related to time and speed, and one related to the content of strategy. The environmental anchor point is addressed by checking the scope for alignment and fit. In considering the management of structure and processes, we have taken knowledge creation and integration, on one hand, and the complexity of structure and processes, on the other, as characterizing elements. For performance and accountability, we have limited ourselves to accountability as the sole characterizing element. Figure 3.6 summarizes our selection.

Figure 3.6: Characterizing Elements of the Managerial Anchor Points

Anchor Point		Characterizing Elements
A.	Leadership:	Leadership direction
		Entrepreneurship of local management
B.	Strategy Development/Content:	Speed of adjustment of the business portfolio
		Consistency of capability development
C.	Environment/Context:	Scope for alignment and fit
D.	Management of Structure and Processes:	Knowledge creation and integration
		Complexity of structure and processes
E.	Performance & Accountability:	Accountability

A: Leadership

As we mentioned earlier, the leadership style is an important element in this thesis. This style differs in a significant way when looking at the three approaches. The differences will be shown with the two selected characterizing elements, leadership direction and entrepreneurship of local management. Leadership direction is an important organizational facet that has been extensively discussed in the management literature. The entrepreneurship of local management, the local parallel of leadership direction, can also be found in the leadership literature (Bourgeois & Brodwin, 1985; Burgelman 2002). We will start with the first characterizing element and see how this varies in the different leadership styles.

Leadership direction

In the different leadership styles the direction of command differs a great deal. In the *directive* approach, the CEO issues directives top down into the organization. He decides what the strategic positioning of the firm should be; he charts the way ahead, in what Bourgeois and

Brodwin call the commander approach (1985). In a world that (at least as these words are written) appears to suffer from increasingly dramatic economic swings after the post-world war period of gradual growth, strong top-down leadership is increasingly seen as a prerequisite for corporate survival. The organizational change literature, too, seems to be increasingly aware that the political dynamics of change are often shaped more directively or coercively than a traditional collaborative approach would recommend (Dunphy & Stace 1988).

In the *conditional* approach, the leadership sets conditions under which the local management has to operate. This leadership direction can be best symbolized as U-turn management. This U-turn management resembles middle-up-down management, as proposed by Nonaka (1994), where top managers create basic managerial concepts (the premises of decision making) and break them down hierarchically – in term of objectives and means – so that subordinates can implement them. Top managers' concepts become operational conditions for middle managers, who then must decide how to realize the concepts. In middle-up-down management, top management sets the direction, provides the field of interaction, selects the participants in the field, establishes the guidelines and deadlines for projects, and supports the innovation process (Nonaka, 1988).

The *ecological* approach gives freedom to the local management in dealing with strategy. However, the leadership wants to see the results after a fixed period of time. This management style has similarities with the "crescive" model (Bourgeois and Brodwin, 1984), where the leadership tries to encourage the front-line managers to develop, champion, and implement sound strategies. In this model, strategy moves upward from the firing line, rather than downward from the top. Burgelman (1983) has shown that these strategies often take place bottom-up, and that the leadership approves of these afterwards ('reactive sensemaking').

Entrepreneurship of local management

The entrepreneurship of local management in the *directive* approach is low because it is the firm's leadership that takes charge of entrepreneurship. This approach has theoretical similarities with Chandler (1962), who states that the primary role of local management is that of operational implementor. Accordingly, there are few if any local entrepreneurs in this model.

In the *conditional* approach, local management must play by certain rules and in a certain context defined by the leadership. There is room for strategic initiatives, but they have to fit into the context set by the leadership. This is more in line with the perspective of Bartlett & Goshal (1993), who stated that the leadership has to be the creator of purpose and challenger of the status quo of the firm. They label this managerial mode proactive bottom-up; it allows for a high degree of local entrepreneurship, and has a partial overlap with our conditional approach.

In the *ecological* approach, the front-line managers have the most room for entrepreneurship. This is supported by research of Quinn (1985) and Huy (2001), who state that front-line managers typically have the most current knowledge and expertise and are better in seeking fit with the market. This leadership style, which holds that the motor of corporate entrepreneurship resides in the autonomous strategic initiatives of individuals at the local levels in the organization, whilst the leadership assesses the results ex post, can be described as 'ecological legitimizer' (Burgelman, 1983). The ecological leadership approach is thus reactive and bottom-up in nature. It relies entirely on the entrepreneurship of (many) local managers.

Figure 3.7: Leadership in the Three Approaches

	Directive	Conditional	Ecological
Leadership direction	Top-down	U-turn	Bottom-up
Number of local entrepreneurs	Few	Many	Many

B: Strategy Development/Content

The second managerial anchor point, strategy development/content, looks at the actual content – actions, directions – of the strategic initiatives employed in our three leadership styles. We have two characterizing elements in this anchor point: (1) speed of adjustment in business portfolio and (2) consistency capability development. The first element leans heavily on leadership theories, the second on dynamic capability and learning theories.

Speed of adjustment of the business portfolio

The three leadership styles have their own characteristics regarding the speed with which adjustments can be made in the business portfolio. In a *directive* mode, the leadership can make timely decisions regarding alterations in the business portfolio. Due to the nature of directive leadership, corporate turnarounds, or journeys of renewal, can be very speedy (Volberda et al., 2001). This directed journey has a modicum of overlap with our directive approach, because it is also a top-down process. However, the directive approach also puts a heavy responsibility on the leadership, who stand alone in making the key decisions. Decisive and prudent management is needed, leading to immediate action when the firm is confronted with major environmental change The advantage is that these actions can be undertaken with little organizational delay under a directive leadership (Ansoff et al., 1975).

In the *conditional* approach, the speed with which the company can change is lower than in the directive mode – mostly due to the limited strategic freedom of individual mangers, both at the top and at local levels. Conditional management requires the creation of the conditional management framework within the firm, which implies the setting of rules by the leadership, and the adoption of these rules by the local managers. Both these efforts take organizational time and energy. This adoption process also means that this operating mode can be used only when there is sufficient participation and support within the organization (Dunphy & Stace 1988).

The speed of overall adjustment in the business portfolio in the *ecological approach* is low, as overall strategy deployment has to wait for local initiatives to take place (or not...), prove their success, and be adopted by other units. In these so-called evolutionary theories, strategies are incremental in nature, and major company-wide turnarounds are difficult if not impossible to realize (Nelson & Winter, 1982).

Consistency of capability development

In the *directive* approach, capability development is a core task of the leadership. The CEO and top management provide the main thrust behind identifying and building capabilities (Chandler, 1962). Capabilities that are aligned and consistent with one another reinforce each other. Such a set of capabilities can only emanate from a single corporate centre in which the leadership has a unified strategic intent regarding capability development (Prahalad & Hamel, 1990). One should realize, however, that the capacity of the leadership to define, design, acquire and implement such a set of capabilities in all its detail may be limited, which may distract from the eventual consistency and effectiveness of the resulting capability set.

In the *conditional* approach, capability development revolves more around the directives that are issued from above. The leadership clearly emphasizes the importance of capability development, and offers plenty of incentives in order to stimulate the local management (Huy, 2001). Local management has to develop dynamic capabilities within a certain context, but there is room for interpretation, which can lead to a divergent policy regarding the development of capabilities.

In the *ecological* mode of leadership concerning capability development, dynamic capabilities are being formed at the bottom of the organization, and the leadership decides afterwards if the chosen directions are correct (Burgelman, 1983). The consistency in the development of dynamic capabilities across the firm will be low, because a lot of different initiatives are undertaken locally with no top-down direction. This inconsistency between the individual local capability developments will reduce opportunities for synergy between the local units, which is one of the main disadvantages of this *laissez faire* style of leadership.

Figure 3.8: Strategy Development in the Three Leadership Approaches

	Directive	Conditional	Ecological
Speed of adjustment in business portfolio	High	Low	Low
Consistency capability development	Moderate/ guided directed	High /enabling facilitating	Low/ *laissez faire*

C: Environment/Context

The environmental context of the firm forms the third anchor point. A number of theories, such as Porter's five forces concept, provide analytical tools for firms that appear to have lost the connection with the markets in which they source and sell. The linkage between the firm and its environment can be two-way: in many instances (especially for firms with many suppliers), the firm ends up seeing itself as unwilling victim of the market circumstances that dictate its demand supply and at times its margins. This view is supported by the theories developed by the population ecologists. But in a number of industries (or rather business segments) an innovative firm can indeed influence its environment. Environmental context thus can work in two directions. We have identified one characterizing element in this cluster: scope for alignment and fit. This element is deduced from leadership theories and life-cycle/ punctuated equilibrium theory.

Scope for alignment and fit

This characterizing element deals with the strategic freedom that a firm has within the different leadership approaches to succeed in a changing environment. This strategic freedom is particularly important, as poor performance acts as a catalyst to management action and organizational change (Cyert & March, 1963). Effective response, or adaptation, requires decision makers to update their beliefs, including identifying and interpreting unfamiliar environmental events (inflection points) and action alternatives, and reinterpreting familiar issues and concepts to more closely align their internal organization with the external environment (Barr, 1998). Revolutionary change is necessary when a relatively stable environment becomes turbulent and the organizational elements no longer fit the environment.

In the *directive* mode there is broad scope for alignment and fit, because leadership has many options for major action when faced with an inflection point (Romanelli & Tushman, 1994). The range of options that managers effectively have at their disposal to stay in sync with the environment is a function of the adjustments that they are able to make in their interpretations of the firm and its environment (Barr, 1998). In a directive mode, the scope for alignment and fit is great, because the leadership has the power to engage in major strategic action to realign the firm with the environment through direct action and direct orders to local management.

In the *conditional* mode, the scope for alignment and fit is moderate, due to the limited freedom of front-line management, which must operate under specific targets and conditions laid down by the leadership. These conditions lock the strategic initiatives into an imposed strategic direction towards an intended optimal fit. There is emerging recognition in the organizational change literature that the political dynamics of change are often shaped more directively or coercively than would be recommended by a more conditional approach, and that this may be the only (or even best) way to bring the organization back in line with changed environmental circumstances (Dunphy & Stace, 1988).

In the *ecological* approach, the leadership is not expected to assess upfront whether the strategic initiatives taken by local management on behalf of the firm are in line with the demands of the environment. The basic premise is that front-line management is closest to the fire and therefore able to make the right decisions (Huy, 2001). Fit will thus be achieved at the business-unit level without consideration of the corporate perspective. It will thus be difficult for the firm to maintain its overall fit with the environment. According to this approach, collaborative change programs, which involve participation by both leadership and front-line managers, do not work when the firm no longer fits in its environment and when important decisions about the organization's future have to be made (Dunphy & Stace, 1988). The incremental adjustment steps that follow, characterizing ecological strategy deployment from a firm's perspective, will not increase the fit with the environment, due to the amplitude and firm-wide scope of the inflection point. The scope for alignment and fit is thus low in this leadership approach.

Figure 3.9: Environment/Context in the Three Leadership Approaches

	Directive	Conditional	Reactive
Scope for alignment and fit	High / many options	Moderate / few options	Low / no options

D: Management of Structure and Processes

In this anchor point we identified characterizing elements that will help us to delineate the three leadership approaches: (1) knowledge creation and integration and (2) the role of structure and processes. These elements have their theoretical grounding in leadership, learning and dynamic capabilities theories.

Knowledge creation and integration

Knowledge, which is receiving more and more attention in today's business world, is currently regarded as the principal productive resource of the firm. The fundamental role of the firm is to integrate the knowledge of 'individual specialists' (Grant, 1996). The following sections will assess how this integration and creation of knowledge works in the different leadership modes.

In the *directive* approach, the leadership carries out the process of knowledge creation and integration. Only the upper echelons are involved in this process, as only top managers are able and allowed to create information (Nonaka, 1994). Moreover, information created by the leadership exists for the sole purpose of implementation.

In the *conditional* approach, the leadership gives voice to a company's future by articulating metaphors, symbols, and concepts that orient the knowledge-creation activities of employees (Nonaka, 1994). Knowledge is created by self-organizing teams, but within the context that is put forward by the leadership. Quinn (1992) calls this way of working a "future vision" that gives intellectual members of the organizations some challenges for intellectual growth and develops their capacity for adapting to shifting industries.

In an *ecological* approach, those that create information are not the top leadership but local management. In this style of organization, the process of knowledge creation and integration is executed entirely by local management (Nonaka, 1994). The current trend towards empowerment, which takes account of the nature of knowledge acquisition and retention in firms, is consistent with a bottom-up management style (Grant 1996).

Complexity of structure and processes

The role of complexity of structure and processes varies in the three leadership approaches. In the directive and ecological approaches, structure and processes are but impediments to the effective development and deployment of strategy by, respectively, the firm's leadership or local management. In the directive case, the leadership must be as close as possible to the action; it will thus be well informed about the environment before taking decisions, and the decisions, once taken, can be rapidly and effectively executed with a minimum of distortion through delegation to lower levels of management. In the ecological case, strategy design and deployment is in hands of local management and firm-wide structure and processes can only impede the speed and effectiveness of its work. In the conditional leadership approach, however, structure and processes are the essential instruments through which the leadership develops its strategic concept and achieves its execution. The challenge here is to impose the right structure and processes, and to manage their complexity.

In the *directive* mode, the complexity of the structure and processes should be limited, because the strategies developed here should be explicit and kept simple: "simplicity is the essence of good art and the conception of strategy brings simplicity to complex organizations" (Andrews, 1987). This sort of leadership can be called the entrepreneurial organization, which has a flexible and informal structure with much of the coordination handled by the leadership itself (Mintzberg, 1989).

Complexity is high in the *conditional* mode, due to the context created by the leadership, within which the local management has to operate. This operating mode is much more difficult for the leadership to handle, due to the increased freedom of the local management (Volberda et al., 2001).
In the *ecological* mode, complexity can be rudimentary and limited to an ex-post review process. In the process, the leadership of the firm assesses the result of the business units and decides on the next round of resource allocations.

Figure 3.10: Management and Organizational Structure and Processes in the Three Leadership Approaches

	Directive	**Conditional**	**Ecological**
Knowledge creation and integration	Low / intended	High	Low / emergent
Complexity of structure and processes	Limited	High	Rudimentary

E: Performance & Accountability

This last anchor point has one characterizing element: accountability. This anchor point, which follows from leadership theories, considers the function of leadership through the lens of accountability.

There is a general tendency in corporations that leadership and front-line managers are more responsible for achieving results than for performing a task (Hammer, 1996).

In the *directive* mode, accountability is executed both ex-ante and ex-post, in the sense that the leadership states clear, explicit and detailed targets to its local managers that do not leave room for local strategy interpretation, but only for implementation. After the actions have been performed, the leadership verifies whether its specific orders have been carried out.

Accountability in the *conditional* approach is important ex-ante and during the strategy deployment: Up-front, the leadership spends a great deal of effort explaining overall targets, and leaves ample room for local management to specify the tactics/local strategies used to achieve these general targets. While strategy is deployed, a comprehensive system of planning and control ensures that the leadership is informed step-by-step about progress made. Accountability against each of these steps is executed, moreover, on a near-continuous basis. As result, ex-post accountability is less severe than in the other approaches.

In the *ecological* approach, the accountability is almost entirely ex-post. The leadership sets a few (e.g., between one and three) up-front targets (like return on investment of growth) and leaves the realization of these targets entirely to local management. These targets are often explicit, in the form of a management brief, but may be implicit and unwritten. After a predetermined period of up to a year – often set by external accounting rules – the leadership conducts an (informal) accountability session in which the performance of the local management is graded against the few up-front targets. The leadership thus assesses the results ex-post and leaves the actual execution of operations to people responsible for the performance of those entities (Merchant, 1998).

3.5: Conclusions about the Three Leadership Approaches

We will end this introduction with a table (Figure 3.11) that shows how each of the three leadership approaches has a different profile against the five managerial anchor points. The horizontal axis shows the three leadership approaches; the vertical axis shows the anchoring points and their characterizing elements.

Figure 3.11: Leadership Approaches and the Managerial Anchoring Points

Managerial Anchor Points		**Leadership Approaches**		
		Directive	***Conditional***	***Ecological***
A:	***Leadership***			
A1:	Leadership direction	Top-down	U-turn	Bottom-up
A2:	Entrepreneurship of local management	Few	Many	Many
B:	***Strategy development: Content***			
B1:	Speed of adjustment in business portfolio	Holistic	Local	Local
B2:	Consistency of Capability development	Moderate	High	Low
		Guided / Directed	Enabling / Facilitating	Laissez Faire
C:	***Environment: Context***			
C1:	Scope for alignment and fit	High/Many Options	Medium/Few Options	Low/No Options
D:	***Management of Structure and Processes***			
D1:	Knowledge creation and integration	Low/Intended	High	Low/ Emergent
D2:	Complexity of structure and processes	Limited	High	Rudimentary
E:	***Performance & Accountability***			
E1:	Accountability	Both	Ex-ante	Ex-post

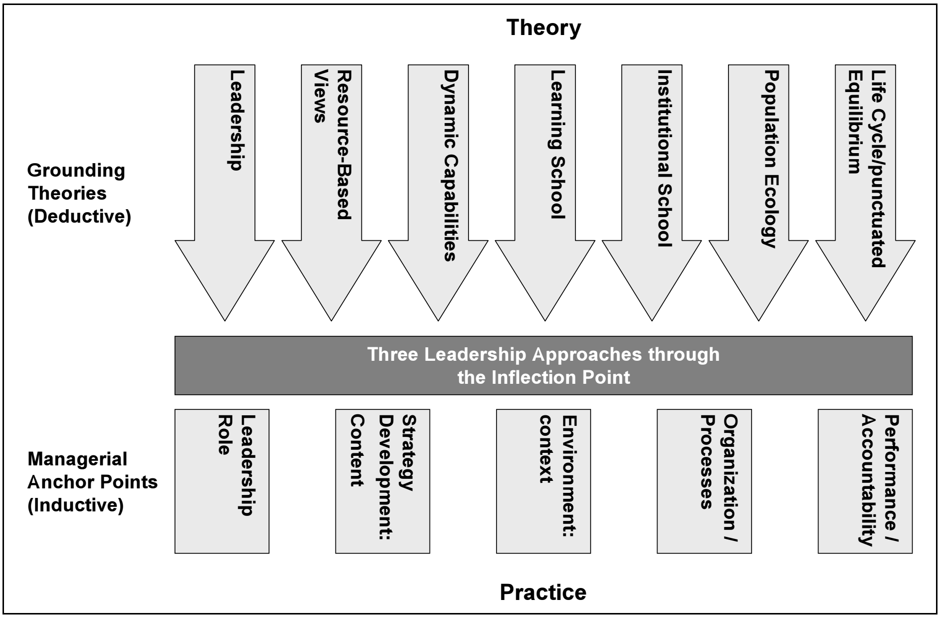
We have now developed a set of three leadership approaches that is grounded in theory and tested against five managerial anchor points, and thus provides a solid basis with which to resolve the questions that have motivated this thesis.

Our literature search enabled us to identify seven schools of thought that have particular bearing on the strategic behavior of leadership in inflection point situations. We showed that these schools have sufficient relevance and scope by plotting them against two axes that are of crucial importance for inflection point strategy: the nature of the transition through the inflection point – which can be adaptive or selective, and the speed of transition – which can be radical or incremental.
We then examined the nature of management actions that can emanate from each of these schools, as defined by their nature and speed, and found that these converge around three general leadership approaches that we have called, respectively, the directive, conditional and ecological approach. Six of the seven grounding theories each clearly point to a single approach. The seventh (life cycle/punctuated equilibrium) also predominantly fits in one school.

Subsequently, we verified the three leadership approaches against five managerial anchoring points to show that they indeed cover these anchor points. Also, they are quite different in nature and do not overlap in any substantive way. For this, we used five clustered managerial anchoring points: (A) leadership; (B) strategy/content development; (C) environment/context; (D) management & organizational structure and processes and (E) performance and accountability. Each of the three approaches, indeed, has its own unique profile against the anchoring points, and the areas of overlap are incidental. They thus constitute a valid model for the practice of management.

Figure 3.12 shows how the theoretical underpinnings provide the conceptual model in a deductive fashion, and how the anchor points provide the test of managerial pragmatism in an inductive way.

Figure 3.12: Development of the Main Hypotheses



Based on: Vosselman, 1997

The next three sections will take an in-depth look at each of the three leadership approaches and the theories that support them.

3.6: The Directive Approach

Introduction

This segment describes the directive leadership style and discusses under which circumstances it is effective. After the introduction, we review the theoretical grounding of the approach. Subsequently, we discuss the anchoring points, followed by the important tools of this approach for practitioners. Finally, we evaluate the main advantages and drawbacks of the approach and its main application areas.

Directive leadership is a way of managing the firm in which the chief executive officer or executive team makes a decision and enacts the changes that it deems necessary for the firm to adjust to the inflection point. The leadership dominates, which leaves local management in supportive and implementation roles, at best, in the strategic redirection (Chandler, 1962). For example, when the leadership readjusts the business portfolio of the firm by acquiring and divesting businesses, this is to be accomplished with help of corporate staff and investment banks, lawyers and other outside advisors, with no participation whatsoever of the (local) management. The need for dominant leadership has often been expressed in the literature, and is regarded by many as the single most important force in a successful transition process of a firm (Andrews 1971; Duncan & Stacey, 1988). Seen through the directive lens, a firm's strategic moves in the inflection point are the consequence of leadership action.

What determines the success of directive leadership and what are its main applications? To be able to function successfully in a directive mode, the leadership must possess the necessary understanding of both the existing firm and of the post-inflection point environment. This insight into the new markets and competition is necessary to develop a workable vision and strategy for the post-inflection era. And the understanding of the existing organization is necessary to make sure that the existing resources and capabilities are used optimally in the new environment: given the major challenges that characterize the inflection point, a firm can ill afford to squander its means. Understanding depends on the right experience and background, and on the right information sources within the firm and the relevant markets. However, given the complexity of the inflection point transition, even a well-informed executive may find that understanding all the elements and executing all the necessary decisions is an insurmountable task, given the limitations of the human mind (Simon, 1976). Strategists are permanently trapped by bounded rationality and by their incomplete and imperfect perceptions of their environment (Simon, 1957). The human workday is another determinant of the effectiveness of directive management, in the sense that time limits the amount of information that an executive can absorb and transmit to others, and time limits the number of decisions he or she can make. This means that success as a directive leader depends on the use of managerial tools that require limited time and limited know-how. These include, among other things, transactions and the use of accountability. The objects of these transactions can be businesses, assets or technologies, in which case we talk about various forms of portfolio management. Accountability always pertains to individuals or groups of people who are made and held accountable for the achievement of explicit or implicit targets. If accountability is to be a time-efficient tool of the directive leader, it should pertain to a few targets only, and be part of a simple or even rudimentary process. Conversely, the directive leader will seek to avoid management tools that require extensive and detailed information, and a lot of leadership time. These included relying on complex management processes and procedures, and substantial delegation.

The tools listed above also show a number of limitations of the directive approach, particularly as so much depends on so few individuals. The advantages of this approach are also derived from the small number of people involved in strategy development and execution. Hence, as we will see later, there is no need for a group strategy process and compromises, which allows for quick decisions and quick action, and provides an opportunity for dramatic change.

The directive approach is thus particularly suited to situations in which urgency calls for dramatic action within a short period, with little time available for strategic analysis, communications and discussion. It is a preferred way of managing innovations that requires changes in the pattern of resource deployment and the creation of new capabilities of positioning in markets (Stopford & Baden Fuller, 1994) – the pattern of which is consistent with an inflection point. But to be effective, the approach does require that leadership have the understanding and capacity to make, and implement, the right decisions.

The directive leadership approach stands out clearly from the two other ways of managing through the inflection point that we identified in the preceding chapter. The most important differentiators are the roles of the leaders and the local managers: in the directive approach, all strategic power is with the leaders, whereas the two other approaches leave the local managers with strategic responsibilities that range from important to dominant. We have also seen that the mix of advantages and disadvantages of the directive approach make it particularly suitable – much more than the two other leadership approaches – to realize rapid, incisive strategic action that does not require inputs from local management. The most important examples of these kinds of actions are business portfolio adjustments and other major new investments (which, by the way, are all actions that change the boundaries of the firm). As soon as the strategic path becomes more complex, and requires involvement and initiative from a broader group of local managers, the directive approach loses its advantage of speed and decisiveness, and two other leadership approaches become a better vehicle for realizing change.

The Theoretical Grounding of the Directive Approach

Directive leadership is a cornerstone of traditional theories on management. Cantillon (one of the first authors to write about management as an intellectual topic) introduced the word "entrepreneur", citing as his main function to "buy means of production at certain prices in order to combine them into a product that he is going to sell at prices that are uncertain at the moment at which he commits himself to his costs". (Say, 1949). Here, the leader – or leadership – is directly responsible for control and consciousness in the firm and its only strategist (Andrews, 1971). In the leadership approach, the role of local management in strategy formulation and deployment is limited: clearly not a decision maker, it may have an executional function in implementation, but only as direct tool in hands of top management (Chandler 1962, Bourgeois & Brodwin 1984). No discussion thus of delegation to local management, of target setting and accountability.

The most obvious way for the leadership to exert its direct influence in a rapidly changing environment is by managing the portfolio of assets of the firm (Amit & Schoemaker, 1993, Langlois, 1994), and, in a broader context, by acquiring or divesting the resources that the firm needs to function in the changing environment (Penrose, 1959; Wernerfelt, 1984). In the latter case, resources are very widely defined as "all the assets, capabilities, organizational processes, information, knowledge etc. controlled by a firm to conceive and implement the strategies that improve its efficiency and effectiveness" (Barney, 1991). Thus, the whole idea of competence management (Selznik 1957) can be construed as being part of resources that are the object of directional leadership: the leader should not only govern physical assets, but also the competencies of his organization (Prahalad & Hamel, 1994). Conversely, since competencies and capabilities cross the spectrum of functions of a firm, the champion of a new competency/-capability-based strategy can only be the top leadership (Stalk, Evans & Schulman, 1992).

The idea of control and consciousness should also be seen from a dynamic perspective: an important function of the leadership/entrepreneur is to find new combinations for the resources that he controls (Schumpeter, 1928). This dynamic concept was expanded when the ability to generate competencies was recognized by Nelson and Winter in 1982 (also Teece et al., 1997) as an independent skill: dynamic capability development. The same dynamic can work the other way around: as the organization adapts to its new environment, new leaders are enabled, and old leaders replaced (Kanter et al., 1992).

The directive approach is most appropriate in a situation where 1) the CEO is able to wield a great deal of power, 2) there is a reasonable information flow to the top, 3) the strategist can avoid political two-way processes and 4) the firm can be split into doers and thinkers (Bourgeois & Brodwin, 1983).

The Directive Approach and the Managerial Anchor Points

This chapter introduced five managerial anchoring points for our leadership approaches: (1) leadership; (2) strategy development: content; (3) environment: context; (4) management & organizational structure and processes and (5) performance & accountability. All of these provide perspectives on the directive leadership approach.

(1) Leadership in the directive approach

The view that the CEO is the architect and central actor of strategy was already recognized in the early days of management theory by authors like Chandler (1962) and Andrews (1971). In this view, strategy is a deliberate, conscious set of directives that determines decisions into the future, including local implementation. It is clear that this way of running a business implies firm, hands-on control by the leadership. Strategies must be broken down into highly specific goals and objectives ready for immediate "no-brain" implementation by local management; this was well illustrated by Bourgeois & Brodwin with their "commander" model (Bourgeois & Brodwin 1984). As result, every local sub-unit of an organization and every individual have a clearly defined set of purposes or goals that are specific to the degree that motion only into a deliberately chosen direction is possible, and any drift in an unintended direction is impossible (Andrew, 1971).

The leadership is not limited to typical directive actions (like portfolio decisions): it is also involved in the conditional aspects of running a business, like the development and adjustments of the firm's structure, and the deployment of people in such a way as to permit both business success and individual expression of ambitions, which leads to individual satisfaction. The mission is to serve all these interests in the most effective and efficient way (Barnard 1938).

The directive leadership mode views the very powerful leadership as dominant actor in the strategy process. The leadership assesses the new business environment and initiates major actions "top-down", with major impact – amplitude – on the business portfolio. Front-line management must conform to the vision of the leadership, and there is no room for dissident thinking.

The well-formulated goals and purposes provided by the leadership turn local management into operators. Since power is centralized in the hand of the chief executive, local management functions in an operating mode with a low level of entrepreneurship (Mintzberg et al., 1999). There is no room for local strategic initiatives and there are few if any local entrepreneurs: the primary role of local management is that of operational implementer that must obey to the directives issued from the upper echelons (Chandler, 1962). The commander model described above (Bourgeois & Brodwin, 1984) separates thinkers from doers, and this is exactly what happens in the directive mode of leadership.

The view that the best way out of an inflection point is through directive leadership was substantiated in four separate case studies of the glass industry, the cement industry, minicomputers and disk drives by Tushman et al.,1986. In their perspective, the local management in these cases had no say in a successful transition through an inflection point, and simply obeyed the directives from above. Local management had only a supportive role by implementing the changes that had been issued by the leadership. These studies did not, however, consider the different transition phases of an inflection point. We will see in chapter 7 that their propositions are correct, but apply only to the transition part of the sequence of developments that defines the inflection point.

(2) Strategy Development: Content in the Directive Approach

In the beginning of this chapter we showed that the directive leadership approach is coercive and top-down in nature. Coercive top-down change is socially disruptive, in the sense that there is no structural means built in to mobilize and motivate local management and staff beyond hierarchical instruction (Ansoff et al., 1990:430). But it does offer the advantage of a rapid strategic response, and permits a radical and holistic change program. And in turbulent times, when the organization no longer fits in its environment and there is little time for extensive participation from all the levels, dictatorial leadership is needed to adapt in a timely way, by deploying a major organizational restructuring (Dunphy & Stace, 1988). In the ensuing directed renewal journey, speed is a critical advantage (Volberda et al., 2001). And directive leadership permits a rapid adjustment of the business portfolio. Clear signals of speedy and radical action are takeovers, divestitures and the recruitment of managerial or technological talent.

The leadership of the firm has the potential of playing a central role in the development and nurturing of dynamic capabilities (Chandler, 1962; Prahalad & Hamel, 1990; and Stalk et al., 1992). With a single central actor in this process of capability development, the firm can be expected to display a high level of consistency. To transmit these capabilities into the field, the firm must first have a well-formulated statement of strategic intent, which conveys a sense of overall strategic direction to the entire firm (Prahalad & Hamel 1994). Strategic intent should be differentiated (pointing at a unique position in the future), bring forward the 'where' question and help employees comprehend the heading of the firm. Therefore, although the overall consistency of vision and capability requirements at the corporate level may be high, the actual realization of capability development at the local level ends up being moderate, particularly for complex organizations with a large distance between the leadership and the field.

(3) Environment: Context in the Directive Approach

Environmental disconnect shows up when the products or services of a firm no longer meet the changing performance and cost expectations of the customers, when new competitive offerings are perceived to be better or cheaper, or when a firm can no longer recruit the people or procure the equipment and materials it needs at a cost that enables profits. The underlying causes lie in finding the appropriate set of businesses, assets, people and capabilities. As we have seen, directive leadership is good at effectuating transactions, and therefore tends to do well in acquiring, or divesting business activities, assets, people and capabilities. These transactions can often be executed rapidly, and we may conclude that the leadership in a directive mode can act in a rapid and radical way to adjust the portfolios of a firm that finds that it no linger fits in an environment that has changed in the course of an inflection point. And, with few exceptions, a radical change in strategy is the better track to success than gradual adjustment (Tushman et al., 1986). The disadvantage of transaction-based strategic adjustment is that the resulting portfolio often does not fit both the exact needs of the markets in which the firm intends to operate, and the characteristics of the activities that already exist in the firm: the failure rate of corporate acquisitions has been well documented.

We have seen above that the directive approach is particularly suited to realize rapid, radical adjustments – albeit that changes involving large numbers of local managers and other staff members are more difficult to realize by purely directive means. We can therefore conclude that in a directive approach the scope for alignment and fit is high, and leaves the leadership with many strategic options.

(4) Management of Structure and Processes in the Directive Approach

In the directive, top-down, approach, top management is the agent of knowledge creation (Nonaka, 1994). Information created by these top-managers is intended and exists for the sole purpose of enabling implementation; it is therefore a tool rather than a strategic direction. Information absorption – which is necessary to cope with the new environment – depends at least in part on the structure and processes deployed by the leadership. The relatively simple corporate structures, like functional and business unit structures, without which directive leadership cannot function, also have a restrictive effect on the ability of the organization to absorb this information (Bosch et al., 1999). However, knowledge integration within the (small) leadership team of the organization is, by definition, perfect across the top level of the firm. The problem arises with the integration of knowledge within lower levels of a firm that can be successful only if local management and all other layers are involved in this process. In the directive (top-down) mode, the dominant knowledge stream in the organization is top-down, and the knowledge that resides in the local managers by definition has a limited chance of reaching the upper echelons of the corporation. Therefore, one can argue that the knowledge creation and integration in this leadership style at the grass-roots level are low and intended (Volberda et al., 2001). Since the knowledge creation process exists only at the apex of the organization, the ideas and knowledge created by front-line managers are not part of the focal area of the leadership and therefore risk being lost. Front-line managers may well be discouraged by this way of working, which increases the risk of motivational problems. Seen across the firm, the level of knowledge creation and integration is therefore relatively low.

The directive approach finds the leadership at the apex of the firm, where it sets the course of the organization and provides local managers with specific orders. Directive leadership can be effective only in an organization with limited complexity of structure and processes. When local management is involved in executing strategy under directive leadership, it must understand the specifics of the implementation task at hand. A directive way of working translates into hierarchical relationships. The needs for effective communication and hierarchy are best served in a simple structure with simple processes (Mintzberg, 1983).

(5) Performance & Accountability in the Directive Approach

In the directive approach, accountability lies with the Chief Executive or leadership of the organization. Responsible for all the strategies that are developed and implemented, the leadership has dominant control over the process and must therefore assume responsibility for the consequences of the choices it has made. This is consistent with the traditional view that regards the general manager of a firm as responsible and accountable for its success (Andrews, 1971).

Independent executive action without delegation characterizes the directive approach, which we have seen to be particularly suitable for leadership that uses transactions and simple targeting and accountability as important management tools. This targeting and accountability is executed in three steps. The first is the setting of targets, which must be simple in order to avoid the need for complex delegation (requiring substantial expertise and time). The second step includes the processes of monitoring and review, which must be simple and infrequent, for the same reason. Accountability is the third step, and consists of either remunerating good performance or punishing bad performance. In that sense, accountability is both ex-ante and ex-post. In some cases, targeting and review have been simplified to the level of being totally informal (i.e. without process) and undocumented.

Tools for Practitioners in the Directive Approach

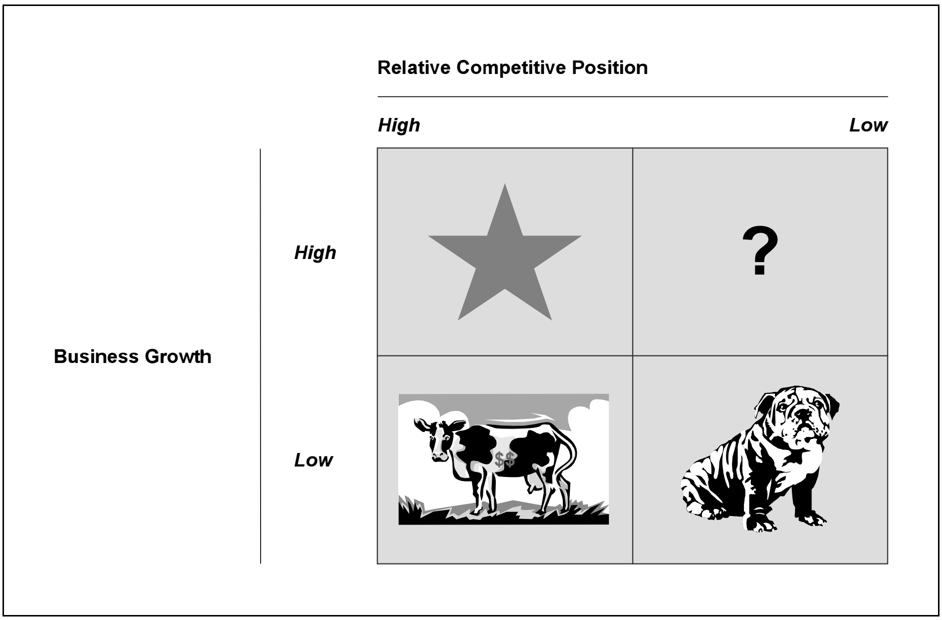
Adjusting the Business Portfolio. The directive approach is a radical leadership style that makes it possible for the firm to initiate major strategic action. This section will bring forward some of the tools available to the leadership. Seen from a leadership perspective, directive approaches are controlled by the leadership of the firm by (re) configuring its business portfolio boundaries.

In many ways, an adjustment of the portfolio of a corporation is the easiest way to improve both its responsiveness to the forces driving the inflection point, and its ability to adjust to the impact. In rapidly changing environments, there is obviously value in the ability to reconfigure the firm's assets structure, and to accomplish the necessary internal and external transformations (Amit & Schoemaker, 1993; Langlois, 1994).

Portfolio analysis has its roots in the financial world. Stocks bring varying levels of returns in the form of share price increases and dividends. They are also, in varying degrees, volatile in nature and inherently risky as a financial instrument (Fama & Miller, 1971). An investor can diversify this risk by putting an appropriate mix of stocks in his portfolio. The same applies to businesses when choosing the right portfolio mix.

In its initial essence, business portfolio analysis starts by plotting the businesses, assets, technologies or competencies of a corporation along the different dimensions of attractiveness, related to objective criteria like market growth and profitability, and firm-related criteria like competitive positioning (e.g. Figure 3.13). This plotting takes place against a segmentation of the environment. The task of management is then to invest in promising activities and to divest the less promising activities. In one well-known model proposed by the consultants of the Boston Consulting Group, the individual businesses are first defined according to their market segmentation and then subsequently ranked into four categories: those in which the firm has a strong position in promising markets (the "stars"), those in which the firm has a strong position in mature markets (the "cows", or "cash cows"), those in which the company is strong in weak markets (the "dogs") and finally those in which the company is weak in emerging markets (the "question marks"). The stage is thus set for strategic action in which resources are withdrawn from the less attractive and promising "dogs" and "cash cows", and are reallocated to the ""stars" and, to some extent, the "question marks". The following figure may serve to illustrate this approach.

Figure 3.13: BCG matrix



Source: Hedley, B.: Strategy and the Business Portfolio, Long Range Planning, 1977

Traditionally, the way in which portfolio strategy was executed by the leadership was by acquiring or divesting businesses – an SBA (strategic business area served by a strategic business unit) being characterized in terms of growth and profitability prospects, key competitive success factors, and expected (economic, technological, and socio-political) turbulence (Ansoff, 1984: 69). Business and market portfolio management owes much of its conceptual underpinnings to the work of the major consultancy firms such as McKinsey, The Boston Consulting Group and Arthur D. Little in the 1960s. Each of these firms developed ideas on how the markets and businesses of a firm should be segmented, and how these segments can be ranked against each other – for which many criteria are available. External criteria include (among others) market positions or market share, growth and competitive intensity. Examples of internal criteria are relative size and growth, asset utilization and profitability, using various definitions. The leadership of the firm was able to use these techniques and formulate their own top-down course of action.

A portfolio can also be defined as a series of activities within a delivery chain from raw materials and manpower to final consumers, which leads to a very different kind of analysis. The basic unit of competitive advantage is then the discrete activity in the delivery chain that creates buyer value and hence differentiation, and also determines the firm's relative cost. The firm's strategy is manifested in the way in which it configures and links the many activities in its value chain relative to its competitors. The value chain also distinguishes between activities that directly produce, market and deliver the product and those that create or source inputs required, and support activities. Discrete activities are part of an interdependent system of linkages in which the cost or effectiveness of one activity can be affected by the way in which others are performed. (Porter, 1980 and 1985).

The *competence portfolio manager* of a successful corporation seeks to use competencies to drive the success of the firm both by improving the performance of its individual units and by creating synergistic linkages between these units. Prahalad (1970) was the first author who stressed the importance of the resource side of the business process with the introduction of the concept "distinctive competence".

A competence is an integration of skills at an aggregation level that is high enough to permit analytical handling, and low enough to remain realistic (Prahalad & Hamel, 1994). As a strategic concept, a competence makes sense only if it is distinctive (Selznick, 1957), increases a firm's ability to deliver key success factors in today's industry (McGrath et al., 1994 & 1995), and allows a firm to achieve a (future) purpose, preferably in a manner superior to that of its competitors (Prahalad & Hamel, 1994). Looking through the resource lens, we can consider a competence as the ability to sustain the coordinated deployment of assets in a way that helps the firm achieve its goals, in which assets have to be defined in the broad sense, as anything tangible or intangible the firm can use in its processes for erecting, producing or offering its products and/or services to a market (Sanchez et al., 1996).

As stated above, only core competencies are worthy of strategic consideration, and the epithet "core" is met by passing three criteria – for customer value, for competitive differentiation and for extendibility into the future (Prahalad & Hamel, 1994). In this somewhat analytical and not very dynamic view, the road of success for a corporation is thus to identify, acquire, build, deploy and protect the right portfolio of core competencies.

Competencies can be categorized into three types: 1) market access competencies that help a firm maintain close proximity to its customers (like the management of distribution and logistics), 2) integrity-related competencies that allow a firm to do things more quickly or reliably than its competitors (like just-in-time inventory management) and 3) functionality-related competencies that enable a firm to invest in products and services with unique functionality and distinctive customer benefits. To garner rents and survive, a firm must distinguish itself from its competitors in one or more of these types of competencies (Prahalad & Hamel 1994).

Technology portfolios are a precursor and subset of competencies in portfolio thinking, which focuses on immediate product and process-related competencies. Since these competencies are more narrowly defined, it often is easier to develop and manage a technology portfolio than a broader competency portfolio. In designing and creating the right technology portfolio, firms should consider technology maturity, competitive position, rewards and risks to determine how much funding should be allocated to each research or development project. Moreover, if only because of the narrower scope of technology management compared to competency management, the leadership should ensure that their technology programs are in step with the overall strategy of the firm (Roussel et al., 1991).

From the leadership perspective, impact and immediacy are the main advantages of portfolio management in the directive approach. The major market turbulence that results in the "amplitude" of change that a firm undergoes when passing through an inflection point usually means that the old definitions of markets and the old segmentations no longer apply. And when the new markets are defined, and their segments identified, the leadership will in many instances find that its position in the resulting portfolio matrices (which presumably was favorable or tenable) is no longer that attractive.

The main reason why the leadership of a firm seeks to adjust its portfolio(s) is to acquire the resources and competencies needed to ensure survival in the new inflection point environment. After all, this new environment will have new success factors, and new success factors result from Schumpeterian new combinations of new resources and new competencies. These can be acquired individually, or in an integrated fashion when a complete business is purchased.

Once the leadership of the firm has decided what the composition of its portfolio of elements should be, there basically are three ways for the leadership to acquire the necessary resources, competencies etc. Acquisition of a firm that already possesses the sought-after businesses, assets, resources or competencies is an action that often has substantial amplitude (i.e., impact on the overall firm) and abruptness (speed of action), but usually requires an integration process to link the new activities with the existing business – often a difficult process, albeit well researched. Acquisition of a competency requires a similar effort, which explains why it is only recommended for technologies that are basic to the new business, but which the firm for some reason has been late in developing itself (Floyd, 1997). Notwithstanding these complications, a directive leadership is often tempted to rely on acquisition to achieve the necessary adaptation because of their speed and potential impact, and because control of the transactions is often easy for the limited manpower available, by definition, to a directive leader. The second way for the leadership to acquire the necessary resources and competencies is through recruitment of individuals with the necessary skills and experience. This approach has a similar result and risk profile, albeit on a smaller scale. The third way, in-house development, calls for a vision of the results that are to be achieved (e.g. the necessary capabilities), and of the resources requirements (in most cases, people with the necessary skills, or know-how). Furthermore, a process blueprint must be made of the work schedule. Given the need to involve local management and staff and the effort needed to do so, this is a difficult approach for an individual or a small group that encompasses a directive leadership, particularly in an organization of any complexity. In-house competence development is thus part of the conditional leadership style, and is discussed below.

The process of developing a portfolio strategy, in essence, is the testing of the chosen portfolio strategy against three decision rules of scope, coherence and diversity, from two perspectives: the fit of each of the current portfolio elements with the three rules, and the fit of possible new portfolio elements (the latter constituting of the new portfolio thrust of the firm) (Ansoff, 1990).

The portfolio scope establishes the outer boundaries of the search for new elements, and is typically defined in terms of size versus existing elements, geography, or market potential. Portfolio coherence specifies the synergies of portfolio elements in three dimensions: functional, strategic and management synergies. The first relates to the sharing of the productive resources, competencies and other functions of the firm. Strategic synergies are identified when the elements show (strong) overlap in their strategic targets. And management synergies occur when there are commonalties and complementarities between the management requirements of each of the targeted portfolio elements. Finally, portfolio diversity specifies the differences that will be preserved among the portfolio elements; this, in particular, to spread risk and achieve the right coverage of opportunities. This diversity can be sought in elements like geography, socio-political climates and market maturities, as well as in each of the portfolio elements, such as competencies and resources.

The major market turbulence that results in the "amplitude" of change that a firm undergoes when passing through the inflection point usually means that the old definitions of markets and the old segmentations no longer apply. When new markets are defined, and their segments identified, the leadership will in many instances find that its position in the resulting portfolio matrices, which presumably was favorable or tenable, is no longer that attractive. The resulting portfolio may well have moved from a nice balance between strong positions in developed markets (cash cows) combined with emerging activities in new arenas (stars), to reflect a new imbalance with too many cash cows and even dogs, and not enough stars. In portfolio theory the way forward is clear: back to redefinition and segmentation of markets, eliminating the dogs, and investing in the stars of the newly defined markets.

Drawing the boundaries of the firm: In a world in which firms are increasingly imbedded in complex sets of social, professional and exchange relationships, a viewpoint that regards firms as atomistic actors competing for profits against each other in an impersonal marketplace is increasingly inadequate. As the economic environments become sharply more competitive, the firm's network assumes enhanced strategic importance (Gulati et al., 2000), and researchers realize that a firm's critical resources may increasingly extend beyond its formal boundaries (Dyer & Singh, 1998). Boundary questions thus relate directly to the core of strategy (Volberda & Elfring, 2001). Chandler (1962) demonstrated the importance of the boundaries of the firm.

These cross-boundary linkages form a broad range of modalities between the two extremes of the integrated internal functions, on one hand, and the arms-length market relationship, on the other. The rich variety of cross-boundary linkages in which firms indulge includes alliances, networking, outsourcing, franchising, licensing agreements, long-term supplier contracts and joint ventures. Boundary theory addresses first of all the issue of which activities should take place and which should be handled either within the firm or through anonymous markets. It also addresses the question of which form of relationship is most suitable to bridge the fuzzy boundary line between the firm and its environment (Foss, 2001). Due to the variety of possible agreements nowadays, the boundaries of the firm may be hard to detect.

The issue of what constitutes a boundary is further complicated by the many theories that together constitute the boundary school. This includes various manifestations of transaction cost economics (which emphasizes static alignment (e.g., Williamson, 1985 and 1986)), the resource-dependency approach (which stresses power considerations (Pfeffer & Salancik, 1987)), and capability and network-based approaches (which are discussed in this book under their respective headings (Foss, 2001)). Boundary issues can thus be addressed and resolved in many different ways through different perspectives in the social sciences. In fact, research dealing with the boundary question is rooted in various disciplines varying from economics to sociology and from psychology to history (Volberda & Elfring, 2001). Because of this and other difficulties, the strategic implications of boundary thinking are not yet clear, necessitating further analysis and consideration (Foss, 2001). Notwithstanding these complications, we see in the business world that cross-boundary relationships, which are based in transactions and can capably be handled by a leadership short on time and expertise, are a suitable tool for directive leadership.

Advantages and Disadvantages of the Directive Approach

The two main advantages of the directive leadership mode stem from the fact that the formulation and the implementation initiatives of a strategy reside in the epicenter of the firm, with one person or a small group. The chief executive or leader(s) of the firm wield considerable power and are the only person(s) that formulate the strategy, with minimum interference from or interaction with stakeholders within or outside the firm.

As result, the leadership can effectively and efficiently make and implement major decisions that alter the strategy and destiny of the firm. These top-down actions can thus be radical, major moves that have a fundamental impact. At a certain point in time in an inflection point (with its major amplitude) there will be a need for such a response, which will exert a countervailing major impact on the firm. A second advantage is speed. The process is more rapid than a conditional or political process in which local managers and other stakeholders are involved. When a firm is out of sync with the environment, speedy action may be crucial for its survival.

A disadvantage of the directive approach is its high dependency on the qualities, knowledge and dedication of the individual leader(s) in charge of the firm. In a world of increasing complexity it is unlikely that the chief executive can monitor all the trends that take place in an industry. Simon (1976) has introduced the notion of ‘bounded rationality’, which means that an administrator or Chief Executive has limited reasoning, perception and information-processing abilities.

We have seen above that the directive approach is not very conducive to the transfer of information from the field. Therefore, the leadership of the firm risks having to work in relative isolation when it formulates the strategy or decides on certain courses of action on his own. It can be argued that the leadership is at a disadvantage in making the decisions without the necessary input of front-line management. After all, front-line managers have the best knowledge of the market and are in the best position to comprehend these trends (Huy 2001).

In a top-down directive leadership style, front-line managers are not encouraged to come forward with ideas for, or comments on, the strategic propositions made, which often leads to motivational problems. When front-line managers sense that their ideas are completely ignored, they feel discouraged, which can be counterproductive to local implementation of the new strategy and can lead to resistance to change. Many firms have had difficulty with coercive change programs due to the resistance of employees. Major change programs initiated by the leadership of the firm may be socially disruptive, so that front-line management might want to stick to the status quo. This problem can be overcome by building a broad management coalition, which results in a shift of leadership approaches to the conditional style.

Another downside of this operating mode is that dynamic capabilities cannot easily be developed at all levels of the firm, due to the restricted role of the local management. To create firm-wide flexibility, all levels should be involved in the strategizing process. When major actions are taken in order to pursue a certain direction, commitment is made. When front-line managers who have ideas to improve the change program are not heard, the firm's flexibility suffers.

Application of the Directive Leadership Approach

This chapter has reviewed and elaborated on the directive leadership style in an inflection point. To be in any way effective, the directive approach has a number of contextual requirements and limitations. We have seen that a key precondition to making productive decisions regarding the firm and its units is a good knowledge base of the business details, result of an effective knowledge-creation effort at the leadership level. A second condition is a relatively low level of complexity of the arena in which strategic decisions are made and implemented. Finally, since directive leadership in its essence disregards the views of local management, it has an increased implementation risk due to lower level resistance – unless the urgency of action is so high that all parties concerned understand and accept direct action by the leadership. The directive approach is therefore more appropriate for urgent situations.

The impact of a directive leadership approach can be major, and is rapid, because no layers of management are involved in the main lines of decision-making and implementation to delay or compromise action. Since the leadership is responsible for the entire firm, it also usually results in an adaptive strategy change, rather than a selective adjustment. There are few organizational constraints to the choices the leadership has, and as result it has a maximum number of strategic options that it can enact. Alignment and fit of the strategic actions with the chosen direction is perfect.

This approach is well suited to when the firm is in trouble and quick and major adjustment is called for, and when the leadership has gained enough understanding of the environmental situation to set the right general direction. Top-down decision-making has a significant time advantage above the conditional and ecological approach. However, this also implies a disadvantage, because local managers will feel ignored in the strategizing process, which can lead to motivational problems and resistance to change. Figure 3.14 summarizes the discussion.

Figure 3.14: Advantages, Disadvantages and Use of the Directive Approach

	Advantages	**Disadvantages**	**Best Application**
Directive	Concentrated decision-making	Lack of information from the market place	Major, firm-wide change
	No consensus required	Motivation of Local management	Speed
			Limited local involvement

Finally, we can now resolve the question regarding how an outside observer can identify a directive behavior, in particular by referring to figure 3.12. The easily observed traits of directive behavior fall into two categories: the kind of actions that the directive leader takes, and the nature of communications with his local managers. Regarding the first point, we have seen that large acquisitions and investments in not only equipment, but also knowledge and people, are a clear signal of directive behavior, since it is under most circumstances difficult if not impossible to obtain full consensus and support from a large group of people on these sweeping moves. The limited, one-way nature of (vertical) communication is another indicator of directive behavior. Orders and information must be passed down from the leadership to the local managers, if only to enable implementation of decisions taken. But we observe relatively few, short meetings with a specific agenda, in which these messages are conveyed only to the limited number of local managers that need to act on the commands given.

3.7: The Conditional Approach

Introduction

This section describes the conditional leadership style and discusses under which circumstances it is effective. This introduction is followed by the theoretical grounding. Managerial anchoring points are subsequently discussed, followed by the important tools for practitioners and the advantages and disadvantages of the conditional approach. The chapter finishes with an indication of its main applications.

The conditional approach is an incremental style in which the leadership influences strategy by setting ex-ante strategic targets, and providing the structural and capability context to local management, who have ample leeway to decide upon and implement the details of the strategic course. Since the leadership thus not only provides the general strategic direction, but also has a wide range of contextual tools (like organizational and process architecture, information, measurement and remuneration systems) at its disposal to control progress towards its stated objectives, it has ample power, even though the specific details of strategy implementation may vary from its intentions (Bower, 1970). The conditional approach bridges the belief in independent internal evolution of an organization, and the belief that this evolution can be impacted by the leadership (Baaij & Commandeur, 1997)

The conditional approach is suited to complex environments in which it is difficult for the leadership to monitor and comprehend local business details. Managers at the operating levels of the organization are closer to the fire and have more information about the heading of an industry (Chakravathy & Lorange, 1991). It has been shown that successful strategic initiatives often stem from individuals that champion opportunities (Bower, 1970; Carter, 1971) The conditional leadership style has a differentiated profile when contrasted against the directive and ecological approaches. Compared to directional leadership, it does not rely on self-implemented strategic actions, but rather on indirect tools that depend on a relatively high level of delegation of local powers. Local management thus has a real influence and role in formulating and executing the specifics of the new strategy. Compared to the ecological approach, the leadership has an important "ex-ante" role, as well as powerful tools at its disposal to set the overall direction and to control progress in that direction. The ecological leader, on the other hand, who can do little else except register the results ex-post and take his measures in the next round of investment decisions, must therefore leave the entire task of strategy formulation and implementation to local management.

In its operation, the conditional approach differentiates itself in particular by its reliance on structure, processes and detailed target setting. By virtue of strong delegation to the local management, it also enables local learning, as well as speedy and flexible responses at the local level. Enabling and encouraging the development of local capabilities and competences is thus an important element of conditional leadership.

The Theoretical Grounding of the Conditional Approach

The conditional approach is grounded in the belief that new ways of doing business that are an essential element of an inflection point, and that a firm's success is highly contingent on the ability of the firm to invent, or rapidly apply, new forms of organization and management (Miles & Snow, 1986). Internally, the conditional approach is grounded in the Bower process model of strategy realization that depicts multiple, simultaneous, interlocking, and sequential managerial activities over three levels of organizational hierarchy – the top leadership, and local management at the middle and bottom levels.

The leadership sets conditions in the conditional approach under which the local management has to operate. This behavior combines elements of two somewhat overlapping leadership models that were identified by Bourgeois and Brodwin (1984): the change model (which uses structure and staffing to reset the firm's priorities) and the collaborative model (in which the leadership relies on group dynamics to reach consensus). The latter model includes redesign of planning, performance measurement and compensation policies, as well as the use of cultural adaptation techniques. The leadership of the firm thus gives up a modicum of immediate power and relaxes its own position in order to stimulate "vertical" strategic initiatives at all levels of the organization. In this approach, strategic management is about finding the right balance in permitting autonomous strategic behavior at the local level, resulting in what Bates (1977) has labeled the 'president's paradox' of control for the leadership.

Conditional leadership typically relies heavily on formal and informal processes to achieve strategic change. From the first impulse to change to realized turnaround, many steps can be identified (Quinn, 1978), including:

1) an analysis by different line and staff groups of the strengths, weaknesses, competencies and problems of the organization,
2) projections of current sales, profits and investment needs,
3) an analysis of selected external movements and opponents' actions for opportunities and threats,
4) establishing broad goals as targets for local management's plans,
5) identification of gaps between expected and desired results,
6) communicating planning assumptions to local management,
7) requesting plans from local managers for their specific local goals, resource needs and supporting action plans,
8) as needed, studies of alternatives, contingencies or long-term opportunities,
9) review and approval of local plans, and summing these for corporate needs,
10) developing long-term budgets, presumably related to these plans,
11) implementing plans
12) monitoring and evaluating performance, presumably against plans, but usually against budgets.

In an inflection point, conditional leadership must rely on the entrepreneurial forces at the local levels to realize the major changes needed. We can identify five types of entrepreneurial forces that need to be developed and nurtured: 1) pro-activeness of the units, which points to both a willingness to explore unknown paths as well as a willingness to borrow from others, 2) ambition beyond current capabilities, which drives capabilities and leads to attempts to develop necessary new competencies, 3) team orientation, which in the horizontal sense between units supports creativity and knowledge transfer, and in the vertical sense enables rapid, effective decision-making, 4) the capability to resolve dilemmas, which in itself is derived from a combination of creativity and entrepreneurial drive, and 5) individual and team learning capability (Stopford & Baden Fuller, 1994).

Conditional leadership in larger organizations requires structures that can easily result in complexity and convoluted processes, involving organization forms such as matrices, networks, and different levels of delegation. A particular challenge is the building of capabilities and the realization of an integrated strategy within a complex structure; we thus see the emergence of combinations of complex structures and internal venturing in the form of "M" structures (Bartlett & Goshal, 1993).

The Conditional Approach and the Managerial Anchoring Points

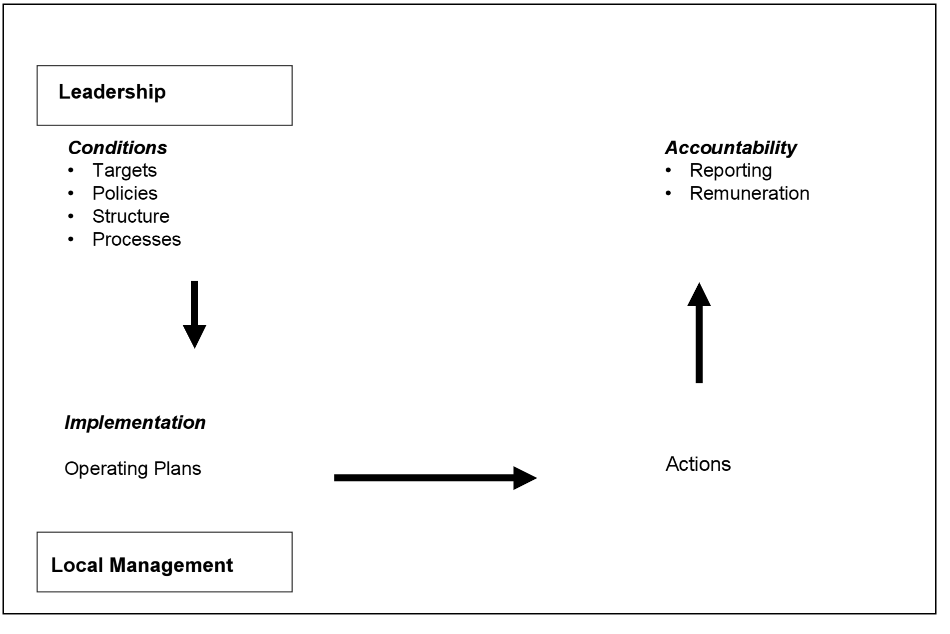
The preceding section elaborated on the five main clusters of anchor points, namely (1) leadership; (2) content: strategy development; (3) context: environment; (4) management & organizational structure and processes and (5) performance & accountability for the directive approach. This section will do the same for the conditional approach.

(1) Leadership

In the conditional approach, the leadership of the firm sets out 'strategic' and 'structural' context determination processes, which comprise the corporate context in which internal corporate venturing (ICV) and strategic initiatives can take place (Burgelman, 1983). These ICV projects represent strategic initiatives that originate at the bottom of the organization within a strategic and structural context. Burgelman (1983) sees ' structural context' as the various organizational and administrative mechanisms that are enforced by the corporate management to implement the current corporate strategy. Bower (1970) calls this 'structural context' the reflection of corporate objectives with which the leadership of the firm can manipulate the context in which the local management have to make decisions and actions. This 'structural context' influences the organization in many ways, and examples include measurement and information systems, and reward and punishment systems. Although in most organizations the leadership sets certain conditions by which the front-line managers have to play (such as, for example, accounting rules), these conditions form the backbone of the firm's governance in this approach, and are thus more numerous and more explicit.

In this model, the context is actively established by the leadership, but local management retains a certain degree of freedom. There is room for strategic initiative, although local managers have to meet the criteria that have been set by the leadership. The role of the CEO is 'premise-setter and judge' (Bourgeois & Brodwin, 1984). This can be depicted as a U-turn, because the leadership first sets top-down certain conditions, which are then followed by bottom-up strategic initiatives that fit in the provided context (Figure 3.15).

Figure 3.15: U-turn Management



In the conditional style, the leadership has three ways to control the strategic process: (1) by emphasizing a particular theme or strategic thrust; (2) by endorsing the planning methodology, which also shapes premises like the product-portfolio approach and (3) by establishing the structure, which will influence the kind of strategies proposed. The level of control chosen is important in the conditional approach, since it influences the freedom of the local management. (Bourgeois & Brodwin, 1984)

In the conditional approach the local management has more substantially strategic freedom that in the directive leadership model, but less than in the ecological approach. Within the overall strategic thrust, local strategic initiatives can emerge from managerial activities of front-line managers. This delegation model can be extended to one in which top management creates a strategic context for nurturing and selecting promising renewal initiatives – for example, by ensuring the maximum incentives for local management, described by Volberda et al. (2001) as a facilitated renewal journey. The result is an internal corporate venturing climate that acts as the motor of corporate entrepreneurship through multiple autonomous strategic initiatives of individuals at the operational levels in the organization (Burgelman, 1983). Local management is stimulated to entrepreneurship within an internal context created by the leadership (Bartlett & Goshal 1993). Despite the strong influence of the conditions set by the leadership, local management often has enough freedom to develop independent strategic initiatives that are not in line with this context.

The entrepreneurship of the local management thus tends to be high in this approach, because it has a lot of freedom in choosing a specific local strategic direction. However, local management is not totally free in its chosen direction, due to the context that has been set by the leadership of the firm. Top managers exercise a critical influence on the strategic initiatives of lower-level managers by establishing the context in which these managers make decisions and take actions (Bower, 1970). Local strategic initiatives will show new features, but will have common traits with the conditions set across the firm by the leadership.

(2) Content: Strategy Development

The speed of adjustment in the conditional approach is lower than in the directive approach, due to the more intensive and elaborate communication between leadership and local management. As we saw in the first part of this paragraph, the leadership has to provide context, and the local management champions have to communicate upwards both local specifics and strategic ideas. There are a many processes involved in this U-turn leadership style (Burgelman 1983; Noda & Bower 1996). Together, these processes take up a lot of time and will therefore hamper the speed of the change. In industries experiencing major shifts, the time needed for assimilating, summarizing and passing information up and down the chain of command is often so long that timely adjustments are no longer possible (Bourgeois & Brodwin, 1984).
These delays are not only a matter of top-down communications. There also will be debate between the different levels of the hierarchy on whether certain initiatives are consistent with the firm's overreaching mission and strategy, and this again takes time. The conditional approach is thus incremental in nature, and it is difficult to make major changes in the business portfolio, if only because it is nearly impossible to secure the involvement of the local business unit management in a timely fashion.

Capability development depends, to a high degree, on the motivation and skills of the individuals that acquire the new capacities, and the leadership has only limited means to impose capability development within a delegated framework in which it alone sets the context. In doing so, the leadership also has to maintain a balance between imposing "hard" planning (reporting and accountability processes), and stimulating an appropriate culture and values (the "soft" side of the business) (Londen, 1998). Front-line management will be well aware of this context, and will try to play by these rules in order to make the new business ideas or adaptations successful. But, as result, the firm-wide consistency of capability development in the conditional approach will be moderate.

Due to the enabling and facilitative management style, consistency tends to be moderate to high. Capabilities developed locally will end up being moderately congruent with the firm-wide context that is set by the leadership.

(3) Context: Environment

In the conditional approach, the scope for alignment and fit of a strategy against the environment of the firm is moderate, with only a limited number of strategic options, because the leadership of the firm is dependent on the capabilities and motivation of the local management to detail and implement the general strategic directions that they have indicated. As we have seen, local management has a relatively high degree of freedom within an overall direction set by the leadership. In a case analysis of Intel, Burgelman (1994) proposed that firms whose internal selection criteria accurately reflect external selection pressures are more likely to strategically exit unattractive businesses than firms whose internal selection criteria do not accurately reflect external selection criteria. When a certain business unit has lost its significance to the firm because an inflection point has swept across the industry, it usually is local management that notices first. If the leadership uses appropriate internal selection mechanisms, this message will be rapidly transmitted along predefined pathways to the upper echelons of the organization. But when the message does not fit any of the predetermined mechanisms, it will have to pass along informal channels, and the leadership will be ill prepared to react to an entirely novel event. The scope for alignment and fit thus depends on the congruence between the internal selection mechanism and current corporate strategy. In general terms, the context that is set by the leadership and the 'retrospective sense making' (Burgelman, 1983) has a decreasing effect on the scope of alignment and fit.

(4) Management of structure and processes

As we saw earlier in the chapter, the conditional approach matches the middle-up-down management style as proposed by Nonaka & Takeuchi (1995). In this style, the leadership stimulates the organization in the knowledge-creation process by providing the necessary conditions. In the middle-up-down model, top management provides 'visions for direction,' as well as the deadline by which the visions should be realized (Nonaka, 1994). Local management deals with the day-to-day reality of the operations and must decide which important ideas and insights can be drawn and then articulated to the leadership. Knowledge is created by self-organizing teams, but within the context put forward by the leadership. A conditional leadership style is also capable of creating and operating relatively complex management structures (like the matrix form), which has a positive impact on the ability of the organization to absorb (new) knowledge (Bosch et al., 1999).

The gap that exists between the vision of the leadership and the reality of day-to-day operations at the local level is the main focus of the knowledge-creation and integration process. In the middle-up-down management style, the primary managerial challenge is to overcome this gap and strive for an accelerating information and knowledge creation (Nonaka 1994). In the conditional approach, the whole organization participates in the knowledge creation process, which can be managed by self-organizing teams. In the thus created "facilitated renewal journey," the potential for learning across business units of the firm can be quite high (Volberda et al., 2001). We may therefore conclude that knowledge creation and integration is high in the conditional approach.
In the conditional mode, the necessity to create a context of targets, structure and processes results in complexity. The strategy proper, in a conditional mode, is the result of definition, impetus, and championing by a group of people at both the leadership and local management levels in which the local management has a considerable degree of freedom (Volberda et al., 2001). The resulting group process – coined the Bower process model of strategy making – consists of multiple, simultaneous, interlocking, and sequential managerial activities (Noda & Bower, 1994).

Unsurprisingly, this mode of strategy building and realization is by far the most cumbersome and time-consuming for the leadership to handle, compared to the other two approaches. The leaders must set down well-formulated guidelines, and constantly monitor the gap between its guidelines and the current state of affairs at the operating levels. The required reporting and information processes are difficult to manage. And, finally, all these activities must take place simultaneously, resulting in a complex process.

(5) Performance & Accountability

Accountability in the conditional approach is specific, and mostly ex-ante, because front-line managers get detailed goals that must be achieved before starting on strategy implementation. The leadership subsequently holds the local managers responsible for the implementation of strategies and good results.

In the conditional world, exercising accountability is a continuous and intensive process, with the emphasis up-front. Since the firm's leadership provides and controls direction, and the local management acts, there is a stream of reports and feedback going up and down the hierarchical chain. In the backbone process, we can identify three main management processes: target setting, the monitoring and review process, and the accountability process. In the conditional approach there are multiple targets relating to market, operational and other performance areas that are set at least annually, and sometimes updated quarterly. In a more formal listing, there are four major areas in which performance can be targeted and benchmarked: 1) financial, 2) customer-related, 3) business process-related and 4) learning and growth (Kaplan & Norton 1996). Targets can be set for a year, but also quarterly, monthly or even weekly. At times, they may even be set for multi-year periods. Monitoring (the arms-length tracking of performance) and review (the discussion between supervisor and manager of performance against stated targets) again have a fixed schedule in a conditional framework – monthly, sometimes quarterly, and even weekly. At least yearly, sometimes semi-annually, this ends with an accountability action in which there are a number of main options: continuation or termination of the relationship, continuation of title and position or promotion/demotion, maintenance or increase of base salary, the amount of variable compensation and the fringe-benefit package. Accountability can relate to a single individual or to a group of individuals.

Tools for Practitioners in the Conditional Approach

The preceding sections explained how the structure and processes are essential tools in this leadership approach. Another important tool of the conditional mode is company-wide learning.

Choosing the Right Structure: Structure has always been considered an important element of strategic change, of which the inflection point is a subset. In strategic thinking, structure is usually considered to be one of the main levers to effectuate a strategy once it has been developed (Chandler, 1961). However, one can also state inversely that structure permits new strategies to be pursued, and that way the firm does business is contingent on the way the firm is organized (Miles & Snow, 1986).

Structure can be defined as the rules that define the interrelationships of individuals or units within a firm. These relationships can be hierarchical, advisory, supportive, or informative. The differentiation between a structure of individuals versus a structure of units is important, because the nature of relations between individuals differs from the nature of linkages between units: the first tend to be more informal and flexible, the latter more formalized and rigid – if only due to the number of people who have to understand, accept and work within the relationship.

An integrative vision of structure vs. strategy, which is developed hand-in-hand, leads to the conclusion that various strategic postures invariably lead to their own structural positioning. For example, it has been determined that "defender" companies, which have reactive strategies often in mature markets, tend to rely heavily on functional organization structures. Companies that have aggressive entrepreneurial strategies – "prospectors" – tend to thrive by using more flexible structures, such as autonomous work groups or product divisions in which planning and control are highly decentralized. Companies in relatively mature but competitive and fluctuating markets end up as "analyzers," who often employ a "mixed" structure, such as a matrix wherein project, program or brand managers act as integrators between resource groups and program units (Miles & Snow, 1986).

Structure is an important factor in determining the survival chances of a firm in an inflection point because it defines to a large extent the immediate control that the leadership has in the behavior of the firm, the degree of leeway that the operating units have in formulating their own responses, and the formal support that operational and functional units can provide to each other. It has been claimed that major competitive breakthroughs have been achieved by firms that invented, or were quick to apply, new forms of organization and management structures (Miles & Snow, 1986).

This is particularly relevant for firms in an inflection point, because of the lack of time available to fill in gaps in the functioning of the organization through informal, ad-hoc measures, and because the severity and complexity of the required adjustments can be realized by the leadership only if the lines of command are clear.

Structure has many linkages with the other functions of the firm. A complete restructuring invariably touches upon areas like information technology, performance measurement, human resources, resource allocation, knowledge management, project tasking and competency management (Nolan & Croson, 1995). When the leadership orders a redefinition of structure (i.e., a redefinition of the interrelationships between individuals or units), it creates a condition for these individuals or units to behave in a different way, thus opening the avenue to adjusted behavior of the firm as a whole in face of the inflection point. As such, structural adjustment is an important conditional tool.

Structure is inherently static, in that it defines interrelationships, but it does not describe how the individuals and units of the firm actually work together to perform the tasks that make the firm function. The latter are described in processes. This is one of the reasons why formal, explicit structure descriptions and instructions can never describe all the details and peculiarities of individual or unit relationships. They are therefore always supplemented and reinforced by informal, unwritten structural rules, which can to some extent be imposed, but in the majority of cases are developed by the individuals or groups of individuals who are the actual participants within the structure.

A well thought-through structural adjustment as a means of adapting an organization for an inflection point has the major advantage of directness and speed: from one day to another, people are confronted with, and can start working in, a new set of interrelationship rules. The quality of the restructuring, i.e., the degree to which it meets the expectations of the leadership, is to a remarkably high degree predictable and controllable, compared to other inflection point approaches. And if the understanding of the leadership of the inflection point environment and its needs have been read correctly, the same can be said of the impact on the performance of the firm.

Most restructuring efforts are to some extent imposed, and also involve a change in work rules and habits that most individuals in the firm have usually have come to experience as "comfortable". Part of the "comfort" is derived from the support that the informal structure provides to the formal rules. When the formal structure is changed, the participants usually have to develop the necessary informal (sub) rules that bridge the gaps found in daily usage of the formal rules. The development of the informal structure takes time and effort for parties to conceive, negotiate and implement their ad-hoc arrangements. The result of this is, in many organizations, a lack of motivation or resistance to structural change. This resistance to change will have a negative effect on the speed with which the people in the organization start conforming to the new structure.

Although restructuring in the narrow sense – between individuals – has lost some of its popularity as a tool on its own, it remains the core of most inflection point strategies, in combination with process redesign and other inflection point approaches. Restructuring between units, often linked with a portfolio review, continues to increase in importance. We can also see a new interest in trying new and often paradoxical organization forms designed for flexibility and knowledge creation, forms that are crucial for organizational survival in the hyper competitive markets that characterize inflection points (Ilinitch et al., 1996).

Installation of Processes: Processes are the schedules that firms follow when they work to serve their stakeholders demands. In particular, they define the way in which the execution of tasks is shared between individuals or units, or passed on from one individual or unit to the next. Processes link the different units of organization structure to each other: as soon as a task is performed by a unit and passed on to the next within or outside the firm, a process takes place. Processes have been identified as the key building blocks for the creation of competencies and a continuous flow of innovations (Deschamps, 1995).

Processes can be formally described, or informal. When the leadership prescribes processes, they do so by issuing a specific instruction, e.g., through a written document. These formal process descriptions are rarely complete, in the sense of describing every action in minute detail. The resulting gaps are filled by informal, unwritten processes developed through intuition, experience, and agreement between the parties concerned with the execution of the process (Scott Morgan, 1994). Thus, in providing the process, the leader creates conditions under which the people who actually operate can and will develop their own work style.

We can illustrate this by a simple case study of the weekly timesheet, a listing of all hours worked on each task that the leadership of a global professional firm requires all of its members to submit to the control department, each Friday morning, with their (electronic) signatures attached. This policy procedure has lead to the following types of actual behavior in different countries:

- In Germany, all the sheets were filled out by the team leaders at the beginning of each 3-6 month project without any staff involvement, and mailed out one-by-one every week.
- In Brazil, the sheets were completed by the administration, based on projections provided by staff on a monthly basis, and sent out to staff for signature.
- In the UK, the sheets were filled out at the beginning of the week by the team leaders and sent down for signature by the individual staff members.
- In the US, staff members were requested by their local managers to submit their signed sheets two days early for verification and correction by local administration.
- In France, there was an office-wide panic each Friday morning as individual staff members took time off from their ongoing assignments to fill in the sheets at the last moment, with the administration riding herd on the laggards.

This interpretation of the policy through informal processes at the local levels leads to significant differences in revenue recognition (an accounting issue) and to variances in the quality of information that the leadership received.

Processes are important for inflection point management, first of all because they make an organization and its structure function. Without processes, individual tasks would not be assigned from above, would not be shared or passed on between individuals or units, and there effect would not be measured and accounted for. For the leadership, processes are crucial, in the sense that it is through processes that leadership can exert its influence beyond its direct reports. Finally, one should realize that processes stand at the basis of all new developments. They govern, among other things, competence creation, portfolio readjustment, and most of the innovation.

Structure and processes are inexorably linked to each other. Redefinition of an organization can be accomplished by restructuring, as has been described in the preceding chapter, in which case the processes have to adjust, through positive action or intuitive reaction to the new structure. Redefinition can, on the other hand, also be realized through process adjustment, which invariably means that position descriptions and therefore structure must also be reviewed and changed.

Process adjustment may well be the most immediate way in which the leadership can change the behavior of individuals or units in the firm, and should therefore be a serious candidate for any inflection point package. Process adjustment, however, cannot stand on its own. Process adjustment shares the disadvantage of restructuring, in that it often triggers resistance in the organization: after all, the "set ways" of people are but a romantic notion of the formal and informal processes that they follow. Process readjustment also shares the backward-looking characteristic with structure, leading to a risk of inflexibility in view of the rapid changes of the inflection point.

The most radical and all-encompassing form of corporate redirection through processes has been coined Business Process Redesign, which can be defined as "the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical contemporary measures of performance such as cost, quality, service and speed" (Hammer & Champy, 1993) Business Process Engineering was an important, albeit incomplete and potentially distracting step towards creative redefinition of the hierarchy. However, it does not:

- address the network organization
- deal with the dichotomy between the stabilizing function of the organization infrastructure and the flexibility and responsiveness afforded by networks
- specify endpoints or overall objectives beyond "order of magnitude improvements (Nolan & Croson, 1995).

Although one can perceive an element of backlash against process redesign as a means to adapt the firm to major change (after the disappointments experienced with re-engineering), the central role of process adjustment as a means to change the posture of an organization can be expected to remain undiminished. With the increasing emphasis on networks as opposed to direct hierarchy, it is likely that processes between (independent) units rather than individuals will be increasingly interesting.

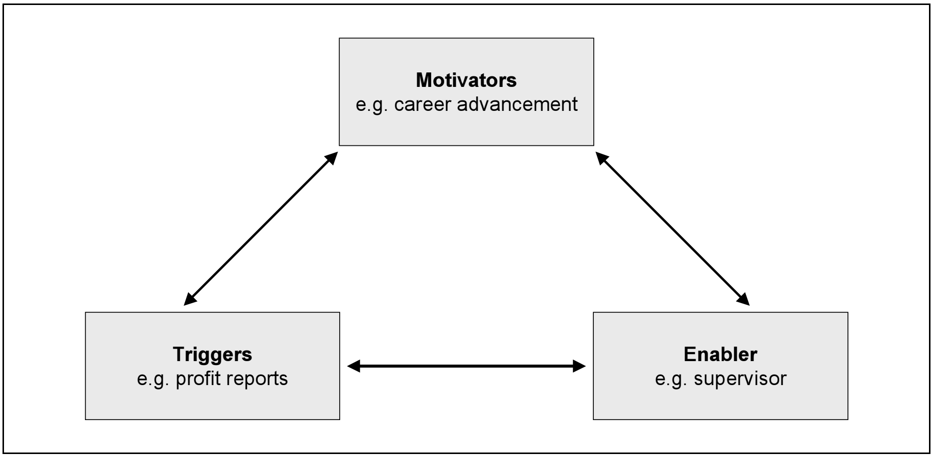
Learning: As we have seen, learning and the creation and integration of knowledge are important elements of the conditional approach. Learning is the capability of an organization to adapt its constituent elements – such as capabilities, knowledge, culture, structure, processes etc. – in response to internal or external stimuli, the latter including inflection points. Learning can be differentiated into generative learning, which is about creating, and adaptive learning, which is about coping (Senge, 1990: 40). Knowledge can be defined as the set of beliefs that an individual holds about causal relationships among the phenomena that he/she observes (Sanchez, et al., 1996:9). Knowledge can therefore be heavily influenced by the conditional structures within which the individual operates.

An inflection point transition involves complex change, which is enabled through learning. This learning can be the result of one of the other tools discussed, or it can be initiated as a means to change on its own. According to many management researchers, complex and rapid changes like inflection points can best be managed as incremental, goal-oriented interactive learning processes. (Quinn, 1985: 207). The most effective strategies of major enterprises tend to emerge step-by-step from an iterative learning process in which the different layers of the organization probe the future, experiment, and learn from a series of partial (incremental) engagements rather than through global formulations of total strategies. Good managers are aware of this process, and they conscientiously intervene in it (Hrebiniak & Joyce, 1984).

There is no single set of methods that builds learning capability, and the leader must therefore rely on a mix of different tools. A pragmatic approach to improving the learning ability of organizations is offered by Peter Senge in *The Fifth Discipline* (1990). Senge's point of departure is the observation that prolonged exposure to a defined business environment immerses management and staff in a "mental model" that may impede sensitivity to changes in the environment as well as an organizational ability to change. Senge offers five disciplines to help a firm become a truly learning organization – mastery, visioning, scenario analysis, systems analysis, and team dynamics. These tools do not portend to change the boundaries and structure of an organization, and also do not offer specific tools to motivate people, except that learning processes themselves often are impressive motivators.

After reviewing the five disciplines described above, one is left with an uneasy feeling regarding the comprehensiveness of these five tools (is there a sixth?), and about ways to implement a learning organization. These questions are to some extent covered by the five disciplines of Senge, and the use of unwritten values and processes, the "unwritten rules of the game" as object of analysis and, subsequently, as lever to change (Scott Morgan, 1994). One can change these unwritten rules and stimulate learning by considering the triangle of personal motivators, triggers and enablers (Figure 3.16). As such, this provides an analytical way of "mobilizing the masses" for a major change process, and therefore provides a foundation stone for successfully making an organization learn. The almost engineering-like approach to changing the rules is a strength and also a scope delimiter of Scott-Morgan's' approach. In his world, enablers feed the motivation of organization members, who receive this "compensation" by setting off triggers. Therefore, if the firm no longer performs (e.g., after an inflection point has fundamentally changed the business), one has but to change either enablers or triggers or, if possible, motivators, to meet the new situation (Scott-Morgan, 1994). Boundaries, structure and processes are beyond the scope of his analysis.

Figure 3.16: Mechanism of Unwritten Rules of the Game
(Scott-Morgan et. al., 1994)



A third approach to stimulating self-learning follows more explicit ("written") processes. Typically, these process steps could be to:

- develop new perspectives on the meaning of control: learning in a group is a form of control that managers do not normally recognize as such
- design the use of power
- encourage self-organizing groups. A group will self-organize only if it discovers its own challenges, goals and objectives,
- present ambitious challenges instead of clear long-term objectives or visions
- expose the business to challenging situations: Managers who avoid taking chances face the certainty of stagnation and therefore the high probability of collapse in the long term.
- devote explicit attention to improving group learning skills
- create resource slack (Stacey, 1993:99).

Organizational learning is the one approach that fully mobilizes the talents, experience and motivation of the individual staff members to realize the changes made necessary by the inflection point. Apart from assuring full utilization of the capabilities of the firm, it also minimizes the risk of resistance to change. Learning is highly flexible, and once an organization is in learning mode, it needs very little direction from above.

This also points to a disadvantage of a learning organization approach: the outcome cannot be controlled by the leadership, and may be unpredictable. Attempts to steer a learning process and its conclusions, once they are launched, invariably lead to demotivation and stagnation.

A second disadvantage of learning models is the effort needed to make them work, which means that learning can take place only in an organization with the necessary organizational slack to absorb the cost of installing and maintaining the learning effort. One study claims that only companies like Hewlett Packard, IBM, Matsushita and Intel had the growth that enabled them to afford these techniques (Bourgeois & Brodwin, 1984).

The same effort to make them work gives rise to a third disadvantage, the risk of organization fatigue. When unwritten rules shift, the culture is disrupted – by a misfit or an overload – and people are forced into a series of learning experiences. By misfit, we mean a shift in the unwritten rules: if a new pattern of unwritten rules emerges that does not satisfy personal goals, we experience it as motivational misfit. If the new patterns of unwritten rules do not fit with the existing pattern of the status quo, people find themselves in a conflictual misfit (Scott-Morgan et al., 2000:186). Also, if many aspects of a firm's learning environment change simultaneously, the ability to ascertain cause-effect relationships is confounded because cognitive structures will not be formed and, hence, rates of learning diminish (Teece et al., 1997:167). The result of these complications is cumulative change fatigue (Scott-Morgan et al., 2000).

As a final conclusion, one could state that any major change in an organization requires adaptation of all the constituent elements, including the informal, undocumented and therefore largely unmanageable elements. A conscientious attempt to improve the learning ability of the organization is therefore almost a necessity for the leadership of a firm passing through an inflection point. Because of effort and time requirements, as well as the need for organizational resource "slack", a learning approach is less effective when time and resources are short.

Advantages and Disadvantages of the Conditional Approach

One of the main advantages of the conditional approach is that it enables the leadership to leverage the experience, know-how and energy of local management, and reduces the demands on its information, insights, and time. In today's highly complex and dynamic business environment, the executive will usually find that it lacks the data, cognitive powers and time to monitor all the important day-to-day activities and trends, to fully understand them, and autonomously take all the actions needed to correct strategic misalignment (Simon, 1946). The conditional approach delegates a level of freedom to local management to use its own information and capabilities to develop and implement strategy at its own levels, within bounds set by the leadership. The motivational problem that we have seen in the directive leadership mode will disappear, due to the empowerment of the local management.

One of the main disadvantages is that the process of empowerment causes a slow-down in decision-making. As seen in the previous section, organizations that use this leadership mode tend to have complex processes. In this mode there is a need for more explanation of the strategy to lower levels, and there will be more debate whether a certain strategy will be fruitful. This comes at the cost of reaction speed. The reaction time versus the awareness time of the problem is larger than in the directive mode. In a highly dynamic environment this can be costly for a firm, because they will be too late with the initiation of a good strategic direction. This empowerment is rooted in the structural context, as observed by Burgelman (1994) at Intel. An important cultural element of Intel's structural context was the tradition of encouraging open debate about the business merit of different strategic initiatives, constructive conversation (Jelinek and Schoonhoven, 1990), and the rule that knowledge power should not be overwhelmed by hierarchical position power (Grove, 1983). Since more layers are involved in strategizing, there also is a risk of misalignment of local initiatives with the firm's overall vision.

The lack of direct control of top management over the organization makes it difficult for the multi-unit firm to engage in any large-scale developments that require central coordination or synergy across units (Volberda et al., 2001). But this strategy model also enables the emergence of knowledge-intensive teams of entrepreneurs, which should provide some compensation.

The strategic initiatives that take place in this leadership style revolve around the CEO's ability to define organization purposes broadly enough to encourage innovation, to select judiciously from among those projects or strategy alternatives that reach his attention (Bourgeois & Brodwin, 1984) and to impose an appropriate set of controls to make sure the local initiatives remain aligned with the overall purpose. "Definition" can be seen as the process by which the basic technical and economic characteristics of a proposed investment project are determined (Bower, 1970). Too broad a definition can be counter-productive and might lead to an unproductive diversity of strategic proposals (Bower, 1970). On the other hand, an excessively narrow definition will lead to the elimination of initiatives because front-line managers are afraid that their ideas will have a limited probability of approval (Carter, 1971). In the conditional mode it is difficult for the leadership to choose the appropriate level of conditions, which leads to loss in decision speed, which is not desirable. Bower (1970) demonstrated that some firms were not able to transform themselves because the leadership of the firm established a context that gave no room for new strategic initiatives unless they were in line with the conditions.

Another disadvantage is the increase of complexity in the conditional approach. In this leadership style, many processes have to be managed at the same time (Bower, 1970; Burgelman, 1983 & 1994). The leadership sets the context, and local management comes with new business ideas that might be in contrast with this context. The leadership acts as judge and must decide whether the new signaled trend justifies a change in the strategic context. As we have seen, this can be a time consuming process, and complex to manage.

Applications of the Conditional Approach

This chapter has elaborated on the conditional approach when a firm is faced with an inflection point. If the leadership opts for a conditional approach, it means that the capabilities, knowledge and support need to be present at the local management level, which are the conditions necessary to make and implement the many decisions needed to execute the overall leadership vision in the field. The leadership needs to have enough understanding of the environment to be able to set an overall course for the firm. Furthermore, knowledge and capabilities of a more supervisory nature are also needed at the leadership level. These important conditions cannot be instantly created as soon as the inflection point occurs: time is needed to understand what is going on and to determine the general direction. And time is needed to involve local management for the decision-making and implementation work that is expected from them. This context in which local management works, involving both procedures and structures to guide local decision-making as well as targets and accountability provided from above, also means that the level of complexity of the organization ends up being relatively high.

Conditional leadership approaches, based on the capabilities, know-how and support of local management, may take somewhat longer to enact, but do result in complete and effective development and implementation at the local level. Because of the more important role played by local managers, their limitations in capability, know-how and support may limit the number of strategic options available to the leadership; within these options, however, alignment with the leadership's intent can be close to complete.

The conditional approach is extremely suitable for complex business environments, where the leadership knows where it wants to go and local management has the best knowledge of the day-to-day operations. This approach deals with the top-down versus bottom-up tension by combining the two into a "U-turn". In situations demanding a quick response, this approach may be of no use because of the elaborate communication between the different levels. Figure 3.17 summarizes the evaluation.

Figure 3.17: Advantages, Disadvantages and Applications of Conditional Leadership

Advantages	Disadvantages	Best Application
Local management Involvement	Time needed to create management conditions	Local detailing of main thrusts that have been decided before
Best possible information at leadership level	Time needed to overcome resistance to change	Time availability: gradual change

Conditional leadership can be recognized from the outside by a number of characteristics that follow from the theoretical framework developed here. These characteristics can be grouped into two categories: the kind of actions that the collective leadership takes, and the nature of its interactions with local managers. Since large, corporate-wide actions are difficult to realize in a collective environment, collective leadership expresses itself in small and incremental changes in the business portfolio that are often executed by local management. Another trait is the emphasis on management process building (including information and communications technology). The interactions between the leadership and local management are intensive and two-way. This means frequent and long meetings with flexible agendas, and often with many participants – including those in the direct line of command and actions, and those involved indirectly.

3.8: The Ecological Approach

Introduction

This section will describe the ecological approach and discuss under which circumstances it can be effective. After this introduction, we will discuss the theoretical grounding of the approach. Subsequently, we will see how it fits with the managerial anchoring points. We will then describe the most relevant management tools that can be used by practitioners of this approach. Finally, we will debate the main (dis)advantages of the approach and its main applications.

The ecological approach is a leadership style in which management conscientiously leaves it to the markets in which the firm operates to select out those businesses that do not possess the competencies that meet their needs. According to the ecological perspective on management, the only changes the leadership and local managers can make to the business units under their responsibility are minor (Hannan & Freeman, 1977; Barney & Zajac, 1994). Only local management is capable of incremental adjustments to the unit it runs. And the firm's leadership can decide only what its expectations are towards its business units. Based on these expectations, it can set (rudimentary) ex-ante targets, and, more importantly, hold the local managers accountable for meeting these targets (Bartlett et al., 1994).

Accordingly, an ecological leadership style differs fundamentally from the directive and conditional approaches in that it lacks up-front and continuing leadership action (e.g., via detailed target setting, conditions or actions), and thus relies mainly on ex-post accountability to exercise management power.

Ecological thinking is relatively new; the seminal work dates from the 1960s and 1970s (e.g., Hannan & Freeman, 1977). Also, by definition, an ecological approach is limited in the number and scope of tools it can use. These factors mean that this section is somewhat shorter than its predecessors. It is, however, no less relevant, given the popularity of ecological models in the recent internet upswing.

The Theoretical Grounding of the Ecological Approach

The ecological approach is grounded in population ecology (Hannan & Freeman, 1977 & 1984; Aldrich & Pfeffer, 1976) and in institutional theories (DiMaggio & Powell, 1983; Greenwood & Higgins, 1996). There also are useful linkages with complexity theory (Kaufman 1995, Sanchez, 1993), particularly in tracing strategy deployment as a process without central, top-down direction.

Population ecologists have brought forward the notion that organizations are subject to strong inertial forces; that is, they seldom succeed in making radical changes in strategy and structure in the face of environmental threats. "Even within broad areas of organization action... there appear to be substantial obstacles to substantial structural change. we will continue to doubt that the major features in the world of organizations arise through adaptation or learning (Hannan & Freeman, 1977). The structural inertia noted by these authors is grounded in a number of processes that can be classified as arising from either internal structural arrangements or from external pressures. In case of internal arrangements, we can categorize four forces that predicate this inertia and inability to adjust to external challenges (Hannan & Freeman, 1977):

- sunk costs combine with financial resource limitations and traditional accounting rules in motivating a firm to earn back the investment from the assets with which that investment was made;
- leadership's bounded rationality, in particular, limits the ability of the leadership to adequately gauge the new environmental trends of an inflection point, which is exacerbated by a lack of good information from existing channels about new developments.
- political rigidities, and resistance to change among employees who are confused and demotivated by rapid change and
- path dependencies and inertia, which translate into an inability to change the myriad of formal and informal processes that characterize the modern firm.

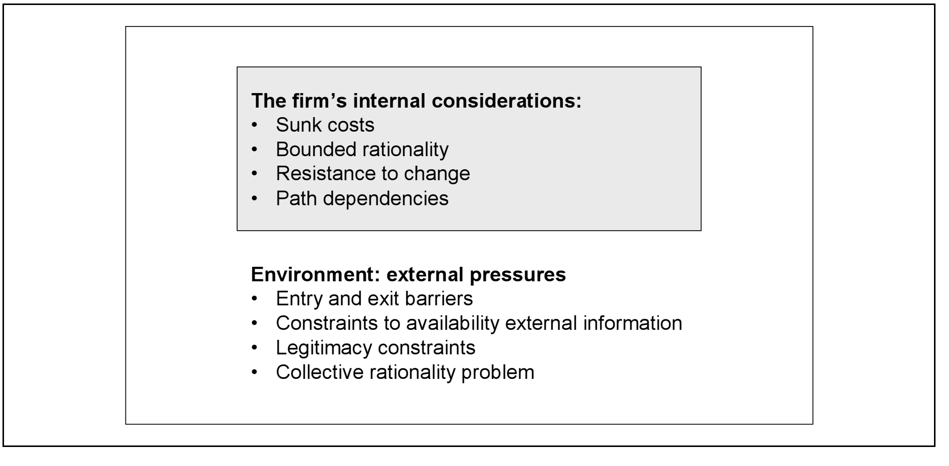
As consequence of these four internal forces, firms that have enjoyed success over a long time period tend to suffer from increasing institutional rigidity (Baaij & van den Bosch, 1998).

To these internal rigidities we can add external pressures, including the following:

- barriers to entry and exit, including a lack of capabilities or resources necessary to enter a new business when the old one ages, as well as legal and fiscal barriers,
- external constraints on the availability of information,
- legitimacy constraints, which set a limit to the positioning options available to the firm in relation to its shareholders and other stakeholders
- collective rationality in the business community, involving myriad suppliers and customers who through the years have established an equilibrium.
  (Hannan & Freeman, 1977)

These internal and external pressures are depicted in the following figure (3.18).

Figure 3.18: Internal and External Inertial Pressures



Source: Hannan & Freeman, 1977

As result of these rigidities, we can regard organizations as "buffeted by the forces of the environment, lucky if they manage to get into a favourable position, fated to die if they do not" (Aldrich & Pfeffer, 1976), as the market selects out those units that have competencies that no longer are appropriate (Bartlett et al., 1994; Barney & Zajak, 1994). In a volatile environment, the changes that established firms are able to make are so marginal that they are frequently insufficient to assure survival (Kaufman, 1985).

An important development of ecology theory was the realization that, whereas small companies are entirely subject to external ecologies, the individual units in larger corporations could be considered subject to an internal ecology, as they compete not only in the outside environment, but against other units for limited organizational resources and support from corporate management (Burgelman, 2002). The internal ecology model is defined not only by distributed strategic decision-making and simultaneous strategic action, but also by a strong ex-post accountability by the corporate leadership. This form of ecology is characterized by variation (as individual units seek different strategic initiatives to express their unique set of capabilities), by selection (as the leadership screens out what it regards as the more promising initiatives, via administrative of cultural means), by retention (of those initiatives that survive both external and internal competition), by internal competition, and by external competition.

The difference in this internal ecology and the framework described by Hannan & Freeman lies in the availability of a credible and effective corporate strategy. One can define this strategy as the theory that the leadership has about the basis of its past and future successes, which provides a shared frame of reference for local managers and expresses the leadership's strategic intent. In the view of Hannan & Freeman, the leadership is in no position to form a clear and viable strategic intent. This is certainly the case in periods of rapid environmental change and uncertainty that characterize the inflection point, which mitigates the value of the internal ecology concept for this study.

The second main inspiration of the ecological school – alongside population ecology – comes from the institutional theorists, who claim that renewal journeys result from coercive, normative, and mimetic isomorphism. Firms have a strong motivation to conform with the norms of their industry, and will only alter their structure and processes if they maintain congruence with these norms and the shared logic of the industry of which they are part. (Dimaggio & Powell, 1983). Institutional theory, thus, does not debate organizational change, but rather focuses on the similarity of organizations within a given business sector. Institutional pressures (such as regulation) are 'a powerful force' against transformational change (Buckho, 1994). Benchmarking by firms against their industry peers will lead to more similarity, as firms try to copy popular features of competitors that they consider to be more successful.

In an institutional framework, isomorphic change does occur. Here, we can distinguish between three mechanisms (DiMaggio & Powell, 1983):

- coercive isomorphism, which results from both formal and informal pressures exerted on organizations by other organizations upon which they are dependent, and by cultural expectations in the society within which organizations function (e.g. the existence of a common legal environment).

- mimetic isomorphism, which results from uncertainty. When organizational technologies are poorly understood (March & Olsen, 1976), when goals are ambiguous, or when the environment creates symbolic uncertainty, organizations may model themselves on other organizations (e.g. benchmarking). This, of course, is particularly relevant in an inflection point situation.
- normative isomorphism stems primarily from "professionalization", which is the collective struggle of members of an occupation to define the conditions and methods of their work, to control "the production of producers" (Larson, 1977:49-52), and to establish a cognitive base and legitimization for their occupational autonomy (e.g. managers who have the same education and background).

A firm's strategic behavior can thus be seen as the product of ideas, values and beliefs that have originated from an institutional context (Meyer & Rowan, 1977). These pressures that originate from the context lead to the adoption of the same organizational form and organizational processes by firms that operate in the same environment. Firms cannot change dramatically because their norms are embedded within this institutional context. This implies that changes in the firm under an ecological leadership style will be modest and incremental in nature.

A third inspiration for the ecological view of leadership comes from the complexity school, which sees the different units within a firm as independent optimization strategies in a fluctuating fitness landscape. Each of the units finds an optimum, but many of these are local, and only one is the best position for the entire firm (Kauffman, 1993). The role of the leadership is to enable these independent teams to pursue their own optimization paths (Beinhocker, 1999). But the power of the leadership to influence the paths of the different (local) units is quite limited. In a dynamic, complex environment that characterizes the inflection point – and in particular its beginning phases, as we will see later – the leadership simply does not have the information, expertise or time needed to make specific strategic decisions, to draft plans for their implementation, and to monitor full compliance with these plans. As result, the leadership will have to function within a system of largely self-managed processes, in which it has only a limited role in setting boundaries and broad milestones, and in holding its unit managers accountable for staying within these boundaries and meeting the broad milestones (Sanchez, 1997). In its pure form, this is ecological leadership behavior. An ecological perspective on managing a firm may also be derived from resource scarcity, in addition to the convergence to industry norms and the structural inertia mentioned above (Volberda et al., 2001); it may also result (as we will see) from lack of information and/or understanding of the dynamics of a rapidly changing market place (Simon, 1947).

When we look at the ecological system around individual units from a leadership perspective, we gain an additional viewpoint. There, the units compete not only externally in the markets in which they operate, but also internally for (financial) resources that are disbursed from the corporate centre. It has been stated that success in obtaining the support from the leadership in the internal accountability and selection process is more important for the survival of a business unit in an inflection point than the stated strategy of that unit (Burgelman, 1996). When this internal competition process is run in an orderly way, distributed decision-making, and simultaneous strategic action of a number of business units may be combined into a coherent firm-wide direction through frequent and specific selection and accountability actions by the leadership; at this point, ecological leadership may transform itself into a form of conditional management.

If, on the other hand, the unit's strategic actions depend on the sequence in which problems, solutions and decision opportunities arise, we find that firm-wide coherence depends on chance. This is an extreme form of the ecology model that has in the literature been called the "garbage-can model." It is characterized by a lack of clear goals, a lack of understanding on how to achieve outcomes, and a fluid participation of the different internal units and functions (March & Olsen, 1976; Smith & Zeithaml, 1996). It should be noted, however, that a new order can emerge from chaos through a process of spontaneous self-organization (Stacey, 1993).

A more balanced form of ecological leadership is provided by Bourgeois and Brodwin, when they describe the "crescive" model, in which the role of top management is that of premise-setter and judge – in the style of traditional Japanese management (Bourgeois & Brodwin, 1983), but also comparable to the venture capitalist who diversifies his strategies along three dimensions: length of time frame, risk, and relatedness between his businesses (Burgelman, 2001; Beinhocker, 1999). We can regard the local units as "platoons of hikers" that move independently from each other, each seeking to maximize their individual odds of survival and success (Beinhocker, 1999).

The Ecological Approach and the Anchoring Points

This section elaborates on the fit of the ecological leadership style with the five main managerial anchor points: (1) leadership; (2) content: strategy development; (3) context: environment; (4) management & organizational structure and processes and (5) performance & accountability.

(1) Leadership in the Ecological Approach

The ecological leadership approach gives total freedom to local management. The leadership of the firm does not interfere with the entrepreneurial activities that are deployed by the local management, nor does it actively stimulate entrepreneurial behavior. Local management is given complete freedom in running the show, with the results being assessed ex-post: a few clear performance targets, such as Return on Investment, may have to be met. The justification of this behavior at the executive level can be found, amongst other arguments, in the limited information and understanding that the leadership has of the dynamics of the environment in an inflection point (Nadler & Heilpern, 1981). Even in more stable times, there are limits to the cognitive skills of the CEO (Simon, 1947).

Volberda et al. (2001) call this behavior the emergent journey of renewal in which the leadership is mainly outward-oriented and managerially passive. Strategic initiatives generally emerge at the bottom of the organization, with local management. At a later point in time, when the leadership is more comfortable with the dynamics of the market place and is thus able to set new directions for the firm, it decides whether the new strategic initiatives taken in the field are in line with their vision and strategy: at that point, their approach is no longer ecological.

The point at which the decision of the leadership suddenly becomes crucial is the accountability point, when the selection is made which units to support and which to drop. The success of the overall firm then depends on the strategic management capability of the leadership (Burgelman, 1996). This strategic recognition involves the ability of the leadership to recognize the strategic relevance of local management actions directed at new business initiatives or at the reduction of existing businesses. This process in itself again illustrates the bottom-up character of ecological management.

In the ecological leadership approach, local management has the freedom to initiate strategic actions as long as they eventually meet the targets that may have been set by the leadership. Local management is not encouraged to think beyond its own business: the leadership stresses the dangers of straying outside the competence boundaries (Volberda et al., 2001). There is scope, however, for a multitude of new activities and entrepreneurs.

(2) Strategy Development: Content in the Ecological Approach

The introduction to this segment made a distinction between internal and external considerations that lead to strategic inertia, by which we mean an inability to pursue new strategic directions. Some of the factors that generate strategic inertia are internal to organizations: these include sunk costs in plant, equipment, and personnel, the dynamics of political coalitions, and the tendency for precedents to become normative standards. Others are external, such as legal and other barriers to entry and exit from certain businesses. Population ecologists as well as institutional thinkers bring forward the notion that these inertial pressures are much stronger than most people think. We have stressed that leaders may also opt for an ecological style when they feel uncertain about the dynamics of the environment, which is a likely mindset during an inflection point.

In the ecological approach the leadership makes no up-front strategic decisions, and leaves the local managers in charge of reactions to the new environment, realizing that it is unlikely that they will be able to cope fully and find fully satisfactory solutions. Once the leadership has the information and mindset to make the necessary strategic moves, they must shift to a forceful directive or conditional leadership style to realize a strategic redirection. For example, when the leadership moves to acquire or divest units, this is usually a directive move. When it moves to restructure the business, this is usually a conditional move. As result, the speed of strategic adjustment of the firm as a whole is low.

Due to the '*laissez faire* mentality' of an ecological leadership, the local managers are not stimulated to think beyond the boundaries of the unit. Capability development at the level of the business-unit takes no account of the needs of the other businesses and of the firm as a whole. In an ecologically run firm, there thus is no mechanism to create and ensure any level of consistency of capability development across the organization.

(3) Environment: Context in the Ecological Approach

In the ecological approach, the leadership of the firm is passive in its direction of the units, and in using the inputs it may receive in monitoring changes in the business landscape. Faced with the high uncertainties presented by the environment, the management has to navigate between reining in chaos and letting chaos reign. In this approach, it has – for the moment – opted for the second stance. No substantive attempts are made from the top level to align the units with the demands of the environment, and to realize a better fit with these demands. The scope for alignment as seen from the perspective of the leadership – which has few options to act – is low. However, the scope for local learning can be quite high. At the accountability point, at the end of the chosen reporting period, the leadership has to make the necessary selection decision, at which point a suitable recognition capability is important, if the leadership is to end up with a collection of successful units (Burgelman, 1996). A basic sense of environmental trends, gained through analysis or intuition, is a crucial element of this recognition capability.

(4) Management of structure and processes

An ecological approach is a strong form of a bottom-up management model, and in a bottom-up model those who create information are local managers (Nonaka, 1994). Knowledge that is created in this leadership approach is not accumulated at the leadership level or across the firm, due to the rudimentary knowledge exchange between business units and the executive, and among each other. Accordingly, unmanaged adaptive learning by the units is the only feasible method for changing organizations, because the firm's management lacks the intelligence to comprehend the world around it and to direct the learning process from above (Lindblom, 1959). Experience in what is going on in the marketplace is gained in the first place by the local managers (Huy, 2001). Firm-wide knowledge creation and learning as seen from a leadership perspective are low and emergent.

In the ecological approach, the discussion on the appropriateness of structure and processes can be conducted only by local management. Where the local units are small, which is often the case, structure and complexity are non-issues (they are also, in any case, non-issues for the leadership of the firm, which is, after all, interested only in the ex-post performance of its units). From a leadership perspective, the complexity of structure and processes is thus low, and could be called rudimentary.

(5) Performance & Accountability in the Ecological Approach

The leadership leaves the development of strategy and actual execution of operations to the people responsible for the performance of those entities, and it assesses the results ex-post (Merchant, 1998). At the beginning of the accounting period the leadership may set a few concrete performance targets that have to be met. The emphasis in terms of content and process is thus on ex-post accountability. After the accounting period, the leadership evaluates whether or not the unit managers have met the targets. They then have the choice of either continuing to commit the (financial) resources to the unit, increasing this commitment, or cutting off resources (these actions conceptually are directive, but also are logical endpoints of ecological behavior). If the leadership shows anything more than "binary" behavior – in writing a new check or stopping the venture – they decidedly have crossed the line into a different leadership style.

Important Tools in the Ecological Approach

In the ecological approach, the simple and only key process is the accountability review in which the performance of local managers and/or units is formally or informally measured against (un)written targets, followed by the selection step, in which financial and other resources are granted or withheld from units and unit heads. In an inflection point, the shock of the environmental change and the ensuing fall in performance threatens the ability of the leadership to perform this role. With regard to ecological leadership in a period of upheaval, we may identify four stages of reaction: 1) denial that the units of the firm are facing a new, life-threatening challenge, 2) escape, sometimes by wasting time on irrelevant subjects, sometimes even physical, by initiating business trips or a headquarters move, or by initiating unrelated actions, like acquisitions. If the leadership does not develop a vision for the new post-inflection-point business, they are on the way to the eventual destruction of the firm. However, if all goes well, the leadership will enter 3) a phase of acceptance of the new business rules, and 4) pertinent action to support the promising units and close the ineffective ones. (Burgelman, 1996) These last phases are often accompanied by a replacement of those leadership members and managers that are no longer effective. Interestingly enough, these are often not basically more capable than their predecessors, but do not have the emotional investment in past strategies. The chances that the leadership, and the firm, will survive the first two stages and come to the right decisions in stage four is enhanced in a major way if the leadership is able to develop a mental image of what the industry will look like and the firm will look like when it has successfully passed through the inflection point.

One condition for effective ecological leadership is that it should have the selection mechanisms that enable it to make the right decision regarding continuation or discontinuation of support for a given unit. The leadership should have the reserves – or slack – that makes failure and experiment possible (Anderson, 1999). Finally, the leadership must also have the courage and independence of thinking to accept the demise of a unit that has not met expectations. In traditional management cultures, this is difficult to accept. However, the termination of ineffective organizations or organizational activities is increasingly becoming part of normal managerial processes, both in the macroeconomic sense (Van der Mandele, 2000) and in corporate life (Burgelman, 2002).

Nonetheless, ecological leadership can be regarded as a way forward in that it is can be regarded as an ultimate consequence of capability-based strategy deployment. When the leadership has acquired local units with highly developed capabilities and motivation, and has provided them with the necessary resources, the process of strategic control of these units can evolve into a process of creating self-organizing systems (Sanchez, 1997).

Advantages and Disadvantages of the Ecological Approach

The ecological approach is simple and clear to the participants. It is, however, rather inflexible and marked by a lack of adaptation. From a holding perspective, the adaptability of the firm in the ecological approach will be very low, due mainly to internal and external inertial pressures. The main advantage of the ecological approach is the simplicity for the leadership. The only knowledge streams that are traceable are the ex-ante and ex-post facts. The binary accountability is very clear to the participants. The communication between the leadership and the local management is low and rudimentary. Communication and knowledge integration is extremely low in the ecological approach. Adaptations are moderate and don't have a significant effect on the existing business portfolio. Another disadvantage is the high theoretic level of the approach, which makes it difficult to translate into practice (figure 3.19).

Figure 3.19: Advantages and Disadvantages of the Ecological Approach

Advantages	Disadvantages	Best Application
Full involvement of local management	Lack of (up-front) leadership control	High market uncertainty
No understanding of markets needed by Leadership	Risk of local independence	Limited resources at stake

Applications of the Ecological Approach

Ecological approaches depend heavily on the strategic insight and entrepreneurship of local managers, which means that high demands are set on their knowledge, capabilities and motivation. Moreover, there are only few contextual targets, management procedures and rules set to their behavior, which means that the complexity of the leadership structure can be extremely simple. From a leadership perspective, the number of strategic options is limited to two: to support or not to support. Accordingly, the leadership has no means of enacting an adaptive strategy track, and is relegated to a selective mode of strategy development. Given the leadership's lack of influence on the actual operations of the units, the ecological approach, from a firm-wide perspective, becomes incremental. Since decision-making is concentrated at the local level, the speed of transition of the units, however, can be relatively fast. Leadership action is entirely ex-post, and this approach is only suited to selective strategies that are enacted bottom-up.

Interestingly enough, the ecological style is best suited to the two extreme states of environmental dynamism: it works reasonably well in stable environments, where few innovations take place, and experienced local management can be left in charge as long as the targets are met. And it works well – for a limited span of time – in highly dynamic environments, where the leadership lacks information and intelligence to set a firm-wide course, and gives local management leeway to experiment in the new conditions.

If the segregation of three leadership approaches is to have any value in the field, it is important to be able to recognize ecological leadership behavior when it occurs in a firm. From the descriptions in this chapter, and the summary of figure 3.27, we can deduct a number of characteristics that can be readily recognized in a firm. These fall into two categories: the nature of the decisions that the leadership takes in a firm, and the way in which communications with the local managers are handled. Regarding the nature of decisions, the ecological style is clearly incompatible with actions that require substantial involvement of local managers. Thus, the emphasis is on portfolio decisions that can be executed at the corporate level, which implies a minimal size (which, by the way, can vary substantially between industries and individual companies). The second type of ecological decisions are the hiring/firing of local (unit) managers:

since there are few if any other means to impact the well-being of the units, and therefore the firm, a relatively high frequency of these is likely to be observed, too. Communications will be quite minimal, limited to infrequent target setting and accountability sessions with the responsible local managers, which means few – in many cases just two – participants in the meetings.

3.9: A Dynamic Framework of Leadership Approaches to the Inflection Point

Introduction

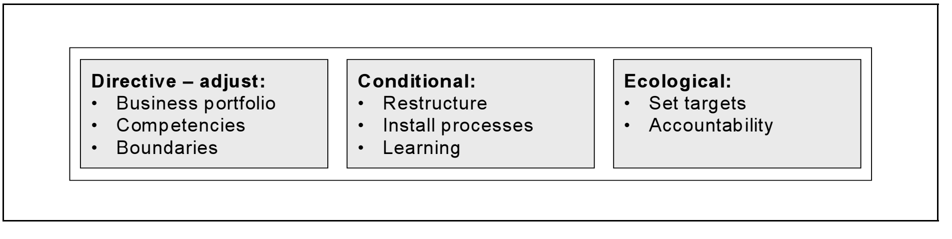
This chapter started with a characterization of the inflection point at the beginning of this chapter in sections 3.1 through 3.5. We reviewed the approaches that have been identified in the literature to manage inflection points, and classified them into three categories: directive, conditional and ecological approaches. Section 3.6 explained that the directive approach has the advantage of centralization of strategic thinking and action. It has the disadvantage of imperfect information flows from the field, as well as a lack of motivating influence on local management. As result, implementation in the field may be flawed. The directive approach thus appears to be most appropriate for realizing major corporate changes at high speed, with limited local involvement.

The discussion on the conditional approach, in section 3.7, shows how this approach excels in involving and mobilizing local management, and in using the know-how of local markets that exists in the field, albeit with a penalty for the time needed to create the new management conditions, as well as the time needed to overcome resistance to change at lower levels. It thus appears most useful in situations in which the main strategic thrusts and boundaries have been set, and there is enough time available to set the new course.

Finally, the ecological approach has the advantage of putting local management in full control of the strategy, which means that the leadership does not have to have a specific understanding of what is going on in the markets, for which it pays the price of loss of up-front control. It appears most useful in times of high market uncertainty, when the leadership lacks the understanding to set a direction but wants to retain full control of the result.

These three leadership approaches are illustrated in figure 3.20:

Figure 3.20: A Summary of Leadership Tools



This section will describe, and expand on, the segregation developed by Utterback (1994) for three transition phases of an inflection point. We will propose that the leadership of a firm has a propensity to prefer one of these three approaches in each phase of the inflection point, and that the compatibility between the three approaches is limited. Subsequently, we translate our propositions into ten underpinning questions that can be tested in the field. We then describe our field research, and discuss its validity and reliability. Thus, the stage is set for the presentation of the outcome of our field research in chapter 8, in which we look at the use of the different approaches in an actual inflection point situation.

The Fit of the Leadership Approaches with the Phases of the Inflection Point

At this stage of the analysis, we can fit the three leadership approaches that we have identified in the initial sections (section 3.3) of this chapter to the development phases of the inflection point (section 2.4). We will do this in two steps. First, we will see how the characteristics of each of the phases are perceived from the perspective of the leadership, and how they impact the functions that the leadership can perform. Subsequently, we will see how the scope of functions that the leadership can perform leads to a choice of approach. The leadership thus chooses the approach that, from its vantage point, allows it to cope as well as possible with the challenges that it perceives from the inflection point, as well as the limitations of its own function in each phase of the inflection point.

The starting point of this exercise is a recapitulation of the most relevant characteristics of the three phases of the inflection point that were described in the preceding paragraphs:

In the *fluid* phase, we see the firm confronted with a fluid and dynamic market environment. The new activities are in a start-up situation, resource needs are relatively modest, and the structure of the exploratory activities is entrepreneurial and informal, with a low level of development of hierarchy and processes. Looking at these conditions from a leadership perspective, we find that its understanding of the situation is usually opaque. It will find that it does not know which capabilities to apply, and may find that it does not (yet) have the capabilities necessary to lead the firm through the transition. Demand for leadership action may be low, however, since local managers do not yet have major resource needs that require executive appropriation, do not need firm-wide reach and support for their activities, and themselves wrestle with a view of the markets, and the best strategic course to take. Looking at the most appropriate leadership approach, one can conclude that a "hands-off" style that looks only at local actions ex-post is not only attractive for the leadership, but is also the most sensible way to manage.

Conversely, we can see that the two other approaches are not attractive in this phase, the most important reason being that the leadership lacks the understanding of the environment to make appropriate and credible decisions, and to supervise the actions of local managers to whom it may have delegated management powers.

In the *transitional* phase, the environment is stabilizing, and the main directions are becoming clear. Customers are becoming more demanding, as they have found through trial and error what they can get and what a reasonable price and other buying conditions are. Competitors are staking out their claims. At this time, the combination of increasing customer needs and competitive pressures forces the firm into making their investments needed to establish a defensible market position – be it through the development of products or services that satisfy and excite the increasingly demanding customer, and beat competitive offerings, or the development of cost-competitive delivery processes. Resources are needed in the form of capital, experienced manpower, new technologies and capabilities. At the same time, the main trends in the marketplace have become clear enough for the leadership set the strategic direction and to decide where the scarce resources (capital, people or franchise) can best be invested. Local management will reach out for these decisions from above, since they know that commitments now made, and positions now staked out in the marketplace will determine the future of the entire firm: if they now move ahead without leadership direction, they have usurped the latter's function. The appropriate posture of the leadership is thus hands-on, to shape the portfolio of activities and resources that determine their future success. The timing for this is right, since there is enough understanding to nullify these decisions, and enough flexibility in the market to conquer the position without excessive effort. This hands-on leadership, taking major decisions, is congruent with the directional style of management.

In the transitional phase, an ecological style of leadership implies inaction of the top executive in a period of strategic formation, through which it effectively loses its license to function. Conversely, the key portfolio decisions that characterize this period can and should not be delegated to local management, as is done in a conditional mode, because they are not, and should not be, entrusted with decisions that pertain to the entire firm.

In the *specific* development phase, markets are starting to mature. Demand conditions, including the rate of innovation and growth, are stabilizing. Customers are becoming experienced and demanding, and margins shrink accordingly. Competition is gradually concentrating into an oligopoly. The name of the game now is cost control, and the use of flexible and innovative tactics to boost, in minor ways, market share and prices. These actions are best realized close to the sales point, in the marketplace. Resource needs to sustain a good competitive position are moderate to high. In this phase, the tactical needs of the marketplace are best met through delegation, which is made possible by the in-depth understanding of the environment that is shared by a wide circle of managers in the firm, including the leadership. Since delegation thus is possible and desirable, the role of the leadership can be limited to setting overall direction and targets, and to defining the framework of organization and processes within which this delegation can take place. These are all characteristics of the conditional leadership approach.

In the specific phase, an ecological management style is not able to achieve the fine-tuning of objectives and actions across the entire firm that are necessary to realize the tactical advances and cost containment that characterize success in these markets. A directive style lacks the capabilities to maintain close touch with local markets, and to motivate local management, which is necessary to maintain, entrepreneurship and tactical innovation in the field.

We have thus provided a logical linkage between the fluid phase of development and an ecological management approach, between a transitional phase of development and a directive style, and the specific phase and a conditional leadership approach. This reasoning is summarized in figure 3.21

Figure 3.21: Inflection Point Phases and Leadership Approaches

	Phases		
Characteristics of the Environment*	***Fluid***	***Transitional***	***Specific***
Markets, including offerings, competition, innovation	Dynamic	Stabilizing	Efficient oligopoly
Resource needs	Low	High	Moderate
Firms' structure	Unstructured, Changing	Major changes still possible	Stable
Leadership scope of functions			
Market understanding	Opaque	Main lines clear	Details clear
Strategic competencies of leadership	Few if any	Sufficient for broad decisions	Sufficient to permit delegation
Demand for leadership	Low/varying	High	Moderate
Appropriate leadership approach			
	"Hands-off"	"Hands-on"	Delegation possible and appropriate
	Ex-post	Major thrusts possible	
	Ecological	***Directive***	***Conditional***

**source: Utterback, 1995 (summarized)*

Four Defining Assumptions and Three Propositions

Following the work done in the preceding chapters and paragraphs, we come to five basic propositions regarding the inflection point that address the three specific questions posed in the beginning of this thesis (chapter 1.2), about the "what", "how" "and "when" of leadership behavior in the inflection point. These questions all are subservient to the overriding issue, which is *why* the leadership of a firm shows different approaches in coping with an inflection point.

Two defining assumptions relate to the initial *"what"* question (i.e., the description of the inflection point):

A: *An inflection point can be described in three dimensions: amplitude, abruptness and complexity*

B: *Firms passing through an inflection point go through three phases: fluid, transitional and specific (Utterback, 1975)*

The basis of these two assumptions is laid in, respectively, Chapter 1.2 and the beginning of this chapter. Chapter 2 explained that the literature identifies a number of different characteristics of major change strategies (see figure 1.1.B). We also see that our focus on a leadership perspective as well as on reactive, longitudinal strategic change that is instigated by external factors reduces the number of relevant dimensions of the inflection point to three, which were explored in Chapter 2. Assumption B derives largely from Utterback, who uses it in a wider context of internally as well as externally caused innovation: in this case, we limit ourselves to externally caused change trajectories.

The next defining assumptions – "C" and "D" – relate to the *"how"* question, i.e. the possible leadership approaches to an inflection point:

C: *We can identify three leadership approaches to an inflection point: the directive, conditional and ecological approaches*

D: *A chosen leadership approach may be supported by a second approach*.

These two assumptions are grounded in chapter 3, where we have deduced these three approaches from a series of seven grounding theories, and tested their relevance against five managerial anchoring points.

The three propositions relate to the *"when"* question regarding the inflection point (i.e., the phase of passage through an inflection point), and the use of the three leadership approaches in each of them:

Proposition: Each of the three leadership approaches is congruent with one of the three industry development phases:

I: *In the fluid phase of an inflection point, the leadership will tend to use an ecological approach*

II: *In the transitional phase of an inflection point, the leadership will tend to use a directive approach*

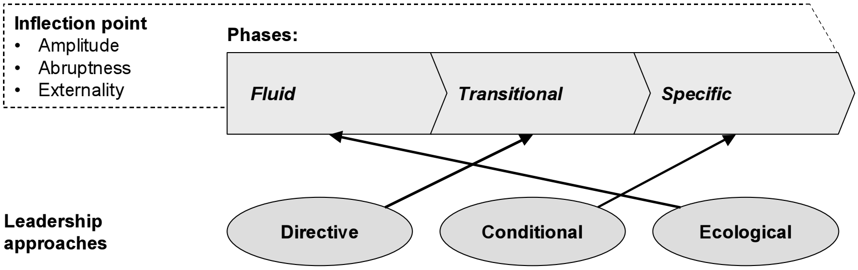
III: *In the specific phase of an inflection point, the leadership will tend to use a conditional approach*

These propositions have been developed in the preceding pages of this chapter in which we have found that there are characteristics in each of the phases that make them more or less amenable to one, and sometimes to a lesser extent a second, of the three leadership approaches.

Since we found that there are different phases in an inflection point that each has an appropriate leadership approach, we can now deductively explain *why* the leadership of a firm shifts its style as it passes through the inflection point. The leadership of a firm will change its approach through an inflection point because 1) an inflection point changes in nature as it passes through its phases (assumption C), and 2) the challenges of each phase are best met by adopting different leadership approaches (assumption D).

We can now finally present the full conceptual figure that will guide the fieldwork (Figure 3.22). On the left-hand side, this figure shows the three defining dimensions of the inflection point – amplitude, abruptness and externality – as explained in chapter 2. These three dimensions feed into, or rather play their role in, the three transition phases to which the firm is subjected – fluid, transitional and specific – which were introduced earlier in this chapter. The three possible leadership approaches that were identified earlier in this chapter – directive, conditional and ecological – are listed on top, and are connected to the three phases following the discussion earlier in this chapter. The propositions made above each refer to their own part of this figure.

Figure 3.22: A Dynamic Framework of Leadership Approaches to an Inflection Point



The Questions to be Asked

If we want to substantiate the five propositions made above in section 3.9, we need to answer the following ten questions, which fall into three topic areas, through our fieldwork.

Before embarking on the development of a plan for fieldwork, we need to determine what will be the overriding question. This overriding question determines which tools – like a historic analysis, survey or case study – we will use, and how we will use them. As we stated in chapter 1 (1.2), the overriding question in this case is *why* the leadership of a firm uses different approaches in coping with an inflection point.

The first sub-area that we need to probe purports to test our definition of the inflection point – a *"what"* question – both from a general perspective and in a direct comparison with the propositions made in the preceding section. It involves four questions about the dimensions and phases of the inflection point:

Question 1: Which dimensions characterize the inflection points that are experienced by firms?

In answering this question, we will look at the elements of scope and characterization that were introduced in chapter 2, and see to what extent the real world fits these descriptions.

Question 2: Are these dimensions congruent with our propositions?

This question is aimed in a more direct sense at the three dimensions that were identified in chapter 2: amplitude, abruptness and complexity. We will see whether we can identify these three dimensions in our field research, and whether they suffice in characterizing the inflection point in a real-world setting.

Question 3: Which transition phases do we observe in firms passing through an inflection point?

Although Utterback (1995) provides substantial documentation on the practice of his three transition phases in periods of innovation and rapid industry restructuring, we will in this case focus on transition within the more limited subset of the inflection point.

Question 4: Are these transition phases congruent with our proposition?

Utterback identifies three transition phases – the fluid, transitional and specific phases – and provides ample field examples to demonstrate the validity of this segregation. Our field research will explore to what extent these phases also apply when seen through the more limited lens of the inflection point.

The second question area covers the *"how"* questions, as it looks at leadership approaches to the inflection point by posing four questions that both explore the topic in a general sense, and test the specific propositions that we developed above on the leadership role.

Question 5: Which leadership approaches can we observe in an inflection point?

Here we will look at the variety of tools and options that the leadership has in an inflection point and see whether we can come to a categorization of approaches. In doing so, we will have to comment on the effectiveness of the different approaches in each situation.

Question 6: Are these leadership approaches congruent with our proposition?

The actual leadership behavior that we observe in our fieldwork will have to be tested against the three approaches – directive, conditional and ecological – that we derived from theory in chapter three, to see whether its segregation into three types indeed holds in practice. Again, the effectiveness question comes up, since ineffective approaches do not support a functional proposition.

Question 7: Do we observe the use of a second approach as support?

In our theory development in this chapter we have found that there is a level of compatibility between the directive and conditional approaches, although one of the two will stand out as dominant. Fieldwork will have to show whether we can indeed observe the use of a second approach in a supportive role.

Question 8: Which approaches are compatible and which are not?

This question tests the premise underlying the preceding issue, i.e. the proposition that directive and conditional approaches may support each other.

The third question area contains the *"when"* questions; this area investigates the temporaryness of each of the leadership approaches. It seeks to determine whether a leadership approach may not have universal applicability through time, but rather an applicability limited to a certain stage in the development of a firm – in this case, a certain phase in its transition through an inflection point.

Question 9: Do we observe a sequence of approaches as the firm passes through the phases of an inflection point? If so, which sequence?

It will be interesting to see to what extent and how the leadership of real world companies change their strategic posture as their firms move through the inflection points. Conceivably, we could observe a leadership using only one approach, or using approaches in a different sequence than suggested in the beginning of this section.

The fourth and final question area covers the *"why"* question, and seeks to explain the leadership behavior for each of the three phases of the inflection point.

Question 10: Can the preference for a particular approach in a phase be explained and justified?

The range of approaches that the leadership can try using to help a firm through an inflection point is wide. Our thesis concerns approaches that work, and we therefore must test the positive impact of the approach, or at least explain why using that particular approach was the most logical and promising way to develop and implement the next steps of the strategy through the inflection point.

These questions follow directly from the defining assumptions and propositions provided in section 3.9. In specific terms, questions 1 through 6 are derived from assumptions A, B and C. Assumption D leads to question 7. And propositions I, II and III lead to questions 7 through 10. Figure 3.23 illustrates the linkages.

Figure 3.23: Questions emanating from the Defining Assumptions and Propositions

Defining Assumptions		**Questions to be Asked**	
A:	Inflection point described by amplitude, abruptness and externality	1.	Which dimensions characterize inflection points?
		2.	Are these dimensions congruent with our propositions?
B:	Three phases of an inflection point: fluid, transitional, specific	3.	Which phases do we observe in firms passing through an inflection point?
		4.	Are these phases congruent with our propositions?
C:	Three leadership approaches: directive, conditional, ecological	5.	Which leadership approaches can we observe in an inflection point?
D:	A given leadership approach may be supported by a second approach	6.	Are these leadership approaches congruent with our propositions?
Propositions			
I:	In the fluid phase, leadership will use an ecological approach	7.	Do we observe the use of a second approach support?
II:	In the transitional phase leadership will use a directive approach	8.	Which approaches are competing and which not?
III:	In the specific phase leadership will use a conditional approach	9.	Do we observe sequences of approaches through an inflection point?
		10.	Can the preference for an approach be explained/justified?

3.10: A Methodology for Case Research and the Units of Analysis

Introduction

After the review of available theories and the development of an outline model, we are left with a number of elements that need to be verified and explored in the field. In order to do this, we have conducted a series of case studies of five publishing companies based in the Netherlands, researching how they have coped with the arrival of e-business.

This section explains why we chose the introduction of e-business as analytical unit, and opted for the case analysis method. We will also explain our selection of the five publishing companies and outline our research strategy, as well as the validity checks.

As stated above, the most important determinant of the research strategy is the type of question that is asked (Yin, 1994). Research questions can exist in various forms, including *"who", "what", "where", "how",* and *"why"*. Each of these has its most appropriate form of research, of which we can conceptually outline five: the experiment, the historic and the archival analysis, the survey and the case analysis. Theoretically, each of these is appropriate to answer the overriding "how" question that we have posed. Each of these techniques is also appropriate only for the analysis of a specific set of data. Some of the most important characteristics that determine this suitability of research forms are (1) the nature of the research question, and (2) the degree to which the analyst can influence the environment – in which case the experiment is a very attractive tool. The final screen (3) is, according to Yin (1994), contemporariness as opposed to historicalness: if we want to analyze a contemporary event – which we do, as we will see later – a number of research techniques (like archival and historical analysis) are not feasible. Through this process of elimination we end up with the case analysis.

Figure 3.24: Determinants of the Research Strategy

Which question?	**Control of event?**	**Is the event contemporary?**	**Resulting research strategy option**
How, why?	Yes	Yes	Experiment
Who, what, where?	No	yes/no	Archival analysis
How many, how much?			
How, why, when?	No	No	History
Who, what, where?	No	Yes	Survey
How many, how much?			
How, why, when	No	Yes	Case study

The shading refers to the strategies used in this analysis
Source: COSMOS Corporation (1994), adjusted.

The alternate research strategies described above have in common that they can all be used to describe, to explain and to explore. We will see in our fieldwork that each of these three objectives plays a role in our work.

A case study is a research strategy that focuses on understanding the dynamics present within a single setting (Eisenhardt, 1989). This definition implies that we can speak of a case study when a phenomenon is investigated within its natural environment. As result, the phenomenon studied cannot be separated from the real-life context in which it takes place. A case study is qualitative in nature, although it may contain quantitative sub-analyses.

Case analyses can be generalized to theoretical propositions and not to populations or universes. The essence of a case study and the central tendency amongst all types of case studies is that it tries to illuminate a decision, or set of decisions: why they were taken, how they were implemented, and with what result (Schramm 1971).

In this thesis, our views on the succession of approaches used by a single leadership can to some extent be viewed as grounded theory, in the sense that our starting hypotheses were derived inductively from our experiences in the field. However, a major part of our proposals was also derived from the available literature, in which the “punctuation” of market developments had already been identified (see chapter 1), as was the succession of development phases (idem). In the formulation of our propositions, information collection, analysis and theory development stand in reciprocal relationship to each other (Strauss & Corbin, 1990).

One of the major advantages of a case study is that a contemporary phenomenon can be investigated within its real-life context. This means that the interaction of context and process can be explored (Swanborn, 1996). The case study also enables a researcher to cope with a large number of variables, albeit that the experiment is a better way to make detailed observations of a smaller number of variables. A history does deal with the entangled relation of process and context, but only for non-contemporary events. And surveys can provide insight into phenomenon and context, although the scope for investigating context is quite limited: the survey designer is constantly challenged by the limits to the number of variables that he/she can analyze.

Another important advantage of the case study is that the evolution of a process – like our inflection point – can be investigated through time. Through multiple measuring moments, the researcher can understand how interactions between individuals or units, the change process and ensuing behavior have proceeded through the period of change (Swanborn, 1996). Therefore, circumstances that influence the main process over time can be tracked. On the other hand, a survey can study a phenomenon only at a single point in time.

A third advantage of the case method is the ability to ask a multitude of questions, albeit from a limited number of respondents (Swanborn, 1996). This makes the approach particularly effective for researching *"why"* and *"how"* questions, as well as the differences between the values, norms, visions attitudes and behaviors of each of the cases and respondents.

Finally, the case method has the advantage of offering the opportunity to use multiple sources of evidence – many more than, for example, experiments, historic analyses or surveys (Yin, 1994).

These advantages appear to outweigh, at least for the purposes of this thesis, the disadvantages. Of these, we can mention the risk of a lack of rigor in the gathering and analysis of quantitative data, as well as the risk that the qualitative results may not be replicable (Miles & Huberman, 1984). It must be noted, however, that this risk of bias also presents itself when the research is based on experiments, surveys (which start with the formulation of a hopefully unbiased questionnaire) and historical research (Yin, 1994). In general terms, methods for the analysis of qualitative data are not formulated as well as methods for quantitative analysis (Miles, 1979).

Related to the first disadvantage is the problem that case analyses often provide only limited bases for scientific generalization. Due to the small number of cases (i.e., the small sample size), the researcher usually cannot draw relevant conclusions about the entire domain. To this argument, a response may be that the purpose of a case analysis is not to prove the statistical relevance of a hypothesis for a population, but rather to create and expand theoretical networks (Niederkofler, 1991). Finally, a disadvantage of the case analysis is its labor-intensity. A case analysis needs multiple sources of evidence, if only because of the variety and possible ambiguity of data inputs used.

Looking back at the research strategy outlined above, we can note that it is both inductive and prescriptive/problem solving in nature, and results in a weakly disciplined methodology. It also fits our objective to identify an adequate solution to the leadership issue in an inflection. These characteristics thus confirm the indication of a clinical research approach that we gave in chapter 1 (Figure 1.3) (Volberda, 1992).

In launching this fieldwork, we started by looking for a recent inflection point with a high level of actuality (with the advantage of easy availability of data). Since an inflection point is an industry-wide occurrence, we needed to find a event that was recognized as such by most of the participants in the industry. Obviously, the event had to fit the three defining characteristics of the inflection point in that, for most companies at least, it occurred within a limited time span (abruptness), had a major impact (amplitude) and touched a number of different functions in the organization (complexity). In the period in which this thesis was written, the penetration of Internet techniques in business was an obvious and attractive inflection point for all the businesses that rely heavily on information and communication techniques. For this reason, we chose the passage of firms through the inflection point as the first unit of analysis.

The second unit of analysis is provided by the scope of this thesis, which concerns itself with the role of the leadership of the firm. The leadership role therefore forms the second unit of analysis in developing the case analyses.

In the terminology of Yin (1994), we thus end up with an embedded case study design, in which more than one unit of analysis are treated with the same case attention. Yin correctly warns against using only single units of analysis (the holistic design) because of the risk of lack of depth in the research.

Before we can do this, we must first assure ourselves that the dimensions of our model – including the descriptors of the inflection point, the leadership approaches and the phases of the inflection point – have characteristics that can be observed in the field. Regarding our selection of the introduction of Internet in an information-intensive industry, we have already made the point in the preceding sections. Looking back at the conclusions drawn in Chapter 3, we arrive at a “checklist” of characteristics of leadership approaches as observed in the field. We can confirm a leadership approach by looking at the actions that it takes. For example, we can find an indication of a leadership approach by looking at the size of the portfolio moves that can be large, or small relative to the size of the firm and its business units. We can also look at the instigators and actors of portfolio moves that can emanate either from the corporate center or holding, or from local/business unit management. Competency shifts that can be observed from the moves of key people and investments made in support of competency development provide a third indicator of leadership approaches. We can also confirm a leadership approach by looking at the nature of the communications with local management. Key indicators here are the frequency of meetings between the firm’s leadership and local management, the number of participants, and the flexibility of the agenda, which may or may not support two-way interactions. Figure 3.25 links the observable characteristics with the three leadership approaches.

Figure 3.25: Observable Characteristics of Leadership Approaches

		Directive	Conditional	Ecological
The Nature of Leadership Actions	Portfolio moves – acquisitions, divestitures:	Large	Small	(relatively) Large
	Execution of portfolio moves by:	Corporate management	Local management	Corporate Management
	Competency/ People moves:	Transfers	Investment in ICT	Hiring/firing only
		Hiring/firing of skilled people	Management training, conferences Large Human Resources staff	
The Nature of Communications with Local Management	Frequency of meetings:	Regular	Frequent	(Bi)Annual or informal
	Number of participants in meetings:	Few	Many	Few
	Meeting agenda:	Rigid	Flexible	Fixed agenda: targets, accountability

Why Multiple Case Studies?

In our fieldwork, we opted for a multiple case study, which generically offers the advantage that the evidence – from multiple sources – is more compelling, and the results more convincing. The essence of multiple case studies is the replication logic, which implies that the outcome of each of the various cases matches the initial set of propositions. In this thesis, this replication logic also can be applied in the negative sense – a contrario – when we observe opposite (polar) behavior and can explain the opposing results through structural differences in the independent variables underlying both sets of cases (Burgelman, 1991). In our fieldwork we will find both types of replication logic. We will see that three of the cases (Elsevier, VNU and De Telegraaf) lead to similar results, which indicates a literal replication. Two other cases (Wolters Kluwer, Wegener) lead to contrary results, albeit for predictable reasons: theoretical replication (Yin, 1994).

Choosing Internet as an Inflection Point for the Publishing Industry

Conceptually, there are four different principles for selecting cases: accidental selection, random sampling, pragmatic criteria and context criteria (Swanborn, 1996).

The choice of event was predicated on the degree that it showed an unambiguous fit with the three dimensions presented in chapter 2: industry participants should (threaten to) suffer amplitudinal change in market position and financial results, requiring amplitudinal shifts in (financial) resources and competencies (i.e., skilled manpower). Abruptness should show through either the actions of the industry leadership – through acquisitions/divestitures or through hiring/firing of skilled people, or through public statements that indicate this sense of urgency. Externality should show through the fact that the industry participants themselves have not developed the technologies or capabilities that drive the major change and/or characterize the competitive environment after the event. As we will see, the introduction of Internet in the publishing industry fits with these characteristics.

From the many major environmental changes that have recently been experienced by industries – consider the Gulf and Iraqi wars, the advent of AIDS, the 9/11 World Trade Center disaster and the subsequent recession, the Millennium, or the collapse of the Berlin Wall and the subsequent opening of Eastern Europe, and many other examples – we selected Internet as one of the environmental phenomena that in information-intensive industries showed the characteristics of an inflection point.

To select the companies for our research, we identified a number of important criteria:

- the firms should be comparable in their main lines of business: it is much more difficult to understand leadership behavior when comparing firms in totally different environments (e.g. a local utility vs. a global high-tech producer) than when a number of main business lines are similar.
- the firms should be subject to an inflection point in its fully defined sense – they must have suffered through its amplitude, abruptness and complexity.
- for pragmatic reasons, a reasonable population of firms should be readily accessible

We selected a single industry to reduce the number of differences between the cases and thus provide a better observation of the inflection point proper. The search was thus for an industry that was fully impacted by the arrival of Internet (the chosen inflection point) and met the criteria mentioned above. A number of service industries, like banking, insurance, travel and publishing came on top of the list. As it happens, the Netherlands is the home for a disproportionate number of global leaders in publishing, like Reed Elsevier, VNU and Wolters Kluwer. Also, the accessible group of companies together had at least 50% share of the markets in which they operate, which gives the case research a level of representation for the entire industry. Accordingly, we approached the six major publishing companies in the Netherlands: Reed Elsevier (in particular, its Elsevier Science Publishers/ESP group), VNU, Wolters Kluwer, Wegener, De Telegraaf and PCM. Five of these agreed to participate in the study, at varying degrees of involvement.

The Work Steps

Our work plan consisted of a logical sequence of activities leading from tquestions to final conclusions. The sequence follows the conceptual work flow documented by Eiosenhardt (1989, figure 3.26).

The first step was the development of hypotheses. These resulted from both desk research – theory and initial reviews of the target companies – and up-front interviews with industry leaders, who were executive board members or division managers during the crucial years 1995-1999. This up-front research also yielded a selection of five publishing companies (work step 3), of interview candidates within these companies, as well as a first topic list to guide us through the interview and data gathering process, which was finalized in work step 4.

As part of work step 2, we conducted a wide survey of possible recent inflection points, including candidates like the Gulf War, the millennium, the opening of Eastern Europe, etc. This survey lead to the selection of Internet, particularly as it related to a number of information- and communication-intensive industries like banking, insurance, ICT, transportation and publishing. It was at this point that we were able to make a final decision regarding the companies we wanted to approach (work step 3).

Our review of relevant theory (Chapter 2 and 3) also enabled us to develop our hypotheses in the form of defining propositions (work step 1) and to define our units of analysis (work step 2).

To develop the protocol and questionnaire in work step 4, and to prepare for the actual interviews, we conducted a thorough analysis of the 1994-2000 annual reports and press files of each of the five companies, which provided a good part of the factual underpinnings to this analysis. Desk research consisted of both theory and initial reviews of the target companies, and up-front research consisted of interviews with industry leaders, who were executive board members or division managers during the crucial years 1995-1999. This up-front research also yielded a selection of interview candidates within the five companies, as well as a topic list to guide us through the interview and data gathering process. The resulting topic list is provided in the appendix.

Subsequent to the desk research, we contacted senior members of the leadership in charge during the critical inflection point years, 1998-1999. With their help, we also had the opportunity to interview between one and three other members of the leadership (i.e., CEO, Executive Board Members and Division Presidents) (work step 5). At a minimum, we conducted two-hour interviews with the selected leadership. But in most instances the interviews took longer, and gave cause and opportunity to go back for second, third and fourth discussions. Most of the interviews were conducted in the summer of 2001, in the offices or homes of the interviewees. Detailed notes were made. After the interviews, the results were incorporated into a next version of the case description, which was then sent to the interviewee for review. In most cases this resulted in corrections provided in writing or by telephone. In a number of others, there was enough reason to conduct an additional interview.

Business is a complex activity, and it took time to isolate the inflection point and the ensuing reactions of the leadership from the "noise" created by a living world and living organizations. During the period in which the publishing companies had to face the changes of Internet, they also had to contend with the impact of other "new economy" trends, like the increase in shareholder influence and the new emphasis on management remuneration, with the economic impact of political events like the Gulf War, and the opening of Eastern Europe and China. We found that a lateral and descriptive perspective – going through the developments year by year – was the most effective, and produced far more results than attempts to answer each question in analytical order.

At the end of the interview program (work step 5) we were able to perform two cross-analyses. The first was to check our case findings against with the original propositions. The outcome of this analysis is provided in the conclusions of chapter 4. The second one was a comparison between the cases, also discussed at the end of chapter 4 (work step 6).

We finally were in a position to reach our final conclusions from the fieldwork in work step 7, as described at the end of chapter 4 and in chapter 5.

The work steps are summarized in Figure 3.26

Figure 3.26: Work Steps in Field Research

Work step		Information sources
1	Hypothesis and question development	Theory review Company reports Interviews
2	Define unit of analysis	Theory review Interviews Company reports
3	Select cases	Company reports Interviews
4	Develop protocol and questionnaire	Company reports
5	Data collection/use crafting tools	Interviews
6	Analyze case study evidence	Data Analysis
7	Reach final conclusions	Data and theory analysis

Adapted from Eisenhardt (1989)

Validity of the Case Research

Traditional literature on methodology regards validity as the degree to which the measurement of a variable is free of both coincidental and systematic mistakes (Swanborn, 1981). Coincidental mistakes are caused by the influence of measurement elements (such as, for example, the researcher, his instruments, the situation or the respondent) on the variable that is measured. Coincidental deviations occur when the measuring results do not occur when the measurement is repeated. Reliability is the extent to which measurement of a variable is free of coincidental mistakes Systematic errors, on the other hand, cause deviations that continue to exist through repetition of the measurement.

A list of quality tests that is more attuned to case study research is provided by Yin (1994), who identifies four types of tests: construct validity, internal validity, external validity, and repeatability.

Construct validity depends on the researchers' ability to develop an operational set of measures that minimize the subjective element of data gathering and analysis. In case of this inflection point analysis, the measures were in large part developed from our theoretical research: it was there that we were able to ground the observations that we will make in chapter 4.

Internal validity only applies to case studies that seek causal relationships between events, and probes the validity of this causality. For example, if we presume that an event is the cause of an outcome, are we sure that there are no other events or contextual circumstances that are the reason (rather than our assumed cause) for the outcome to occur? In our case, the emphasis of the analysis is on the leadership experience of the five firms in the inflection point, rather than on proving that one firm has better managed the three approaches than the other, and thus has delivered better results. This is relevant, because one of the results that we analyze (i.e., financial performance through the period), is indeed the consequence of many factors (of which Internet is but one). For example, VNU, in our research period, embarked not only on a major redirection towards Internet, but also on a fundamental restructuring of its portfolio that resulted in the company losing two traditional core operations – newspaper publishing and broadcasting – and gaining a major position in media information, via the purchase of the two Nielsen companies. These portfolio moves undoubtedly were inspired by the leadership's perception of moves in the use of information in the outside world, including the perception of maturity or even ageing of the print business, and the associated emergence of new media, such as Internet. But this restructuring thus had a broader context than just Internet, and it is difficult to differentiate it on financial performance and (relative) share price from the impact of the Internet developments on their own. Similar statements can be made about the investments of Wegener in Direct Mail. Figure 3.27, however, shows that nearly all of the major actions taken by the five companies had a strong connection to the changes in information and communication markets, of which Internet is a major part.

Figure 3.27: Inflection Point/Internet related Leadership Actions

Company	**Major direct Internet actions**	**Action with strong Internet connection**	**Non Internet-related actions**
Reed Elsevier:			
Elsevier Science	Science Direct	Lexis-Nexus	Acq. Harcourt
Wolters Kluwer	Atos-Origin	Merger discussions with Reed Elsevier	
VNU	Creation of VIPS	Acq. A.C. Nielsen Acq. Nielsen Acq. Directories Div. Newspapers Div. Broadcasting	
Wegener	CityOnline		Div. Arcadis Acq. Newspapers
De Telegraaf	Joint Ventures		

Source: company reports

External validity relates to the ability to generalize the findings of the study beyond the cases that have been researched. As discussed, this is often a weakness of the case study approach. In this particular case there is little doubt about the relevance of the findings to the publishing industries. The sample of five companies covers a major portion of the global scientific and professional publishing business, although the scope of the newspaper companies is mainly in the Netherlands. Additional fieldwork would of course add depth to this substantiation, as discussed in chapter 4.

Finally, the reliability test of case research refers to its repeatability, which in this case is not an issue: each of the work steps described above can be repeated.

3.11 Conclusions regarding the Framework

After having described the inflection point in chapter 2, and subsequently three leadership approaches in chapter 3, we have now developed a linkage between the inflection point and the most appropriate approaches. The starting point of this process has been the realization that an inflection point is not a "big bang" that takes place in a single instant, but rather, metaphorically, a thunderstorm that announces itself in vague and threatening rumblings, then overwhelms us with flashes, and thunderclaps, and ends in beautiful refreshing quiet, which can be enjoyed by those who have sought and found a dry spot, and have not been washed away by the rain. The theoretical underpinnings of this view were developed in chapter 2 through a review of the six holistic and the four specific views on major change, which resulted in the identification of three key dimensions: amplitude, abruptness and externality.

To describe the phases of the inflection point, we have benefited from the segregation in three phases that was developed by Utterback. Subsequently, in our review, in the beginning of chapter 3, of seven grounding theories of leadership behavior we plotted these against the nature and speed of strategy deployment which are essential characteristics of strategic action in an inflection point (fig 3.4). Out of this projection, we identified three leadership approaches, the directive, conditional and ecological approach, which were verified against five managerial anchor points. We also developed the hypothesis that the three leadership approaches are not uniformly congruent with all of the phases, but rather that each of these is particularly appropriate for one of the phases, although it may have a supporting role in the others. The result is a leadership model (figure 3.23) that links the characteristics and phases of the inflection point with the three leadership approaches and can be verified in the field. To do this verification, we formulated our hypotheses in four defining assumptions and three propositions that address the three questions with which we embarked on this thesis in chapter 1, and developed ten questions that enable us to substantiate our propositions in the field. We have explained why we prefer multiple case studies as the main means to answer our ten questions, and explained our choice of Internet as the inflection point, as experienced by five publishing multinationals as cases.

The next chapter will explore whether we can observe our model in the case studies that we selected in the outside world.

4 Case Research - Catching up with the Internet in the Publishing Industry

4.1 Introduction: Case Studies

Having developed a set of propositions about the approaches that the leadership of a firm can apply in an inflection point, we still question the practicality of the theorems: how well do they hold in real life?

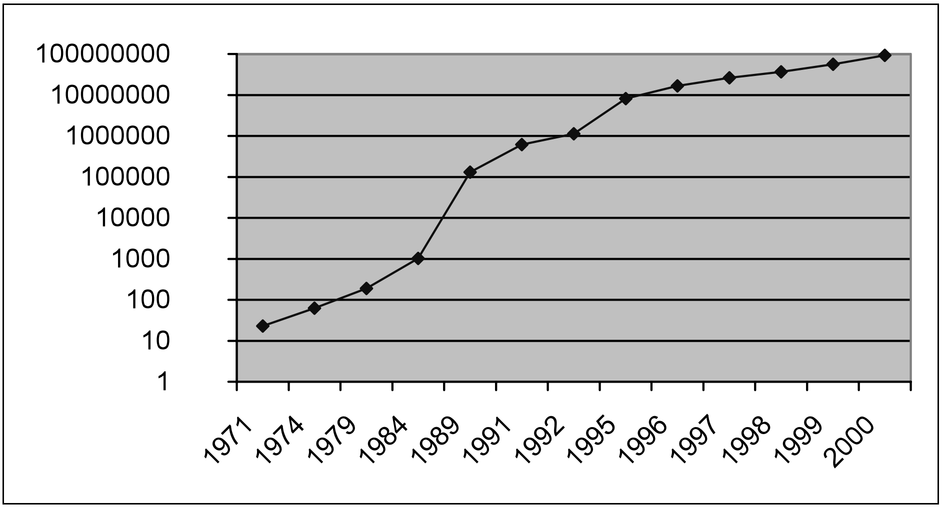
To find illustrative proof, we turn to one of the more important inflection points encountered by the business world over the past decade in the rapid introduction of Internet in business in the industrialized countries. This chapter first provides a summarized background on the creation of Internet and on the five case studies selected (4.1). Subsequently, sections 4.2 through 4.6 present the five individual cases. Conclusions appear in 4.7, the final section of this chapter.

The eventual success of Internet was based on the collusion of three standards that occurred in the early 1990s: Microsoft Windows (for the operation of personal computers), IP (Internet Protocol) for low-cost communications between computers, and HTML (hyper text marker language) as a tool that enables efficient and rapid access to new addresses. Alignment of these three technologies brought forth a wave of new services and companies from 1995 onwards. For the first time, people could instantly access information across the globe at low cost, and interact with one another or with a business in a very cost-efficient way, even if the e-mail standard did initially limit communications to text only. This inflection point in its inception was supported by a healthy economy that produced sufficient amounts of high-risk seed and venture capital to enable the launch of a multitude of Internet companies, many of which failed, but many of which also succeeded dramatically.

The basic concepts of Internet herald back to 1961, when the US Department of Defense established a distributed network of computers called Arpanet (Advanced Research Projects Agency Network). In 1962, Paul Baron of RAND wrote a research paper “On Distributed Communications Networks” that explained that networks without a central node like Arpanet were flexible and highly reliable – the disappearance of a single (central) node did not fundamentally harm the performance of the network, and expansion and adjustment was a continuous organic process without disruptions to expand the system. Since a number of universities were highly involved in defense research, it was attractive to connect them to Arpanet, and in early 1971, the first four US universities were connected, a number that expanded rapidly to 23 universities by the end of that year. 1973 saw the first international connections, with the UK and Norway. By then, three quarters of Arpanet traffic consists of e-mail. In 1974, Telnet, the commercial counterpart of Arpanet, was established; in 1979, USnet introduced the concept of discussion groups. In 1982, the word *Internet* was coined, and EUnet established as European equivalent of USnet. Finally, in 1983, introduction of the TCP/IP protocols signaled the breakthrough of Internet: one year later the Apple Macintosh computer brought us the now-ubiquitous mouse, and in 1985 the domain categorizations .com, .edu, .gov and .uk were established. The design of the global web WWW was started by Berner-Lee at CERN (Conseil Europeenne de la Recherche Nucleaire), in 1990, which took over the role of Arpanet. The first publicly accessible HTML page was launched on August 6, 1991. In the same year the first navigation program, Gopher, was launched, followed in 1993 by Mosaic, the first graphic web browser. WWW went public in 1992, enabling the large scale, global spread of Internet.

In the first ten years of Internet's existence, the number of connections grew from 23 to more than 400,000; in the 1990s, the number grew from 130,000 to nearly 60 million, a number that has increased to more than a hundred million as we write this page (figure 4.1)

Figure 4.1: Number of Internet connections (computers with an IP address)

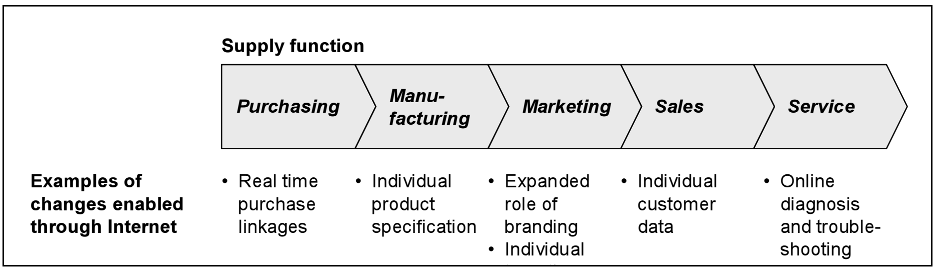


Number of Connections: 23 130K 60mln 93mln

In 1994-1995 the first large-scale commercial applications emerged. These were limited to commodity articles with easily guaranteed quality, like books and music-CDs, and stock trading. First successes thus included Amazon.com and Barnes & Noble in the first category, and Charles Schwab in the second. Products and services with a more complex or emotional specification, or a more complex delivery (e.g. large volume groceries) came later, although an exception should be made for businesses where the Internet's ability to span distances created new trading opportunities. A good example here is the early emergence of auctions of a wide range of products – from used toys and books to cars and last-minute travel offers. Here, companies like E-bay were an early success.

Undoubtedly, Internet was an inflection point for those organizations that rely heavily on communications and information processing, like banks, publishers and media companies. First of all, the entire value chain of these service companies has changed fundamentally. The customer interface has become much more personal and intense, and for many companies, a systematic recording and analysis of customer behavior has become feasible (and therefore a competitive necessity). Since a large (or at least larger) part of the customer interactions takes place in a computerized individual continuum, delivery and production systems needed to be adjusted – or rather redesigned and rebuilt – to take advantage of this new ability to deliver exactly what the customer wants, at the moment he or she wants it. Within the delivery chain, the ability to stay totally informed of events across a network of business partners has in many instances enabled a new networked, decentralized supply system with significantly enhanced flexibility, often with significant cost savings (figure 4.2).

Figure 4.2: Impact of Internet on the Supply Chain

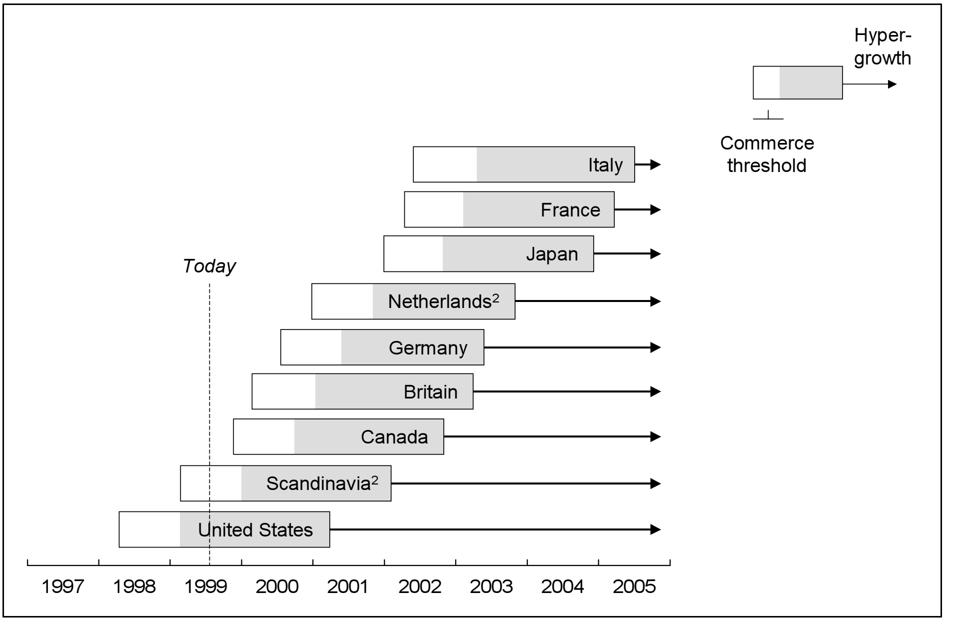


For many of the existing business suppliers, the shift from traditional business to Internet-based business was unexpected and rapid. In 1985, Internet was still a communication tool for scientists and enthusiasts, but by 1999, it had become the basis of a number of major new business – like auctioning and global book and CD sales – and was starting to affect a wide range of information-intensive businesses like banking, travel, trading and retailing. The race was on.

The incumbent suppliers in the businesses mentioned above mainly showed a defensive bewilderment with the new media, and an inability to adjust. In some cases, companies simply opened their Internet website with only advertising text. In others, management announced new regional or global market strategies based on Internet, while implying that this could be achieved simply by launching advanced Internet services (thereby ignoring the key branding and advertising processes).

In the initial years, the US took an early lead in Internet development, and as this book is written, they are still perceived to be two years ahead of Europe (see figure 4.3), which in turn is ahead of Asia and the rest of the world. However, the lagging regions – in particular Europe – appear to be gradually catching up. Industry wise, information-intensive and consumer marketing business sectors are ahead of capital-intensive business-to-business industries (figure 4.3).

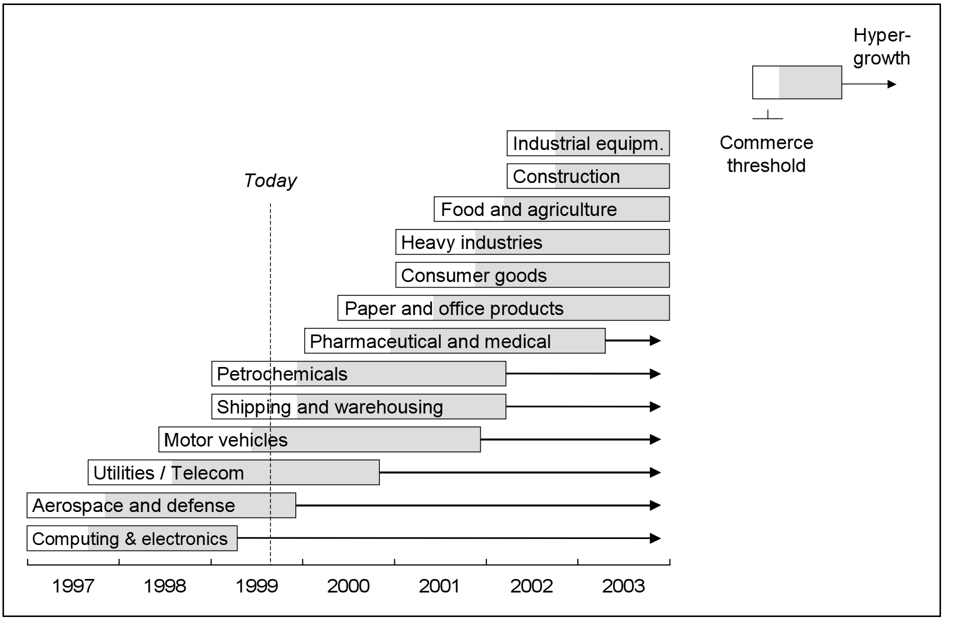
Figure 4.3: E-Momentum by Country



Source: Forrester Research (Dec. 1996) / Arthur D. Little analysis, IDC (June 1999)

Accordingly, the different 'waves' of penetration make it possible to see how companies in different regions and industries are successively reacting to the introduction of this new media. To make this comparison, a research study has been launched that covers ten industries in the country most ahead in Internet applications (the US) and the country most years behind (the Netherlands). The study also involves industries that are ahead in introducing Internet (like banking), and industries that have been slower (like steel making) (figure 4.4).

Figure 4.4: E-Momentum by Industry



Source: Forrester Research (Dec. 1998) / Arthur D. Little analysts

For our field investigation, we selected five publishing companies that all have their base in the Netherlands. Two of these – Elsevier Science and Wolters Kluwer – are involved in global scientific and professional publishing. One company – VNU – is developing into a global business supplier of consumer and professional information. And Wegener and De Telegraaf are regional Dutch newspaper and magazine publishers. Although the roots of these companies were not that far apart (since they all started in traditional publishing on paper – i.e., books, magazines and/or newspapers), they are now finding that their areas of endeavor are drifting apart, a movement that was undoubtedly hastened by the introduction of Internet. As this thesis is written, we can see how the different strategic tracks followed in recent years have resulted in companies with increasingly different profiles (figure 4.5).

Figure 4.5: Summary Profile of the Five Publishing Companies

Company	Main Line of Business	Geographic scope	% Domestic sales	Revenues $ blns	Number of employees (000)
Reed Elsevier	professional publications	Global	7%	5.5	28.9
Elsevier Science	scientific publications	Global	5%	0.9	3.7
Wolters Kluwer	professional publications	Europe, USA	20%	3.4	19.0
VNU	business information, magazines	Europe, USA	7%	3.1	21.6
Wegener	newspapers, magazines	Netherlands	90%	0.9	7.6
De Telegraaf	newspapers, magazines	Netherlands	97%	1.6	6.0

Source: annual reports, 2000

In the course our case discussions we will test our observations against the characteristics of the inflection points against the phases of the inflection point (figure 2.12) and against the managerial anchor points (fig 3.11).

4.2: Elsevier Science: Continuing Success through Internet

Introduction - Entering the Internet World

Elsevier Science (ES) is part of Reed Elsevier, which was formed in 1993 out of a merger between Dutch publishers Elsevier (founded in 1880) and Reed (founded in the UK in 1903). The two companies still have their own legal identity, and are listed on the stock exchanges of London and Amsterdam. Reed Elsevier has a turnover of $5.5 bln (2000), produced by four business units: Science & Medical/ESP (18% of turnover), Business (45%), Legal (32%) and Education (5%). More than half of the revenues (56%) are realized in North American markets, and one-third (33%) in Europe.

Elsevier Science (ES) was and is the main cash earner for Reed Elsevier, and is one of the most successful information companies in the world, with an unequalled track record of growth and profitability. ES was established as successor both of the scientific publishing at Elsevier, as well as its Excerpta Medica, an integrated database of medical articles. In the 1950s, Excerpta Medica merged with the venerable publishing house of Elsevier, which had roots tracing back to 1880.

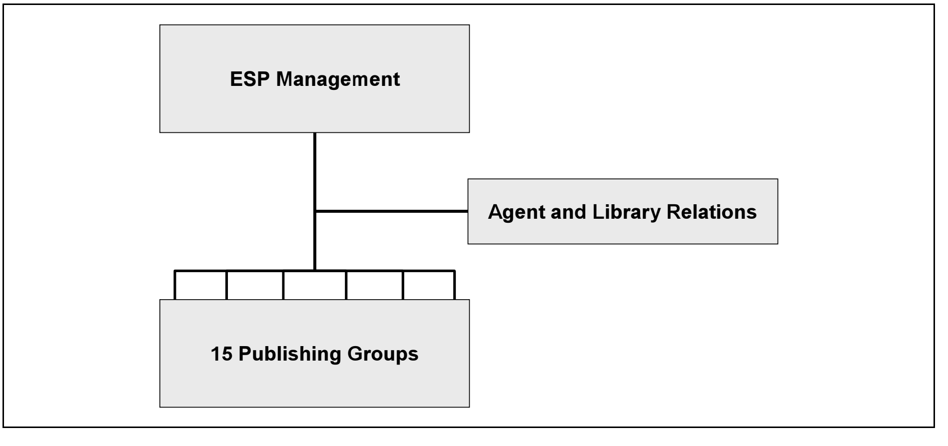
ES started as a crude – by modern standards – collection of reference material, and rapidly developed into a family of fifteen publishing firms covering a wide range of medical and scientific topics. In the early 1980s, ES was already aware of the potential new information technologies. Business managers visited conferences on electronic document handling, at which the SGML standard was announced, albeit to an audience of mainly government and defense organizations. They also commissioned a number of consulting studies by professional firms and individual experts to try to predict the new market, and the possible role that ESP could play in it. These studies were mainly conceptual and technical models: at that time there were few if any relevant historic data, and the main focus of the planners was therefore to consider the features that new information processing and communications technologies could provide, match these against known or possible needs of different populations of actual and potential customers, and define qualitative models of a new information environment. These reports never made it beyond a small circle of top Elsevier and ESP managers, and in the first years no strategic decisions and actions were taken.

A Fluid Start-up – 1988-1993

Until 1993, ES was a relatively traditional publishing house, in which about 15 publishing units – totally independent until 1985, and each a profit center – produced 1200 journals with 15,000 issues per year, and 160,000 individual articles. Each article traditionally passed through a pre-print round in which the first concepts were mailed to about 10 colleagues of the author for comments, and then formally submitted for reference, before going into print (figure 4.13).

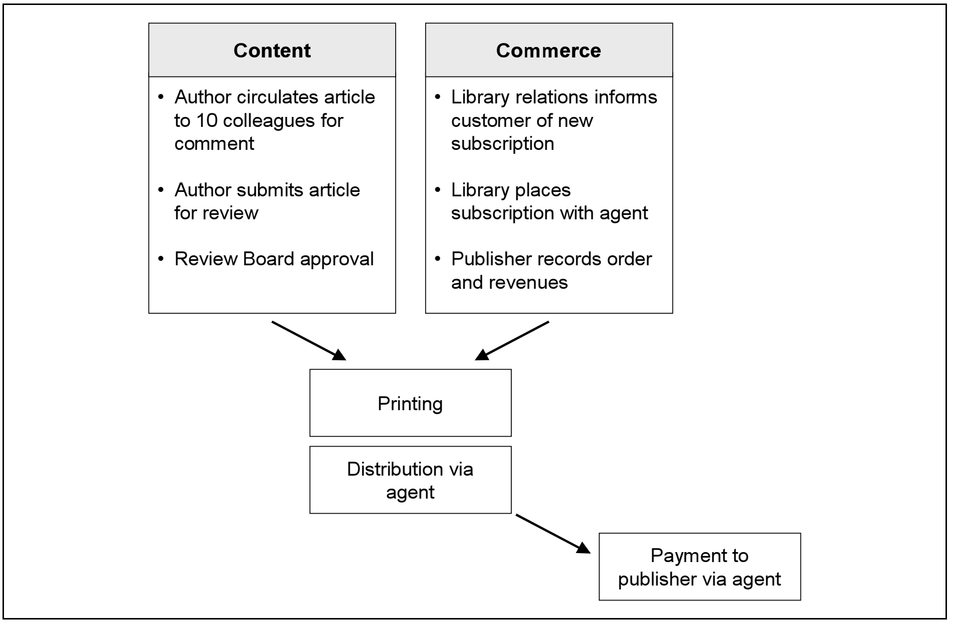
In the late 1980s (after 1987), however, the operating units of ES publishers, organized in four divisions, started their own Internet initiatives. These were conducted independently, which meant that each unit developed its own processes and content (figure 4.6).

Figure 4.6: ESP organization before the inflection point



The economic process at the same time ran a different, albeit parallel, course. The main customer group was (and is) the 2000-odd university libraries across the world that received regular visits from ES library representatives, who traditionally performed a staff function. Staff of the individual publishing companies, who also took care of invoicing and receivables, took actual subscription orders.

Figure 4.7: Traditional Scientific Publishing Process Flows



Commercially, ES found itself in an attractive although increasingly risky equilibrium. The number of journals went up, whilst the rejection rate, paper volume and production costs also went up. To their library customers, the publishers charged increasing prices, which stimulated a lively trade of photocopies, and the emergence of document delivery centers in the libraries that used fax as distribution medium. As result, there was a gradual decline of subscriptions that was, however, more than compensated by price increases of up to 15% annually, thus continuing a profitable, albeit downward, spiral.

At the same time, the first authors started experimenting with electronic pre-press – i.e., the circulation of first drafts for collegial comments, as well as the formal submission and review process. Database storage of these articles was strongly stimulated by the introduction of the SGML standard (which proved less effective for communications), which started in the physics area (where the graphic complexity of articles strongly stimulated quality automation).

Unsurprisingly, the scientific community at CERN was leader in both automated pre-press and the early introduction of Internet. For example, CERN originally developed the WWW/HTML communications standard. The idea was popular, and before long, each of the 15 publishing houses had its own Internet project, with a rapid expansion of the number of websites, as each of the (main) journals started its own site.

At the central level, an important strategic experiment called Tulip was launched together with six American university libraries. Furthermore, ES started, again experimentally, to centrally co-ordinate the electronic filing of article abstracts (project CAPCAS/Production of Current Awareness Services, predecessor of the later Computer Aided Production Process) – with mixed success, both technically and commercially.

At the end of 1992, ES found itself in a rapidly changing environment in which the effectiveness of its offerings, processes and structure – and as result of this its competitive leadership – were increasingly uncertain.

1993 - Start of the Inflection

In 1993, ES started following a general market trend in accepting Internet as main standard for the submission of articles, which was somewhat inevitable, given the popularity that this channel was gaining with scientists. Other standards, however, including diskettes, remained acceptable. On the distribution side, ES initiated dissemination of integrated content/software CD-ROM's through Elsevier Electronic Services (EES), which was an implementation project of Tulip, as well as a local storage variant of what was to become Science Direct. These introductions did result in multi-standard platforms for distribution, but also gave ES units valuable experience in electronic media, which was also appreciated by defense organizations and other customers that wanted to assure total confidentiality of their searches. It was clear that the internal organization and sales were insufficiently geared towards fully electronic (Internet) products and sales. Increasingly, the role of the ES leadership was geared towards keeping track of investments and financial results. There was a multitude of conflicting internal strategies and policies, which led to increasing confusion in the marketplace, particularly when the different sales policies of each of the publishers came into play.

Comparing the situation during these years with the characteristics of the three phases of the inflection point (figure 9.3), we can state the following:

- There was a rapidly changing diversity of products and services offered mostly on a local basis,
- There were few emerging standards, like IP and HTML, and even those were often under development
- Internet business processes were flexible, and conducted mostly at the unit level, and
- There were a relatively large and growing number of (Internet) competitors; For Elsevier ESP, the market thus was in a fluid state.

In terms of the leadership approaches observed (figure 3.26), we can conclude the following:
Most Internet initiatives and investments were made at the unit level, with the exception of Tulip and CAPCAS.

Internal communications were generally informal, which leads us to a leadership style that was generally ecological, with a few directive actions

Transition – 1994-1997

From 1994 onwards, new leaders were appointed to head ES, and they gradually became the spearhead of new strategic and organizational thinking. They realized that the strategic situation of ES was rapidly deteriorating. The downward spiral of declining subscriptions was accelerating and taking dangerous proportions, and it was obvious that any solutions would seriously affect most if not all of the business functions of ES, including the development of articles, the production and storage functions, sales and distribution. At the same time, a high level of uncertainty persisted about the actual projections for electronic media. In the 1995 annual report, the leadership noted its expectation that hard copy journals would for some time continue to account for a significant portion of the scientific information market. Figure 4.8 specifies the trends by function.

Figure 4.8: The Impact of Electronic Technologies on the ES Publishing Business

Function	Traditional	Transitional	Electronic
Authoring	Typewriter	Word processor	PC
Review	Mail	Fax	E-mail
Journal assembly	Paper/manual	Word processor	Database
Printing	Paper	Paper	Database
Distribution	Mail	Mail, Fax	Internet
Sales	Single subscription	Single subscription	Package subscription
Payment	Check	Check	Electronic

Efforts at the unit level to meet these challenges were generally ineffective, and certainly an inefficient use of scarce resources. Also, the customers were increasingly confused and angered by the often conflicting offers made to them by the individual publishing units. Most of the local efforts at designing and implementing both the front-end and back-end systems were ineffective. The leadership came to the conclusion that the time had come to move from the experimental phase towards imposing a general solution.

At this point, the leadership made an in-depth analysis of the work process of scientific publishing, and created a "grand design," proposing a more centralized approach. The focus of this vision was internal, and the analysis was thus not part of a broader market blueprint: external conditions were either judged to be constants (like customer segmentation), or included intuitively (like the industry-wide trend to using Internet).

The essential characteristics of the grand design were 1) a single global database for all scientific publishing, 2) a single fulfillment system 3) global outsourcing for key functions like editing and 4) global management of the key functions.

ES leadership also outlined a vision for electronic publishing, although individual publishing units continued to experiment at the grassroots level, with a resulting proliferation of local websites.

The leadership used a novel way to introduce the new process and allocate the funding, by relying on the dedication, cognitive powers and experience of a large group of local managers to introduce the new measures within six months following a chaotic approach. To everybody's surprise, the project was a success.

Early 1994 - First Directive Initiatives

In early 1994, the leadership took the first steps to implement the "grand design" by imposing a standard production process (CAPCAS: computer-aided production process), which was media-neutral. This process was to make use of a central storage facility (electronic data warehouse), which ES started up in 1994 with project support from IBM, which enabled slicing and dicing techniques. The first operational applications of this process were Content Alert and Content Direct, which provided readers with the contents pages of journals by electronic mail

In late 1994, Elsevier acquired Lexis-Nexis for $1 bln. This company provided Elsevier with very powerful automated database management and search routines that later were to form the backbone of ES's Internet activities. Interestingly, the information competencies of Lexis were but a secondary argument in the acquisition, which had the legal and business markets in the US as main targets. Accordingly, Lexis-Nexis was considered primarily a business acquisition, and secondarily a competency portfolio addition. ESP management soon realized, however, what a major contribution could be made by the powerful search engine of Lexis-Nexis, which accelerated the transfer of know-how and software without giving up the original data base structure.

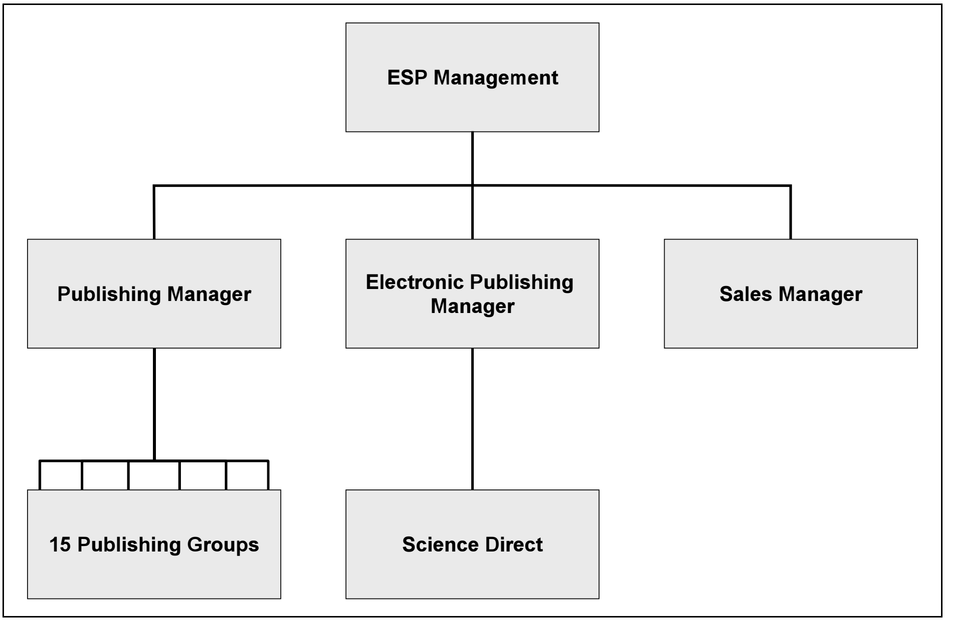
Notwithstanding the local experiments, acceptance of the idea of a new business model was difficult: ES's existing model had been a 40-year success, and it was difficult to convince key players that the fundamental structure of the business had to change. Management started a concerted effort to direct and motivate people to a new approach under the motto "fear and excitement".

1995 - Major Change

In 1995, ES leadership made a series of major moves to further implement the "grand design". The most important of these was to combine all the text gathering and database management into one new company called Science Direct, which started in 1996, with an initial mission to establish a central global database for all pre-press activities.

A second major action, undertaken shortly thereafter, was to focus the sales activities into one unit, thus leaving the publishers with a sole responsibility for content (figure 9.4) A single new global sales policy and pricing structure was introduced, with a new thrust towards selling the entire ES database for a single high ($1 mln) fee rather than selling a collection of individual subscriptions. At the time of this study, more than 60% of all contracts have already been converted. Under the new policies, pricing strategy was also taken over by ES management, leaving the 15 individual publishing units responsible for the all-important task of content provision.

Figure 4.9: ES Organization after restructuring



These actions had far-reaching consequences – including the following:

- all articles now had to conform to a standardized structure,
- all publishing groups were made subject to a single economic management model,
- with the introduction of global sales, country management was moved to a less dominant role,
- relations with the agents had to be redefined, since many of their tasks were taken over by the new sales organization – which also meant smoothing some ruffled feathers.

ES management also decided to source out any activities that were not considered core. This included large parts of the editing function, which were moved to contractors in India and the Philippines.

If we try to assess this period in terms of its position in the Internet transition process (figure 7.3A), we observe the following:

- Products and services are now being introduced on a firm-wide basis; if only for that reason, the number of introductions went down dramatically,
- The acceptance of industry-wide standards, and
- The gradual reduction in the number of competitors who often were absorbed by Elsevier and its larger colleagues.

Which leads us to regard this period as transitional, from an Elsevier vantage point.

In considering the leadership's approaches used (figure 9.5) we see the following:

- Large acquisitions including Lexis-Nexis
- The imposition of key business processes (CAPCAS)
- Management meetings to explain the new strategies

Which are traits of a Directive leadership style

1996 - Towards Conditional Management

Initially (i.e., in the beginning of 1996), the management opted for a hands-off approach in implementing the new vision, and permitted the operating units to sort out the specifics of the new policy. On one hand, the publishing units continued their own Internet experiments, which was a major draw on managerial time and expenses: not surprisingly, financial results were very poor in this period. There was also strong resistance against the plans of ES leadership. But by the third quarter, the main lines had been straightened out. Overall, 1996 was characterized by a chaotic management style, combined with increasing pressures as costs went up and the market became increasingly confused about brand and sales approaches. With hindsight, management regarded this period as highly valuable as a local learning experience.

Management made a conscious decision not to confront local initiative directly ("to keep them ticking over") in order to avoid de-motivation of unit management.
In the same year, ES recorded major losses by writing off the accrued cost of Science Direct. In addition, the investment levels for e-publishing went up from Dfl. 15 ml/yr to Dfl. 80 mln/yr on a sustained basis, which was of course reason for concern at the leadership level.

1997-1998 - Towards Delegation

By mid 1997, Science Direct was officially on-line, which meant that 50% of the articles were included, albeit some of them up to three weeks late. Management reported that the test was successfully ended. Science Direct could now be accessed by Internet: the encyclopedia Neuroscience became the first fully Internet-based product.

ES also introduced the information service Science Channel, which supplies news and information about the journals via Internet. This introduction had been enabled by two small but important acquisitions, of Biomednet and Chemweb, which gave ES the necessary experience and know-how in the creation of electronic user groups for individual scientists.

ES could also report an important improvement of its operating results, notwithstanding the heavy investments in electronic publishing and the associated infrastructure.

In the subsequent two years, the quality of Science Direct went up, and the budgets of the publishers for independent IM work were gradually squeezed, which meant that by the end of 2000, 13 of the 15 publishing houses had moved their databases to Science Direct, which thus became the main physical and data-warehouse of ES. The new track did leave flexibility for adjustment of the model. For example, when ES discovered that filling the databases of Science Direct in a centralized process took too much time, they successfully changed to a decentralized data delivery model.

By 1998, the products and main processes of ES had become well defined, and the company could focus on realizing an industry-wide rollout of its offerings, as well as improvement of the economics of the business (including cost control). For example, the well-known medical journal *The Lancet* had introduced a website in 1996, but now became fully available on a paperless subscription basis. Also, Science Direct introduced a new generation standard for the electronic dissemination of scientific information, which was supported by the advanced search routines of Lexis-Nexis.

By that time, the leadership of ES had changed its posture to a more traditional corporate style, by delegating the tactics of running the publishing, commercial and production processes to the appropriate unit heads. The time of dramatic decisions was past.

If we try to characterize the environment as seen from Elsevier's position, we observe the following:

- Few product changes, although the flow of new products continued,
- The consolidation of the industry continued, albeit with a declining number of acquisitions,
- The industry concentrated on a few standards (e.g., the marginalization of Apple's OS),
- Rigid business processes, and
- Increasingly, an oligopoly with only a few global science information suppliers,

which appears to Elsevier to be a specific development phase of the industry

Regarding the leadership posture in this period (figure 3.10), we see the following:

- No major, and a number of minor, acquisitions in this period,
- Acquisitions initiated and executed by local managers,
- A further build-up in investment in ICT and human resources, and
- The establishment of a regular system of management conferences that included dialog agenda items,

which leads us to a characterization of a conditional management style

The Situation after 1997: Conclusions

As this analysis is written, ES appears to be back on track, with both its market position and financial performance improving. Accordingly, ES leadership is gradually moving towards a more hands-off conditional approach in which the business units have more freedom to operate within a prescribed set of policies and procedures.

In terms of inflection point behavior, all three management approaches can be identified. In the start-up phase – until 1994 – management depended strongly on an ecological approach, which enabled the individual units to develop learning attitudes. Entrepreneurship in the multiple local units was encourages, but the consistency of Internet capability development as well as the integration of knowledge accordingly were low. As often is the case with ecological approaches, management policies often felt intuitive and not explicit, and it seemed that the levels of accountability (new economy) both at the portfolio and individual levels necessary to make ecological approaches work was insufficient – witness the losses made in 1997 and 1998. The big benefit of this period was the learning experience at both the unit and company levels.

The units learned what was possible technologically with the new medium of Internet, and found out by trial and error that they could not run their "closed shops" without a modicum of centralization in a common database and sales policy. Company management learned, the hard way, how costly chaos strategies could be in terms of duplicate efforts and sub-optimal use of competencies, as well as the confusion that these strategies evoke in the marketplace.

1995 was the short period of strong directive action, in which Reed Elsevier first bought Lexis-Nexis, which was an important capability move, and the leadership of ES set up Science Direct and imposed its processes on the organization in a holistic manner. During this period the new strategic directions and a new structure were imposed, top-down. This would provide the framework for the successful working conditions of subsequent years. The starting point was a total rethink of the basic business processes of ES, which in turn resulted in an organizational restructuring of the business. These changes were, to a good extent, imposed on the units. A number of typically directive tools, like the acquisition of Lexis-Nexis and the conscious appointment of new leaders, were used. The entire period did result in a redirection of a now unified competence portfolio.

After 1995, the leadership of ES gradually increased its reliance on conditional tools to guide strategy and operations within the vision, structure and processes that had been set. Management directions now became u-turn, and provided the multiple unit managers with a good degree of local entrepreneurial freedom. Due to the standards set in procedures and (software) tools, consistency of capability development as well as the knowledge integration remained high Accountability was instilled ex-ante. But the price of this balance between top-down and bottom-up was an increased complexity of structure and processes. Figure 4.10 illustrates the approaches used.

Figure 4.10: ES Approaches Used

Phase	**Directive**	**Conditional**	**Ecological**
1992-1993 **Fluid**	Tulip		Local pre-press experiments
1994-1995 **Transition**	Acq. Lexis-Nexis Science Direct New Management Key Appointments		
1996-2000 **Specific**		New processes New Structure New policies	
2001-		Further delegation	

The strategic posture of the holding company that owns ES, Reed Elsevier, was basically ecological, with a small but essential interjection of directive management in the appointment of the leadership. One can note a slight adjustment in 2001 with the appointment of a chief technology officer (a conditional move). But the creation of a venture capital fund in the same year was a portfolio enhancement (potentially directive) that was run in an ecological way: one can debate the purpose and effectiveness of such a hybrid.

4.3: Wolters Kluwer - The Track of Gradual Change

Wolters Kluwer, an international publisher of professional and scientific journals, was the result of a relatively late (1987) merger of two long-standing publishing houses, Wolters Samsom, founded in 1836, and the Kluwer group, established in 1889. The company, with Eur 3664 mln in sales in 2000, and 19,000 employees, has three main areas of business: Legal, Tax and Business (70% of sales), International Health, and Science & Education. The main lines of business are organized on a geographical basis due to the national differences in legal and tax systems. We will see that this regional decentralization had an important influence on the reaction of the company to Internet. Europe is the most important continent (49% of sales), followed closely by North America (47%).

Before 1998 - First Gradual Growth

Wolters Kluwer was an early starter in digitization. Many of its operating companies were involved in publishing reference works, and expended a great deal of effort in tracking updates – and errors on updates – in the many editions of their (paper) databases. They soon found out that digitization of those databases, which was not too difficult for text-only topics like law and taxes, was an obvious way to enable instant upgrades of editions and elimination of errors. If only due to the real cost savings, they found themselves well on the way to full internal digitization by the early 1980s. These digital databases were so good, that by 1994 the Dutch lawmakers found themselves writing new statutes directly into the WK legal database. In 1997, a start was also made with Kluwer Online, which provided electronic referencing of a series of journals and went commercial with 400 titles in 1999.
In other areas (like science and education), however, the experience was more mixed. For example, the Samson unit, involved in textbooks for school, started early – in 1985 – with computerization of its text material. By 1994, however, it found that the quality of its products and services had declined, while costs had risen. Externally, WK announced in early 1995 that it had chosen for a very gradual introduction of external electronic services

The strategic development of Wolters Kluwer (WK) in the area of Internet was to a large extent driven by two important traits: First of all, WK was a strongly decentralized company with a small holding staff, which saw itself mainly as a (financial) facilitating and accountability unit. Most of the work, including strategy development, was done by the 30-odd country units, which was also where the vast majority of the 16,000 employees were located. Secondly, WK as a company was financially driven, and for many years prided itself with a 15% earnings growth rate, a trend that it even publicly predicted three years ahead. Because of these considerations, WK stressed the evolutionary element in e-publishing, and the gradual introduction of electronic products and services. Content ownership was the core of the strategy, and this content was to be supplied in any form the customer specified.

In 1995, the executive board began to discuss Internet, and the announcement was made that WK would invest Dfl. 100 mln per year in electronic publishing, and would pay considerable attention to publishing on demand. After serious management debate, however, investment decisions were not implemented, since it would have seriously disrupted the earnings track record that WK had established. In 1996, WK did launch its first online journal.

A year later, in 1996, WK did announce its first offerings on the Internet and with Kluwer Online, which made the content of WK journals available on the Internet with extensive search routines. But it also stressed the gradual growth of the market.

If we plot the outlook from a Kluwer perspective on the outside world following the criteria discussed in chapter 2, we can make the following observations:

- Business development – including investments, standard setting and product development – was very much at the local market level,
- Most business processes were run at the local unit level, with the exception of financial controls, and
- Competition was relatively fragmented,

which leads us to an observation of a fluid market

Regarding the attitudes of WK's leadership (figure 3.25), we see the following:

A few, major portfolio moves that were unrelated to Internet and are not discussed here, but were executed at the corporate level. Few people moves. Infrequent management meetings. And a rigid agenda of budgeting and ex-post reporting, which was the most important formal interaction with unit managers. This leads us to conclude that the leadership style was ecological in nature, with a conditional undercurrent. Most of the Internet initiatives were conducted at the local level, with a high degree of local entrepreneurship. Speed and consistency of portfolio development was relatively low, with little overall scope for alignment and fit of Internet activities. The same limitations applied to knowledge creation regarding the new medium.

1998-1999 A Conflictual Breakthrough

The apparent prospects of heavy investments to prepare for the Internet era were an important reason to enter into merger negotiations with Reed Elsevier, in October 1997. From WK's perspective, this alliance had a number of advantages. Reed Elsevier had ample financial resources, for example, which would have helped defray the investments in Internet. Another advantage was the recent acquisition that Reed Elsevier had made in Lexis-Nexis, which had the potential of providing an important technology base for developing the digital databases and access systems needed by the post inflection company. The two companies could not agree on the financial terms, however, and the alliance discussions were terminated in March 1998.

This state of affairs forced corporate management to develop an independent view on Internet strategy in a very uncertain environment, and to find the right partners(s) where appropriate. In order to start a thinking process, WK recruited a consultant, Rost van Tonningen, as advisor: Van Tonningen had just spent considerable time familiarizing himself with the "new economy" on the West Coast. However, there were incompatible viewpoints at the corporate and country levels. Corporate management wanted to move ahead, but was very concerned about the costs of developing multiple Internet systems at the country level. The country managers generally were wary of Internet and preferred to postpone Internet investments. In 1997, the company did appoint a CTO. Overall, understanding of the technical and commercial potential of Internet remained limited. Officially, the company stressed the important role of country managers in introducing Internet applications, and also the freedom of the customer to choose the medium.

In the course of 1998, investment analysts and journalists began to query WK about its Internet activities, and started to make unfavorable comparisons with the company relative to its peers Reed Elsevier and Pearson. The executive board asked each of the operating companies to submit a "wish list" of Internet projects and received 80 proposals, requiring major sums of investment money. The Board started a project to launch a single platform for the entire company in which the operations could "plug in" their specific applications.

In order to move forward and to come to a coherent blueprint for WK, the executive board in 1998 appointed a fifteen-man steering group for electronic publishing consisting of "young Turks" – bright and ambitious young managers. These started working on plans for portals, economics, commercial actions, etc., which were received with considerable enthusiasm at the shop floor level, but with skepticism by the majority of senior managers. As they proceeded, the few Internet initiatives that had been launched in the field were held back, pending corporate-wide action.

The steering group started by noting that many professional in the outer world were migrating to closed online platforms and the Internet. This trend posed a very serious commercial threat to WK, but also a major new opportunity, because it enabled WK to maintain a much closer relationship with its users, and respond much more rapidly and accurately to new market needs.

The structure of the new business proved to be totally different from the tradition. For example, the ultimate priority in off-line (paper) publications is content ownership, which provides a strong barrier to entry and perfection, because there is no opportunity to correct mistakes. For the new business, however, customer ownership and speed were paramount, and on-line publications were easily improved on the go. Traditional publishers had little understanding of required marketing techniques, including the mechanics and value of customer feedback. Also, traditional barriers to entry – like protected access to major databases of statutes and jurisprudence, were lost as the suppliers, like the government and law courts, either went public in creating their own websites, or started auctioning access off to the highest bidder. For example, the Dutch Ministry of Justice in 2001 decided for the first time to tender its statutes, which auction was won by SDU, although some claim this was due to political pressure. But generally, the feeling evolved that paper was on the way out, and with it, WK dominance. WK, however, announced in its annual report that its strategy was directed towards offering its customers the option of paper versus electronic, and that usage of the latter was growing gradually.

A number of measures were already taken to pave the way forward. For legal and tax publications, the European Internet Services (EIS) operation was started, which developed uniform company-wide formats for data, templates presentation and branding. An outsourcing contract was signed with Atos/Origin for central hosting services in Europe. In the US, the same was done with Navistar. The acquisitions program was stepped up and oriented towards the acquisition of needed capabilities: LAS was an example of such a transaction. A large number of WK web portals were launched, which provided the basis for the first communities, and further experiments. And corporate leadership started to actively rotate or recruit managers, with the objective to rapidly develop and disseminate Internet competencies. Finally, the leadership took the important step of restructuring the company away from country management into five global business units, using Internet – with its disregard of national borders and total geographic transparency – as an important argument.

At the end of 1999, an important debate started in the executive board about the right balance of speed, investment and risk in the creation of the necessary technology and business platform for WK, while maintaining a modicum of consistency with the traditional performance growth of the firm. This discussion resulted in the departure of the CEO Van Kempen in the beginning of 2000, and a more gradual phasing of Internet implementation.

If we look at the way in which WK management saw the development of Internet, we can note the following:

- Views on standards were rapidly solidifying, and the rate of product introductions decreased,
- Companies started to impose business processes, top-down, and
- Competition was observed to be concentrating into fewer companies, which threatened WK's strong position in its core market (e.g., legal).

The view of a fluid market thus was substantiated

In considering the approaches that WK's leadership took, we see the following (figure 3.26):

- Large corporate portfolio moves in Internet (e.g. the outsourcing IT to Atos/Origin and Navistar), and the proposed merger with Reed Elsevier,
- The creation of a "young Turk" group of (future) leaders, and
- Limited communications outside the Executive Board

These point to a Directive style of leadership: mostly top-down, limited local entrepreneurship, but holistic portfolio development at high speed. But the price was limited company-wide knowledge development.

2000 Onwards: On an Evolutionary Track

In its 1999 annual report, the executive board under leadership of the new CEO Pieterse acknowledged the importance of realizing interactive communications with its communities of users, and announced that 9% of turnover was realized through Internet. It further announced its intention to invest Eur. 250 million in Internet over 2000-2003. To Pieterse and his colleagues, the rules of the new game were becoming clear. Actual Internet strategies could thus be relegated to the five clusters of operating companies operating in independence. For example, WK announced the establishment of a Dutch commercial Internet center for its legal publications in 2000. The building publications went beyond this and started commercial websites for the construction industry. Full search facilities were by then available for all the WK publications, and the leadership indicated in its 2000 annual report that it expected to receive 50% of all revenues from e-publishing.

By 2001, Internet activities were strengthened further at the division level. For example, the European professional publications group started a "European Internet Service Center" in Brussels, to support and coordinate activities across the division. Corporate management did, however, make one important decision: in early 2001 it signed a contract with software supplier Atos-Origin to outsource all edp and communications operations in Europe to that company.

In its mission statement, the leadership stated that it wanted to provide professionals with extensive, leading and reliable printed and electronic information products, thus enabling them to improve their efficiency and productivity and to reduce their costs.

In 2000, however, five to six portals had been launched and the company had no encompassing front page; WK found itself on the defensive against new competitors that did not offer a large amount of own content, but did provide rapid access to a variety of information points that were of value to their focused set of users. For example, two sites in the US – Healtheon (started by Jim Clark) and Web MD – not only provided easy access to the full range of reference materials and topical information to general practitioners, but also offered tailor-made software to help the (family) doctor run his administration and collect invoices. These were hugely successful, and relegated WK to the position of data source in this particular segment. It must be noted, however, that these developments are typically extremely difficult to predict. Some considered this as a chance lost. WK was also perceived to have lost market share to smaller competitors (e.g. to the SDU in the Dutch legal market, in which it once was dominant).

The perceived loss of position in a number of key markets led some observers to conclude that the main actions that WK could have taken earlier to come out ahead in this inflection point should have included investing in the paramount central technology platform earlier, and imposing a much stronger central steering process. More thorough planning (e.g. by doing a balance scorecard analysis, which WK never did) would also have helped WK to maintain its position, in particular with its large customers, and avoid market losses like the medical portal business. It would also have helped the organization accept the unavoidable cannibalization processes that are unavoidable in major technology jumps.
Considering the perspective of WK on its industry, we observe the following:

- A more stable, evolutionary environment, with few product and standard changes,
- More formalized u-turn business processes, and
- Competition trending towards oligopoly,

which point to a Specific development stage of the industry.

Looking at the leadership style adopted by WK in this period (figure 3.26), we see a delegated management style with regular interactive meetings and many participants. This points to a conditional leadership approach, since these traits are consistent with u-turn leadership, which relies on well-developed processes and ex-ante accountability combined with a high degree of local entrepreneurship to enable a high level of knowledge creation.

Conclusions

Overall, from a corporate perspective, WK has through the years leading to 1998 shown a strong ecological trait (figure 4.11): Internet strategy and implementation were left to the country operations and, later to the five clusters of country operations. Capabilities were developed in a laissez faire mode and their consistency accordingly was low. But the leadership relationships were not complex, and ex-post accountability was straight-forward. In this consistent pattern there was a hiatus of two years, in which the leadership took a number of important steps to restructure the company for the new environment. This period culminated in the management board changes of early 2000. In this period, the board took a clearly directive track in writing the blueprint, launching the central platform project, organizing the five business units, and, of course, attempting the alliance with Reed Elsevier. From 2000 onwards, the leadership has limited its role to a conditional one, setting the standards for formats and branding and supporting investment in databases and Internet service, but leaving detailed strategy and implementation to the five business groups. Strategy development has a u-turn direction and gives local management a clear own responsibility. The management processes however have become more complex. The only exception to conditional management was the Atos-Origin contract, which provided for company-wide economies of scale (thus explaining the corporate, directive, decision).

Figure 4.11: Wolters Kluwer - Approaches Used

Phase	Directive	Conditional	Ecological
1980-1997 **Fluid**			Country initiatives
1998-1999 **Transitional**	Internet blueprint Central technology platform Reed Elsevier alliance Atos Origin outsourcing New Leadership		
2000 plus **Specific**		Independent cluster strategies Divisional service centers	

4.4: VNU - Rapid Focus to Business Information

VNU (which stands for Verenigde Nederlandse Uitgeverijen – United Dutch Publishers) was initially active in the publishing and distribution of consumer magazines, telephone directories and information services, education publications, trade and professional magazines and marketing information services. It was formed in 1964 out of a merger of two Dutch magazine, book and newspaper publishers. In the 1960s, its primary operations were the publishing, printing and distribution of consumer magazines, newspapers and books in the Netherlands and Belgium. But by 2000 the company had transformed itself into a supplier of business and professional information, with a turnover of Euro 3.4 billion, and 21,600 employees, focusing mainly on Europe (31%) and the United States (54%). In the late 1990s, it had five business units: Marketing Information, Business Information, Directories, Consumer Information and Educational Information.

In order to leverage the knowledge within the individual operations, marketing, editing and sales are maintained within the business unit; only a limited number of IT activities are provided by the central technology function, which sometimes leads to priority problems. Specific applications are developed within the business unit itself.

1995-1996: Baseline development

VNU's e-strategy started as one of "stepwise trial and error" (1995 annual report). In 1994/1995, several business units started experimenting with Internet, with a preference for joint ventures to minimize risks. For example:

- The magazine group bought 50% of Bopp Media, which produced city maps on CD-ROM and online, but otherwise shied away from the new media
- Newspapers took a minority position in CityOnline, which had Maurice de Hondt of Wegener as main champion. This highly innovative project created a virtual (regional) city for the consumers, but proved unsuccessful, as we will see later. They also started cable (teletext) newspapers in two Dutch regions (Brabant and Gelderland). But soon the newspapers launched TV guides and other websites, which cost a lot of money but had limited success. By the end of 1996, all the newspapers had their own websites
- Broadcasting had no Internet projects
- Business Information Europe was one of the first groups to start Internet operations, with recruitment advertisements of *Intermediair*
- Business Information USA
- Educational Publishing made a careful start with VNU Interactive Media, which by the end of 1996 had already published 17 CDs.

In the UK, VNU started a site, Scoop, in a joint venture with the Freepages group, entirely with their own facilities, which stressed interactive consumer information accessible by telephone, mobile phone and Internet, with high startup costs. Corporate management also initiated large-scale automation projects in the editing and commercial departments of the company.

Management of VNU was well versed in traditional strategy methodology, but realized that traditional methods were becoming less capable of handling the speed at which the environment was changing. Conversely, new strategies driven by a long-term vision appeared to have both high costs and high risks, since they lacked checks and balances on the investments in the startup phases. Finally, in the Internet world the two months or more needed to conjure a vision sometimes are too long to maintain the first-mover advantage.

1997-1998: Initial Leadership awareness

In 1997, the management board recognized the importance of Internet, in part because investment analysts suddenly started asking pointed questions. Internet had suddenly become an important issue in capital markets, and companies with perceived strong Internet strategies started to be awarded with dramatically high share prices and price/earnings ratios of 70 and higher. At the same time, VNU's leadership found it difficult to understand the fundamental market trends. VNU was a highly decentralized organization. To achieve some synergy between the scores of Internet-related efforts, corporate management established a central group in mid-1997 as part of corporate development. Initially, this group was directed at informing the business units about the importance and opportunities of Internet, But it soon changed into a small 15-man IT unit providing technical advice, and hosting services and website development support, mostly in co-operation with third parties. Since most divisions quickly developed their own IT departments to run Internet applications (under the assumption that this would speed up implementation and improve service levels), they quickly took over these basic roles. 1997 also saw the acquisition of ITT World Directories, which covered six European countries and had its own Internet project. But most of Internet strategy still took place in the field:

- The Magazines started development of a series of thematic portals destined to replace the title-linked websites, one for each magazine. In 1996 VNU could proudly announce its first success: Libelle got high hit rates, but modest revenues.
- Newspapers continued major investments in Internet: the cable newspapers were not developing well, and VNU considered consolidation. Also, the participation in CityOnline was sold.
- Directories put high priority on Internet products, which it considered promising.
- Broadcasting was sold in this period.
- Business Information Europe consolidated its *Intermediair* websites into one portal: *Intermediair* Online. It also made a 40% investment in Atwood Systems (UK) in order to boost its competencies in database management.
- Business Information USA
- Education

The holding in Scoop – managed directly by corporate – was boosted from 25% to 75%.

Seen through the lens of this case analysis, management perceptions of the outside world at this time were formed by frequent product tests by the local business units. Design and standard setting were local. Business processes were run mainly by the units, and competition was fragmented. These observations point to a fluid development stage of the industry.

When we observe leadership postures (figure 3.26), we can note the following:

- A few large corporate portfolio moves, like the acquisition of the yellow pages,
- A leadership focused on ex-post financial accountability, given the admitted lack of understanding of the leadership of the new trends, and
- Regular, albeit infrequent and not highly interactive management meetings, during which target discussions were the key agenda point,

which give an indication of a bottom-up direction of the company with a high level of local entrepreneurship, and only limited overall alignment and knowledge creation, ergo an ecological leadership style.

1999: Time for leadership action

By the end of 1998, the management board became alarmed with the slow rate of progress, and launched a major consulting project with McKinsey to study Internet strategy for the Yellow Pages, and consumer and business magazines. This project provided the leadership of VNU with a "blueprint" of the new environment, which helped it take decisive action.

The new strategy documents defined a business model for each of the divisions, and proposed the creation of dedicated Internet business units for each. But in fact, the leadership consolidated its corporate grip on strategy development and execution by establishing a central coordinating committee consisting of the key division presidents and the executive board. This committee started meeting every six weeks to decide strategy and monitor progress across the company.

The second main direct leadership action in 1999 was the redirection of the central Internet support unit, which was renamed VNU Internet Publishing Services (VIPS) and charged with co-ordination of all European Internet-related efforts as well as the management of corporate and inter-divisional Internet projects. This unit (initially three persons) reported directly to the management board of VNU, one member of which was made directly responsible for all Internet activities. The divisions formally remained in charge of their own Internet operations, with VIPS providing guidance and support in the form of contracting for bandwidth with the local telecom operators like KPN, providing market research, corporate alliances with third parties like Microsoft and the identification of e-commerce opportunities beyond the scope of the divisions. It was foreseen that some IT-related tasks like database development and payment automation would eventually have to be centralized, but no decision was made out of fear of slowing down divisional projects. To support the launch of VIPS, the company also announced an incremental Eur.30 mln. investment in Internet activities.
The strategy study also resulted in a series of portfolio extensions. One was the creation of two dedicated Internet projects for consumer information, Emage and Email marketing. The first was a technology to create individualized real time advertising. The second extension was a series of technologies to enrich e-mail addresses by electronic direct mail. Finally, a number of important investments were made, such as the purchase of 20% of NetRatings, a US company that had established a position in the measurement of Internet use in the US. NetRatings was the takeoff point for a global rating company, ACNielseneRatings.com. And VNU decided to sell its regional newspaper group to Wegener.

Under corporate pressure, *Intermediair* Online was rapidly expanded, and VNUNet was started as a joint venture with Randstad (an interim services provider) This last venture created a website called newmonday.com, but found out that its joint venture structure impeded decision making, which cost it its initial lead position against competitor Monsterboard. Nonetheless, VNU by then had eight very active recruiting sites across Europe, six of which were dedicated to six countries, and two of which were pan-European. Again, local management complained of high costs and decreasing margins (Annual Report 1999).

The division that was most activated by the strategy work was the magazine group which, amongst other things, started websites for *VTWonen* (on interior decoration), "Vrouw (woman) on Line" (a consolidation of a number of title sites) and Wuzzup (for teenagers), and acquired 50% of Medical Media, a medical Internet publisher that ran ziekenhuis.nl, a regional medical information and discussion site with 650,000 page views per month, growing at 10% monthly. The group also established a central advertising sales unit, called Medianet (20% of which was owned by an advertising agency). VIPS ran most of the sites.

VIPS thus also started taking the lead in business creation, but was eventually found to lack applications and market know-how to make them a success. An example was the forced transfer, within one month, of the Yellow Pages Internet units (by then responsible for their own revenue generation) in the Netherlands, Belgium and Portugal to VIPS, which created a lot of unhappiness with users and local managers, and may, with hindsight, have been an error. US management was the only division to steadfastly refuse to invest in Internet, with exception of their successful Billboard activities, and the acquisition of Nielsen Netratings.

Interestingly enough, the consulting study proved very effective as an instigator of Internet projects, but was less effective in predicting Internet developments. One reason for this may have been that it relied mainly on extrapolative projection techniques. The mobilization did create a certain amount of unrest in the organization: for example, large groups of managers now wanted new remuneration packages with a large option content, which VNU was unwilling to provide.

In 1999, Italtel bought the Italian Yellow Pages for a yet unheard-of price, which gave the share price of VNU a major boost and appeared to confirm the ambitions of the strategy studies that VNU had just undertaken. At that time, VNU had over 200 websites, most of which ran at a loss: only Billboard.com in the US was profitable.

The leadership at that time had in the same year spent Eur 28 mln in operating costs and invested Eur 255 in acquisitions (mainly NetRatings. There were 325 staff members dedicated to Internet. The results of this effort (excluding Nielsen Media Research and NetRatings) were 250 Internet sites generating 500 million page views and a turnover of Eur 15 mln.

In its 1999 annual report, the leadership saw VNU as a world leader in publishing and information provision, with leading market positions in mass magazines, telephone directories and information services, business information and educational publications.

Looking back at that hectic year, we observe that management perceived itself driven by a threat of a rapidly changing environment, including:

- Rapid introduction of new product concepts by existing and new competitors,
- Standards not yet established,
- Most business processes run entirely at the local level, and
- Highly fragmented and growing competition,

pointing to a fluid development stage (figure 2.12)

Faced with these prospects, the leadership took the following actions: (figure 3.27):

- Creation of VIPS as a new Internet entity – which entailed a number of key managerial appointments and recruitments,
- Multiple sizeable corporate acquisitions such as NetRatings and Medical Media,
- Imposition of firm-wide product innovation via VIPS, and
- Frequent one-to-one task force meetings with the business units with a disciplined agenda.

These actions point to a highly directive leadership style – top-down, not much latitude for local entrepreneurs, high adjustment speed of the portfolio of businesses and capabilities, and rapid alignment. This was achieved through relatively simple management processes, continuing accountability and relatively limited local knowledge creation.

2000: New realism and consolidation

At the start of 2000, the leadership realized that it finally had a clear understanding of the immediate opportunities and limitations of Internet, and that many of the ongoing projects were ineffective. The company, moreover, was clearly unable to maintain the level of Internet investments beyond 2000: in that year, operational costs for developing Internet had grown to Eur 110 (up from Eur. 82 a year earlier), whereas the new medium had only delivered Eur. 47 mln in revenues (vs. 16 mln in 1999).

As result, the leadership decided that the time had come to take delegation seriously, and to leave strategy detailing and execution to the divisions. This meant that VIPS was dismantled, and that the many Internet projects that did not show immediate promise, like Scoot, were stopped. A few acquisition proposals made by the divisions that already had solid revenues and good earnings prospects were approved. These acquisitions included front-page Startpagina and the Dutch search engine Ilse, which were both already the most frequented and successful sites in the Netherlands: Startpagina turned out to be highly profitable. A number of magazine sites like VTwonen, vrouw online and medianet were consolidated into Startpagina. This consolidation trend was also followed by the business publication group, which positioned most of its sites under the VNUnet portal for IT insiders. The directory group enjoyed the first successes of its websites, with page views going up from 75 mln in 1999 to 300 mln in 2000. This group started up a WAP portal called Tutch.

VNU also bought ACNielsen, which owned an important Internet operation eRatings, that focused on Internet ratings outside North America and thus provided a valuable complement to NetRatings. An exploratory investment was a 50/50% joint venture with Naviant to develop pinpoint Internet user marketing programs in Europe.

At the start of 2001, the management perspective on the industry was one of increasing stability (figure 2.12), with few, regular product generation changes, industry-wide information formatting and communication standards established, in a concentrating industry. These factors all are indicators of a Specific development stage.

Looking at leadership approaches used (figure 3.27), we can see the following:

- Acquisitions continuing, but managed by the divisions,
- Continuing strong investment in ICT and management development, and
- More interactive management meetings, with more attendants and more up-front accountability.

These are consistent with a "u-turn" conditional leadership style that was slower in processes and alignment, but did enable more local entrepreneurship and knowledge creation.

Conclusions

These notes indicate that the leadership of VNU went through three periods of strategic posturing in reaction to the advent of Internet. The first, until 1999, was characterized by trial and error efforts in highly fluid markets, in which the divisions and business units were stimulated into launching Internet projects, and also were given a high level of freedom in executing them. In the Internet sense, the directions were thus set bottom-up, with widespread local entrepreneurship, simple processes and ex-post accountability. As result, there was a low consistency in capability development, not too much scope for overall alignment with the environment, and not too much integration of knowledge.

After the strategy studies of late 1998-'99, the leadership had a much clearer vision of VNU's markets, in which the rules of the business game were starting to emerge. VNU could thus develop a blueprint for action, which it implemented though a corporate steering committee and the central unit VIPS, which reported directly to the management board. In this period, a number of acquisitions were made to either round off market positions (e.g., eRatings) or to gain necessary competencies. As it turned out, these efforts were not always in touch with the market, which was still developing and changing rapidly, and the centralized controls did not always show the necessary close touch with these markets.

These developments, and the stress they put on human and financial resources, could not be sustained. From 2000 onwards it became clear which projects were grounded in real market needs and which were pipe dreams. The leadership thus was in a position to cut back on the number and scope of the Internet projects. But also, by then, divisional capabilities and expertise had advanced to a level such that further Internet development could be, and was indeed, further delegated to local management. Figure 4.12 shows the evolution of leadership approaches at VNU.

Figure 4.12: VNU – Leadership Approaches used

Phase	Directive	Conditional	Ecological
1995-1998 **Fluid**			Initiatives: • Newspaper, CityOnline • NL - Recruiting • UK - Business information
1999 **Transitional**	VIPS Acquisitions		
2000 onwards **Specific**		Delegation to Divisions Corporate Policies	

4.5: Wegener – the Pioneer

Introduction

Johan Frederik Wegener founded the Wegener Company in 1903 as a newspaper publisher for the Dutch provincial town of Apeldoorn. The company has since grown, mainly through acquisitions, to its current size of Eur 978 mln (in 2000) in revenues and 7600 employees. Wegener now is the largest Dutch publisher of regional daily newspapers and free door-to-door papers, and a major national and international player in direct mail. It has four business segments: Print products (including all the newspapers, 77% of revenues), Direct Marketing (14% of revenues), Radio, and Internet.

The first Internet venturing years 1994 - 1998

New media started at Wegener as early as 1984, when it launched a cable newspaper (Kabelkrant). Development was slow until acceleration started in 1994. In that year, Wegener set up a new unit called WISE "Wegener Informatie Services Exploitatie to promote and commercialize new media activities and new projects within Wegener. In 1994 it also joined with broadcaster Veronica in setting op a digital shopping center, "Veronica Interactive Plaza" (VIP), with shopping, news, games, product information and information about shopping on the electronic highway, which was not (yet) a success and had to be stopped nine months later. In the same period, Wegener also started a website for young people called "Primeur". Its closely controlled subsidiary Tijll Data started a joint venture (2/3 Wegener) with ADP to provide financial market information, initially via broadcasted teletext, which went online in March 1995.

Serious Internet activities of Wegener started in 1995 with the arrival of Maurice de Hondt, who joined Wegener as head of new media after a career in market research and with ITT's Yellow Pages. De Hondt was a visionary who wrote a plan for an extended portal service that was launched later that year as CityOnline. CityOnline was a revolutionary new concept in which each user had his own virtual house, in a street and neighborhood of people with similar interests. Logging on caused the lights of the "house" to be turned on. CityOnline was one of the first concepts to introduce the ICQ ("I-seek-you") hatbox format. CityOnline had its own newspaper, shopping center and interest group “club houses”, and successfully integrated the three key dimensions of a successful portal: Content, community and commerce. CityOnline was first launched to cover three cities (Utrecht, Tilburg and Apeldoorn), and later expanded to include 18 towns by the end of 1997. Other actions in that year included the launch of Wegener Nieuws TV (60% Wegener, 40% Edon) to provide cable news, and the purchase of a 20% holding in Planet Internet, which had been launched by KPN Telecom together with De Telegraaf and Quote.

At the same time, a broad multimedia strategy was pursued: Wegener stated a desire to “develop Internet concepts for third parties as well as our own companies, and to function as a so-called “presence-provider”, assisting companies to get on to Internet with these new media” (1995 Annual Report). Wegener also terminated the joint venture with Veronica (VIP) because this Internet site turned out to be too small to have any impact, and constrained Wegener in the development of its own ambitions. To support the development of CityOnline, Wegener first acquired Riverland Network in 1995 to “provide facilities management, design an implementation of so-called websites” and integrated Wegener Internet within that unit (1996 Annual Report).

In the 1995 Annual Report, the leadership acknowledged the uncertainties surrounding the Internet environment and its own strategy: “despite the increasing attention being given to the possibilities for providing information via the long-heralded electronic highway, it remains unclear for many people as to the way in which these possibilities will take shape in the coming years. What role will the Internet play? How can we anticipate ?.... Our multifaceted strategy means that it is vital for Wegener to make timely use of new developments and opportunities offered to us” (1995 Annual Report).

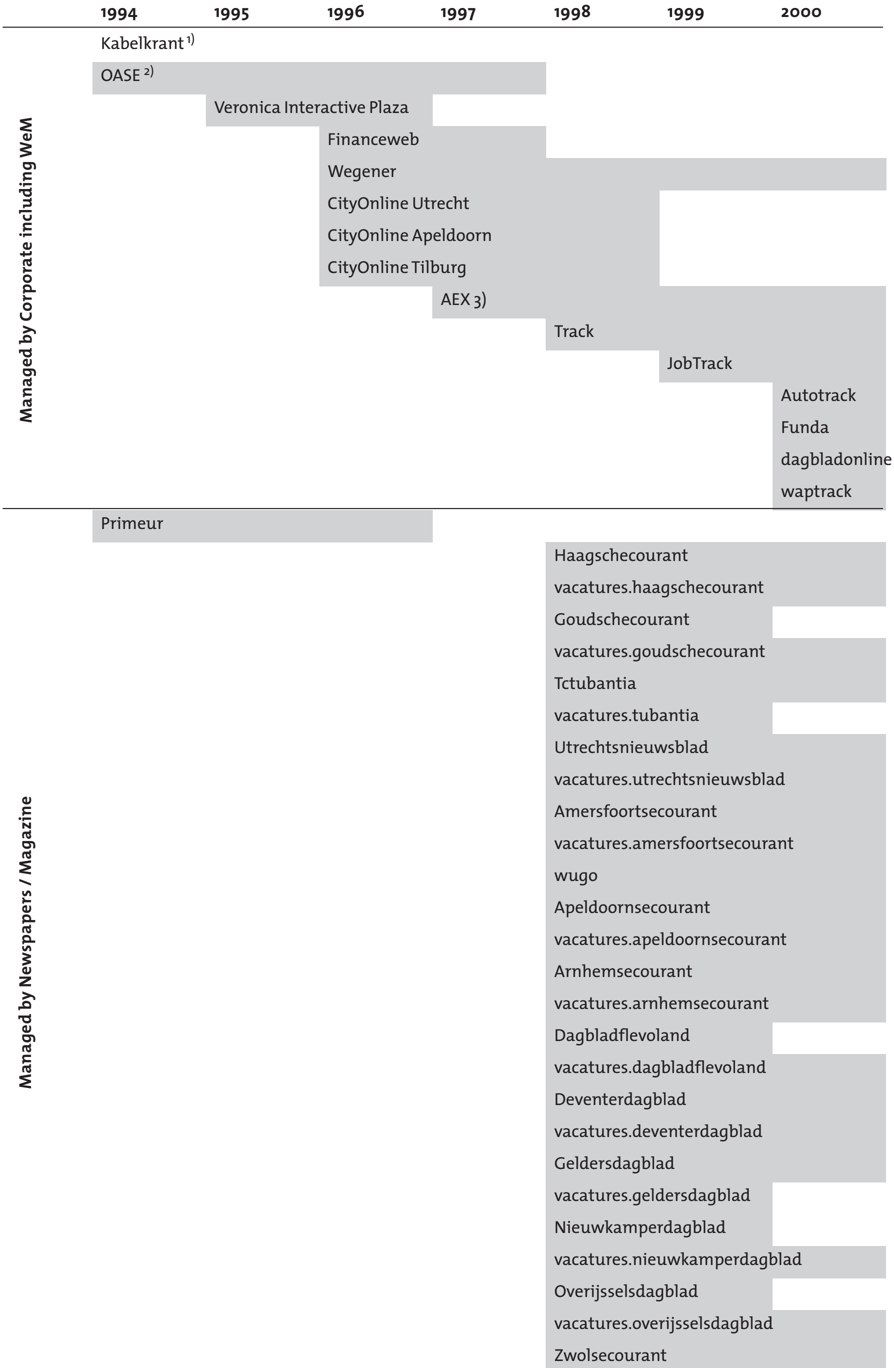
1996 started with major ambitions. Wegener set up Wegener Internet B.V. to provide services to companies and organizations seeking to integrate the electronic highway to its existing activities. First projects were the creation of websites for the Dutch Yellow pages, and a finance web for Beursdata N.V. Wegener also arranged for a possible acquisition of 20% of Planet Internet, a well-known local portal, and acquired 80% of NetCast, an Internet software development company in 1996. This latter activity was quite successful and profitable in its own right, focusing on development and service provision for so-called high-end sites. It was reorganized into business units in 1997 to better serve its various market segments, and divested to co-owner Lost Boys in 2000 because it was considered non-core. In 1996, Wegener also merged with Arcade Beheer, and renamed itself Wegener Arcade, as a reflection of a stated strategy to become a multimedia company.

However, 1996 was not without disappointments: it turned out that available technology was not yet able to support the functionality required to make a success of CityOnline, which thus proved to be quite slow and cumbersome in use: it never gained more than 25,000 "inhabitants (subscribers)". In 1996, Wegener attempted to broaden the scope through an alliance with the VNU daily newspapers, which, however, never adopted the concept ("NIH"/not invented here) and got out a year later. Also, growth beyond 25,000 users resulted in increasingly more technical problems, and necessitated a redesign of the core software, with a transition to a standard package. Nonetheless, CityOnline covered 18 cities by the end of 1997, and the leadership proclaimed that it was a cornerstone of the Wegener strategy in new media. In the meanwhile, Netcast had become (financially) successful as developer and service provider of high-end sites, and Wegener announced the intention to expand its ownership to 80%. Netcast was also divided into a number of business units (source: interviews).

Notwithstanding CityOnline's visionary promise, its problems mounted. Apart from the technology up-scaling issue, and the resulting economic problems, CityOnline never linked into the core newspapers of Wegener, which continued to consider the new activities as a foreign entity, and in general tended to ignore the leadership's multimedia investments. The local managers did respond to directives from the leadership by setting up a large number of local websites, which for the most part were unsuccessful. At the end of 1998, CityOnline was terminated and Maurice de Hondt left Wegener to set up an Internet investment company called New Economy. At that time, Wegener had a large number of centrally and decentrally run Internet units with a wide scope of activities and missions, of which only a few were earning money. (figure 4.13)

But the leadership remained somewhat frustrated by the lack of local entrepreneurship in identifying and developing Internet ventures, and started working on initiatives to stimulate local actions by exposure to the "silicon valley" activities (having itself visited this region) and designing more elaborate training and coaching schemes (which were, however, only partially implemented).

Figure 4.13: Wegener's Internet Offerings, 1994-2000 (year-end)



continued

	1994	1995	1996	1997	1998	1999	2000
Managed by Newspapers / Magazine					vacatures.zwolsecourant		
					pzc		
					vacatures.pzc		
					zeeland.woonkeuze		
					Dehavenloods		
							brabants-dagblad
							eindhovens-dagblad
							z-hc
							gelderlander
							bndestem
							arnhemse-courant
							dagbladrivie-renland
							veluwsdag-blad
							leidscherijn
Managed by Direct Mail					wegener-dm		
					wdmg		
TMF, Magazines & Other					Suurlandfalkplan		
					graficus		
					dutchgolf		
					tmf		
					tmfweb		
						tmfshop	

Note: Arcademusic, Yntema and other divested activities not listed

1) Teletext medium; 2) Teletext + broadcast medium

Source: Annual reports, Financieel Dagblad

Internal Initiatives - 1996-1999

The internal introduction of new information technologies showed a disciplined approach, in which the key processes were redesigned systematically on a corporate-wide basis. The successful projects were as follows:

- In 1994, the Sijthoff unit started studies for electronic archiving. The company took a lead role, which resulted in a dedicated company-wide function, Sijthoff information system (SIS), from which the external database services were spun off in 1998 under the name Wegener Informatie Centrum (WIC).
- A year later, in 1995, work started on the introduction of a standard page-making and pre-press system. The choice was made for a package by Unisys, "Hermes", which was introduced company-wide in 1999.

- The introduction of a new company-wide integrated advertising administration and production system called "Enterprise" was launched in 1996, and fully implemented by 1999.
- In 1998, the company launched a subscription administration system ("Paradise").
- Finally, in 1999, Wegener introduced a company-wide intranet "WAX" (Wegener Arcade Exchange).

Looking at the outside world through the lens of Wegener management (figure 2.12), we note that they observed a rapid introduction of new entrepreneurial products in fragmented market segments, an absence of standards in the first years, followed by a rapid penetration, mostly of Microsoft standards, business processes run entirely at the local levels, and fragmented but growing competition. These are all characteristics of a fluid market phase.

The leadership's attitude was mostly directive, with strong top-down direction, relatively limited local entrepreneurship, holistic portfolio adjustments with many options, limited local knowledge creation and relatively simpler corporate processes (witness figure 3.26):

- Multiple corporate portfolio moves,
- Recruiting (and termination) of skilled senior people – e.g. Maurice de Hondt, and
- A lean communications agenda with the operating units with regular routines of which strong ex-post accountability was an important element

Towards a more pragmatic Internet approach - 1999 onwards

At the end of 1998, the management board decided to ask consultants Booz Allen & Hamilton (BAH) to analyze both the situation and Wegener's opportunities. One of their main conclusions was that the existing operating companies should be in charge of new initiatives, with central co-ordination through a NewMedia Operating Committee. For the new initiatives, the leadership considered three business models:

1) building unique extensions to the existing business,
2) constructing vertical portals, and
3) taking a major leap forward, venture capital style

A choice was made for a combination of the first and second models.

In 1999, the management board was also strengthened by the arrival of a new executive board member, and Wegener started to implement the new, decentralized strategy. Accordingly, the newspapers were each put in charge of their respective regional "regioportals". Wegener also created national vertical portals, destined to help customers from enquiry of news to background stories, to reference materials and to commercial transactions like trade or recruiting. There was a new pragmatic focus on three promising areas: cars (AutoTrack), real estate (Funda, planned with help of consultancy OC&C), and recruitment ads (JobTrack); the regional newspapers obtained an additional distribution channel, with a high guaranteed product and service quality, albeit at the expense of some speed and flexibility that are inherent to a centrally focused effort. The vertical portals are allowed to pursue only those topics in which they could become #1 or #2 in their market, an adage that is even more important for Internet than for other markets. On the whole, they appear to be successful. For example, Wegener

JobTrack succeeded in breaking through the monopoly of the competitor Volkskrant in recruitment advertising. Apart from the three newspaper-linked market foci, Wegener continued to develop the successful TMF-Web which was linked to its very successful broadcast channel "The Music Factory"/ TMF which produces and distributes video clips of pop music.

Wegener eMedia (WeM) was established in 1999 to support the regional portal infrastructure. WeM retained responsible for hosting, technology, product development, with an additional function as "internal incubator. Wegener also considered starting up a voice portal, but eventually dropped the idea as being technologically too challenging: being the first in a new technology was not considered to be part of Wegener's mission.

WeM's new management has a newspaper background. It derives part of its revenues from the outside marketplace. Wegener has three regional portals, each with a vertical component, including Jobtrack and Autotrack (with 600 dealers online) and Funda, majority owned by the national association of real estate brokers (NVM).

In entering this period, management was clearly more comfortable with outside trends, which were perceived to show few, more predictable product changes, standardization in most of the business areas, established business routines, and the start of oligopoly in most of Wegener's business arenas (like the car and real estate markets). These trends point to a specific phase in market development (figure 2.12).

The leadership approaches used by Wegener's leadership moved strongly towards a conditional style (figure 2.12) – u-turn, with broad entrepreneurship and local portfolio adaptations, high knowledge creation, continuous accountability and more complex processes:

- There were no more large corporate moves in Internet, and acquisitions/investments were left to local management.
- Considerable attention was paid, however, to training and management development oriented towards the new technologies.
- Meeting schedules became more two-way, with more people involved.

Conclusions

In the initial period (until 1999), Wegener's approach was characterized by a series of portfolio decisions taken by the leadership to explore the many opportunities that the Internet medium appeared to offer, and to take positions in as many of the promising market points as was possible. These multiple initiatives took place in a highly fluid and uncertain environment. Nearly all these ventures were started and managed by corporate leadership, with limited support at best from the local managers leading the mainstream regional newspapers. Reasons for this were both a matter of capability and motivation. The local leaders were generally considered to lack the skills and experience to run new technology ventures. And they generally could not see the relevance of these ventures to their daily regional newspaper operations. As it turned out, they were correct – in the short run at least. The result was a top-down leadership style with limited local entrepreneurship and a moderate speed of capability development, with limited knowledge creation across the firm. But the scope for overall alignment was high, and the management processes and accountability straightforward.

In the transition after the blueprinting of 1999, strategy was based more on an understanding of the short-term opportunities that were beginning to show their attractiveness than on long-term visioning. The leadership made the important step to move Internet strategy to the existing business units and to manage them within a conditional framework. Activities were thus structured within the regional newspaper setup, management processes were redefined to align the new activities with the strengths of the existing businesses, and the leadership started thinking about ways to improve the innovativeness of the entire company. The critical redesign of the most important internal processes also showed a strong leadership hand: actions here were in most instances taken with a very short time between corporate decision and company-wide implementation.

Figure 4.14 illustrates the move from the direct, visionary leadership role to the delegated, pragmatic approach adopted in 1999.

Figure 4.14: Wegener — Leadership Approaches Used

Phase	Directive	Conditional	Ecological
1994 - 1998 **Fluid (Transitional)**	CityOnline Wegener Internet		
1999 - 2000 **Specific**	Vertical Portals: • Autotrack • Jobtrack • Funda	WeM Regioportals	

Source: Company reports, interviews

4.6: De Telegraaf - Attempting Evolution

Introduction

De *Telegraaf* is by far the largest morning daily of the Netherlands and its largest newspaper. It is also by far the principal activity of the newspaper and magazine publishing company of the same name, accounting for most of the overall revenues of Eur. 1788 mln generated by the company in 2000. Other activities are regional newspapers and magazines (which together with the main newspaper make up 89% of revenues), as well as printing services (10% of revenues) and miscellaneous activities (1%). Advertising comprises 54% of overall revenues, with subscriptions and vendor sales making up an additional 30%. Nearly 97% of the revenues are generated in the Netherlands (source: company reports).

As early as 1991, the management board of De Telegraaf set up a corporate planning/commercial development department that had as part of its mission the task of ensuring that the newspaper company was staying abreast of new developments. Soon, the new department developed an interest in all kinds of new media, including radio, TV, local broadcasting, and incubation of new business ideas "avant la lettre". The leadership of the company kept these projects at arm's length with ongoing operations, because this would help localize the high risk of failure of the new activities (source: interviews).

1993 was an important year at De Telegraaf. In that year, the leadership of the holding was separated from the operational management of its most important activity, the morning newspaper. This was a clear confirmation that the company expected its future environment to go far beyond printed newspapers, and that its ambitions reached beyond printing the dominant daily newspaper. In that year, the executive board (RvB) appointed a managing director for the newspaper, but continued to have a heavy influence in its operations.

1994-1997 Exploratory Investments

Internet history at De Telegraaf started in 1994, when a few selected managers conducted a series of study trips to the US West Coast to review progress in electronic communications. As result, one of the Executive Board members gave a speech called "Wagon Trail or Turnpike" to the staff representatives. As part of the strategizing process, the department of commercial development wrote a biannual series of reports on Internet progress in the business, of which the studies in 1995 and 1996 were more detailed. These studies recommended a centralized approach. Since these recommendations on the whole were not followed, they were not very effective in stimulating Internet ventures.

In 1995, De Telegraaf made the first of a series of exploratory minority investments, although management was well aware of the difficulty their company generally had with minority positions. Planet Internet was a joint venture with telecom operator KPN, Wegener and *Quote* magazine to set up the first full-scale consumer portal in the Netherlands. In terms of market interest, this venture was a major success: a year later it already had 50,000 subscriptions. But it did not make money. Similarly, De Telegraaf took a 30% holding in Kabel Amsterdam in 1995. As of today, this activity has been transformed into MGW, with a 10% holding by UPC, which as the publishing arm of Kabel Amsterdam is profitable, with cable news and teletext (SBS, Net5) as main applications. In 1995, the company also made a start of a small, focused electronic publication, *Surf* magazine. The operation also got its own advertising revenue channel.

In 1996, developments picked up speed. On February 6th, the company published the first electronic interactive version of its daily newspaper, De Telegraaf-i. To help advertisers develop appropriate material for De Telegraaf-i, the corporate management set up a service shop, Basis Media, and in early 1997, Telegraaf Electronische Media (TEM) as a laboratory for commercial Internet applications. One of the first ventures of TEM was started in cooperation with the national weather service: de Weerkamer, which was a real success and turned out to be a cornerstone of subsequent Internet development efforts. TEM also started two other crucial sites: Prive (associated with the weekly tabloid) and Autovisie. At the same time, the company sold its participation in Planet Internet, in which it could obtain only a minority position: this was not considered to be an appropriate strategic position.

In this period, management's view on the evolution of the industry could be characterized in terms of a world with frequent new product introductions, a lack of industry-wide standards, "free for all" in terms of business processes, and growing and unknown competition. Figure 2.12 summarizes the fluid perspective of the environment.

Management attitudes nonetheless appeared to be hands-on and directive. There was a high top-down component, which entailed limited local entrepreneurship, and holistic and moderate speed of portfolio and capability development. Many strategic options were available, but also low knowledge creation and simple processes involving both ex-ante and ex-post accountability (figure 3.26). Typical indicators included the following:

- Sizeable corporate portfolio moves, such as MGW and TEM,
- Some hiring and transfers of skilled seniors, and
- Limited and disciplined interactions with unit heads on these topics.

1999 Rapid Entrepreneurial Expansion

A year later, TEM (which still was handling Internet ventures on behalf of the management board) launched a key portal, TelegraafNet, which eventually encompassed quite a number of sites including veilinghal, siteshopper, chatweb, elcheapo, quickalert, netmail, cybercard. Further TEM initiatives in the course of 1999 included the launch of Nieuwslink (with actual news items) as well as Sportlink (with sports news) and "De Financiele Telegraaf" (dft.nl) (the financial website). The latter website contained a host of information for investors as well as a tax information section, and reached more than 100,000 page-views/month within six months. Overall, however, few of the Internet applications made any money. But the management realized that expanding sites like De Financiele Telegraaf to a commercial scale would require major marketing and advertising investments, and many more people than the 12-odd staff that TEM had by mid-1999. The overall perspectives on what the market had to offer, and what it would take to succeed, were gradually becoming clear.

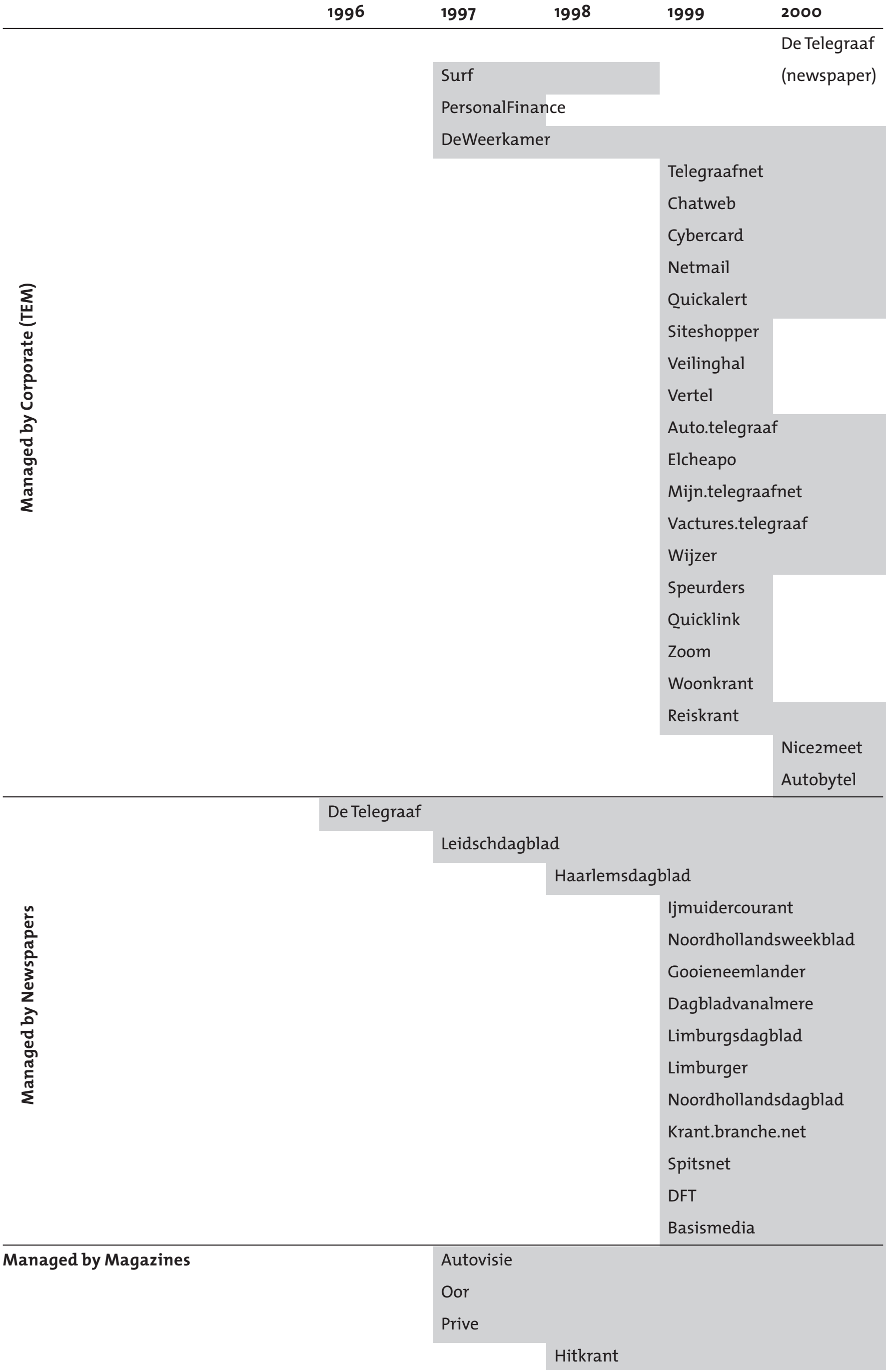
In the meanwhile, the individual publishing groups were left with total freedom to launch further Internet applications. To some extent, the race between corporate TEM and the divisions was thus on, and by year-end 1999, TEM controlled 18 websites and the newspapers 11. By year-end, the headcount of Internet-dedicated full-time staff at TEM amounted to about 20 persons, and at the divisions to about 30. Expenses for Internet amounted to Eur. 2.5 mln in 1999, and were growing rapidly. Figure 4.14 lists the websites of De Telegraaf and their controlling entities at the end of 1999.

By the end of 1999, the leadership formulated the thrusts of the company's Internet strategy in the following terms:

- Actively building Telegraaf-i and other electronic activities under the aegis of TEM,
- Stimulating e-commerce activities of the newspapers and magazine, and
- Budgeting Eur. 15 mln for Internet development in 2000.

Source: 1999 Annual Report

Figure 4.15: Internet Activities of De Telegraaf, 1996-2000 (year-end)



Source: annual reports, websites

At the end of 1999, management views on the environment were becoming more clear, with a more steady and predictable stream of products, rapid standardization, in many cases industry-wide (e.g., Microsoft software), stabilizing business practices and concentrating competition. These are indicators of a transitional phase of development (figure 2.12).

However, the leadership adopted a two-pronged attitude, combining directive and ecological elements (figure 4.15):

- Rapidly escalating corporate investment in TEM, both in terms of skilled people and financial resources, enabled a holistic development of the portfolio with consistent capability development and a wide scope for alignment and fit (which all are directive characteristics), and
- Maintaining an arms-length relationship with the business units, which continued their own Internet activities, allowed the company to rely on local entrepreneurship. At the same time, a regular schedule of interactive, flexible (u-turn) meetings was instigated with the units. The result was a high level of local knowledge creation and relatively complex processes. These are all characteristics of a conditional approach.

2000 Emergence of a Strategy

In the course of the first months of 2000, confusion about the role of TEM increased. As we mentioned, DeTelegraaf-i was energetically moving forward with its websites for breaking news, sports and financial news (the infrastructure of which was implemented by TEM). TEM was responsible for building sites, operations and commercialization, as well as for holding shares in external investments. Website content was the responsibility of the respective site managers, of which De Telegraaf-i, still part of TEM but closely related to the newspaper group, was the most important. This matrix structure looked good on paper but was difficult to operate, if only because TEM saw itself as champion in every respect of the new developments, and the newspapers thought it had the better understanding of the marketplace and how to earn money in it. Through all of this, TEM had by October 2000 a staff of about 1000 full-time and part-time people, and total Internet investments for 2000 amounted to Eur. 25 mln. In the same year, the decision was made to combine all archives into one database.

Through the year, the leadership of De Telegraaf had gradually gained a more solid grasp of the rules of the new game, and had developed a vision on Internet based on the concept of leisure time: basically, the premise was that:

1) the population as a whole has a gradually growing number of leisure hours,
2) printed matter is accorded less of that leisure time,
3) the ensuing gap is for the most part filled by TV and radio,
4) Internet, and its successor broadband networks, will fill an increasing number of entertainment and information functions, and
5) when real information and entertainment needs are filled by Internet and broadband, people will (eventually) pay for having these needs met, which translates into revenues and margins for Internet services.

Source: Telegraaf interviews

It was now felt that outside advice was needed. The issue was not the perception of the opportunity or the enthusiasm of people, but rather the inability of technology to deliver. Management also feared competition: from the traditional publishers, only VNU was regarded a real competitor, but there was a high level of uncertainty and nervousness about new competition. Management thus called in consultants from McKinsey to check the Internet plans to ensure that no attractive targets were missed, that De Telegraaf could stand up to its benchmark competitors, and that all the necessary support was secured at corporate and operating levels. As it happened, their impact was to mobilize people rather than to develop a comprehensive blueprint.

After this study, the crucial decision was made to give each publishing group autonomy in its Internet developments, and to leave them on their own in developing their e-strategies. TEM was moved from corporate to the Newspaper group in March 2000, while retaining its role in offering services to all the other company groups – a crucial delegation. Thus, there were no matrix structures any more. Activities were also scaled down: for example, more than six websites were combined or closed down, and by October TEM was down to 100 FTE's, and was run on a low-cost basis.

At this point, the perspective of management on the environment had advanced to the point where they perceived a more regular stream of product offerings, established designs and standards, established business practices and an emerging oligopoly (e.g. in car, job and real estate advertising). These are all signs of a specific market (figure 3.11).

Leadership attitudes were oriented towards an ecological approach:

- Relegation of portfolio actions to the divisions – TEM now was under the newspaper,
- No interference with the divisions, except for financial accountability and top job appointments, and
- A regular set of meetings directed at (financial) target setting and review.

Internet leadership had thus become a bottom-up process, with a high scope for local entrepreneurship, simple processes and a high reliance on ex-post accountability. But this also implied relatively low adjustment speed of the business portfolio, limited scope for overall alignment, and limited overall knowledge creation (figure 3.26).

2001 saw a further retrenchment of Internet activities, which by then had been largely relegated to the operating groups like Dagblad, and Magazines. TEM headcount was gradually reduced to 70 FTE's by mid 2001. Within the Newspaper group, progress went ahead full-steam; within the Magazine groups and TEM, progress was more careful (albeit for different reasons).

Management, however, was left with a feeling that De Telegraaf had not capitalized on its market strengths, and had lost an opportunity to be a forerunner. The company was still run mainly on a product basis (i.e., newspapers vs. magazines vs. broadcasting; De Telegraaf still owned 30% of SBS/Net5), and the leadership realized that it would be necessary to introduce a modicum of market-based thinking (e.g. with management groups thinking about the automotive consumer or the job seeker). At the same time, the introduction of any level of matrix management would be in opposition to the culture of the firm, and would be very difficult to realize. In 2001, the Newspaper was dominant, not only in printed form but also (through its TEM subsidiary) as an Internet application. Internet for the magazines was at a more rudimentary stage. The leadership also started to realize that the major benefit of Internet conceivably was not in the area where they always thought it would be (i.e. new revenue creation), but rather in reduction of transaction costs with the consumer (e.g. in the registration of subscriptions and advertisements).

Figure 4.16: De Telegraaf — Approaches Used

Phase	Directive	Conditional	Ecological
1994 – 1998 **Fluid**	Planet Internet MGW		
1999 **Transitional**	TEM		Newspaper portals Magazine portals
2000 and beyond **Specific**		TEM restructuring	Full delegation of Internet

Source: Company reports, interviews

Conclusions

Figure 4.16 shows how the leadership of De Telegraaf embarked on the e-publishing track in a relatively hands-on, top-down (directive) mode, by making a number of minority investments and starting up TEM 1997. It did so, notwithstanding a low level of understanding and confidence in the environment, which appeared to be quite fluid. This explains why the company placed relatively small minority bets in Planet Internet and MGW, which offered a good learning experience but little strategic opportunity, given the lack of control and the resistance of the culture of De Telegraaf to minority holdings. It also explains why management used a supporting ecological approach towards its operating divisions, and encouraged them to take their own initiatives without exerting strong strategic control. The focus on competencies and motivation of the local managers on their daily newspaper and other publishing jobs, positions that were quite different in every respect to that of an "e-publisher", explains the relative lack of local initiatives until 1999, when, through market pressure as well as the internal initiatives of TEM, a wave of business-unit-level initiatives signaled an entrepreneurial period. In this period, firm wide knowledge creation and capability development were modest. But the complexity of business development processes was also limited, and there was good up-front and ex-post accountability.

In 1999 was the culmination of directive corporate initiatives that coincided, and collided, with local ecological ventures in which many parties vied for leadership in setting the strategy, in an environment that still was characterized by rapidly decreasing levels of dynamism and uncertainty. The initiative gradually shifted to the publishing groups, which each initiated a number of websites and portals.

The McKinsey study in 2000 served to create a (more) solid understanding of the new business rules, and to mobilize efforts in which the individual publishing groups were in the driving seat, under conditional control of the holding company, with TEM (as part of the newspaper group) limited to support services.

4.7: Conclusions of the Case Studies

Introduction

The following section seeks to answer the questions that were posed in chapter three through case studies. We will first see to what extent the five publishing companies perceived the challenges of Internet to fit the three characteristics of an inflection point provided in chapter 2. Subsequently, we will look at the transition phases that each of the companies went through and verify these against the three inflection point phases described by Utterback (1995) and introduced in section 2.4. Next verification are the observation of managerial anchor points in our cases, followed by the discussion on the applicability of the defining assumptions and propositions for each of the case studies. We will then seek to trace the three leadership approaches to results in terms of financial performance. And finally, we will see which answers our case research provides to each of the ten questions. These ten questions connect back relate to our three main three topic areas: the dimensions of the inflection point (Q 1 & 2), the phases through which the firm passes in an inflection point (Q 3 & 4), and the approaches leadership can use when managing the firm through the inflection point (Q 5 - 10).

Case Perceptions on the Three Dimensions of the Inflection Point

To start with, each of the five corporations experienced all three of the dimensions of the inflection point. Regarding *amplitude*, the arrival of Internet indeed was for most of them a life-threatening change (Grove, 1996), in which they felt that they were losing market position, could no longer respond to changing customer needs, and no longer had the capabilities to initiate and execute the necessary new mission (Tushman et al., 1986). They lost time and opportunities, and we have seen that their performance sagged as a result, as they risked heavy financial losses (Ansoff, 1984). They all, at different times, showed a willingness to make major investments simply to catch up in capabilities. These were financial investments and investments in people, who had to be recruited and trained with the new skills, and who had to suffer the departure of those in the "old guard" who could not keep up.

The two scientific and professional publishers, Elsevier Science (ES) and Wolters Kluwer (WK), both regarded the advent of e-publishing as an event that came upon them with speed and was life-threatening in its amplitude. Both companies made major investments in Internet, as ES publicly noted in 1996 and WK in 1998. For WK, the amplitude of change in terms of financing and competencies was such that the company entered into serious merger negotiations with Reed Elsevier. Both companies changed their leadership in the course of the transition – ES in '94 and WK in '98: in both cases, the strategy towards e-publishing was at the heart of the leadership change. Subsequently, the main business structures had to be adjusted for the new environment.

In 1995, ES went for a strongly centralized setup in which nearly all of the firm's structures and processes were either totally redesigned or strongly adjusted. Kluwer reorganized into five business groups in 1998. These are strong indicators of amplitude. At business information provider VNU, the leadership noted already in 1995 that their traditional management methods no longer were effective. And in 1999, VNU felt obliged to establish a level of Internet investments of Eur. 30mln p.a. that was later found unsustainable for the company.

Without doubt, the two newspaper companies De Telegraaf and Wegener also perceived Internet as an event with amplitude. Wegener showed it by making a major effort in resources and capabilities in building a range of websites, which reached a total of nearly 50 sites by 1998. Just as was the case with VNU, the leadership had to admit that (the amplitude of) this investment was too large for the company, and the efforts were scaled back in 1999. De Telegraaf appeared less impacted, since it was and is heavily dependent on its newspaper and magazines, which has to a limited extent mitigated the impact of the Internet. Nonetheless, De Telegraaf explicitly reorganized the company in 1993 to face the challenges of new multimedia environment.

All of the companies also experienced the abruptness of the inflection point, caused by the speed of developments (Kanter et al., 1992), the abundance of new information to be absorbed by the leadership (Ansoff, 1984), and its cognitive constraints to define the rules of the new game (Cyert & Marsh, 1963). As partial exceptions to this abruptness, two corporations, Elsevier Science and Wegener, had started experimenting with Internet at a very early stage. In all our cases we see acquisitions as a means of rapidly gaining access to new skills. In case of these two scientific and professional publishers, the leadership felt that they were operating in a rapidly changing environment in which the effectiveness of their existing business models and leadership was uncertain (ES, 1992). This sense of abruptness was less prevalent at WK, although differences of opinion on the speed of industry change prompted the departure of the CEO. The new environment called for new ideas (WK "young Turk" analysis, 1998). For the two newspaper publishers Wegener and De Telegraaf the shift of internet also was less abrupt since they already experienced a structural decline (of on average 2% p.a.) in readership due to both the advent of TV, cable TV, etc., as well as changes in reading habits.

Externality clearly was evident in all the five cases, with the partial exception of Wegener, which established an Internet software department at a very early stage that it used to develop and test a number of early applications such as its CityOnline concept. However, even Wegener later adopted standards and software from outside. The other early adopter, Elsevier Science, initially did so by procuring software from a number of outside vendors. VNU management noted from 1997 onwards the questions of analysts were rapidly mounting in number and inquisitiveness, and that the prices and PE's of Internet-related stocks were rapidly going up. It were these external pressures that initiated the strategic reorientation that VNU undertook from 1999 onwards. Figure 4.17 summarizes the perspectives of the five publishers on the three dimensions of the inflection point.

Figure 4.17: Three Dimensions of the Inflection Point in the Case Studies

	Elsevier Science	Wolters Kluwer	VNU	Wegener	Telegraaf
Dimensions:					
Amplitude	xx	xx	xx	xx	xx/x
Abruptness	xx/x	xx	xx	x	xx
Externality	xx	xx	xx	x	xx

Legend: xx Fully confirmed; x Partially confirmed
Source: Company publications and interviews

Case Perceptions of the Three Transition Phases of the Inflection Point.

At the end of chapter 2, we listed the observable characteristics of the inflection point phases (fig 2.12). In general, we can now state that the three phases were observed in all of the five case analyses. Starting with the *fluid phase*, we see that most of the companies showed the four observable characteristics of this phase. This pertains in particular to the local and flexible character of the standards, and the emerging competition. In some instances, changes in products and services, as well as processes, were not yet observed (figure 4.18).

In case of the scientific/professional publishers at Elsevier Science and Wolters Kluwer, it is clear that the leadership was well aware of the uncertainties and dynamism of the Internet media at an early stage. ES leadership acknowledged this when they stated in 1992 that they could no longer stand for the effectiveness of their business model. At WK, local managers had to find their way in the new environment through trial and error – witness the failure of the electronic database for Samson textbooks. These trial-and-error exercises led to discussions with the leadership in which neither level of management was able to substantiate its views on market developments, due to the fluid nature of the environment (WK, 1998).

At this point, it is of interest to note that the development phases of the inflection point following Utterback are defined in objective terms (i.e., characteristics of the marketplace as presumably observed by the population of participants), the observations of individual firms of the fluidity of the market may vary. At ES, the first rules of the new game – the start of transition – were becoming apparent in 1993; at WK this happened in 1998. This difference in timing can be explained not only by the attitudes and approaches of management of both companies, but also certainly by the differences in market mix. At ES, the markets were heavily oriented towards international scientific publishing in which CERN, a powerhouse in Internet introduction, played an important leaders' role. WK's market mix was relatively more professional (legal, tax), with a heavier European and Dutch component. These (sub) markets were a few years slower in entering the transition phase.

In the business information environment, VNU operated in an environment that until 1988 was dynamic and unpredictable. There were no accepted standards and the "rules of the game" were unknown. In 1997, the leadership stated that it had great difficulty understanding the Internet market environment.

Finally, both Wegener and De Telegraaf also experienced an initial period until 1993, in which they felt they were operating in a totally uncertain and fluid world, a time in which they could do little more than make limited exploratory investments, as Wegener did with WISE and VIPS, or set up study units to follow new trends, as De Telegraaf did in 1991 with its Corporate Planning/Commercial Development group. Both companies stressed that they were keeping new activities at arm's length of existing operations in order to contain the risks to ongoing business.

By 1997 and 1998 the number of portals and websites controlled by the two companies as well as its competitors was growing rapidly, which meant that its participants were learning the ropes, albeit sometimes the hard way: they were approaching a transitional situation. Both Wegener and De Telegraaf were happy to publish their long lists of portals and ventures, and the leadership of both companies admitted their concerns with the increasing levels of required investment, as well as the lack of positive returns of the majority of the ventures.

The second phase to be considered is the *transitional phase*. Here we find confirmation of the observable characteristics indicated by Utterback (1995). Product changes were regular, product launches and standards were firm-wide, processes were imposed. One real exception was the competitive climate that for most firms became more difficult in this period, and not easier, as had been hypothesized by Utterback (Figure 4.18).

The two scientific/professional publishers Elsevier Science and Wolters Kluwer found, in this period, that enough market parameters were becoming visible to enable a modicum of objective analysis. ES leadership noted in 1993 that the authors that provided its publishing materials were starting to accept Internet (the IP standard) as standard for the submission of articles. ES thus launched the planning process of its "grand design" of 1994, whereas WK's "young Turk" planning sessions started in 98. But uncertainties persisted, as ES leadership stated when they had their major losses, and worries, in 1996.

In the case of Wegener and De Telegraaf, however, by 1998 the basics of the new industry had emerged to the extent that concrete strategic thinking could take place, an indication of transition. The McKinsey studies obviously could not yet have the deterministic quality that could have been obtained if the studies had been done a few years later (prediction techniques in particular were found lacking), but they clearly were able to identify the main lines of the new market structure and its dynamics. This was enough for both the leadership (which was under time pressure from the investment community) and some of its markets to start the strong directive thrusts of 1999.

By late 1993/early 1994, the general trends in the newspaper business were becoming more visible. For De Telegraaf this meant a fundamental structural reorientation towards a multimedia company in which the newspaper was but one of the activities. For Wegener, this meant the recruitment of Maurice de Hondt in late 1994, and the subsequent development of a Grand Design for extended portal services, including CityOnline, in 1995. But the uncertainties of the markets remained such that the leadership of both companies felt it necessary to publicly acknowledge the more elevated risk levels of markets and strategies.

The last phase to be verified is the *specific phase*. Here, again, the characteristics that we derived from Utterback (1995) were generally confirmed. Product and service changes were (becoming) rare, most companies tended to company-wide standards for products, information and communications (although this was not always fully adhered to), and business processes were rapidly becoming more rigid. And yes, competition in most cases was trending towards an oligopoly, which did not always translate into a lower competitive intensity.

For Elsevier Science and Wolters Kluwer, this transition phase was relatively short for both companies, as they both perceived a clear new set of market models by 1998. This was the year in which ES leadership was confident enough about the stability of the environment and (thus) its understanding of its dynamics, that it could delegate future strategy development to its business units. In the same year, WK fundamentally changed its structure from a geographically focused one to five global business units.

In case of VNU, 2000 was the year in which the new rules of the game were clear to the leadership, which thus felt it had entered a specific market phase. This paved the road for the delegation and decentralization actions of that year, and the emergence of a conditional management style.

The same "solidification" occurred two years earlier for Wegener and De Telegraaf, where it was noted by late 1998 that market rules had started to solidify, which meant that focused plans and structures could be developed. Both companies engaged consulting firms to help in the process – Wegener used Booz.Allen & Hamilton, and De Telegraaf used McKinsey. The outcome of both studies was that the specific nature of the markets now enabled much more focus and delegation of Internet activities. De Telegraaf now moved its dedicated support facilities TEM to the newspaper group, and Wegener moved most of its e-business operations to the regional newspapers. Figure 4.18 provides the overview.

Figure 4.18: Observed Characteristics of the Inflection Point Phases in the Five Case Studies

	Fluid	Transitional	Specific
Product/services changes			
• Frequent	3	4	4
• Local	3	4	4.5
Designs/standards:			
• Local	5	4	2.5
• Flexible	5	1	4.5
Business Processes			
• Flexible	3	4.5	3.5
• Bottom-up	2	4	3
Competition			
• Growing	4.5	2	3

Legend *Observed in one of the companies:* *1 point*
Partially observed: *0.5 point*

Source: Utterback 1995, company publications and interviews

It is interesting to note that the *timing* of these phases tended to vary considerably between the different companies, even if they had similar activities. The fluid phase lasted a long time in all cases, between two and seven years. One should note that this timing was different even for similar companies. For example, the fluid phase was seven years, and ended in 1993 for Elsevier Science, and lasted much longer, and ended later in 1997, for Wolters Kluwer. This can be explained by the differences in development of the different segments in which the companies operate. Elsevier Science is active in scientific publications, where Internet was an early development that was strongly stimulated by key scientific players like CERN in physics. Wolters Kluwer is strong in legal and professional publications, where the user adoption speed for new technologies was much slower. The timing of the transitional phase was much more homogeneous across the case studies. In all cases, this phase lasted between one and two years. With exception of ES, it took place in 1998-1999. As explained, developments at ES were earlier by a few years. Figure 4.19 shows the timing of the phases of the inflection point as perceived by each of the case respondents.

Figure 4.19: Timing of Phases through the Inflection Point

	Elsevier Science	Wolters Kluwer	VNU	Wegener	Telegraaf
Phases					
Fluid	'92-'93	'80-'97	'95-'98	'94-'98	'94-'98
Transitional	'94-'95	'98-'99	'99	('98)	'99
Specific	>'95	>'99	>'99	>'98	>'99

Source: Company publications and interviews

Case Perceptions on the Managerial Anchor Points

Before moving to the review of our actual model, we conduct a rapid verification of the managerial anchor points. Of these five points, *leadership* was observed through the entire transition process in nearly all of the cases, with exception of Wolters Kluwer and De Telegraaf where it was only partially observed. *Management of structure and processes* as well as *accountability* were also generally observed in all cases, except Wolters Kluwer and De Telegraaf. *Strategy development/content* and *environment/context* were fully observed in only two of the cases – VNU and Wegener, with the partial exceptions Wolters Kluwer and De Telegraaf explained.

Of the individual firms, VNU and Wegener fully applied all of the managerial anchor points with one partial exception. Elsevier Science is follows with two anchor points fully and three partially applied. Wolters Kluwer and De Telegraaf showing only part of the anchor points. Figure 4.20 documents the observations.

Figure 4.20: Managerial Anchor Points in the Five Case Studies

	Cases				
	Elsevier Science	**Wolters Kluwer**	**VNU**	**Wegener**	**De Telegraaf**
Anchor Points					
Leadership	°°	°	°°	°°	°
Strategy development/ content	°	°	°°	°°	°/o
Environment/ context	°°	°	°	°	°
Management of Structure & Processes	°	°	°°	°°	°
Performance & Accountability	°	°	°°	°°	°
Legend	°°	Observed through the entire transition process			
	°	Partially observed			
	o	Not observed			

Source: Company reports, interviews

Case Perceptions on the Defining Assumptions and Propositions

Overall, our case analyses appear to strongly support the defining assumptions and propositions that were laid down in section 3.9. As we can see in fig 4.21, the *defining assumptions* were fully confirmed in almost all five case studies, in particular in the Elsevier Science, VNU and Wegener cases. Wolters Kluwer and De Telegraaf, for reasons explained above, only partially confirmed our assumptions.

Of these assumptions, the one concerning the three dimensions of the inflection point (A), the one about phasing (B) as well as the one relating to the support function of a second leadership approach (D) were almost fully supported. The assumption about the three leadership approaches(C) was fully confirmed in two of the case analyses, and partially confirmed in the other three.

The *propositions* show a somewhat more mixed picture, in particular in the initial, fluid phase. Here, only Elsevier Science fully supports our propositions. Wolters Kluwer and VNU partially support them. Wegener and De Telegraaf do not support the propositions. As we have noted above, Wegener's leadership opted for a directive style from the first day onwards, which was explained by looking at the positioning and competence base of its local management. Similarly, and for the same reasons, management of De Telegraaf also started off on a directive track. But in later (transitional and specific) phases, it opted for a rather ecological approach in its Internet ventures, as we have discussed above. This was explained by referring to the highly decentralized management style of De Telegraaf, the dominance of the newspaper company within the group that laid the basis for a more hands-off management style.

Overall, Elsevier Science and VNU thus support our model best. Wolters Kluwer and Wegener largely supported our model, and De Telegraaf provided a mixed picture, reasons for which were explained above. Figure 4.21 illustrates the analysis.

Figure 4.21: Defining Assumptions and Propositions in the Five Case Studies

	Elsevier Science	Wolters Kluwer	VNU	Wegener	De Telegraaf
Defining Assumptions					
A: Inflection point described by amplitude, abruptness & externality	°°	°(°)	°°	°°	°
B: Three phases of an inflection point: fluid, transitional, specific	°°	°°	°°	°°	°
C: Three leadership approaches: directive, conditional, ecological	°°	°	°	°°	°
D: A given leadership approach may be supported by a second approach	°	°°	°°	°	°°
Propositions					
I: In the fluid phase, leadership will use an ecological approach	°°	°	°	o	o
II: In the transitional phase leadership will use a directive approach	°°	°°	°°	°°	°
III: In the specific phase leadership will use a conditional approach	°°	°°	°°	°°	°°

Legend	°°	Fully confirmed
	°	Partially confirmed
	o	Not confirmed

Source: Company reports, interviews

Case Perceptions on the Three Leadership Approaches

When we look at the leadership approaches we can observe that the five publishing companies indeed used all the tools that were identified in chapter 3 as characterizing these approaches, albeit in different degrees of intensity (figure 4.22) and, as we will see later, at different time periods. We can see, for example, that the scientific and professional publishers at Elsevier and Wolters Kluwer were the most intensive users of conditional approaches – conceivably because the education and experience levels of local managers enabled such behavior. Conversely, VNU and Wegener favored directive approaches, not only because their rapid transitional phases stressed urgent and incisive action, but also because their local management may have been less experienced in managing according to the new business rules. Finally, the leadership of the holding company De Telegraaf showed the most ecological behavior: this corporation has a strict holding structure, and was initially less affected by the inflection point.

We will first see to what extent each of the five companies used an *ecological* leadership style. We can observe in case of Elsevier Science and Wolters Kluwer that, in the initial fluid development phases – which we have associated with an ecological leadership style – their leadership left most, or all, of the thinking and testing of the new waters to the local publishing units. Local managers were the active participants to the SGML conferences in 1980 (ES); they were the ones to launch trails with electronic text banks (WK/Sampson, 1998). And their leadership stated that a policy of 'hands-off' decentralization was the best approach to the uncertainties of the new environment. The characteristics of the leadership approach seen here were as follows:

1) no interference with entrepreneurial activities in the area of Internet, and thus a 'bottom-up' management style,
2) budgetary freedom as long as the profitability of the unit was not seriously threatened,
3) reliance on the competencies of local management to manage the exploratory ventures,
4) ex post accountability and sanctions (stop the project, or hire/fire the manager) in case of unacceptable waste of resource and
5) and acceptance of limited speed of adjustment of the overall portfolio, limited alignment options, limited knowledge creation.

This provides us with a leadership style that fits closely with the ecological approach identified and explored in its theoretical concepts in chapter 3, and characterized in figure 3.25. This style was considered by the leadership of ES and WK to be most appropriate because the leadership itself at that point had no superior idea what the new environment would look like, and what the best strategic posture would be. Relatively the best informed people were those closest to the market interfaces, i.e., the publishers and salesmen – and even their views were uncertain, their decisions risky. A highly delegatory style was thus the best option.

In case of VNU, we observe that its leadership maintained a very high level of delegation in the beginning years up to 1995, leaving the individual units freedom to run their text management, publishing, marketing and sales to Internet markets in the way they deemed most appropriate. One exception was the IT function that was centralized and remained so through the entire inflection period. The ensuing leadership style had the following characteristics:

1) a strategic independence of the business units in Internet development, as long as they
2) stayed within the resource allocation limits agreed with the leadership and
3) intermittent but tough reviews.

In comparison with our three approaches, this approach lies closest to an ecological approach, although one senses a level of conditional leadership both in the imposition of central IT services and in the overall financial limits. Given the lack of understanding of the fluid market, in which the operational people in direct market contact had the best (albeit modest) understanding of new developments, this was the highest level of control that the leadership could strive for, and thus the best approach the leadership could choose. We do find, as stated above, that conditional tools support the main thrust ecological approach.

It is interesting to note that in case of Wegener, the leadership in its ten-year history through Internet did not display ecological behavior. As stated, this was due to both the active interest taken by the management in the new technology at an early stage, and the (perceived) lack of interest and competency at the field level to address the new medium,

De Telegraaf, however, opted for an ecological leadership approach both in the fluid and specific phases of development, this mostly due to its corporate structure with strong business units that served individual markets. Corporate leadership could therefore fully delegate entrepreneurship in the new markets to these units. The technology development team TEM, for example, was restructured under the largest operating unit. This approach was consistent with a leadership vision of an overall somewhat arm's-length holding company that the news group adopted at the same time.

The next approach to be considered is the *directive* leadership style. Starting with Elsevier Science and Wolters Kluwer, we can see that, as they entered the transitional development phase, we can see a marked change in attitude, with the leadership taking a much more forceful and proactive posture. At ES, the leadership started the phase in 1994 by developing a grand design, and ended it with the Lexis-Nexis acquisition and the imposition of the CAPCAS central data entry process. The establishment of the Science Direct centralized text database in 1995 was a further strong leadership imposition. At WK, the merger with Reed Elsevier would, if it had gone through in 1998, been a similar strong leadership action. The consulting study launched by Rost van Tonningen, and the "Young Turk" studies in the same year, can be seen as actions of a leadership that senses it can no longer leave Internet strategy totally in the hands of local management. The same applied to investments, as the leadership of WK took the initiative of outsourcing all Internet facilitates and their operations to Atos-Origin in 1998, as well as structure, as the leadership reorganized WK into five global business units. These management styles at ES and WK had the following characteristics:

1) direct imposition – top-down – by the leadership of resources, competencies, structure or processes,
2) major corporate portfolio moves involving important resources or many functions (complexity),
3) rapid execution of the task undertaken,

4) accountability for action and follow-up remained with the leadership,
5) advisory or supportive roles for local management.

This style fits closely with the directive management approach identified and described in chapter 3, and summarized in figure 3.25. Undoubtedly, a directive style is an attractive option for the leadership, since it offers the advantages of speed and effectiveness associated with major moves like acquisition (Lexis-Nexis) and centralization (Science Direct), albeit at the price of limited local knowledge creation. We observe in these cases that the leadership that combines a period (or series) of directive moves with conditional action experiences fewer errors in implementation and fewer motivational problems (e.g. ES introduction of Science Direct).

In case of VNU, the consulting study of late 1998, which resulted both from market pressures and from mounting investor pressure, gave a better insight in the transitional markets, and a perceived need for rapid, decisive structural action. Among other actions, VNU leadership created the powerful central co-coordinating committee, and its operating unit, VIPS, with a budget of Eur. 60mln. Its management style was characterized by

1) top-down planning, decision making and implementation of Internet projects by VIPS or under weekly leadership supervision,
2) central reporting of key projects either directly or via VIPS,
3) committing of sizeable resources to the new projects and
4) recruitment or transfers of key people into VIPS.

This style of work is entirely congruent with the directive approach, which indeed was the best way to achieve rapid results in view of outside pressures. The entire process was comprehensively managed, so there was only a minimum of delegation, which with hindsight proved to be a disadvantage, since a number of the VIPS ventures lost touch with (and support of) the core businesses.

Wegener and De Telegraaf stand out as companies in which the leadership took an early active role in developing and launching e-publishing strategies even in the fluid phase. This was not due to any superior understanding of the structure and dynamics of the new markets, but rather due to the lack of interest in the new media at the operating levels. It was – and to some extent still is – very difficult for a printed newspaper publisher to envision a multimedia offering (or series of offerings) within a practical time horizon. Thus, it was either leadership action or no action. De Telegraaf bit the bullet by establishing its commercial development department at the corporate level in 1991; Wegener followed in 1994-'95 with the establishment of WISE and VIP and the subsequent recruitment of De Hondt in the leadership, who initiated and directed a series of ambitious e-publishing projects. It is interesting to note that, in its general directive thrust, De Telegraaf in 1993 added a conditional element by separating the holding from the newspaper, and leaving quite a number of Internet projects within the newspaper and magazines. This turned out to be the cause of turf frictions and was thus ineffective. Wegener's directive approach was not a big success either, because many of De Hondt's big initiatives, like CityOnline, were too far ahead of the market (and certainly the traditional operations) and had to be spun off or stopped.

In conclusion, the better option (at least for Wegener) might at this stage have been to opt for an ecological leadership approach and accept the slow initiation of new initiatives. In that way, hindsight tells us, the results would at least have been aligned with the resources and competencies of the traditional operations, and there would have been better overall control between the leading units producing multiple projects, and the leadership keeping its hand on the till. In summary, we can in both cases identify

1) a dominant role for the corporate leadership in Internet strategy deployment, with a more passive position taken by local management,
2) a number of sizeable acquisitions and/or investments,
3) relatively formal and one-way relationships with the field units.

This confirms the directive profile.

Both companies continued working under directive leadership styles until 1999, when improved insights in the transitional markets and the organizational support of consultants helped the leadership of both companies to set new courses. At this point, the leadership of the two companies made different choices.

Finally, we need to review the extent and nature of *conditional* leadership approaches at the five companies. In case of Elsevier Science and Wolters Kluwer, the leadership found that, after having imposed broad structures for the new business, it was in a situation in which market developments were more evolutionary and thus easier to understand and communicate between levels of the company. At the same time, it was impossible to manage the detailed field implementation, as ES found when it made a few attempts to impose Science Direct in its entirety in 1996: attempts like these resulted in errors and de-motivation. At the same time, capable local managers were available to take over many of the roles. Both companies therefore reverted to a much more of a delegation style (ES in 1998 and WK in 1999), with the following characteristics:

1) leadership imposes and controls strategic targets,
2) leadership imposes key operational procedures and the use of central facilities (e.g., text storage),
3) local management responsible for detailing and executing the unit strategy.

This style is very close to the conditional management approach described in chapter 3. This management style was feasible for both ES and WK, given the training/experience levels as well as the interests of the majority of the local cadre, although quite a number of management transfers within and outside both companies were necessary. The approach has the advantages over a directive approach of leverage of local competencies, and the advantage over ecological approaches of more close control by the leadership, which in this case is feasible, given the level of shared understanding of (specific) market conditions at all management levels. Obviously, where (major) shifts of portfolio or structure are necessary (e.g. when ES bought Biomednet and ScienceNet in 1996), the directive approach remains appropriate.

We should note that, since the timing of the inflection point phases was different for the two companies, the same applied to the leadership approaches. This indeed was apparent in the early shift to a directive style at Elsevier Science (in 1994-'95), compared to 1998 for Wolters Kluwer. The same was observed in the move to conditional leadership that was observed in 1996 at Elsevier Science, and 2000 at Wolters Kluwer. These differences can be explained from the traits of the specific market segments in which each of these two companies operates.

At VNU it took until 2000 until it became clear that the directive approach of the preceding two years was outlasting its value. The costs were very high and increasing, the success rate of the projects and the support from operations were low. Where co-operation with the businesses was called for, the directive projects necessitated matrix management structures, which slowed down progress. Management decided to go for a strongly decentralized approach in which

1) business units would develop and run their own Internet operations,
2) the leadership would agree upon a priori targets with the units and control the results and
3) coordination of strategy would take place via regular two-way conferences.

This in essence is a conditional approach, and was the best of the three choices, given the level of shared understanding of the specific market conditions through the different levels of the company, as well as competencies that existed at local management levels to effectively run the local projects.

Wegener went for a conditional approach in 1999, witness

1) emphasis on management/coaching processes and training,
2) continuing ICT investments, and
3) u-turn and continuous target setting and monitoring.

In their case, the choice appears appropriate because, whereas the ambitions of the leadership towards the new media had become more realistic, local management had gone up the awareness and capabilities curve. The most attractive option was then to delegate the actual development and execution of Internet plans to local management, under strong guidance and control from corporate.

In case of De Telegraaf, the conditional approach can only be considered alongside the more dominant ecological and directive styles used by that company. Undoubtedly, many conditional tools were used, including use of key processes, but nonetheless this was not a dominant approach of leadership in this period.

Figure 4.22: Use of Leadership Approaches and Tools

Key Tool Used	Elsevier Science	Wolters Kluwer	VNU	Wegener	De Telegraaf
Directive Approach					
Adjust Business	**	*	***	***	*
Portfolio	**	**	***	***	*
Adjust Competency	*	*	***	***	**
Portfolio					
Redraw Boundaries					
Conditional Approach					
Structure	**	***	*	**	*
Processes	***	**	**	*	*
Learning	**	**	*	**	**
Ecological Approach					
Accountability	*	*	**	**	**
Overall	***	**	***	***	**

Source: Company reports, interviews

Results in the Field

After determining what the leadership styles of the different companies have been through the inflection point, a logical question is what the impact of these different styles has been on the success of the respective companies. A conclusive answer to this question is near-impossible to give, due to the many definitions that exist of the concept "corporate success" as well as the number and variety of factors that contribute to the results. Nonetheless, an attempt is made to at least consider a number of indicators that were available from public sources. For this, we took:

- the cumulated aggregate growth of the revenues of each of the companies between 1993 and 2000
- the autonomous growth of revenues, calculated in the same way, after elimination of the revenues attributed to acquisitions
- the operating margin n 2000 of the case companies
- the return on invested capital
- the turnover per capita and its growth between 1993 and 2000
- the average price/earnings ratio of the case companies in 1994 and 2000

We also were able to create two pairs of companies: Elsevier Science and Wolters Kluwer who both operate in related scientific/professional markets, and Wegener and De Telegraaf who both are heavily involved in newspapers. We thus are able to compare both the leadership approaches of these companies and their performance, and find a first indication but not proof of causality. We had no comparative base available for VNU and its business information position.

Elsevier Science (ES) and Wolters Kluwer provide a first challenge in comparison. From the case review and the subsequent comments made by Elsevier management, it is clear that the company gained market share, and attributed its performance in large part to the operations base provided by Science Direct and the associated new automated processes. On the other hand, Wolters Kluwer faced a policy adjustment in late 2000, and admitted to being somewhat behind in introducing Internet-based publishing, while stating the advantages of being a follower in new technologies (this probably with good reason). The consequences of these actions are to some extent reflected in the financial results (which were for both companies impacted by acquisitions), but also show ES having overall better performance in autonomous revenue growth, margin, return on investment and turnover per capita. Good divisional performance by ES helped lift the price-earnings ratio of Reed Elsevier above that of Wolters Kluwer.

Determining how much of the economic performance of VNU is due to the leadership approaches applied is much more difficult due to lack of suitable comparative material within the scope of this study. In the 1993-2000 period VNU had, by any standard, excellent overall and autonomous growth and ended the period with an extraordinary P/E of 54. Other indicators – like the operating margin, return on invested capital and per capita productivity – seemed more "normal", albeit that there was no standard to measure this normality.

At the newspaper side of the publishing business, De Telegraaf shows up more successfully relative to Wegener in the comparison of the relevant financial statistics that could be gleaned out of the available sources (figure 4.22). From these, we can deduct that De Telegraaf ended with a better higher revenue growth, higher margins and higher productivity (expressed in turnover per capita) than Wegener. As result, De Telegraaf was able to catch up with Wegener in PE terms: it started with a much lower PE of 6 in 1993, but by 2000 had come up to a PE of 14 – the same as Wegener. With hindsight, this better performance can be explained by the conservatism of De Telegraaf, and conceivably its more extensive delegation of strategy matters to its business units. As result, the development and sharing of competencies and knowledge may have suffered, and the investments may have been less efficient. But the developments remained close to the market place, and there turned out to be less need at the end to undo strategic investments. But the relatively slower development of Internet markets turned out to be an advantage for the conservative leaders of De Telegraaf. Key financial data are shown in figure 4.23.

Figure 4.23: Key Financials of the Five Publishing Companies (2000)

	Elsevier Science	Wolters Kluwer	VNU	Wegener	De Telegraaf
Overall use of leadership approaches (fig 4.22)	***	**	**	***	**
Revenue growth (1993-2000)	5.2	17.5	18.2	15.6	7.9
Autonomous growth cagr %	5.2	5.0 (est.)	8.8	5.1 (est.)	7.9
Operating margin % (2000)	36.3	21.5	21.5	12.8	17.4
Return on invested capital % (2000)	89.8	16.9	10.5	13	26.2
Turnover per capita:					
• Euro (000)	262	191	157	128	134
• Growth %, 1993-2000	2.1	3.8	3.3	6	3.7
P/E 2000	27	26	54	14	14
P/E 1994	21	20	15	15	6

Legend 15.9 – best of subcategory

Source: annual reports

In case of Wegener and De Telegraaf, we were able to trace the impact of Internet leadership through an analysis of the website introductions done by the two companies in the period 1994-2000. The data of this review came from documentation published by both companies, and from a scan of the sites that both corporations currently operate. The latter is a review of the financial reports of both over this period, which delivered a number of interesting indications of the effectiveness of their external and internal Internet strategies.

The review of website development at both newspaper companies (figure 4.24) shows a number of interesting parallels. In this diagram, Wegener's development through time (the vertical axis) is shown on the left, and that of De Telegraaf on the right. For each company, we show the number of websites maintained by corporate leadership – an indication of directive behavior –, the number of websites maintained by local management – and indicator of conditional or ecological behavior –, and the cumulative total number of websites. Both companies ended up with about 35 websites, most of which are directly tied to the individual newspapers and magazines. They both retain a set of central websites that mainly serve direct commercial purposes, like the sale of real estate and cars, and recruiting. There also are interesting differences. Wegener was quick off the mark in 1994, with its first site in 1994 and seven sites in 1996. Of these, three were related to the CityOnline project. However, Wegener took risks in its early launches: it started no less than 63 sites, but had to close 27 of these. These closures, by the way, fall into two categories: the early starts like CityOnline (which turned out to be beyond both the immediate needs of the market and the capabilities of then-existent technologies), and ambitious launches of the local newspapers in 1998 (which included a series of local recruiting sites for which there was insufficient demand; they were all closed two years later). One should note that the initiative of nearly all of the Wegener launches was either taken directly by corporate or, in case of the 38 local sites started in 1998, prompted by a corporate directive. This confirms our statement regarding the strong directive leadership approach by

Wegener in the period up to 2000. De Telegraaf had a much more conservative and gradual build-up. One corporate site was started in 1996, with a buildup to eight sites in the ensuing two years. The major expansion took place in 1999, when corporate TEM started 18 sites, and the newspapers and magazines 11 sites. Corporate interference with the newspaper activities in e-business was limited in this case, which may have played a role in the higher success rate of the local sites, of which none had to be closed. We can thus see that the conservatism and the higher ecological tolerance of local initiatives by De Telegraaf leadership paid off in a better fit of the local initiatives with market needs (figure 4.24).

Figure 4.24: Website development by Wegener and De Telegraaf, 1994-2000

Wegener					Year	De Telegraaf				
Total		**Local**		**Corp**		**Corp**		**Local**		**Total**
+2		+1		+1						
2	=	1	+	1	1994					
+1		+1								
3	=	1	+	2	1995					
-1+5		-1+5						+1		
7	=	1	+	6	1996			1	=	1
-1+1		-1		+1		+3		+4		
7	=	0	+	7	1997	3	+	5	=	8
-5+39		+38		-5+1		-1		+2		
41	=	38	+	3	1998	2	+	7	=	9
-1+2		-1+1		+1		-1+18		+11		
42	=	38	+	4	1999	19	+	18	=	37
-19+13		-19+9		+4		-7+2				
36	=	28	+	8	2000	14	+	18	=	32

Summary statistics:

Website introductions:	63	Website introductions:	41
Website deletions:	27	Website deletions:	9

Legend:

1-3 active websites

7-9 active websites

More than 30 active websites

Sources: Field research, annual reports

Concluding Remarks: Answers to the Ten Questions

Reviewing each of the ten questions that were set against the five propositions made in chapter 7, we arrive at the following statements:

Answer 1: We have observed that firms experience the same characteristics of an inflection point.

Our case studies reveal that the advent of Internet was generally perceived as an existential event characterized by the speed and lack of clarity of structural change in the relevant markets (ES, 1992) which made it impossible to plan ahead in the normal way (VNU, 1998) The event touched on all, or nearly all, of the functions of the companies involved (ES 1995), and usually required a fundamental organizational reorientation of the firms involved (ES, 1995, WK, 1998, De Telegraaf, 1993). The leadership of the companies involved often felt that they could survive the inflection point only by making a major resource- or capability-enhancing alliance (ES, 1994; WK, 1998) or by major development investments (ES, 1996; WK, 1999; VNU, 1998; De Telegraaf, 1999). A sense of urgency was provided to the necessity to develop an appropriate strategic reaction by client and supplier demands (ES, 1993) as well as investor inquiries (VNU, 1997; WK,1998).

Answer 2. These experiences are congruent with the three dimensions that we have identified in an inflection point

Out of the long list of characteristics of the e-publishing inflection point, two of our defining dimensions emerge quite clearly, and the third in a less prominent way. *Amplitude* shows clearly, both in the existential nature of the inflection point and in the size of change of both the portfolio and the organization that it entails. A number of respondents (ES, 1995; WK, 1998) also mentioned the abundance of functions and interrelations that had to be fundamentally changed.

The *abrupt* nature of e-publishing is also evident. The leadership of ES in the 1980's and Wegener in 1984 certainly were aware of a pending major change up to five years before it really started to affect their companies. The complication was that the markets were in a state of extreme fluidity (opaque and dynamic), which meant that there were no signals to steer on. Only after markets entered the transitional phase was there enough understanding to start action beyond the experimental levels. Transition phases proved to be surprising short, however, from one year (VNU), to two years (ES and WK). The following specific phase is characterized by emergent competition, and the period of initiating appropriate strategic action can indeed be called abrupt. Overall, one can state that the entire move from solid awareness of a fluid environment to the stable and specific end-state took between three years (VNU) to up to nine years (ES). Figure 4.25 illustrates the point.

Figure 4.25: Perceptions of Timing of the Inflection Point, Years

Company	**First public acknowledgement to industry stability** (three phases)	**Start of major restructuring to industry stability** (transitional phase)
Elsevier Science	9 years	2 years
Wolters Kluwer	5	2
VNU	3	1
Wegener	6	2
De Telegraaf	5	2

Source: case analyses

Externality undoubtedly was an important challenge for the five publishers. Internet originally had come out of the US defense establishment via the scientific world, with CERN playing an important role. Of the five, Elsevier had the most intensive contacts with this community, which did not alleviate the insecurity of its leadership to the point that they commissioned a number of consulting studies in the mid-1990s to try to sharpen their expectations. For the other firms, the sense of foreignness of Internet was even stronger. Like ES, they all decided to ask consulting firms or individuals to support them in understanding the new phenomena, and had to import the necessary technologies. Their inexperience with the new tools shows in their hands-off, ecological, leadership styles over the initial years, which contrasted with the more assertive approaches that they adopted as soon as they (thought they) understood the new media.

Answer 3. The firms passing through the inflection points clearly perceive different phases in environmental development, shifting from a period of rapid change and high uncertainty to an end-state of stability.

All the companies researched felt that they were initially operating in markets that were unclear in terms of structure and rules as well as highly dynamic (ES, 1992; WK, 1998; VNU, 1995; Wegener, 1995). A complication is that the leadership of each company seems to differ in how they perceived the timing of this fluid phase. We have analyzed this timing shift in the light of comments made by ES and WK about the start and end of the fluid phase, and concluded that differentials in the observation of timing can be explained partially by the subjective perceptions of the leadership, and partially by the differences of the sub-markets in which each of the companies operates.

After this extended period of total and dynamic uncertainty, most companies experienced a short period in which the main lines of the new business became more apparent, the composition of customer, supplier and competitor groups became more tangible, and both the opportunity and necessity for strategic action seemed to impose itself. ES noted as a crucial event the acceptance of Internet standards in 1993. WK also notes the move to just a few new platforms (in 1998, however).

This short period of "solidification" opened the way to a phase of evolutionary market development in which opportunities and challenges were broadly known in quite specific terms, and thus the more traditional rules of competition and management became applicable. The companies surveyed all perceived this to happen in late 1999 or 2000, which permitted their respective leadership to start delegating many of the specific tasks they had taken upon their shoulders.

Answer 4. These dynamics are congruent with the fluid, transitional and specific development phases.

The passage from a highly uncertain period to a phase in which dominant designs or standards as well as structures emerge, to new a more stable environment pictured above, is in its main lines consistent with the phasing of Utterback in fluid, transitional and specific. Utterback provides rather detailed descriptors of his three phases, which are, however, rather oriented towards innovation in "traditional" products and services. In a number of instances, thus, our case findings differ from Utterback's propositions: these deviations can be explained by looking at the technologies involved as well as the peculiarities of the publishing industry:

In the *fluid phase*, we can observe congruency between the innovation theory of Utterback and our field observations in the areas of innovation sourcing by pioneering users, the key success factors (being functional performance) and the reliance on entrepreneurship by local management to maintain local control. The main differences – in new designs, process efficiency and cost of change – are all caused by the characteristics of information- and communication technology-based innovation, as opposed to innovation in more traditional products and services. In case of ICT innovation, the design and implementation of a new system is a major effort with a high fixed project cost. Once launched, the ICT systems are efficient to operate, with a near-zero marginal cost for expansion within the capacity bounds of the system. Most traditional ("tangible") products and services that still dominate Utterback's thinking can in most instances be developed in small series in a start-up phase and can thus be tested in a very flexible way (albeit with high variable and marginal cost).

In the *transition phase*, there is much more congruency because the traditional innovation explained by Utterback also becomes more rigid (e.g. in its design and supply processes). In both cases, ramp-up to full deployment usually involves major design adjustments and investment in equipment and software. The key differences between traditional innovation and the inflection point observed in the case analyses lie in the cost of change, which is low for traditional innovation and high for ICT adaptations, and in the key success factors, which center around the ability to produce many product variations in case of traditional product innovation, and share of content in case of our publishing firms: for them, control of the important information sources, which determines their value to the users, is crucial. Finally, Utterback finds projects and task groups to be the preferred way to exert management control in traditional innovation, whereas we see transition in ICT/publishing effectuated through major deterministic actions.

Finally, in the *specific phase*, we again find congruency between innovation as analyzed by Utterback and the inflection point development experienced by the publishing companies (e.g., in process development (rigid), cost of change (high) competition (moderate) and organizational control (structured)). The main differences can again be attributed to the nature of ICT and publishing. For example, since the information generation linkage with information suppliers is very close in publishing, information suppliers have already played their influencing role in the first two phases of the development of e-publishing. In the third phase, the users tend to start exerting their role. ICT technology then also enables the creation of a more differentiated product tailor-made to individual user groups. For these users, comprehensive access to the information they need remains the dominant success factor: either the author delivers the specific information needed, or he/she is out of the race. Also, publishers often have an opportunity to monopolize important information sources – for example, through exclusive contracts with well-known authors, or by establishing a major database that is costly to duplicate. In a more traditional business, gradually increasing competition tends to make the cost of the delivered product much more important in this phase. Figure 4.26 compares the characteristics of each phase as observed by our five publishing companies with those provided by Utterback.

Figure 4.26: Phases of Innovation versus Phases of Inflection Points

Phases	Shared characteristics	Dissimilar Characteristics	
		Innovation	Inflection Point
Fluid Phase			
Innovation	Pioneering users		
New Designs	Frequent		
Supply Processes	Inefficient		
Cost of Change	Low		
Competition	Many/fragmented:	Local	Global
Key Success Factors	Functional performance		
Organizational Control	Informal		
Transitional Phase			
Innovation	Major process/ramp-up		
New Designs	Dominant design emerges		
Supply processes	Becoming rigid		
Cost of Change	⟶	Moderate	High
Competition	Many/declining number		
Key Success Factors	⟶	Product variation	Share of content
Organizational Control	⟶	Many task groups	Strong top-down
Specific Phase			
Innovation	⟶	Suppliers	Users
New Designs	Incremental improvements:	Standard	Differentiated
Supply processes	Rigid		
Cost of Change	High		
Competition	Few		
Key Success Factors	⟶	Price	Share of offerings
Organizational Control	Structure, rules		

Source: Utterback, J.M., 1994, Case analyses

Answer 5. We can identify a range of leadership approaches in companies that pass through the inflection point

In the course of our case reviews we have seen a wide variety of management approaches and styles, ranging from totally hands-off to totally hands-on.

In particular, many companies in the fluid beginning periods stressed a hands-off attitude, which meant that most of the work necessary to stay abreast with fluid developments (ES, 1980), and to launch the first trial and error projects (WK, 1998) were left to local management. Key characteristics of this style of leadership were as follows:

1) All initiatives in the post-inflection point environment were left to local managers (ES, 1988),

2) No ex-ante targets or expectations existed regarding what the local management should achieve in testing the new markets: local management thus had total freedom as to the scope, size and nature of their Internet ventures (deTel'96),
3) Ex-post accountability usually existed in the financial sense only: in most cases local units were expected to stay within their financial constraints (i.e. not produce inordinate losses) (WK'98).

When immediate action was possible or appropriate, the leadership of all companies proved to be quite capable of hands-on management. Basically, this capacity demonstrated itself in eight different ways:

1) The launch of comprehensive strategy development exercises (WK, 1998; VNU, 1998),
2) The extensive use of acquisitions to acquire capabilities (Weg, 1996) and to build market presence (ES, 1994, 1996; WK, 1998; deTel, 1993),
3) The development and operation of major infrastructures under direct corporate control (ES, 1995; VNU, 1998; De Tel, 1995) or the signing of outsourcing contracts for key infrastructure functions (WK, 1998),
4) The launch of new Internet operations under direct leadership control (Weg, 1995; VNU, 1998),
5) The imposition of core operating procedures (ES, 1994),
6) Frequent (monthly at most) supervisory meetings between leadership and local management to plan and control progress (VNU, 1997),
7) The imposition of organization structures (ES, 1995; WK, 1998), and
8) The nomination of local managers (WK, 1998).

When the markets were perceived to be relatively stable and predictable, we could observe all of the companies reverting to a delegatory style of management in which all of the market- and sales operations were placed under local units (WK, 1999; VNU, 2000; deTel, 2000; Weg, 1999), and the leadership resorted to management by setting targets and conducting regular (monthly at most) meetings with local units to monitor progress.

Answer 6. The management styles that we have observed can be classified into the directive, conditional or ecological leadership approaches.

The leadership approaches that we have observed show a high level of congruency with the three approaches that were developed and detailed from a theoretical perspective in chapter 3.

We see now that the 'hands-off' attitude used by all of the companies researched in the fluid phase coincides very well with the ecological management approach. As we have seen before, this approach is founded on the premise that the leadership is unable to fundamentally change the strategic course of the firm of which it has been put in charge. The only option it has is to withdraw its commitment. In the fluid phase, the leadership of our set of companies did not feel they had enough information to make strategic decisions. They thus all opted for an ecological approach and left all initiative to local managers. They did, however, continue to keep track of the overall performance of local operations (which were in the beginning predominantly traditional in nature), and in most cases to intercede when new experiments were perceived to be too costly.

In the transitional phase of the industry, we see 'hands-on' behavior that meets the characteristics of the directive leadership approach. As we have seen before, this approach comes forth from the various leadership schools, and seeks direct leadership actions like portfolio changes, boundary selection and appointments as key strategic actions to achieve the desired adjustment of the firm to the new environment. Our list of eight types of actions mentioned above closely fits this leadership approach.

Finally, we mentioned that all of the leaderships adopted a highly delegational style of leadership once their companies were steering towards more tranquil waters of the specific phase. This fits with conditional leadership approach, which stresses the capabilities of local management as the basis of a more decentralized, but also u-turn, process of leadership.

Answer 7. We observed the use of a second approach as support.

As noted, we have regularly seen conditional leadership backed up by incidental directive action. This can be explained by the fact that even in a specific environment and a well-delegated company, a key acquisition or change has to be made now and then, and should be done centrally. We also observed directive leadership that adopted a more laissez faire conditional approach in managing less important functions. This can be explained by the manpower constraint that the leadership invariably experiences in a directive mode. It is physically impossible for an individual or a small group of people to conceive of major actions, implement them and provide follow-up.

There are no instances found of a second approach used in support of an ecological leadership approach. This can be explained by the philosophy that drives this approach (i.e., the inability of leadership to formulate strategy given the environmental uncertainties), which results in a passive corporate posture.

Answer 8. The directive and conditional approaches are compatible

From the above, it appears that directive and conditional approaches are mutually compatible, but that neither of them is compatible with an ecological approach. A directive leadership may enact dramatic shifts in the portfolio of activities and capabilities of a firm, and at the same time impose new structures and processes, and initiate learning experiences in the ongoing operations. Simultaneously redirecting the firm along these two lines presents a considerable challenge to the leadership, which may explain why in our field studies we usually observed the sequence directive first, conditional later.

Answer 9. The leadership changes its approach as the firm passes through an inflection point.

Our observations indicated that as the industry passed through the fluid and transitional phases to the specific phase, the leadership of most firms researched justified their propensity to move from an ecological leadership style to a directive style and, finally, to a conditional style. The main exceptions to this rule were the two newspaper publishing companies, which had insufficient grassroots capabilities to venture in the new environment to permit an ecological approach in the fluid phase.

Answer 10. The preference for an approach in a phase be explained and justified.

The preference of the leadership of each of the companies for a given approach was the logical consequence of 1) their level of understanding of the environment; 2) the urgency of action and 3) the capabilities of local management to further develop and implement strategy. Our finding is that the companies often made this choice intuitively, but always were consistent, and thus all came to similar approaches that followed the rules given above.

5 Conclusions and Closing Remarks

5.1: Introduction

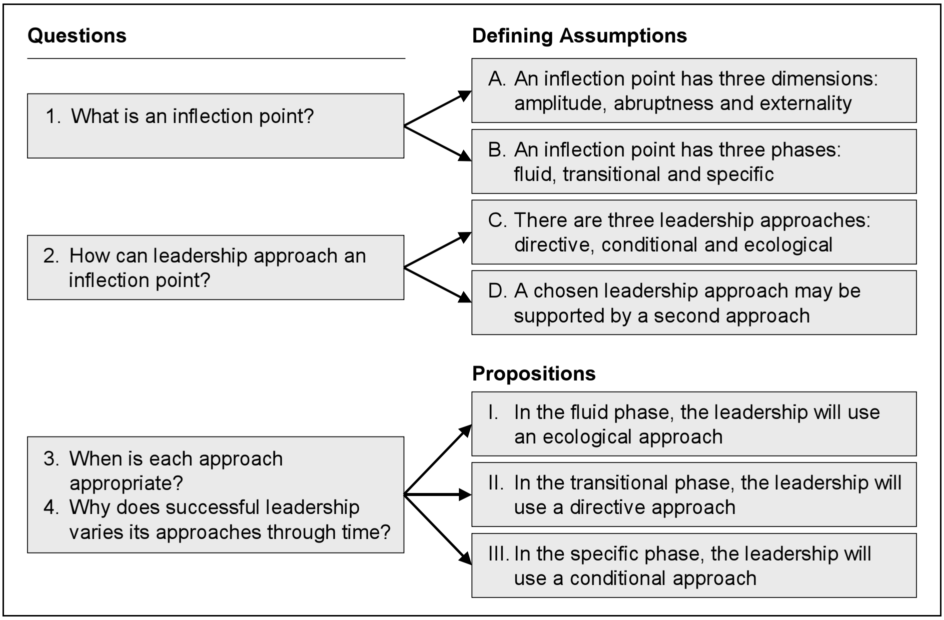
The preceding chapters characterized the inflection point and identified three approaches that can be used to lead the firm through this period of upheaval. The inflection point was dissected into three phases, and we showed how each leadership approach is particularly appropriate for one of the three phases. Our analysis of five publishing companies as they encountered the Internet revolution has provided us with substantiation of our findings.

This chapter will first bring to the fore the questions of chapter 1 – regarding the "what", "how", "when" and "why" of the inflection point –, link them to the defining assumptions and propositions of chapter 3, and then comment on their validity. Subsequently we will point to those elements in our findings that we regard as scientific contributions to in the form of concepts, methodology and applications. This leads us into a discussion of a number of research topics that will further build on the work done here: we will look at the application of our work outside the publishing field, at chances to predict an inflection point, at organizational resistance, at interactions with the external world, and finally at the concept of reactive strategies. Finally, we will debate the management implications of our work by formulating three recommendations, and end our study with our concluding comments in the epilogue.

5.2: The Four Questions and their Underlying Propositions

In the first pages of this study – section 1.2 – we posed the four questions that have underpinned our work: 1) what, from a strategic perspective, is the most effective description of an inflection point? 2) how can leadership approach an inflection point, 3) when is each of the identified leadership approaches relevant and 4) why does the leadership of those firms that successfully pass through an inflection point appear to vary its style. The answers to these questions were hypothesized at the end of chapter 3, in section 3.9, in our defining assumptions and propositions. As we can see in figure 5.1, the questions can be directly linked to these defining assumptions and propositions.

Figure 5.1: Four Questions, Defining Assumptions and Propositions



1) ***What is, from a strategic perspective, the most effective description of an inflection point?***

A: An inflection point can be described in three dimensions: amplitude, abruptness and externality.

The three dimensions of the inflection point were theoretically grounded in chapter two. In the fieldwork, we found that the case study companies fully experienced *amplitude* and *externality*. *Abruptness*, however, was defined less in terms of surprise, and more in terms of a lack of understanding what measures to take, and the short time span available to management to take appropriate strategic initiative. In the transition phase there was enough understanding of the new environment to formulate strategy, and competitive positions had not yet been pre-empted. This assumption is thus supported by our analysis.

We found that the necessary understanding of leadership behavior in the inflection point is improved if we take a longitudinal view of the latter. In doing so, we can state the following:

B: Industries passing through inflection points go through three phases: fluid, transitional and specific.

This assumption was first formulated and substantiated by Utterback (1995) in the broader context of industrial innovation. Our case analyses revealed that the companies reviewed indeed perceive the industry in which they operate to pass through three phases – dynamic uncertainty (fluid), structural formation (transition) and increasing stabilization (specific). A complication was found when some companies experienced the start of a particular phase up to four years earlier than others. This was explained by considering the sub-segmentation of the market as well as the subjectivity in cognition of the leadership. This assumption is thus supported by our analysis.

The second question that we posed at the beginning of this analysis was *how* the leadership of a firm can approach an inflection point. To answer this question, section 3.9 made two defining assumptions, which we can now substantiate after reviewing our fieldwork.

*2) **How can the leadership of a firm approach an inflection point?***

C: We can identify three leadership approaches to an inflection point: directive, conditional and ecological.

In all of the five case studies, we found that the leadership had used three approaches that coincide with the classification provided above, albeit in different degrees. Some firms, such as VNU and Wegener relied heavily on directive approaches; others, such as Elsevier Science and Wolters Kluwer, tended more towards conditional tools. De Telegraaf leadership stands out as being a modest user of all of these tools.

D: A chosen approach may be supported by a second approach.

This assumption was supported for conditional and directive management. From deductive reasoning it follows that directive and conditional approaches may well support each other, but that ecological leadership is not compatible with the other two approaches. In the fieldwork, we indeed found situations in which an overall directive or conditional style was supported on an incidental basis by, respectively, conditional or directive actions. At De Telegraaf, we observe a somewhat confused period of ecological leadership combined with conditional measures, which was not very successful and was rapidly abandoned.

*3) **When is each of the leadership approaches appropriate?***

The third question that we posed in starting this analysis was when each of the leadership approaches is appropriate. Chapter 3.9 formulated a proposition to answer this question. After reviewing our fieldwork, we can now substantiate this proposition.

E: Each of the three leadership approaches is congruent with an industry development phase.

This assumption is supported for firms with innovation-oriented local management. Our theoretical work and our fieldwork demonstrated that an ecological management style is most appropriate for fluid industry conditions; a directive style is best for a transition phase, and a conditional approach best for the specific development phase. We did identify an important exception for companies in which the local management lacks the capabilities or motivation to undertake the experimental ventures that are a necessary feature of the fluid phase.

4) ***Why does the leadership of a firm that successfully passes through an inflection point appear to vary its style through time?***

The last question of chapter 1, why the leadership of a firm that passes through an inflection appears to change its approach, can be answered from the assumptions and propositions. An inflection changes in nature as it evolves (assumption B); we have seen that different leadership approaches are possible (assumption C), and that each leadership approach is congruent with a phase. Since the leadership of a firm will seek to use approaches that are particularly effective in each phase, this provides an overall explanation of the changes in leadership approaches that were identified in our fieldwork. When we specifically look at the propositions, we see that:

I: In the fluid phase of an inflection point, the leadership will tend to use an ecological approach.

We have seen in Chapter 3 (section 3.3, figure 3.4) that the ecological approach combines a selective nature of strategy deployment with an incremental speed of transition. In the fluid phase, market conditions and trends are unclear, and it is difficult, often impossible to make essential strategic decisions on resources, capabilities, structure and processes on logical, informed grounds. This provides the logical underpinning of a hands-off ecological style that leaves decision-making to the local management levels. In the case reviews, we observe that an ecological stance was fully adopted by one of our companies, and partially adopted by two others. In the two cases where there was little or no indication of an ecological approach in the fluid phase, these aberrations were explained by taking the capability balance between leadership and local management into consideration.

II: In the transitional phase of an inflection point, the leadership will tend to use a directive approach.

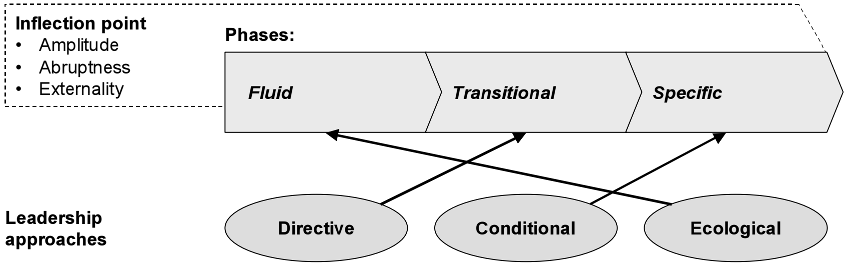
The directive approach combines adaptive strategy deployment with radical speed (fig 3.4). In the transitional phase, new market structures and trends become clear, which renders an active leadership posture possible. This, and the need urgent and rapid change combine to stimulate the leadership towards a hands-on management style in which it undertakes the necessary restructuring of the business and competency portfolios as well as the organization and processes on its own initiative. In the case reviews, we observed a directive posture in all of the situations observed, with one part confirmation that was explained in chapter 4.

III: In the specific phase of an inflection point, the leadership will tend to use a conditional approach.

The conditional approach is a balanced phase in which either a selective nature of strategy deployment combines with radical speed, or an adaptive nature of strategy deployment combines with incremental speed (fig 3.4). In both these situations, there is a relatively high level of understanding and control ability at leadership levels that thus enables a measured level of delegation through well-developed processes. These are characteristics of the conditional leadership approach. Here, too, we observe four of the five case examples to fully deploy the assumed leadership style, and the fifth to partially apply it, with again an explanation provided in chapter 4.

In conclusion, we have thus confirmed the dimensions, phases and leadership approaches of the inflection point as well as the linkages between these three sets of elements, as hypothesized in figure 3.23 which is reproduced here as figure 5.2

Figure 5.2: A Dynamic Framework of Leadership Approaches to an Inflection Point



5.3: Scientific Contributions

This study purports to make scientific contributions in the form new concepts – through the identification of three dimensions in the inflection point –, through methodology – by analyzing the inflection point in a longitudinal way –, and through application – by looking at the inflection point through the leadership lens.

Conceptual Contribution: the Three Dimensions of the Inflection Point

As we have seen in chapter 2, there are at least thirteen theories that describe rapid change and that we have used as reference base in our description of the inflection point. More close examination however shows that none of these describes the three dimensions comprehensively and in the specificity needed to define appropriate leadership behavior. Of the ten theories discussed in Chapter 2, only four cover all three dimensions of the inflection point, which are all necessary to describe and scope out an environment shift in such a way that the leadership ends up with limited, well-defined behavior options. Without amplitude there is no need for decisive, far-reaching action. Without abruptness there is time for contemplation and preparation. Without externality, upfront management control of the industry change becomes possible.

When we look at the four schools of thought that cover all three dimensions of the inflection point in more detail, we find out that Kanter et.al.(1992) and J.B.Quinn (1980), take an ecological perspective on changes in the environment, which is described as a given entity. Change is caused by "major external or internal events that would precipitate urgent, piecemeal interim decisions". Major corporate change then is effectuated by the "change strategist" who is as much the actor of internal adjustment as a re-actor. The nature of these events is left undescribed. Abell (1993) on the other hand does identify a series of internal and external forces of change, like product life cycles, seller and buyer behavior, technology effects and globalization.

But he considers this at the market level, not the firm level, which makes the linkage with leadership reactions an indirect one. In case of Nadler et.al. (1995), changes in the industry are not differentiated, and the distinction between these changes those in the immediate environment of the firm also are not discussed in any level of detail. They do provide a segregation of organization changes along two axes – reactive vs. anticipatory, and incremental vs. discontinuous that leads to organization re-creation (reactive and discontinuous) as their equivalent of inflection point behavior. But overall, their work focuses on change leadership within an organization without an attempt to describe the reasons for these changes in any specificity, which again makes it more difficult to make the transition to the management's perspective. The characterization of an inflection point into three key dimensions – amplitude, abruptness and externality, and thus in such a way that it can be fitted into a model of leadership behavior, is a new contribution of this study.

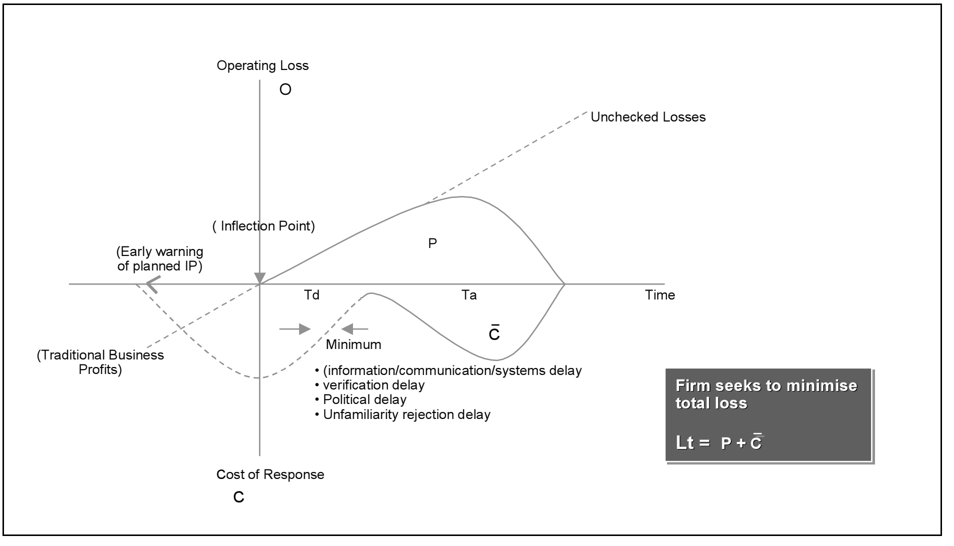
Methodological Contribution: the Longitudinal View

Regarding the longitudinal view, we can note in a similar vein that many authors have addressed the phenomenon of major industrial change, but that a company perspective on the phasing of the inflection point is new.

One of the first classical writers of major change (Ansoff) describes his "strategic surprises" in terms of 1) sudden arrival, 2) novel problems, 3) failure to respond, which carries a strong penalty and 4) response that is urgent and extraordinary (Ansoff, 1984). Similar descriptions were written by quite a number of authors, including Tushman & Romanelli (1994), Abernathy & Clark (1985), Stopford & Baden Fuller (1994) and Kanter et al. (1992). All of these authors appear to treat the inflection point as a single "big bang" event: yesterday it wasn't there and today – hey presto – a new world.

A few important exceptions to this general statement can and should be made. First, Ansoff in his 1984 book does make note of the fact that there is a time line involved in the economic analysis of an inflection point (i.e., there are opportunity losses in the period before the leadership undertakes action, and there are investments to be made). There are the revenues and margins out of the traditional business that go down in linear fashion. There are the start-up costs, revenues and margins out of the new business that materialize in a discontinuous way, resulting in a more unpredictable curve. The result are losses that will increase "though the ceiling" unless the leadership checks these by restructuring the old business and building the new to profitable levels. Ansoff drew figure 5.2 to illustrate his point. He stresses the longitudinal – time – dimension of the inflection point, but does not, however, pursue his longitudinal thinking beyond the economic dimension.

Figure 5.3: Economic Passage through the Inflection Point according to Ansoff (1984)



Source: Ansoff, HI. Implanting Strategic Management, 1984

Paul Strebel provided one of the more dynamic views on major change. He considered his breakpoint the result of a shifting balance between industrial change forces and resistance forces. However, the "blow-by-blow" account of the breakpoint as it unfolds, and the possibilities for leadership action in each phase, is not given.

As we noted, a few exceptions exist in this void. Lewin (1947) analyzed major change within an organization that passes through three stages (unfreezing, adjustment and refreezing); the firm has an internal managerial focus and lacks the element of urgent environmental upheaval, including externality and abruptness, which is a crucial ingredient to the inflection point. And Utterback (1995) provides a detailed and effective description of development phased through an inflection point (of which we have made extensive use in this thesis). But his scope of analysis is the industry, which means that he does not look at the transition through the lens of the firm.

This study has projected – for the first time – the three phases of industrial development of Utterback onto the firm. We have seen how the leadership copes with each of his phases – fluid, transitional and specific. The leadership indeed perceives these phases, and adapts a different approach to each of them. We have thus developed a longitudinal perspective on the transition through an inflection point from a firm's perspective.

Application Contribution: Perspective of the Leadership

Leadership per se has been an important topic on the management literature list almost as long as it exists. Interestingly enough, one of the early mentions is also one of the most relevant: in 1920, Schumpeter regarded the entrepreneur – the leader in innovation – as somebody who is "not concerned with the administration of existing industrial plant and equipment, but rather with the incessant creation of new plant and equipment embodying new technologies that revolutionize existing industrial structures", (Schumpeter, 1946). Schumpeter sees the leader as initiator of major innovative change, but apart from that, his description fits our requirement to the 't'. The Schumpeterian view was recently reinforced by Stopford and Baden Fuller, who stated "all types of entrepreneurship are based on innovations that require changes in the pattern of resource deployment and the creation of new capabilities for positioning in markets" (Stopford & Baden Fuller, 1994).

A great deal of research has been done on the role of the leader in determining and implementing strategy. One can state, for example, that he "conceptualizes, expresses or implies" the strategy in terms of 1) the long-term objectives or purposes of the organization, 2) the broad constraints and policies, either self-imposed by the leader or accepted by him from his superiors, which currently restrict the scope of the organization's activities, and 3) the current set of plans and near-term goals that have been adopted in the expectation of contributing to the achievement of the organization's objectives (Lorange & Vancil, 1977)

The focus in recent years has shifted to major change processes in organizations, and the factors of success in surviving periods of major change. Tushman and Romanelli conducted extensive analysis in industries developing through a punctuated equilibrium, and found that in periods of turmoil, replacement of the leader often is a key ingredient to survival (Tushman et al., 1985). It is clear that a good intellectual and intuitive grasp of the post-inflection point world is crucial for success, that this world is presumably quite different from the pre-inflection point world, that therefore the likelihood that the existing leadership has a good understanding of the new world is relatively small, and ergo that replacement of the leadership is thus the best way to promote the survival changes of the firm – this in particular when we do this as early as possible in the inflection point (Kanter et al., 1992)

We get somewhat closer to our target if we look at the personality of the leader who must pass two tests relating to his understanding of the new (external) environment and his skills in leading the (internal) organisation. In other words, does the leader have the foresight and environmental understanding to see where the firm can and should end in an (external) industrial revolution? And does he/she have the administrative and leadership skills to help the internal organization pass through a major change process? (Hamel, 2000)

None of these analyses, however, covers the strategic posture (or approach) that he (and his team) can take (the 'how' questions that form the centerpiece of this analysis). Schumpeter and his colleagues tell us how important a good leader is for major change. Lorange, Vancil and their colleagues describe the leader's task list. Nadler & Heilpern and Kanter et al. inform us that replacement of the leader is a key step to success. Hamel tells us what kind of person the leader should be. But how should the leadership go about their job? It is in this area that this analysis makes a contribution.

The preceding chapters explained that passage through an inflection point involves three development phases, and that each of the three has its appropriate leadership approach. We may note that in three of the five case studies (ES, WK, Wegener) at least part of the leadership was replaced. But we have also explained both from a theoretical perspective and from case experience what the best leadership approach is in each of the phases.

5.4: Further Research Topics

As is usually the case with research that has been worthwhile, this thesis leaves us with the perception of more questions than the list with which we started. The most important ones can be categorized into five groups:

A) How applicable are our propositions outside the publishing field?

B) Can we predict an inflection point?

C) How do we overcome organizational resistance to the adjustments necessary to succeed through the infection point?

D) Can we influence the environment, or is the inflection point in all its aspects dictated externally? and

E) Is strategy development through an inflection point simply a sub-set of general theory on reactive strategy development?

A) How applicable are our propositions outside the publishing field?

One of the most difficult questions to ask about the statements made in this thesis relates to their general applicability and their validity outside the area of publishing covered by our five case studies. It would obviously be of considerable interest and relevance to conduct both a more extensive series of case studies and a broad survey. Regarding the case studies, and barring comprehensive coverage of the gamut of businesses, one should think of the unique traits of the publishing industry and find complementary counterparts, preferably outside the media industry.

Development of a full-fledged survey on inflection point behavior is more straight-forward. The list of questions is provided the appendix; these can be detailed and phrased in a form that is more amenable to multiple-choice interrogation. An important question is to whom the questionnaire should be sent. Obviously, it would be the most interesting to have the responses of both leaders and local managers in large and small companies. The coverage of both leadership and local managers is of particular importance because one can expect a bias at both sides. Ideally, ways should also be found to obtain an unbiased response rate (e.g., by making the survey obligatory to all recipients). The coverage of a number of industries and countries would enable important cross-comparisons across industries with widely varying structures and dynamics, and countries with very different cultural patterns.

This additional fieldwork would also shed more light on the two idiosyncrasies that we were able to resolve on an indicative basis only:

- The dichotomy between the three approaches used by the majority of publishing companies vs. the two used by the newspaper publishers, and
- the differentials in timing in the development phases experienced in particular by the scientific and professional publishers.

B) How do we overcome organizational resistance to the adjustments necessary to succeed through the infection point?

The fascinating quality of inflection points is that the incumbent organizations that suffer under them often have the underlying competencies to restructure and reorient themselves to the new environment. More often than not, people have the background to retrain, the financing exists to buy the new hardware and software needed, and a beautiful brand has been established. And, of course the necessary reorganization intellectually is nothing more than the drawing of a new organigram together with new position descriptions and process figures. Why, then, is the resistance of an established organization to these changes usually so high? And why is it that, even if the organization is highly motivated to change, it more often than not turns out to be incapable of making the about-turn that is needed?

When we consider resistance, we will first examine internal resistance elements, and then external resistance, outside the organization proper. Internally, there are four main sources of rigidity: a) vision and values, b) unwritten rules of the game, c) hierarchy and d) business processes.

A common *vision and values* are essential for a large group to function effectively. Since it is not possible to instruct every individual of the group about every detailed action he or she must make, delegation of decision authority is needed. It is surprising, actually, how much delegation takes place even in a highly centralized organization (like an army). This delegation is possible only if each member is aligned regarding the direction of the organization and its mission. These alignment patterns run deep, often starting at the point when the individual joins the organization: an army recruit joins the army to "fight the communists"; a business gradate applies for a job with a certain brokerage firm because he likes the prospects of the high bonus he will earn. One of his engineering colleagues goes for a computer company because it has a reputation of putting quality before short-term gain. The successful company has optimized its ability to meet these personal ambitions. In an inflection point the new vision may no longer fit personal ambitions as well as the old one did: employees seeking annual bonus packages find that the company has to invest heavily in restructuring – ergo no bonus for a few years. The engineer who loves the quality of his mechanical devices finds the concept of quality totally redefined by the inflection point – gone are the intricate visible gears, toggles and levers, replaced by the dull zeroes and one's of a sophisticated software package. After the inflection point, not only the community but also the members often have to change their vision about what makes life worthwhile. Undoubtedly, some will feel inspired by the new challenges. But many will end up either demotivated or quitting.

The second key rigidity are the *"unwritten rules of the game"* – coined by Scott-Morgan, referring to the multitude of uncharted behavioral patterns that govern how a company functions. These can vary – from making a round of lobbying visits to senior influencers before presenting a proposal to top management, to making sure one is promoted or at least moved out of a job within three years to gain experience in different functions and countries. The problem is that these rules fall (by definition) outside the codebook (so it is not easy for management to track them down). Their impact may also be very different – and often undesirable – in the new environment: the consensus management achieved by the round of lobbying may no longer be effective when bold entrepreneurship is needed, and the job rotation schedule may no longer fit with a more decentralized scale of a reformulated company. Adjusting to these unwritten rules is not easy. They must first be identified, and then changed, which may call for a variety of instruments. Sometimes, this will be a new compensation and career structure. Sometimes a new report will be called for (Scott-Morgan, 1994).

Interestingly, *hierarchy* itself, which can be seen as the main lever through which change is achieved, more often ends up being an impediment. Isn't it obvious that things are changed when the boss tells his underlings to start doing other things or at least to do them differently? The complication lies in the fact that a superior can give the right orders only if he understands the task that must be performed by his underling: an army officer is no good at ordering the sailors of a ship to hoist anchor because he has no understanding of the variations involved in this maneuver. So what does the manager of a pharmaceutical plant do when the process switches to fermentation with biological modified microbes? He has a problem, and it requires training or replacement – reason enough for resistance (with thanks to Prof. P. Bouw).

The *business processes* are analytically easier to tackle, if only because the subject is well understood and thoroughly debated in the scientific and business literature. There is thus presumably less need to describe how processes are first identified, then prioritized, codified, designed and implemented. The books by Champy & Hammer (1996) on re-engineering the company provide more than enough examples. There is a multitude of processes: main business processes, like design, purchasing, production, marketing, and sales; key functional processes, like financing, human resources, technology development quality; and support processes, like communications (internal and external), training, etc. All of these processes have been developed and optimized through the years to serve the old business vision, to make the company successful in the old environment. The chances that they will work well in the new world are slim.

There is also the interesting question regarding how these four principles find their way into specific hurdles that companies appear to face in taking appropriate action at an inflection point. In a study of companies that need to implement an innovation rapidly, Foster finds the following impediments to immediate action:

- Belief that an evolutionary approach (to existing technology) will be enough,
- Assuming that there will be ample warning about a coming discontinuity if the present technology, customer needs and competition are understood,
- Conviction that the company understands what its customers want,
- An incorrect definition of the market,

- Overestimating the ability to see discontinuities coming because the company understands its competition, and
- Thinking the company can react fast enough.
  (Foster, 1986)

Abruptness is a characteristic of an inflection point, and the risk of organizational resistance is therefore high (ES, 1986; WK, 1998; DeTelegraaf, 2001). It is important that further research be done to see how the organizational barriers to action can be rapidly broken down.

C) Is the inflection point in all its aspects dictated externally, or is there an opportunity to influence the outcome?

In the scope of this thesis, we have purposefully limited ourselves to major industry upheavals that found their origins outside the sphere of influence of the firm. This limitation proved to be consistent with our fieldwork, in which the companies studied in most instances saw themselves at the receiving end of customer demands and market trends. One possible exception may have been the modest degree of influence that ES and WK had on the use of media by their customers and text suppliers.

Interestingly enough, this assumed passivity with regard to structural market developments is in marked contrast with the theories on innovation, starting with Schumpeter. Schumpeter views the entrepreneur as initiator of structural change in the business in which he/she operates. His main function is to take the resources that he can lay his hands on, and to develop heretounforeseen combinations (Schumpeter, 1920). His challenges to the individual – entrepreneurship, after all, becomes quite a job – were not actively pursued for a number of years, when more process- and oriented-oriented strategy models were more popular. But in the 1970s, Richard Foster and others picked up on the theme, as innovation once again became a hot topic. Gary Hamel is the most vocal recent champion of the innovator forming his own world; it is the entrepreneur's mission to revolutionize markets around him (Hamel, 2000). When Hamel wrote his book, stock markets were up and venture capital was easy to come by – the right world for somebody who wants to transform an industry. As we write this thesis, stock markets are down, venture capital is tight and business is cautious. We believe there is a role for the industry transformer, Hamel style. The focal point of this thesis, however, is the incumbent, who presumably has been around for a number of decades, and who has gained an important position in his traditional markets – a description that fits, by the way, all of our case studies. This important incumbent is faced with a critical transformation of his markets: an inflection point. To what extent can he and should he attempt to use his strong position to influence his markets? In conclusion, we have helped ourselves in this thesis by assuming the environment to be an independent monolith, an unpopular source of challenges. If we relax this premise, we open a new area of research into the interreaction of important incumbents and their environment as the challenge of an inflection point occurs.

D) Is strategy development through an inflection point a sub-set of a general theory on reactive strategy development?

Classical strategy development has always been pro-active. The general view has been one of the leadership of the firm leaning back and taking stock of the challenges and opportunities of the future. In this respect there is no difference between the design approach of

Chandler, the planning philosophy of Ansoff, the positioning school of Porter or the resource-based views of Penrose & Wernerfeldt: they all need time and effort to blueprint the situation and the outlook. And the more complex the business is, the less differentiated the company appears, and the more effort and time the analysis takes. This does not translate into a guarantee of a workable blueprint. Alas, the trade routes of strategy are lined with the bleached bones of failed plans, developed too often at great expense by consulting firms of high repute. But one highly illustrative example is provided by the apparently sophisticated consulting work done to support the market position of the British motorcycle industry in the USA against the Japanese build-up (Mintzberg, 1990), which clearly was ineffective in countering the almost total demise of this market position.

These challenges have been exacerbated by gradual shifts in the macro-economy. Compared to the 1950s and 60s, a relative decrease can be observed in the importance of capital-intensive industries-steel making, refining and chemicals now make up less of GNP than they did twenty years ago. There is also an increase in availability of capital, which is less of a scarce resource than before, and human capital has emerged in different dimensions – knowledge, competencies, and entrepreneurship – as an ever-increasing (scarce) economic factor. On top of all of this, time horizons are shortening. To put it succinctly: a software package may have a typical economic lifetime of five years, and a refinery a lifetime of thirty.

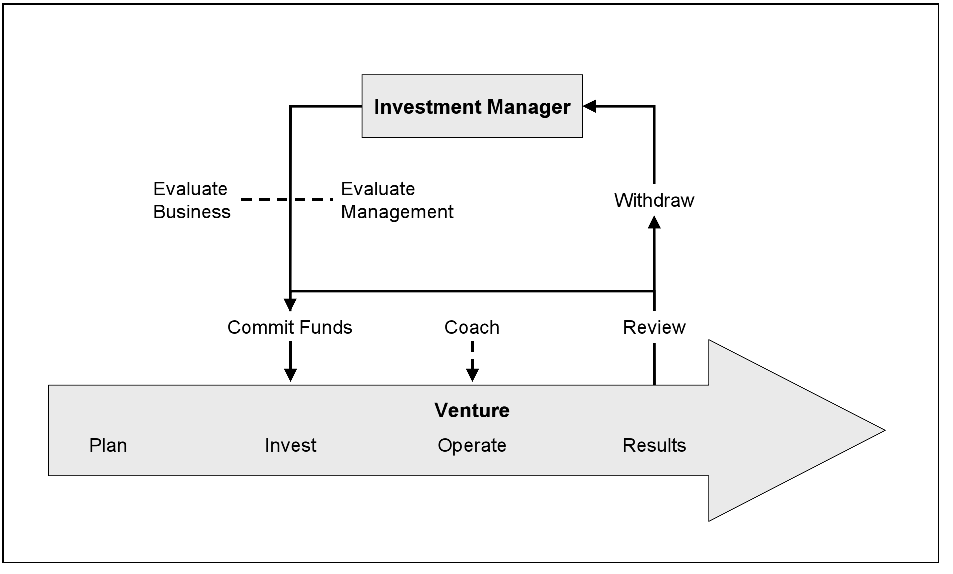
One of the major disadvantages of the "traditional" strategy schools – leadership losing touch with an increasingly capable and vocal group of middle managers – was overcome by the organizational learning theories popularized by Senge (1990). Another promising approach was launched by Volberda, who made a pioneering comprehensive analysis of the strategic gains to be made by improving the flexibility of the organization. These approaches at "mass mobilization" were successful, but only if ample time and effort had – again – been spent in preparing the groundwork. Work on new approaches is not abating; the talk now is of virtual corporations (Davidow & Malone, 1992), "hollow" or "doughnut" corporations, dynamic networks (Miles & Snow, 1986), hypertext (Nonaka & Takeuchi, 1995), platform (Ciborra, 1996), and shamrock (Handy, 1995) organizations, and cellular structures (Miles et al., 1997; Volberda, 1998).

On the outside, the environment has not simplified matters. Chapter 1 noted the decrease in lead-times required for major new innovations to penetrate global markets. This is undoubtedly fostered by the improvement of communications and the disappearance of global trade barriers. The time available to react to new trends, and to prepare for new arenas as they emerge, appears to have shortened.

One outcome can be the increase in the number of inflection points, for which we have tried to develop an appropriate strategic response in this thesis. But even in circumstances less abrupt, more complex, and with less amplitude, many firms experience a combination of less clarity about the environment, with less time to think about it.

For information intensive industries, the latter half of the 1990s of course appeared to be an era of major change and opportunity, and it was there that we observed the emergence of the somewhat playfully coined the "new economy" school of strategy, which was based on playing options combined with an ecological approach to each option, and was therefore largely void of analytical content. The process was simple: test the capabilities (and if possible the track record) of the venturing team, with due care, and give them the money; then come back at three-month intervals to see how they are doing (figure 5.4)

Figure 5.4: Strategy Development in the New Economy



The mild recession that appears to have started in 2001 caused capital to become slightly less abundant, which spelled the end of this school, but does seem to leave us with an analytical gap between the cognitive tools currently available to develop our strategic thought and the needs of today. Not every firm faces an inflection point every year, fortunately, but there is a need for new ways to look at the uncertain environment and deduce the best paths possible. Is the future for reactive strategies?

5.5: Management Implications

Nobel prize winner Herbert Simon, who started his career at the school of management and ended at the psychology department of Carnegie Mellon University, was one of the first to focus attention on the mind of the strategist and his cognitive skills and limitations. In his view, the world is large and complex (particularly in an inflection point) while human brains and their information-processing capabilities are highly limited in comparison. Strategy development thus becomes not so much rational as a vain effort to be rational (Simon, 1947). This may help us understand why many leaders already are challenged in managing an ongoing firm, and why many more feel, or find themselves, powerless at the advent of an inflection point that imposes an entirely new set of complex rules applying to an already complex world.

A contribution to resolving this dilemma was provided by Derek Abell, who stressed the necessity to separate strategy development for the ongoing business from strategy development for the post inflection point environment (Abell, 1993). He correctly points out that it is difficult to maintain two worlds of thought in one person. How often does a manager, in the throes of turmoil surrounding his ongoing affairs, lean back and consider the challenges of a new post-inflection-point world that is slowly starting to take shape around him? And then he must consciously decide what his personal posture will be towards that major change.

The leadership of all the five companies researched did take some distance and made decisions in view of each phase of the inflection point that in most cases amounted to a different leadership approach. There was a lot of thinking about the specific decisions to be made. There was no systematic thinking about the overall approach to be used. It is remarkable that they all nonetheless came to the same outcome. Undoubtedly, time and effort were lost in the process. This leads us to the first recommendation:

a) It pays for leadership to conscientiously decide for a management approach whenever a fundamental shift in business rules occurs.

The second recommendation relates to the timing of different approaches. As we have seen, an inflection point in actuality consists of three development phases, and each of these phases has its appropriate leadership approach. Therefore

b) It pays for leadership to be aware of inflection point phases and choose their approach accordingly.

Finally, we should realize that an inflection point is an abrupt event, in which timing is critical. Moving too early in terms of investments and approach translates into resources lost to a market that is not ready to appreciate the new services or products, as shown by the first years of Wegener/CityOnline. Moving too late means that competition may have pre-empted important market positions, as WK medical information found in the US. The advantages to the party that gets the timing right are not minor, which leads us to the third recommendation:

c) Having the best possible understanding of the phases of the inflection point and making the transition between approaches at the right moment spells the difference between failure and success in the inflection point.

5.6: Epilogue

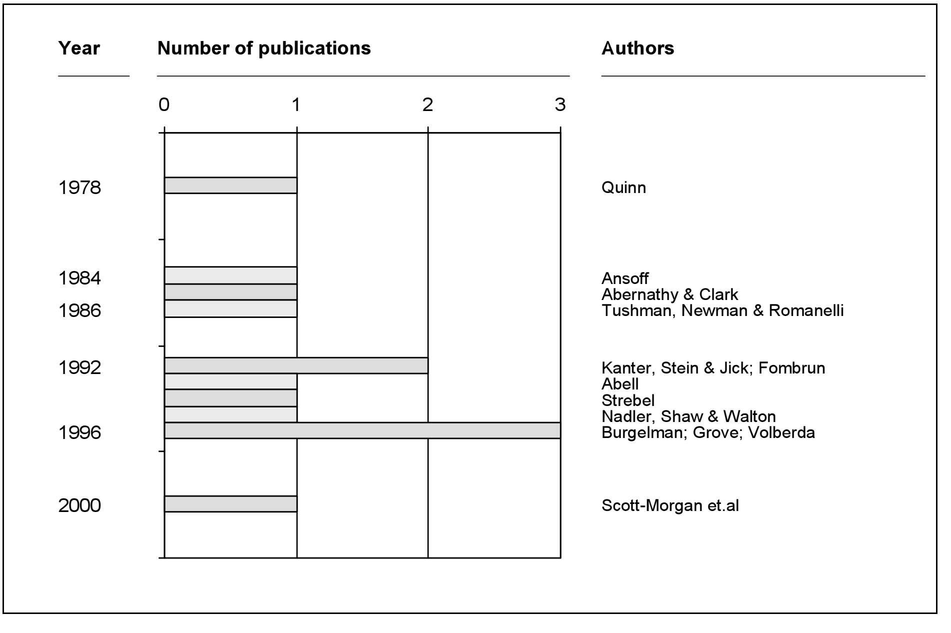
This study was initiated to look at an economic phenomenon of sudden, unpredictable changes that seem to threaten the existence of the corporations of this world with increasing frequency. This may be one of the reasons why so many researchers have embarked on analysis covering the concept of major corporate change, as the list of thirteen concepts provided in Figure 1.2 shows.

However, none of these thirteen concepts has focused on the role of leadership in a firm that passes through an inflection point. None of these concepts takes an external change as sole starting point for change. And none of these concepts looks at management roles in a longitudinal way in each phase of the inflection point as it evolves, step-by-step. Looking at the passage through the inflection point through this lens provides a model that can easily be translated into leadership action.

The ensuing model was derived from a relatively comprehensive literature review and can thus claim to be grounded in current management theory. It was tested on five publishing firms that survived the Internet revolution – undoubtedly an inflection point for them. The three leadership approaches are thus well rooted in theory and practice.
We hope to have made a contribution.

Looking at the way ahead, strategy as a managerial process may be moving ahead of strategy as a (analytical) way of thinking. We accept that many analytical methods of the recent past – in particular extrapolation techniques – no longer are effective in the current uncertain world. But beyond scenario analysis, options theory and chaos theory, the number of analytical tools that are available and useful to the strategy practitioner is small. And, seemingly, the interest in strategic analysis as an important source of important corporate and academic renewal seems to be waning. Annual procedures are routinely followed, markets are segmented, portfolio analyses conducted. But the real interest of top management appears to be shortening to the next quarterly results – or the next major incident, be it the 9/11, the Iraq war or SARS, for which Porter and the 1980's techniques provide little answer. Figure 5.5 plots the grounding authors of inflection point thinking on a time axis, and signals that, after the wave in the early 1990's, there has been only one really new concept, by Scott Morgan et.al. in 2000. Are we now experiencing the Fall of Strategic Planning, as predicted by Minzberg in 1994?

Figure 5.5: Inflection Point Schools Through Time



One reason of the decline in interest in strategic planning may lie in finding the right object for the next strategy exercise. Are we seeking to maximize returns on capital – in a time when capital is relatively abundant, or shareholder returns – with the role of the shareholder under debate? Or would we rather increase the satisfaction of the right set of stakeholders, or build competencies, or focus on human assets? The options available to the strategist in selecting his priorities are many. And only the (financial) analysis tools that serve the shareholder and other capital providers are well developed.

Strategic Analysis makes sense only when there is scarcity – scarcity of financing, people or other resources, scarcity of market opportunity, or scarcity of time. One of the most important functions of strategic analysis is to provide the algorithms to make the best of this scarcity.

In the post-war decades, until about 1990, scarcity meant financial scarcity. This may help explain why the main body of strategic analysis tools, from DCF analysis to EVA, to the market attractiveness matrices, related to the generation of margins and cash flow.
We now face uncertain times. In the late 1990s, which are the focal point of our case analysis, capital was certainly not the scarce commodity, knowledge and competencies were. Capable manpower was in short supply, too. But the planning and control tools available to the publishing firms – and other companies entering the Internet era – in the areas of knowledge and competence management lagged far behind available financial techniques in breadth and depth.

The function of strategic analysis has thus become to help understand what the scarce commodity of the next round will be, and to provide the analytical tools to make the best out of that scarcity. This may be the next frontier in strategy thinking.

Santa Monica, October 2002/Leiden, August 2003

Appendices Contents

Leiderschap en het Inflectiepunt

– Een Longitudinaal Perspectief –

Nederlandse samenvatting

Nederlandse samenvatting

Beleidsvorming als vakgebied voor bedrijfskunde is een betrekkelijk nieuw terrein dat pas in de twintigste eeuw ontstaan en tot een mate van wasdom gekomen is. Nadat schrijvers als Schumpeter in de twintiger jaren een eerste beeld gevormd hadden van ondernemerschap en invloed daarvan op de economie, was het aan naoorlogse denkers als Chandler, Porter, Ansoff en anderen om de eerste theoretische beelden te vormen van het gedrag van ondernemingen en hun leiding. Al aan het eind van de vijftiger jaren was al een aantal management theorieën ontstaan, die door Ansoff (1984) onderverdeeld konden worden in vier categorieën, die zich baseren op, respectievelijk, het achteraf beheersen van de ontwikkelingen van de onderneming, een extrapolatie van het heden, anticipatie in een evoluerende omgeving, en tot slot flexibiliteit en aanpassing.

In de tachtiger jaren van de vorige eeuw raakten de leiders van ondernemingen bovendien steeds meer geneigd om hun wereld te zien als een arena die regelmatig van een toestand van relatieve rust door perioden van chaos en onrust verkeert naar een nieuwe en onvoorspelbare positie. Schumpeter bekeek als eerste deze omwentelingen vanuit het perspectief van industriële innovatie. Later gaven schrijvers als Tushman, Newman & Romanelli (1986) inhoud aan het begrip industriële discontinuïteit. In de negentiger jaren raakte het dynamisch denken in ondernemingsstrategie verder in zwang, met de invoering van concepten als competentiedenken (Prahalad & Hamel,) flexibiliteit (Volberda, 1999), en netwerkdenken (Davidow & Malone, 1992). Hoe een onderneming met turbulente verandering moet omgaan werd pregnant aan de praktijk geschilderd door Andrew Grove, die als bestuursvoorzitter van Intel twee dramatische omwentelingen in de industrie had meegemaakt: de eerste toen het primaat in geheugenchips van Intel en andere Amerikaanse ondernemingen over ging op Japen en andere Aziatische landen, de tweede toen Intel de consequenties van zijn succesvolle consumentencampagnes pas bemerkte toen het bijna te laat was. Het was Grove die in samenwerking met Robert Burgelman van de Stanford Universiteit met zijn boek “Only the Paranoid Survive” (1996) de term “Inflectiepunt” populariseerde.

Is er in de afgelopen jaren het nodige gepubliceerd over snelle omgevings-veranderingen, het blijkt dat er nog weinig bekend is over de houding die de leiding van de onderneming kan aannemen als deze veranderingen plaatsvinden. Het doel van deze analyse is dan ook om vast te stellen 1) *wat* een effectieve beschrijving van een inflectiepunt is, 2) *hoe* de leiding van een onderneming met een inflectiepunt om kan gaan en 3) *wanneer* de verschillende benaderingen die de leiding kan toepassen het meest geëigend zijn. Deze drie vragen geven een pragmatische invulling aan de overkoepelende vraag 4) *waarom* de leiding van een onderneming die door een inflectiepunt gaat een strategische gedragsverandering moet ondergaan.

Deze studie beoogt met name twee nieuwe gezichtpunten naar voren te brengen. Ten eerste wordt het perspectief van de ondernemingsleiding ingenomen: de vraag wordt gesteld welke maatregelen de leiding kan nemen. Ten tweede wordt een longitudinaal perspectief aangenomen. Het inflectiepunt en de reacties van de leiding daarop worden niet als een enkelvoudige gebeurtenis gezien, maar als een sequentieel proces dat met een beginfase aanvangt en stapsgewijze naar een eindfase toe loopt. Hoofdstuk 1 geeft de hier in samenvatting weergegeven inleiding. Een analyse van theorie (Hoofdstuk 3) en van een aantal praktijkvoorbeelden (Hoofdstuk 4) brengt ons nader tot de beantwoording van bovengenoemde vier basisvragen.

2 Beschrijving van het Inflectiepunt

Een overzicht van relevante theoretische concepten van Tushman, Newman & Romanelli (1986) en Strebel (1994) en anderen brengt ons tot een begripsbepaling in drie dimensies:

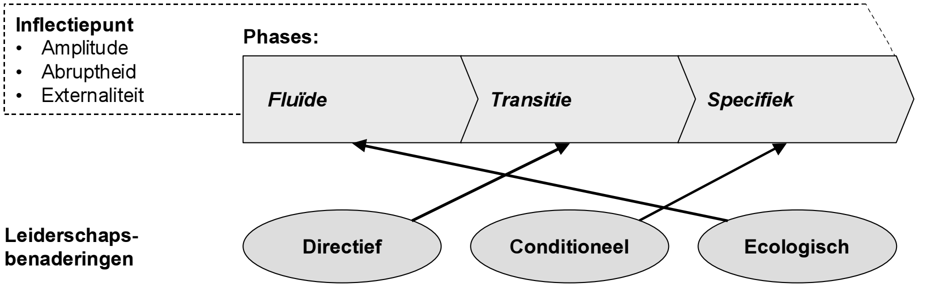
- *Amplitude*, dat wil zeggen de ingrijpende aard van het inflectiepunt, waarbij een groot aantal ondernemingsfuncties aangetast wordt en het voortbestaan in gevaar komt – zoals beschreven door onder meer Abernathy & Clark (1985) en Quinn(1978)
- *Abruptheid*, dat wil zeggen de korte tijdsperiode waarin de veranderingen in de omgeving plaatsvinden, die dwingen tot een snel ingrijpen en niet zelden voor de ondernemingsleiding verrassen – zoals beschreven door Ansoff (1984), Kanter, Stein & Jick (1992)
- *Externaliteit*, dat wil zeggen ontwikkelingen die van buiten af aan de onderneming opgelegd worden – zoals beschreven door Tushman et.al. en Abernathy & Clark.

De volgende stap is een nader onderzoek naar de dynamiek van het inflectiepunt. Hiervoor kunnen wij gebruikmaken van de onderscheiding die Utterback (1995) maakte van industriële innovaties: hoewel deze een terrein bestrijkt dat groter is dan het inflectiepunt – het omvat enerzijds een bedrijfstakperspectief, anderzijds interne innovaties – blijkt zij uitstekend bruikbaar om te ontwikkeling van het inflectiepunt te volgen. Utterback onderscheidt drie ontwikkelingsfasen:

- In het begin, een *fluïde* fase, een periode van een industriële omwenteling waarin veel veranderingen tegelijkertijd plaatsvinden, de uitkomsten van deze veranderingen in de zin van produkten, ontwerpen, processen, concurrentieverhoudingen, en de structuur van ondernemingen uiterst onzeker zijn,
- Een *transitiefase*, waarin de markt de nieuwe produkten en diensten begint te accepteren, dominante ontwerpen ingang vinden en de aandacht van ondernemingen van innovatie naar productie verschuift
- De *specifieke fase* is het laatste ontwikkelingsstadium, waarin produkten en diensten in hoge mate gedefinieerd zijn en de voortbrenging zich concentreert op volume en lage kosten.

De bovengenoemde onderscheidingen stellen ons in staat om het strategisch proces dat het bestuur van een onderneming volgt om de organisatie door een inflectiepunt heen te gidsen te zien als een reeks achtereenvolgende leaderschapsattitudes. Deze opeenvolging is een longitudinaal proces.
Aan het eind van dit hoofdstuk kunnen de bovengenoemde concepten gecombineerd worden tot een model dat de benaderingen van de leiders in een inflectiepunt beschrijft (fig. 1)

Figuur 1: Een Dynamisch Model van Leiderschapsbenaderingen in een Inflectiepunt



3 Leiderschapsbenaderingen van een Inflectiepunt

De aandacht kan zich nu richten op de leiderschapsbenaderingen die onder deze omstandigheden mogelijk zijn. Hiervoor is gebruik gemaakt van een zevental theoretische modellen, terwijl de effectiviteit van de resultaten geijkt is tegen vijf belangrijke management functies.

Voor de zeven theoretische stromingen is gezocht naar voorbeelden die leiderschap belichten in periodes van radicale en snelle verandering, waarbij met name gelet is op de behandeling van adaptieve en selectieve managementbenaderingen, en naar de behandeling van incrementele versus radicale managementstijlen. Op grond hiervan kon gekozen worden voor 1) de leiderschapsschool van Schumpeter (1934) en Barnard (1938), 2) de "resource" benadering van Penrose(1959) en Wernerfelt (1984), 3) de dynamische vermogensschool van Teece, Pisano en Shuen (1997) alsmede Eisenhardt en Martin (2000), 4) de lerende benaderingen van Argyris & Schon (1978) alsmede Weick (1979), 5) de institutionele school van DiMaggio en Powell (1983) en Greenwood en Hinings (1996), 6) de populatie-ecologie benadering van Hannan & Freeman (1977) en Aldrich en Pfeffer (1976) en tot slot 7) de levenscyclus/onderbroken equilibrium school van Tushman & Anderson (1986) alsmede Romanelli en Tushman (1994).

Een beschouwing van deze zeven stromingen leert ons dat zij over twee assen – de aard en de snelheid van transitie – vergeleken kunnen worden. Daar uit blijkt dat drie leiderschaps-benaderingen mogelijk zijn:

- de *directieve* benadering die een adaptieve aanpassing paart aan een radikaal-snel proces
- de *conditionele* benadering die adaptief/incrementeel dan wel selectief/radicaal is.
- de *ecologische* benadering die een selectieve aanpassing combineert met een incrementeel-snelle transitie.

Wij kunnen deze drie benaderingen verifiëren tegen vijf gangbare management functies die wij gekozen hebben, namelijk 1) leiderschap, 2) strategische inhoud, 3) omgevings-context, 4) managementstructuur en -processen en 5) prestaties en verantwoording. Bij een test tegen recente indelingen als het dynamische krachtenmodel van Burgelman blijken deze vijf functies het arbeidsterrein van de ondernemingsleiding te dekken zonder met elkaar te overlappen. Als wij de vijf functies onderzoeken in ieder van de drie leiderschapsbenaderingen, blijkt dat iedere benadering hier op een geheel eigen wijze inhoud aan geeft. Hiermee deze drie leiderschapsbenaderingen niet alleen getoetst op compleetheid en differentiatie, maar zijn zij ook verder verduidelijkt.

In het volgende deel van hoofdstuk 3 worden de directieve, conditionele en ecologische leiderschapsbenaderingen theoretisch verdiept met hulp van de eerdergenoemde vijf functies van management. Voorts worden van ieder van de benaderingen de belangrijkste middelen ("tools") beschreven. Deze middelen vertalen de theoretische benaderingen naar de praktijk in de zin dat zij door de leiding van bedrijven als daadwerkelijke acties gezien kunnen worden, maar ook in de zin dat deze "tools" in de praktijk verifieerbaar zijn.

Aan het einde van hoofdstuk 3 kan niet alleen het volledige dynamische kader, de dimensies en de fasen van het inflectiepunt en de mogelijke leiderschapsbenaderingen gepresenteerd worden, maar kunnen ook vier bepalende onderstellingen en drie stellingen geformuleerd worden die uit de vier basis vragen van hoofdstuk 1 voortkomen:

- Betreffende vraag 1, *wat* is de definitie van een inflectiepunt zijn er twee bepalende onderstellingen:
  - Een inflectiepunt kan gedefinieerd worden in drie dimensies: amplitude, abruptheid en externaliteit
  - Binnen een inflectiepunt kan een onderscheid worden gemaakt in een fluïde, een transitieve en een specifieke ontwikkelingsfase
- Betreffende vraag 2, *hoe* kan de leiding een inflectiepunt benaderen zijn er ook twee bepalende onderstellingen:
  - Wij kunnen voor een inflectiepunt drie verschillende leiderschapsbenaderingen onderscheiden – de directieve, conditioneele en ecologische benadering
  - Een gekozen leiderschapsbenadering kan ondersteund worden door een tweede benadering
- Betreffende vraag 3: *wanneer* zijn de verschillende leiderschapsbenaderingen toepasbaar, zijn er drie stellingen die er van uitgaan dat ieder van de drie leiderschapsbenaderingen bij uitstek toepasbaar is in een van de ontwikkelingsfasen van een inflectiepunt:
  - de directieve benadering past bij de transitieve fase,
  - de conditionele benadering bij de specifieke fase en
  - de ecologische benadering bij de fluïde fase.
- Betreffende vraag 4: *waarom* gebruikt het leiderschap van een onderneming verschillende benaderingen blijkt dat de synthese van het voorgaande hier antwoord op geeft.

4 Praktijkstudies

Wij toetsen deze stellingen in hoofdstuk 4 aan de praktijk middels een tiental verifieerbare vragen. Verder bevestigt onderzoek van de researchlitteratuur (Yin, 1994, Swanborn, 1996, Strauss & Corbin, 1990) dat praktijkvoorbeelden ("cases") in combinatie met een vraagonderzoek een goede bevestiging kunnen leveren van dit soort stellingen. Voor deze praktijkvoorbeelden is, vanwege de duidelijkheid van het waargenomen inflectiepunt, de overgang van vijf grote uitgeverijen naar het internet tijdperk gekozen. Deze vijf bedrijven zijn: Elsevier Science, Wolters Kluwer, VNU, Wegener en De Telegraaf.

De vijf praktijkstudies worden eerst afzonderlijk, vervolgens in vergelijk behandeld. Uit de praktijkstudies blijkt dat de vijf uitgeversbedrijven de drie dimensies van het inflectiepunt – amplitude, abruptheid en externaliteit – ervaren hebben. In alle gevallen was er een gevoel van grote onzekerheid over de nieuwe structuur en spelregels van de bedrijfstak, gecombineerd met de realisatie dat het voortbestaan op termijn van de onderneming in het spel stond. Wel waren op deze brede bevestiging een aantal gedeeltelijke uitzonderingen: zo experimenteerde Wegener al in een vroeg stadium zelf met internettoepassingen (waaronder het CityOnline project) waardoor er sprake was van een zekere mate van interne innovatie in plaats van externaliteit. Zowel Elsevier Essence als Wegener hadden een vroege start in internet, waardoor het element van abruptheid hier verminderd werd. En bij de Telegraaf droegen zowel het karakter van het bedrijf – met nadruk op kranten en magazines – als het niveau van decentralisatie bij tot een relatieve beperking van de omvang van verandering.

Uit de voorbeelden blijkt duidelijk dat al de vijf bedrijven door de drie fasen heen zijn gegaan, hoewel gesteld kan worden dat de transitieperiode bij Wegener zwakker werd ervaren bij de anderen. Dit laatste kan mede worden verklaard uit de lange periode van "fluïde" voorbereiding bij dat bedrijf. Opvallend zijn de verschillen in fasering: hoewel Elsevier Science en Wolters Kluwer in vergelijkbare industrietakken werkzaam zijn – eerstgenoemde in wetenschappelijke publicaties, de tweede vooral ook in juridische en professionele uitgaven – zijn de eerste onzekere signalen van internet als serieuze uitdaging ongeveer tien jaar eerder bij Wolters Kluwer doorgekomen dan bij Elsevier. Desondanks vond de transitiefase bijna vier jaar later plaats. Oorzaak van deze afwijkingen moeten gezocht worden in de aard van de individuele marktsegmenten. Zo was de internetdruk op alle activiteiten in de uitgeverijketen bij Elsevier Science al van de eerste dag zeer hoog (een van de grote klanten van ES, CERN in Geneve, stond aan de wieg van internet). Bij Wolters Kluwer waren het bedrijfstechnische gronden die al vroeg reden gaven tot automatisering van de productietrajecten bijvoorbeeld van de (juridische) referentieboeken, terwijl de markt aanvankelijk achter bleef. Wij kunnen hier zien hoe het marktsegment "uitgeverijen" uiteenvalt in een aantal microsegmenten die een groot verschil in marktgedrag laten zien. De drie overige ondernemingen – VNU, Wegener en De Telegraaf – laten allen een grotere homogeniteit in fasering zien, zij het dat Wegener een voorloper was.

Als wij kijken naar de leiderschapsbenaderingen, dan zien wij dat al de vijf ondernemingen successievelijk ecologisch, directief en conditioneel leiderschapsgedrag laten zien, zij het dat de intensiteit van dit gedrag nogal verschilt. Zo zien wij dat de leiding van Elsevier Science en Wolters Kluwer een meer conditioneel strategisch gedrag vertoonden, onder meer omdat deze ondernemingen een vroege start hadden gehad in internet, en hoog opgeleid management in de eenheden in het veld. De leiding VNU en Wegener daarentegen vertoonde meer directief strategisch gedrag, wat verklaard kan worden uit het relatief minder opgeleide plaatselijk kader bij beide ondernemingen, en de relatief late aanvang van de transitie bij VNU. De Telegraaf liet het meeste ecologische strategische gedrag zien wat verband houdt met het sterke holdingkarakter van deze onderneming en de relatief lagere urgentie van de internetuitdaging. Wij konden tot slot in exacte termen na gaan in welk opzicht de faseringen van innovatie die oorspronkelijk door Utterback hebben voorgesteld verschillen van de karakteristieken van het inflectiepunt zoals door ons vastgesteld. Geconstateerd wordt dat er inderdaad een aantal verschillen zijn die aan de bruikbaarheid van het model van Utterback voor de fasering van het inflectiepunt geen afbreuk doen.

Aan het eind van hoofdstuk 4 kunnen de vier bepalende onderstellingen en de drie stellingen die in hoofdstuk 3 geponeerd zijn middels beantwoording van de tien daaruit afgeleide vragen met een aantal nuanceringen bevestigd worden.

5 Conclusies

In Hoofdstuk 5 worden tot slot vanuit bovengenoemde aannames en stellingen de vier basisvragen van dit boek positief beantwoord. In dit hoofdstuk wordt verder ingegaan op de bijdragen die dit boek hoopt te leveren tot de theorievorming. Ten eerste is hier een analyse gemaakt van het strategisch gedrag van de leiding van een onderneming in een inflectiepunt. In eerdere werk was het nodige onderzoek gedaan naar majeure veranderingen in ondernemingen (wij noemden in dit kader reeds Tushman, Newman en Romanelli 1985 en Kanter, Stein & Jick, 1992), maar dat was niet eerder gebeurd vanuit het optiek van het leiderschap. Ten tweede was het onderzoek naar grote veranderingen tot op heden in een opzicht statisch, in de zin dat omgevingsveranderingen gezien werden als een enkelvoudige ommekeer (of een trage evolutie) zonder dat over her algemeen aandacht werd besteed aan de fasering van deze omkeer. De bijdrage van dit boek is dat de fasering die Utterback ontwikkelde om industriële in algemene zin innovatie te beschrijven toegepast wordt op het strategisch gedrag van de ondernemingsleiding.

Tot slot worden naar aanleiding van dit onderzoek een aantal onderwerpen gesignaleerd voor toekomstig werk. Om te beginnen roepen de beperkingen die het veldonderzoek van vijf uitgeverijen vragen op over de algemene toepasselijkheid van de uitkomsten. Verder konden twee terreinen die voor het leiderschap in een inflectiepunt van het grootste belang zijn – de voorspelling van inflectiepunten en de weerstand van organisaties tegen sterke veranderingen – binnen het kader van dit onderzoek niet verder in beschouwing worden genomen. Een vierde onderwerp betreft de interrelatie tussen innovatie en het inflectiepunt: in welk opzicht is de in dit onderzoek waargenomen leiderschapsgedrag toepasselijk op omwentelingen die niet extern zijn maar binnen de onderneming worden gegenereerd? En tot slot wordt de vraag gesteld in hoeverre dit onderzoek niet een aanzet is tot een veel breder en mogelijk actueel terrein van reactieve strategievorming, waarbij de leiding niet meer voorop kan lopen in het ontwikkelen van strategische modellen voor de onderneming, maar moet reageren op nieuwe wetmatigheden die zich onverwacht aan de markten waarin de onderneming opereert opdringen. Volberda initieerde een aantal belangrijke gedachten op dit terrein met zijn exploratie van het begrip flexibiliteit in bedrijfskundige zin. Op strategisch-analytisch gebied ligt hier terrein braak. De functie van strategisch management is om te begrijpen wat de “scarce commodity” in brede zin is van de toekomst, en de onderneming te equiperen om hier zo goed mogelijk mee om te gaan. Dit is een uitdaging die blijft voortbestaan.

Reference List

Author(s)	Year	Article
Aaker, D.A., and Macarenhas, B.	1984	The Need for Strategic Flexibility
Abell, Derek	1993	
Abernathy, W.J., and Clark, K.B.	1985	Innovation: Mapping the Winds of Creative Destruction
Ackoff, R. L.	1974	
Ackoff, R. L.	1981	
Ackoff, R. L.	1971	Towards a System of Systems Concepts
Ackoff, R. L.	1977	Towards Flexible Organizations: A multidimensional design
Ackoff, R. L.	1994	
Albert, S.	1984	A Design Model for Successful Transitions
Aldrich, H.	1985	
Aldrich, H. & Pfeffer	1976	Environments of Organisations
Amit, R., and Schoemaker, P.J.H.	1993	Strategic assets and organizational rents
Amit, R., and Zott, C.	2001	Value creation in e-business
Anderson, P.	1999	Complexity Theory and Organization Science
Anderson, P., and Tushman, M.L.	1990	Technological Discontinuities and Dominant Designs: A Cyclical Model of Technological Change
Anderson, P., and Tushman, M.L.	1991	Managing through cycles of technological change
Andrews, K.	1987	
Ansoff, H.I.	1978	The Changing Shape of the Strategic Problem
Ansoff, H.I.	1988	
Ansoff, H.I.	1965	
Ansoff, H.I., Eppink, D.J. and Gomer, H.	1975	Management and Discontinuity, Problems of Managerial Decisiveness
Ansoff, I.		
Ansoff, H.I., and McDonnel, E.	1984	
Argyris, C. & Schon,D.A.	1974	
Argyris, C.	1990	
Baaij, M.G., and van den Bosch, F.A.J.	1999	Naar een evolutionair raamwerk van strategie
Baaij, M.G., and van den Bosch, F.A.J.	1998	Is blijvend ondernemingssucces mogelijk?
Baaij, M.G., & Commandeur, H.R.	1997	
Baden-Fuller, C., and Stopford, J.M.	1994	
Baden-Fuller, C., and Volberda, H.W.	1997	Strategic Renewal in Large Complex Organizations: A Competence-Based View

Journal/Book Title	Publisher
The Journal of Business Strategy, 5/2, 74-82	
Managing with dual strategies: mastering the present, preempting the future	New York: The Free Press
Research Policy, 14: 3-22	
Redesigning the Future	New York, Wiley
Creating the Corporate Future	New York, Wiley
Management Science 17/11, 661-71	
Omega 5/6, 649-62	
The Democratic Organization	Oxford: Oxford University Press
Managing Organizational Transitions, J. Kimberley and R. Quinn (eds.) 169-91	Homewood, Ill.: Irwin
Population perspectives on organization	Stockholm: Gotab
Annual Review of Sociology,	
Strategic Management Journal, 14 (1): 33-46	
Strategic Management Journal, 22: 493-520	
Organization Science 10/3: 216-232.	
Administrative Science Quarterly, 35: 604-633	
Research Technology Management, 34 (3)	
The Concept of Corporate Strategy	Irwin
Strategic Management: A New View of Business Policy and Planning,	Boston and Toronto: Little,
D.E. Schendel and C.W. Hofer (eds.) 30-44	Brown & Company
The New Corporate Strategy	Chichester: Wiley
Corporate Strategy	New York, McGraw-Hill
Working Paper 75-29	European Institute for Advanced
	Studies in Management, Brussels
Early Warning Systems	
Implanting Stratecig Change	Prentice Hall
Theory in Practice: Increasing Professional Efectiveness	San Francisco: Jossey-Bass
Overcome Organizational Defences: facilitating organizational learning	Prentice Hall
Bedrijfskunde, 71 (2): 52-59	
Management & Organisatie	
Rejuvenating the Mature Business	Boston: Harvard Business
	School Press
Competence-Based Strategic Management, A. Heene and R. Sanchez (eds.) 89-110	Chichester: Wiley

Author(s)	Year	Article
Baden-Fuller, C.W.F.	1995	Strategic Innovation, Corporate Entrepreneurship and Matching Outside-In to Inside-Out Approaches to Strategy Research
Bahrami, H.	1992	The Emerging Flexible Organization: Perspectives from Silicon Valley
Bakker, B.A. & van Luyk, T.	1988	
Barney, J.B. & Zajak	1994	Competitive Organisational Behaviour: Towards and Organizationally-Based Theory of Competitive Advantage
Barthon, L.	1992	
Barker, V.L., and Duhaime, I.M.	1997	Strategic Change in the Turnaround Process: Theory and Empirical Evidence
Barnard, C.I.	1938	
Barney, J.B.	1991	Firm resources and sustained competitive advantage
Barras, R.	1986	Towards a theory of innovation in services
Bartlett, C.A., and Ghoshal, S.	1993	Beyond the M-form: Towards a managerial theory of the firm
Barnett, W.P, Greeve, H.R. & Park, D.Y.	1994	An Evolutionary Model of Organizational Performance
Baumol, W.J.	2002	
Becker, S.W., and Whiskler, T.L.	1967	The Innovative Organization: A Selective View of Current Theory and Research
Beinhocker, E.D.	1999	Robust Adaptive Strategies
Beinhocker, E.D.	1997	Strategy at the edge of chaos
Belasco, J.	1990	
Boer, de M., Bosch, van den F.A.J, and Volberda, H.W.	1999	Managing organizational knowledge intergration in the emerging multimedia complex
Boisot, M., and Child, J.	1999	Organizations as Adaptive Systems in Complex Environments: The Case of China
Bosch, van den F.A.J.	1994	Over de Grenzen van Organisaties
Bosch, van den F.A.J.	1995	Naar een Dynamische Theorie van Organisatie
Bosch, van den F.A.J., and Riel, van C.B.M.	1996	Buffering- versus bridging-strategieën en het management van strategische issues
Bosch, van den F.A.J.	1996	Stakeholders en Management: een Case-study
Bosch, F. A. J. van den	1993	Ontwikkelingen in de Wetenschappelijke Benadering van Strategie- en Omgevingsvraagstukken
Van den Bosch, F. A. J., and de Man, A.P. (eds.)	1997	
Bosch, van den F.A.J., Volberda, H.W., and Boer, de M.	1999	Coevolution of firm absorptive capacity and knowledge environment: organizational forms and combinative capabilities
Bourgeois, J.L.	1984	Strategic Management and Determinism
Bourgeois, J.L. & Brodwin, D.	1983	Putting your strategy into action
Bolwijn, P.T., and Kumpe, T.	1990	Manufacturing in the 1990s - Productivity, Flexibility and Innovation
Burgelman, R.A.	2002	

Journal/Book Title	Publisher
British Journal of Management, 6: 3-16	
California Management Review, summer, 33-52	
Handboek Klantgericht Denken en Doen	Alphen: Samsom
Strategic Management Journal, 15, Winter Special Issue: 5-9	
Core Rigidities	
Strategic Management Journal, 18/1: 13-38	
The Functions of the Executive	Boston: Harvard University Press
Journal of Management, 17 (1): 99-120	
Research Policy, 15: 161-173	
Strategic Management Journal, 14: 23-46	
Strategic Management Journal 15, Winter Special Issue: 11-28	Princeton: Princeton University
the Free Market Innovation Machine	Press
Journal of Business, 40: 462-69	
Sloan Management Review, Spring1999: 95-106.	
McKinsey Quarterly, (1):25-39	
Teaching the Elephant to Dance	Random House/ Century
Journal of Management Studies: 36 (3): 379-398	
Organization Science 10/3: 237-252.	
Bedrijfskunde: 66 (1): 57-64	
Bedrijfskunde: 67 (1): 52-69	
Bedrijfskunde: 68 (4): 44-50	
Holland /Belgium Management Review: 47: 24-31	
Erasmus University Management Report Series, no. 161	
Perspectives on Stretegy: Contributions of Michael E. Porter	Boston/Dordrecht/London: Kluwer Academic Publishers
Organization Science: 10 (5): 551-568	
Acadamy of Management Review 9/4: 586-596	
Strategic Management Planning	
Long Range Planning 23/4:44-57	
Strategy is Destiny	NY: Free Press

Author(s)	Year	Article
Burgelman, R.A.	1994	Fading Memories: A Process Theory of Strategic Business Exit in Dynamic Environments
Burgelman, R.A.	1983	A process model for internal corporate venturing in a diversified major firm
Burgelman, R.A.	1996	A Process of Strategic Business Exit: Implications for an Evolutionary Perspective on Strategy
Burgelman, R.A & Grove.	2001	
Burgelman, R.A., Maidique, M.A., Wheelwright, S.C.	1995	
Burns, T., and Stalker, G.M.	1961	
Chakravathy & Lorange	1991	
Chandler, A.D. Jr.	1962	
Christenson, C.	1997	
Ciborra, C.U.	1996	The Platform Organization: Recombining Strategies, Structures, and Surprises
Clark, K.B.	1989	What Strategy Can Do for Technology
Cohn, S.F., and Turyn, R.M.	1984	Organizational Structure, Decision Making Procedures and the Adaption of Innovations
Cole, A.H.	1957	
Cole, A.H.	1959	
Commandeur, H.R.	1994	Strategische Samenwerking in Netwerkperspectief
Commandeur, H.R.	1999	De Betekenis van Increasing Returns voor Managementvraagstukken
Conner, K.R., and Prahalad, C.K.	1996	A Resourced-Based Theory of the Firm: Knowledge Versus Opportunism
Copeland, T., and Koller, T.	1995	
Coyle, T., and Page, T.	1994	Learning to Change in SmithKline Beecham
Craig, T.	1996	The Japanese Beer Wars: Initiating and Responding to Hypercompetition in New Product Development
Cyert, R., and March, J.	1963	
Daft & Weick	1984	Toward a Model of Organizations as Interpretation Systems
D'Aveni, R.	1994	
D'Aveni, R.	1999	Strategic Supremacy through Disruption and Dominance
Darwin, C.R.	1859	
Davidow, W. H., and Malone, M. S.	1992	
Deschamps, J. P., & Najak, P.R.	1995	
Dierickx, I., and Cool, K.	1989	Asset stock accumulation and sustainability of competitive advantage

Journal/Book Title	Publisher
Administrative Science Quarterly, 39: 24-56	
Administrative Science Quarterly 28: 223-244	
Strategic Management Journal 17: 193-214	
Strategic Management ofTechnology and Innovation	NY: McGraw Hill
The Management of Innovation	London: Tavistock
Strategy and Structure	Cambridge, Mass.: MIT Press
The Innovator's Dilemma. When new technologies cause great firms to fail	Boston MA: Harvard Business School Press
Organization Science, 7/2: 103-18	
Harvard Business Review 67/6: 94-98	
IEEE Transactions on Engineering Management, EM 31, Nov., 154-61	
The historical development of economic and business literature	Boston
Business Enterprise in its social setting	Cambridge: Harvard University Press
Dissertation	Erasmus Universiteit
Inaugural Lecture, Nyenrode	Nyenrode
Organization Science 7/5, 477-501	
Valuation	Wiley
Business Change and Re-engineering 1/4:10-19	
Organization Science, 7/3: 302-21	
A Behavioral Theory of the Firm	Englewoods Cliffs, NJ: Prentice-Hall
Academy of Management Review 9(2): 284-95	
Hypercompetition: Managing the Dynamics of Strategic Maneuvering	New York: The Free Press
Sloan Management Review, Spring 1999	
On the Origin of Species by Means of Natural Selection	London: J. Murray
The Virtual Corporation	New York: HarperCollins
Product Juggernauts: How companies mobilize to generate a stream of market winners	Boston, MA: Harvard Business School Press
Management Science, 35: 1504-11	

Author(s)	Year	Article
Dijksterhuis, M.S., Bosch, van den F.A.J., and Volberda, H.W.	1999	Where do new organizational forms come from? Management logics as a source of coevolution
DiMaggio, P.J. & Powell, W.W.	1983	The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organization Fields
Dooley, K.J., and Van de Ven, A.H.	1999	Explaining Complex Organizational Dynamics
Douglas, M.	1986	
Douma, S. & Schreuder, H.	1991	
Doz, Y.	1994	Managing Core Competency for Corporate Renewal: Towards a Managerial Theory of Core Competencies
Drucker, P.	1973	
Drucker, P.	1985	
Dumphy & Stace	1994	
Eccles, R., and Nohria, N.	1992	
Eisenhardt, K.M.	1989	Building theories from case study research
Eisenhardt, K.M.	1990	Speed and strategic choice: how managers accelerate decision making
Eisenhardt, K.M., and Martin, J.A.	2000	Dynamic capabilities: what are they?
Elfring, T., and Volberda, H.W.	1996	Schools of Thought in Strategic Management
Eppink, D. J.	1978	
Evans, J. S.	1991	Strategic Flexibility for High Technology Manoeuvres: A Conceptual Framework
Fama, E. & Miller, M.	1971	
Fayol, H.F.	1914	
Feldman, S. P.	1988	How Organizational Culture Can Affect Innovation
Fiol, C. M., and Lyles, M. A.	1985	Organizational Learning
Floyd, C.	1997	
Forrester, J. W.	1961	
Foss, N.J.	2000	Evolutionary Theories of the Firm: Reconstruction and Relation to Contractual Theories
Foss, N.J., Knudsen, C., and Montgomery, C.A.	1995	
Foster, R.	1986	
Frazelle, E. H.	1986	Flexibility: A Strategic Response in Changing Times
Freeman, C.	1982	
Friedlander, F.	1983	Patterns of Individual and Organizational Learning
Fulmer, W.E.	2000	
Galbraith, J. R.	1973	
Galbraith, J. R.	1995	

Journal/Book Title	Publisher
Organization Science , 10 (5): 569-82	
American Sociological Review, 48: 147-60	
Organization Science 10/3: 358-372.	
How Institutions Think	Syracuse University Press
Economic Approaches to Organizations	HemelHempstead: Prentice Hall
INSEAD Working Paper	
Management: Tasks, Responsibilities, Practices	NY: Harper & Row
Innovation and Entrepreneurship	New York: Harper & Row
Beyond the Boudaries: Leading and Re-creating the Successful Enterprize	NY: McGraw Hill
Beyond the Hype	Nervall Business School Press
Academy of Management Review 14(4), 532-550	
California Management Review, 32 (2): 39-54	
Strategic Management Journal, 21: 1105-1121	
Theory Building in the Business Sciences, T. Elfring, H. Siggaard Jensen	Copenhagen: Munksgaard
and A. Money (eds.), 11-47	International Publishers
Managing the Unforeseen: A Study of Flexibility, dissertation thesis	Ermelo: Administratief Centrum
Journal of Management Studies, 28/1: 69-89	
The Theory of Finance	Hinsdale: Dryden Press
Administration industrielle et generale: prevoyance, organisation,	Paris: Dunod
commandement, coordination, controle	
Organizational Dynamics, summer, 57-67	
Academy of Management Review, 10/4: 803-13	
Managing Technology for Corporate Success	Hampshire: Gower
Industrial Dynamics	MIT Press
Evolutionary Principles of Economicz (K.Dopfer, ed.)	Boston: Kluwer Academic
Resource-Based and Evolutionary Theories of the Firm: Towards a Syntesis	Boston: Kluwer Academic
Innovation. The Attacker's Advantage	NY: Summit Books
Industrial Engineering, Mar., 17-20	
The Economics of Industrial Organization	Boston: MIT Press
The Executive Mind, P. Srivastva (ed.) 192-220	San Francisco: Jossey-Bass
Shaping the Adaptive Organization	NY: Amacom
Designing Complex Organizations	Reading, Mass.: Addison-Wesley
Designing Organizations	San Francisco: Jossey-Bass

Author(s)	Year	Article
Galer, G. and Heyden, K. van der	1992	How Planners Create Organizational Learning
Garvin, D. A.	2002	
Garvin, D. A.	1993	Building a Learning Organization
Gersick, C.J.G.	1991	Revolutionary Change Theories: A Multilevel Exploration of the Punctuated Equilibrium Paradigm
Geus, A. de	1988	Planning as Learning
Geus, A. de	1997	
Ghemawat, P.	1991	
Ginsburg, A., and Buchholtz, A.	1990	Converting to For-Profit Status: Corporate Responsiveness to Radical Change
Glzaer, B. & Strauss, A.	1967	
Goold, M., and Campbell, A., and Alexander, M.	1994	
Goshal, S., and Bartlett, C.A.	1996	Building Behavioral Context: A Blueprint for Corporate Renewal
Grant, R.M.	1998	
Grant, R.M.	1996	Prospering in Dynamically-Competitive Environments: Organizational Capablity as Knowledge Integration
Grove, Andrew S.	1996	
Grove, A.S.	1997	Navigating Strategic Inflection Points
Hage, J., and Dewar, R.	1973	Elite Values versus Organizational Structure in Predicting Innovation
Hambrick, D. C., and D'Aveni, R.	1988	Large Corporate Failures as Downward Spirals
Hambrick, D. C., Nadler, D. A., Tushman, M. L. (eds.)	1998	
Hamel, G., and Prahalad, C. K.	1989	Strategic Intent
Hammer, M.	1996	
Hammer, M., and Champy, J.	1993	
Hampelen-Turner, C.	1990	
Handy, C.	1995	
Hannan, M. T., and Freeman, J.	1977	The Population Ecology of Organizational
Hannan, M. T., and Freeman, J.	1984	Structural Inertia and Organizational Change
Harrigan, K. R.	1985	
Haspeslagh, P., and Jemison, D.	1991	
Hatch, J.M., and Tsoukas, H.	1997	Complex Thinking about Organizational Complexity: The Appeal of a Narrative Approach to Complexity Theory
Hatten, K.J., and Schendel, D.E.	1972	
Hatten, K.J., and Schendel, D.E.	1972	
Hatten, K.J., and Schendel, D.E.	1976	
Hedberg, B.	1981	How Organizationas Learn and Unlearn

Journal/Book Title	Publisher
Marketing Intelligence and Planning, 10, no. 2	
Processe & Action	NY: McGraw Hill
Harvard Business Review, 71, July-Aug., 78-91	
Academy of Management Review 16/1: 10-36.	
Harvard Business Review, 66 (no. 2)	
The living company: growth, learning and longevity in business	London: Nicolas Brealey Publishing
Commitment: The Dynamic Strategy	New York: The Free Press
Academy of Management Journal, 33/3, Sept., 445-77	
The discovery of grounded theory: Strategies for qualitative research	Chicago: Aldine
Corporate-level Strategy	Wiley
Sloan Management Review, 37/2: 23-36	
Contemporary Strategy Analysis	Malden: Blackwell
Organization Science, 7(4): 375-87	
Only the paranoid survive. How to exploit the crisis points that challenge every company and career.	New York: Currency Doubleday
Business Strategy Review 8/3: 11-18.	
Administrative Science Quarterly, 18: 279-90	
Administrative Science Quarterly, 33: 1-23	
Navigating Change. How CEOs, top teams and boards steer transformation.	Boston, MA: Harvard Business School Press
Harvard Business Review, May-June, 63-76	
Beyond Reengineering	NY: HarperCollins
Reengineering The Corporation	London: Nicholas Brealey
Charting the Corporate Mind	Blackwell
The Age of Unreason	London: Arrow Business Books
American Journal of Sociology, 82: 929-64	
American Sociological Review, 49: 149-64	
Strategic Flexibility	Massachusetts and Toronto: Lexington Books
Managing Acquisitions	Free Press
Warwick Business School Research Paper	
Business policy or strategic management: a broader view for an emerging discipline	
Strategic planning and higher education: some concepts, problems and opportunities	
Stertegy's role in policy research	
Handbook of Organizational Design, i, N. Nystrom and W. Starbuck (eds.) 3-27	Oxford: Oxford University Press

Author(s)	Year	Article
Hedgberg, B.L.T., Nystrom, P.C., and Starbuck, W.H.	1976	Camping on Seesaw Prescriptions for a Self-Designing Organization
Heene, A.	1995	
Henderson & Cockburn	1994	Measuring Competence Exploitation in Pharmaceutical Firms
Heyden, K. van der	1994	Probabilistic Planning and Scenario Analysis
Heyden, K. van der	1996	
Hisrich, R. D., and Peters, M. P.	1989	
Hofer, C. W., and Schendel, D.	1978	
Hofstede, G., Neuijen, B., Daval Ohayv, D., and Sanders, G.	1990	Measuring Organizational Cultures: A Qualitative and Quantitative Study across Twenty Cases
Hunt, J. W.	1972	
Hunt, R. G.	1970	Technology and Organization
Huy, Q.N.	1999	Emotional Capability, Emotional Intelligence, and Radical Change
Huy, Q.N.	2001	In praise of middle managers
Huygens, M., Baden-Fuller, C., Bosch, van den F.A.J., and Volberda, H.W.	2001	Coevolution of firm capabilities and industry competition: investigating the music industry, 1877-1997
Ilinitch, A. Y., D'Aveni, R. A., and Lewin, A. Y.	1996	New Organizational Forms and Strategies for Managing in Hypercompetitive Environments
Ilinitch, A. Y., Lewin, A. Y., and D'Aveni, R. (eds.)	1998	
Itami, H., and Roehl	1987	
Jacobs, R.W.	1994	
Johannisson, B.	1987	Anarchists and Organizers - Entrepreneurs in a Network Perspective
Kanter, R. M.	1988	When a Thousand Flowers Bloom: Structural, Collective, and Social Conditions for Innovation in Organization
Kanter, R.M.	1983	
Kanter, R.M.	1989	
Kanter, R. M., Stein, B. A., and Jick, T. D.	1992	
Kaplan, R.S., and Norton, D.P.	1996	
Kauffman, S.A.	1985	
Kauffman, S.A.	1993	
Kauffman, S.A.	1995	Escaping the red queen effect
Keuning, D.	1995	
Keuning, D & Eppink, D.J.	2000	
Keuning, D & Opheij, W.	1994	
Kieser, A.	1994	Why Organization Theory Needs Historical Analyses - And How This Should Be Performed

Journal/Book Title	Publisher
Administrative Science Quarterly, 21: 41-65	
Bruggen naar de Toekomst	Lannoo
Strategic Management Journal 15:63-84	
Subjective Probability, Wright and Ayton (ed.)	Wiley
Scenarios: The art of strategic conversation	Chichester: Wiley
Entrepreneurship: Starting, Developing, and Managing a New Enterprise	Homewood, Ill.: Irwin
Strategy Formulation: Analytical Concepts	St Paul, Minn.: West Publishing
Administrative Science Quarterly, 35: 286-316	
The Restless Organization	Sydney: Wiley
Academy of Management Journal, 13: 236-52	
Academy of Management Review 24/2: 325-345.	
Harvard Business Review	
Organizational Studies, 22 (6): 971-1101	
Organization Science, 7/3: 211-20	
Managing in times of disorder: hypercompetitive organizational responses	Thousand Oaks CA: Sage
Mobilizing Invisible Assets	Cambridge, Mass.: Harvard University Press
Real Time Stratecig Change	Barrett-Koehler
International Studies of Management and Organization, 17/1: 49-63	
Research in Organizational Behavior, x, B. M. Staw and L. L. Cummings (eds.) 169-211	Greenwich, Conn.: JAI Press
The Change Masters	New York: Simon & Schuster
When Giants Learn to Dance	New York: Simon & Schuster
The Challenge of Organizational Change: How Companies Experience it and Leaders Guide it	New York: The Free Press
The Balanced Scorecard	Harvard Business School Press
Time, Chance and Organisation	
The Origins of Order: Self-Organization and Selection in Evolution	New York: Oxford University Press
McKinsey Quarterly, (1):119-129	
Grondslagen van het Management	Zutphen: Stenfert Kroese
Management & Organisatie	Houten: Educatieve Partners Nederland
Delayering Organisations	London: Pittman
Organization Science, 5/4: 608-20	

Author(s)	Year	Article
Kirzner, I.	1973	
Knight, K.	1976	Matrix Organization: A Review
Kotler, P.	1988	
Kotler, P.	1972	A Generic Concept of Marketing
Kotler, P.	1988	
Kotter, J.P.	1996	
Krijnen, H. G.	1979	The Flexible Firm
Lawrence, P., and Lorsch, J.	1967	
Leemhuis, J.	1985	Using scenarios to develop strategies
Lenz, R. T., and Lyles, M. A.	1985	Paralysis by Analysis: Is Your Planning System Becoming Too Rational?
Leonard-Barton, D.	1995	
Leonard-Barton, D.	1992	Core Capabilities and Core Rigidities: A Paradox in Managing New Product Development
Levinthal, D. A., and March, J. G.	1993	The Myopia of Learning
Levitt, B., and March, J. G.	1988	Organizational Learning
Levy, D.	1994	Chaos Theory and Strategy: Theory, Application, and Managerial Inplications
Levy, A., and Merry, U.	1986	
Lewin,A & Volberda,H	1999	Prolegomena on Coevolution: A Framework for Research on Strategy and New Oranisation Forms
Lewin, K.	1947	Frontiers in groep dynamics, concept method and reality in social science
Lindblom, C. E.	1959	The Science of "Muddling Through"
Linneman, R.E., and Chandran, R.	1981	Contingency Planning
Londen, Hans van	1990	
Londen, Hans van	1992	
Londen, Hans van	1999	
Lorange, P., and Vancil, R. A.	1977	
Lorenzoni, G., and Baden-Fuller, C.	1995	Creating a Strategic Center to Manage a Web of Partners
Maira, A. and Scott-Morgan, P.	1997	
Maljers, F., Baden-Fuller, C., and Van den Bosch, F.	1996	Maintaining Strategic Momentum: The CEO's Agenda
Mandele, H.C. van der	2002	Apoptose en de Stellingen van Pronk
March, J.G.	1981	Footnotes to Organizational Change
March, J.G.	1991	Exploration and Exploitation in Organizational Learning
March, J.G. & Olsen	1972	A Garbage Can Approach of Organizational Choice

Journal/Book Title	Publisher
Competition and Entrepreneurship	Chicago: University of Chicago Press
The Journal of Management Studies, 13: 111-130	
Marketing Management: Analysis, Planning, Implementation and Control	Englewoods Cliffs, NJ: Prentice-Hall
Journal of Marketing 36, April 46-54	
Marketing Management: Analysis, Planning, Implementation and Control	Englewoods Cliffs, NJ: Prentice-Hall
Leading Change	Cambidge: Harvard Business School Press
Long Range Planning 12, Apr., 63-75	
Organization and Environment	Harvard Business School Press
Long Range Planning, 18, no. 2	
Long Range Planning, 18/4: 64-72	
Wellsprings of Knowledge: Building and Sustaining the Sources of Innovation	Boston, Mass.: Harvard Business School Press
Strategic Management Journal, 13, Special Issue, 111-25	
Strategic Management Journal, 14, Special Issue, 95-112	
Annual Review of Sociology, xiv, W. R. Scott (ed.) 319-40	Palo Alto, Calif: Annual Reviews
Strategic Management Journal 15: 167-178	
Organizational Transformation	New York: Praeger
Proceedings of Academy of Management 519-534	Washington, D.C.
Human Relations: I, 2-38	
Public Administration Review, 19, spring, 79-88	
Managerial Planning, Jan.-Feb.	
Leiden en leren leiden	Van Gorcum
Synergie en Decentralisatie	Kluwer
De Waarde en Waarden van Concerns	Van Gorcum/Stichting Management Studies
Strategic Planning Systems	Englewoods Cliffs, NJ: Prentice-Hall
California Management Review, 37/3: 146-63	
The Accelerating Organization. Embracing the human face of change	New York: McGraw-Hill
European Management Journal, 14/6: 555-61	
ESB 87/4356: 308	ESB
Administrative Science Quarterly, 26/4: 563-77	
Organization Science, 2/1: 71-87	
Administrative Science Quarterly 17: 1-25	

Author(s)	Year	Article
Marlow, H.	1994	Intuition and forecasting - a holistic approach
Martin, J., and Siehl, C.	1983	Organizational Cultures and Counter-Culture: An Uneasy Symbiosis
Mascarenhas, B.	1982	Coping with Uncertainty in International Business
Mason, R., and Mitroff, I.	1981	New York: Wiley
McKelvey, B., and Aldrich, H.	1983	Populations, Natural Selection, and Applied Organizational Science
Metcalfe, L.	1981	Designing Precarious Partnerships
Meyer & Rowan	1977	Institutional Organisations: Frmal Structures as Myth and Ceremony
Miles, M.B. & Huberman, A.M.,	1984	
Miles, R. E., and Snow, C. C.	1986	Organizations: New Concepts for New Forms
Miles, R. E., and Snow, C. C.	1992	Causes and Failure in Network Organizations
Miles, R.E., and Snow, C.C.	1978	
Miles, R. E., Coleman, H. J., Jr., and Creed, W.E.D.	1995	Keys to Success in Corporate Redesign
Miller, D., and Chen, M.	1994	Sources and Consequences of Competitive Inertia: A Study of the U.S. Airline Industry
Mintzberg, H.	1983	
Mintzberg, H. et. al.	1998	
Mintzberg, H.	1990	Strategy Formation: Schools of Thought
Mintzberg, H.	1994	
Mintzberg, H., Quinn, J.B., Goschal, S.	1995	
Mintzberg, H. and Waters, J. A.	1985	Of Strategies, Deliberate and Emergent
Mintzberg, H., and Waters, J.A.	1982	Tracking Strategy in an Entrepreunerial Firm
Mintzberg, H. and Westley, F.	1992	Cycles of Organizational Change
Mitchell, R.K., Agle, B.R., and Wood, D.J.	1997	Toward a theory of stakeholder identification and salience: defining the priciple of who and what really counts
Montgomery, C.A. (ed.)	1995	
Moss-Kanter, R.	1989	
Moss-Kanter, R.	2001	
Moss-Kanter, R.	1983	
Morel, B., and Ramanujam, R.	1999	Through the Looking Glass of Complexity: The Dynamics of Organizations as Adaptive and Evolving Systems
Nadler, D.A., Shaw, R.B. & Walton, A.E.	1995	
Nadler, D A.	1981	Managing Organizational Change: An Integrative Perspective
Naert, P.A., & Leeflang P.S.H	1978	
Nelson, R. R., and Winter, S. G.	1977	In Search of a Useful Theory of Innovation
Nelson, R., and Winter, S. G.	1982	
Noda, T., and Bower, J.L.	1996	Strategy making as iterated processes of resource allocation

Journal/Book Title	Publisher
Long Range Planning, 27 (6): 58-68	
Organizational Dynamics, 11: 52-64	
Journal of International Business Studies, 13/2: 87-98	
Challenging Strategic Planning Assumptions	
Administrative Science Quarterly, 28/1: 101-28	
Handbook of Organizational Design, i, N. Nystrom and W. Starbuck (eds.) 503-30	New York: Oxford University Press
American Journal of Sociology, 83: 340-63	
Analysing qualitative data: A source book for new methods	Beverley Hills, CA: Sage
California Management Review, 28/3: 62-73	
California Management Review, 34/4: 53-72	
Organizational Strategy, Structure and Process	Mc Graw Hill
California Management Review, 37/3: 128-145	
Administrative Science Quarterly, 39: 1-23	
Structure in Fives	Prentice Hall
Strategy Safari: A Guided Tour through the Wilds of Strategic Management	New York: Free Press
Perspectives on Strategic Management, J. W. Frederickson (ed.) 105-235	Boston: Ballinger
The Rise and Fall of Strategic Planning	New York: The Free Press
The Strategy Process	Harlow, Pearson
Strategic Management Journal, 6: 257-272	
Academy of Management Journal, 25/3: 465-99	
Strategic Management Journal, 13: 39-59	
Academy of Management Review, 22 (4): 853-886	
Resourced-Based and Evolutionary Theories of the Firm: Towards a Synthesis	Boston: Kluwer Academic
When Giants learn to dance	New York: Simon & Schuster
E-Volve	Cambridge: Harvard Business School Press
The Change Masters	Allen & Unwin
Organization Science 10/3: 278-293	
Discontinuous Change	San Francisco: Jossey-Bass
The Journal of Applied Behavioral Science, 17/2: 191-211	
Buildig Implementable Maketing Models	Deventer: Kluwer
Research Policy, 6: 36-76	
An evolutionary theory of economic change.	Cambridge MA: Belknap Press of Harvard University Press
Strategic Management Journal, 17: 169-192	

Author(s)	Year	Article
Nolan, R., and Croson, D.	1995	
Nonaka, I.	1994	A Dynamic Theory of Organizational Knowledge Creation
Nonaka, I., and Takeuchi, H.	1995	
Normann, R.	1977	
Oomens, M.J.H., and Bosch, van den F.A.J.	1999	Strategic issue management in major European-based companies
Ouchi, W. G.	1981	
Pascale, R. T.	1990	
Pascale, R. T., and Athos, A. G.	1981	
Pasmore, W. A.	1994	
Pennings, J. M., and Harianto, F.	1992	Technological Networking and Innovation Implementation
Penrose, E.	1959	
Peters, T. J.	1987	
Peters, T. J., and Waterman, R. H., Jr.	1982	
Pettigrew, A., and Whipp, R.	1991	
Piore, M., and Sabel, C.	1984	Why Companies Might be Moving Steadily towards Specialization and Flexibility
Porter, M.E.	1980	
Porter, M.E.	1985	
Porter, M.E.	1991	Towards a Dynamic Theory of Strategy
Porter, M.E.	1996	What is Strategy
Porter, M.E.	2001	Strategy and the Internet
Powell, W.W. & DiMaggio, P.J.	1991	
Prahalad, C. K., and Bettis, R. A.	1986	The Dominant Logic: A New Linkage Between Diversity and Performance
Prahalad, C. K., and Hamel, G.	1990	The Core Competence of the Corporation
Prahalad, C.K., and Doz, Y.	1987	
Puffer, S.M.	1999	Global Executive: Intel's Andrew Grove on Competitiveness
Pugh, D.S., Hickson, D.J., and Hinings,C.R.	1969	An Empirical Taxanomy of Structures of Work Organizations
Quinn, J. B.	1980	
Quinn, J. B.	1992	
Quinn, J. B.	1985	Managing Innovation: Controlled Chaos
Quinn, J. B.	1978	Strategic Change: Logic Incrementalism
Richardson, J.	1996	Vertical Integration and Rapid Response in Fashion Apparel
Roberts, E. B.	1980	New Ventures for Corporate Growth
Rhenman, E.	1973	
Rigby, D.	2001	Moving upward in a downturn

Journal/Book Title	Publisher
Creative Deatruction	Harvard Business School Press
Organizational Science, 5/1: 14-37	
The Knowledge-Creating Company	New York: Oxford University Press
Management for Growth	New York: Wiley
Long Range Planning, 32 (1): 49-57	
Theory Z: How American Business can Meet the Japanese Challenge	Reading, Mass.: Addison-Wesley
Managing on the Edge	London: Penguin Books
The Art of Japanese Management: Applications for American Executives	New York: Simon & Schuster
Creating Strategic Change: Designing the Flexible, High-Performing Organization	New York: Wiley
Organization Science, 3/3: 356-82	
The Theory of the Growth of the Firm	London: Oxford University Press
Thriving on Chaos	New York: Knopf
In Search of Excellence	New York: Warner Books
Managing Change for Strategic Succes	Blackwell
International Management, Oct., 97-100	
Competitive Strategy	New York: The Free Press
Competitive Advantage	New York: The Free Press
Strategic Management Journal, 12 (Winter Special Issue): 95-117	
Harvard Business Review, 74/6: 61-78	
Harvard Business Review, 79: 63-78	
New Institutionalism in Organizational Analysis	Chicago: University of Chicago Press
Strategic Management Journal, 7/6: 485-501	
Harvard Business Review, 68, May-June, 79-91	
The Multinational Mission	New York: The Free Press
Academy of Management Executive 13/1: 15-24.	
Administrative Science Quarterly, 115-126	
Strategies for Change - Logical Incrementalism	Homewood, Ill.: Irwin
Intelligent Enterprise: A Knowledge and Service Based Paradigm for Industry	New York: The Free Press
Harvard Business Review, 63/3: 73-84	
Sloan Management Review, Fall 1978: p68-90	
Organization Science, 7/4: 400-12	
Harvard Business Review, July-Aug., 134-42	
Organization Theory for Long-Range Planning	London: John Wiley
Harvard Business review	

Author(s)	Year	Article
Romanelli, E., Tushman, M.L.	1994	Organizational transformation as punctuated euiqilibrium: an empirical test
Roussel, P. A., Saad, K. N., & Erikson, T.	1991	
Rumelt, R. P.	1984	Towards a Strategic Theory of the Firm
Rumelt, R. P.	1995	Inertia and Transformation
Rumelt, R. P.	1987	Theory, Strategy, and Entrepreneurship
Rumelt, R.P., and Schendel, D., and Teece, D.	1994	
Sanchez, R.	1997	Strategic Management at the Point of Inflection: Complexity and Competence Theory
Sanchez, R.	1993	Strategic Flexibility, Firm Organization, and Managerial Work in Dynamic Markets
Sanchez, R., Heene,A. & Thomas, H.	1996	Towards the Theory and Practice of Competence-Based Competition
Schendel, D.E., and Hofer, C.A. eds.	1979	
Schien, E.	1992	
Schramm, W.	1971	Notes on case studies of instructional media projects
Schumpeter, J. A.	1934	
Schumpeter, J. A.	1942	
Schumpeter, J. A.	1928	The Instability of Capitalism
Schumpeter, J. A.	1946	Capitalism
Schumpeter, J. A.	1947	The Creative Response in Economic History
Schumpeter, J. A.	1934	
Schwartz, P.	1991	
Scott, B. W.	1965	
Scott-Morgan, P.	1994	
Scott-Morgan, P., Hoving, E., Smit, J. & Slot, A.van der	2001	End of Change
Selznick, P.	1957	
Senge, P.	1990	The Leader's New Work: Building Learning Organizations
Senge, P.	1990	
Shepard, H. A.	1967	Innovation-Resisting and Innovation-Producing Organizations
Simon, H.	1957	
Simon, H.	1976	
Slytowzky, A.	1996	
Slywotzky, A.J., and Morisson, D.J.	2001	Pattern thinking: a strategic shortcut

Journal/Book Title	Publisher
Academy of Management Journal, 37 (5): 1141-66	
Third Generation R&D	Amsterdam: The Management Bibliotheek
Competitive Strategic Management, R.B. Lamb (ed.)	New York: Prentice Hall
Resource-Based and Evolutionary Theories of the Firm, C. A. Montgomery (ed.) 101-32	Boston: Kluwer Academic
The Competitive Challenge - Strategies for Industrial Innovation and Renewal, D. J. Teece (ed.) 137-58	Cambridge: Ballinger Publishing Company
Fundamentel Issues in Strategy	Harvard Business School Press
Long Range Planning, 30/6: 939-945	
Advances in Strategic Management, ix, 251-91	Greenwich, Conn.: JAI Press
in: Dynamics of Competence-Based Competition	Oxford: Elsevier Pergamon
Strategic Management: A New View of Business Policy and Planning	Boston: Little, Brown
Organization Culture & Leadership	Jossey Base
Academy of Educational Development	
Theorie der Wirtschaftliche Entwicklung	Cambridge: Harvard University Press
Capitalis,, Socialism and Democracy	NY: Harper & Brothers
Economic Journal, 9/28: 361-386	
Encyclopaedia Brittanca, 1946: 801-807	
Journal of Economic History, 11/47: 149-159	
The Theory of Economic Development	Cambridge Mass.: Harvard University Press
The Art of the Long View. Planning for the future in an uncertain world.	New York: Doubleday
Long-Range Planning in American Industry	New York: American Management Association
The Unwritten Rules of the Game	New York: McGraw-Hill
New York: McGraw-Hill	
Leadership in administration: a sociological interpretation	New York: Row Peterson
Sloan Management Review, autumn, 7-23	
The Fifth Discipline: the Art and Practice of the Learning Organization	New York: Currency Doubleday
Journal of Business, 40/4, Oct., 470-77	
Models of Man	
Administrative Behavior	New York: The Free Press
Value Migration	Harvard Business School Press
Strategy and Leadership	

Author(s)	Year	Article
Smith, A.	1776	
Smith, A. D. and Zeithaml, C.	1996	Garbage Cans and Advancing Hypercompetition: The Creation and Exploitation of New Capabilities and Strategic Flexibility in Two Regional Bell Operating Companies
Smith, V.	1994	Institutionalizing Flexibility in a Service Firm
Stacey, R.	1993	
Stalk, G., Evans, P., and Shulman, L. E.	1992	Competing on Capabilities: The New Rules of Corporate Strategy
Stalk, G., Jr., and Hout, T. M.	1990	
Stopford, J. M., and Baden-Fuller, C. W. F.	1994	Creating Corporate Entrepreneurship
Strauss, A. & Corbin, J.	1990	
Strebel, P.	1992	
Teece, D. J.	1984	Economic Analysis and Strategic Management
Teece, D. J., Pisano, G., and Shuen, A.	1997	Dynamic Capabilities and Strategic Management
Thomas, T.J. (ed.)	1991	
Tichy, N. M.	1983	
Toffler, A.	1985	
Toffler, A.	1990	
Tomasko, R.M.	1987	
Tushman, M. L. Newman, W.H. & Romanelli. E.	1986	Convergence and Upheaval:Managing the Unsteady Pace of Organizational Evolution
Tushman, M. L. Newman, W.H. & Romanelli. E.	1994	
Tushman, M. L., Anderson P. & Romanelli. E.	1986	
Tushman, M. L. and Anderson, P. (eds.)	1997	
Tushman, M. L. and Romanelli, E.	1985	Organizational Evolution: A Metamorphosis Model of Convergence and Rorientation
Tushman, M. L., and Anderson, P.	1986	Technological Discontinuities and Organizational Environments
Utterback, J. M., and Abernathy, W. J.	1975	A Dynamic Model of Process and Product Innovation
Utterback, J.M.	1994	
Ven, A. H. van der	1986	Central Problems in the Management of Innovation
Ven, A. H. van der, & Garud, R.	1988	A Framework for Understanding the Emergence of New Industries
Verhaegen, P.M.A.M.	1998	
Volberda, H. W.	1996	Toward The Flexible Form: How to Remain Vital in Hypercompetitive Environments
Volberda, H. W.	1998	

Journal/Book Title	Publisher
Selections from the Wealth of Nations, George J. Stigler (ed.)	New York: Appleton
Organization Science, 7/4: 388-99	
Work and Occupations, 21/3: 284-307	
Strategic Management and Organizational Dynamics	Pitman
Harvard Business Review, Mar.-Apr., 57-69.	
Competing Against Time. How time-based competition is reshaping global markets	New York: The Free Press
Strategic Management Journal, 15/7: 521-36	
Basics of qualitative research: Grounded theroy procedures and techniques	Newbury Park, CA: Sage
Breakpoints. How managers exploit radical business change.	New York: Harvard Business School Press
California Management Review, spring, 87-110.	
Strategic Management Journal, 18/7: 509-33	
New Product Succes Strories: Lessons from Leading Innovators	New York: John Wiley & Sons
Managing Strategic Change	New York: Wiley
The Adaptive Corporation	New York: McGraw-Hill
Powershift	Bantam
Downsizing: Reshaping the Corporation for the Future	NY: Amacom
California Management Review, Fall '86 Vol 29 Issue 1 : 22-45	
Managing strategic innovation and change: a collection of readings	New York: Oxford University Press
Research in Organizational Behavior, vii, Greenwich, Conn.: JAI Press B. M. Staw and L. L. Cummings (eds.) 171-222	
Administrative Science Quarterly, 31:439-65	
Omega, 3/6: 639-56	
Mastering the Dynamics of Innovation	New York: Harvard Business School Press
Management Science, 32/5: 590-607	
Research on Technological Innovation, Management and Policy, iv, R. S. Rosenbloom and R. A. Burgelman (eds.)	Greenwich, Conn.: JAI Press
Balanceren tussn Macht en Organisatie: een BedrijfskundigPerspectief	Delft: Eburon
Organization Science, 7/4: 359-74	
Blijvend Strategisch Vernieuwen in de 21e Eeuw	Kluwer: Deventer

Author(s)	Year	Article
Volberda, H. W.	1997	Building Flexible Organizations for Fast-moving Markets
Volberda, H. W.	1996	Flexible Configuration Strategies within Philips Semiconductors: A Strategic Process of Entrepreneurial Revitalization
Volberda, H. W.	1964	
Volberda, H. W.	1998	
Volberda, H. W. & Baden-Fuller, C.	1996	Strategic Renewal from an Evolutionary Perspective: Four Dynamic Mechanisms
Volberda, H. W. & Baden-Fuller, C. & Bosch, F. van den	2001	Mastering Strategi Renewal: Mobiliozing Renewal Journeys in Multi-Unit Firms
Volberda, H.W. & Elfring, T.	2001	
Vosselman, E.G.J.	1996	Ontwerp van 'Management Control' Systemen - een Economisch Perspectief
Wack, P.	1985	Scenarios: shooting the rapids
Wack, P.	1985	Scenarios: Unchartered waters ahead
Waterman, R.H., Peters, T.J., Philips, J.R.	1980	Structure is not organization
Weick, K.E.	1979	
Wernerfelt, B.	1984	A Resource-Based View of the Firm
Wheelwright, S. C.	1984	Manufacturing Strategy: Defining the Missing Link
Wijk, van R.A., and Bosch, van den F.A.J.	1999	Interne netwerken en intraorganisationele kennisdeling
Williams, J.R.	1992	How sustainable is your competitive advantage?
Winter, S.G.	1984	Schumpeterian Competition in Alternitave Technological Regimes
Wissema, H.	1992	
Womack, J. P., Jones, D. T., and Roos, D.	1990	
Wooldridge, B., and Floyd, S.	1990	The strategy process, middle management involvement , and organizational performance
Wright, G., and Ayton, P. (eds.)	1994	
Yin, R.K.	1994	
Yoshino, N., and Rangan, S.	1991	
Zande, van der D.	2001	Strategic Renewal from an Industry Perspective

Journal/Book Title	Publisher
Long Range Planning, 30/2: 169-83	
Dynamics of Competence-Based Competition, R. Sanchez, A. Heene, and H. Thomas (eds.) 229-78	Oxford: Elsevier Science
Organizational Flexibility: Change and Preservation	Groningen: Wolter Noordhoff
Building the flexible firm. How to remain competitive.	Oxford: Oxford University Press
Management Report Series, No. 266	Rotterdam School of Management, Erasmus University
Long Rang Planning	
Rethinking Strategy	London: Sage
	Kluwer, Deventer
Harvard Business Review 63 no. 6	
Harvard Business Review 63 no. 5	
Business Horizons: 14-26	
The social psychology of organizing	New York: McGraw-Hill
Strategic Management Journal, 5: 171-80	
Strategic Management Journal, 5/1: 77-91	
Bedrijfskunde, 71: 54-60	
California Management Review	
Journal of Economic Behavior and Organization, 5: 287-320	
Unit Management: Entrepreneurship and Coordination in the Decentralized Firm	London:Pittman
The Machine that Changed the World	New York: Rawson Associates
Strategic Management Journal, 11: 231-241	
Subjective Probability	Chichester: Wiley
Case study research: Design and methods	Thousand Oaks CA: Sage
Strategic Alliances	New York: Harvard Business School Press
Long Range Planning, 34 (2): 259-261	

Inflection Point

Case Questions

1 *First attempts:*

- Initial awareness of ICT opportunities at leadership and local levels:
  - Who became aware
  - How was awareness created
  - When
  - Initial reactions

- First attempts at automating text creation, review, editing, storage, distribution:
  - Activities (what)
  - Timing (when)
  - Role of leadership and local management (who)
  - Activities of leadership and local management (how)
  - Results of initial efforts: new activities, investments, revenues, profits, cash impact (what)

2 *Full Internet/Intranet:*

- Initial awareness of Internet/Intranet opportunities at leadership and local levels:
  - Who became aware
  - How was awareness created
  - When
  - Initial reactions

- Internet/Intranet Strategy Development:
  - Initiation
  - Process
  - Role of consultants
  - Timing
  - Role of leadership/local management
  - Types of actions considered and decided:
    - Acquisitions, joint ventures, alliances
    - Investments in fixed assets, software, licenses, etc.
    - Recruitment of experts
    - Training, knowledge building
    - Restructuring
    - New business processes
    - Imposition of company-wide standards
  - Expected results: new activities, investments, revenues, profits, cash impact

- Internet/Intranet Strategy deployment/implementation:
  - Initiation (who, how)
  - Process, project management
  - Role of consultants
  - Timing (year started, ended)
  - Role of leadership/local management
  - Types of actions taken:
    - Acquisitions, joint ventures, alliances
    - Investments in fixed assets, software, licenses, etc.
    - Recruitment of experts
    - Training, knowledge building
    - Restructuring
    - New business processes
    - Imposition of company-wide standards
  - Results of strategy deployment: new activities, investments, revenues, profits, cash impact
- Monitoring/course correction of strategy deployment/implementation:
  - Role of leadership and local management
  - Monitoring/awareness maintenance
  - Actions taken
  - Timing

3 *Post implementation situation:*
- Role/position of leadership and local management
- Structure and processes compared to pre-strategy period
- Business position: market position, growth, profitability, cash flows

4 *Current Situation (if different from 3) :*
- Role/position of leadership and local management
- Structure and processes compared to pre-strategy period
- Business position: market position, growth, profitability, cash flows
- Sustainability of current situation

5 *Perception of transition process:*
- Successes, failures
- How things could have been managed better

List of Case Interviews

In the course of the case analyses, interviews were conducted with the following individuals:

Reed Elsevier		
	Herman Bruggink	Chairman, Board of Management (retired)
	Derk Haank	Executive Director, Elsevier Science Publishers
	Herman Spruijt	Executive Director, Elsevier Science Publishers
Wolters Kluwer		
	Rob Pieterse	Chairman, Board of Management
	Caf van Kempen	Chairman, Board of Management (retired)
De Telegraaf		
	Hans Swart	Member, Board of Management
	Hans Elekan	Managing Director
Wegener		
	Jan van Hanxleven	Chairman, Board of Management
	Peter Nientker	Member, Board of Management
	Joachim Driessen	Head Strategic Planning
VNU		
	Ed Penninx	Managing Director, VNU Yellow Pages
	Peter Tordoir	Managing Director, VNU Business Information

Biography - L. Martin van der Mandele

Mr. Van der Mandele is President of RAND Europe. Before joining RAND Corporation in 2002, he held a number of management position at Arthur D. Little where he established and led the Dutch office and was member of its European Operating Team. He also worked as strategy consultant for Booz Allen & Hamilton in New York, Hamburg and Paris. As a consultant, Mr. Van der Mandele was primarily involved with strategic planning and technology management assignments, mostly for hi-technology multinationals. He also held positions in Planning and Acquisitions for International Paper Company in New York, and in ICT for the ABN-AMRO Bank.

Mr. Van der Mandele has written a number of articles on strategy and planning that were published in “Financieel Dagblad” and “Prism”. More recently, an article that he wrote on the measurement of economic benefits of fundamental research appeared in the Holland Management Review. He holds a Doctoral degree in Law from the University of Leiden where he wrote a thesis on international monetary affairs. He also has an Masters Degree in Business Administration with a finance/accounting orientation from the University of Chicago.

He is chairman or board member of a number of institutes in the field of higher education, science and business, including the Center of Human Drug Research, the Rotterdam School of Management, the Holland Academy of Sciences, Twente University(Advisory), TIAS (Tilburg University), the Institute of Young Entrepreneurship, etc.

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Bijman, W.J.J., *Essays on Agricultural Co-operatives; Governance Structure in Fruit and Vegetable Chains*, (co-) Promotor(es): Prof.dr. G.W.J. Hendrikse, EPS-2002-015-ORG, ISBN: 90-5892-024-0, http://hdl.handle.net/1765/867

Brito, M.P. de, *Managing Reverse Logistics or Reversing Logistics Management?* (co-) Promotor(es): Prof.dr.ir. R. Dekker & Prof.dr. M. B. M. de Koster, EPS-2004-035-LIS, ISBN: 90-5892-058-5, http://hdl.handle.net/1765/1132

Campbell, R.A.J., *Rethinking Risk in International Financial Markets*, (co-) Promotor(es): Prof.dr. C.G. Koedijk, EPS-2001-005-F&A, ISBN: 90-5892-008-9, http://hdl.handle.net/1765/306

Chen, Y., *Labour flexibility in China's companies: an empirical study,* (co-) Promotor(es): Prof.dr. A. Buitendam & Prof.dr. B. Krug, EPS-2001-006-ORG, ISBN: 90-5892-012-7, http://hdl.handle.net/1765/307

Delporte-Vermeiren, D.J.E., *Improving the flexibility and profitability of ICT-enabled business networks: an assessment method and tool,* (co-) Promotor(es): Prof.mr.dr. P.H.M. Vervest & Prof.dr.ir. H.W.G.M. van Heck, EPS-2003-021-LIS, ISBN: 90-5892-040-2, http://hdl.handle.net/1765/359

Dijksterhuis, M., *Organizational dynamics of cognition and action in the changing Dutch and U.S. banking industries*, (co-) Promotor(es): Prof.dr. F.A.J. van den Bosch & Prof.dr. H.W. Volberda, EPS-2003-026-STR, ISBN: 90-5892-048-8, http://hdl.handle.net/1037

Fenema, P.C. van, *Coordination and Control of Globally Distributed Software Projects*, (co-) Promotor(es): Prof.dr. K. Kumar, EPS-2002-019-LIS, ISBN: 90-5892-030-5, http://hdl.handle.net/1765/360

Fleischmann, M., *Quantitative Models for Reverse Logistics*, (co-) Promoter(es): Prof.dr.ir. J.A.E.E. van Nunen & Prof.dr.ir. R. Dekker, EPS-2000-002-LIS, ISBN: 3540 417 117, http://hdl.handle.net/1044

Flier, B., *Strategic Renewal of European Financial Incumbents; Coevolution of Environmental Selection, Institutional Effects, and Managerial Intentionality*, (co-) Promotor(es): Prof.dr.ing. F.A.J. van den Bosch & Prof.dr. H.W. Volberda, EPS-2003-033-STR, ISBN: 90–5892–055–0, http://hdl.handle.net/1765/1071

Fok, D., *Advanced Econometric Marketing Models*, (co-) Promotor(es): Prof.dr. P.H.B.F. Franses, EPS-2003-027-MKT, ISBN: 90-5892-049-6, http://hdl.handle.net/1035

Ganzaroli , A., *Creating Trust between Local and Global Systems*, (co-) Promotor(es): Prof.dr. K. Kumar & Prof.dr. R.M. Lee, EPS-2002-018-LIS, ISBN: 90-5892-031-3, http://hdl.handle.net/1765/361

Gilsing, V.A., *Exploration, Exploitation and Co-evolution in Innovation Networks*. (co) Promotor(es): Prof.dr. B. Nooteboom & Prof.dr. J.P.M. Groenewegen, EPS-2003-032-ORG, ISBN 90-5892-05-42, http://hdl.handle.net/1040

Graaf, G. de, *Tractable Morality. Customer discourses of bankers, veterinarians and charity workers.* (co-) Promotor(es): Prof.dr. F. Leijnse & Prof.dr. T. van Willigenburg. EPS-2003-031-ORG, ISBN 90–5892–051–8, http://hdl.handle.net/1038

Heugens, P.M.A.R., *Strategic Issues Management: Implications for Corporate Performance*, (co-) Promotor(es): Prof.dr.ing. F.A.J. van den Bosch & Prof.dr. C.B.M. van Riel, EPS-2001-007-STR, ISBN: 90-5892-009-7, http://hdl.handle.net/1765/358

Hooghiemstra, R., *The Construction of Reality*, (co-) Promotor(es): Prof.dr. L.G. van der Tas RA & Prof.dr. A.Th.H. Pruyn, EPS-2003-025-F&A, ISBN: 90-5892-047-X, http://hdl.handle.net/1765/871

Jong, C. de, Dealing with Derivatives: Studies on the role, informational content and pricing of financial derivatives, (co-) Promotor(es): Prof.dr. C.G. Koedijk, ISBN: 90-5892-043-7, http://hdl.handle.net/1043

Koppius, O.R., *Information Architecture and Electronic Market Performance*, (co-) Promotor(es): Prof.dr. P.H.M. Vervest & Prof.dr.ir. H.W.G.M. van Heck, EPS-2002-013-LIS, ISBN: 90-5892-023-2, http://hdl.handle.net/1765/921

Langen, P.W. de, *The Performance of Seaport Clusters; A Framework to Analyze Cluster Performance and an Application to the Seaport Clusters of Durban, Rotterdam and the Lower Mississippi*, (co-) Promotor(es): Prof.dr. B. Nooteboom & Prof.drs. H.W.H. Welters, EPS-2004-034-LIS, ISBN: 90-5892-056-9, http://hdl.handle.net/1765/1133

Loef, J., *Incongruity between Ads and Consumer Expectations of Advertising*, (co-) Promotor(es): Prof.dr. W.F. van Raaij & prof. dr. G. Antonides, EPS-2002-017-MKT, ISBN: 90-5892-028-3, http://hdl.handle.net/1765/869

Meer, J.R. van der, *Operational Control of Internal Transport*, (co-) Promotor(es): Prof.dr. M.B.M. de Koster & Prof.dr.ir. R. Dekker, EPS-2000-001-LIS, ISBN:90-5892-004-6, http://hdl.handle.net/1765/859

Miltenburg, P.R., *Effects of modular sourcing on manufacturing flexibility in the automotive industry. A study among German OEMs.* (co) Promotor(es): Prof.dr. J. Paauwe & Prof.dr. H.R. Commandeur, EPS-2003-030-ORG, ISBN 90-5892-052-6, http://hdl.handle.net/1039

Mol, M.M., *Outsourcing, Supplier-relations and Internationalisation: Global Source Strategy as a chinese puzzle*, (co-) Promotor(es): Prof.dr. R.J.M. van Tulder, EPS-2001-010-ORG, ISBN: 90-5892-014-3, http://hdl.handle.net/1765/355

Oosterhout, J. van., *The Quest for Legitimacy; On Authority and Responsibility in Governance*, (co-) Promotor(es): Prof.dr. T. van Willigenburg & Prof.mr. H.R. van Gunsteren, EPS-2002-012-ORG, ISBN: 90-5892-022-4, http://hdl.handle.net/1765/362

Peeters, L.W.P., *Cyclic Railway Timetable Optimization*, (co-) Promotor(es): Prof. Dr. L.G. Kroon & Prof.dr.ir. J.A.E.E. van Nunen, EPS-2003-022-LIS, ISBN: 90-5892-042-9, http://hdl.handle.net/1765/429

Puvanasvari Ratnasingam , P., *Interorganizational Trust in Business to Business E-Commerce,* (co-) Promotor(es): Prof.dr. K. Kumar & Prof.dr. H.G. van Dissel, EPS-2001-009-LIS, ISBN: 90-5892-017-8, http://hdl.handle.net/1765/356

Romero Morales, D., *Optimization Problems in Supply Chain Management*, (co-) Promotor(es): Prof.dr.ir. J.A.E.E. van Nunen & Dr. H.E. Romeijn, EPS-2000-003-LIS, ISBN: 90-9014078-6, http://hdl.handle.net/1765/865

Roodbergen , K.J., *Layout and Routing Methods for Warehouses*, (co-) Promotor(es): Prof.dr. M.B.M. de Koster & Prof.dr.ir. J.A.E.E. van Nunen, EPS-2001-004-LIS, ISBN: 90-5892-005-4, http://hdl.handle.net/1765/861

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Teunter, L.H., *Analysis of Sales Promotion Effects on Household Purchase Behavior*, (co-) Promotor(es):Prof.dr. ir. B. Wierenga & Prof.dr. T. Kloek, EPS-2002-015-ORG, ISBN: 90-5892-029-1, http://hdl.handle.net/1765/868

Vis, I.F.A., *Planning and Control Concepts for Material Handling Systems*, (co-) Promotor(es): Prof.dr. M.B.M. de Koster & Prof. dr. ir. R. Dekker, EPS-2002-014-LIS, ISBN: 90-5892-021-6, http://hdl.handle.net/1765/866

Waal, A.G. de, *Processing of Erroneous and Unsafe Data*, Promotor(es): Prof.dr.ir. R. Dekker, EPS-2003-024-LIS, ISBN: 90-5892-045-3, http://hdl.handle.net/1765/870

Waal, T. de, *Processing of Erroneous and Unsafe Data*, (co-) Promotor(es): Prof.dr.ir. R. Dekker, EPS-2003-024-LIS, ISBN: 90-5892-045-3, http://hdl.handle.net/1765/870

Wielemaker, M.W., *Managing Initiatives. A Synthesis of the Conditioning and Knowledge-Creating View*. (co) Promotor(es): Prof.dr. H.W. Volberda & Prof.dr. C.W.F. Baden-Fuller, EPS-2003-28-STR, ISBN 90-5892-050-X, http://hdl.handle.net/1036

Wijk, R.A.J.L. van, *Organizing Knowledge in Internal Networks. A Multilevel Study*, (co-) Promotor(es): Prof.dr.ing. F.A.J. van den Bosch, EPS-2003-021-STR, ISBN: 90-5892-039-9, http://hdl.handle.net/1765/347

Wolters, M.J.J., *The Business of Modularity and the Modularity of Business*, (co-) Promotor(es): Prof. mr.dr. P.H.M. Vervest & Prof.dr.ir. H.W.G.M. van Heck, EPS-2002-011-LIS, ISBN: 90-5892-020-8, http://hdl.handle.net/1765/920

Leadership and the Inflection Point
- A Longitudinal Perspective -

Once in a while, many corporations of this world are threatened by changes in their markets and environment that threaten their existence. These changes can be characterized by their severity, their sudden occurrence and by their origins outside the company, which usually makes it impossible to predict them. They are life-threatening and call for a dramatic change in the strategy and structure of the corporation. The deregulation of air transport was such an event. The rapid expansion of the telecommunications industry with the simultaneous introduction of new wide-band technologies was another. The same can be said for the enlargement of the European Union and the addition of a number of low wage-cost countries.

This book focuses two aspects of the inflection point. The first is the leadership viewpoint – it looks at the transition from the perspective of the CEO and his executive board, and considers what they can, and cannot, do. The second is the longitudinal perspective – it does not consider an inflection point as a single event, but rather a process that unfolds over a number of years.

This book provides an analysis of what the leadership of a firm can do in each of the development phases of an inflection point. It also tests these ideas against a case example, the transition of the publishing industry into the Internet era.

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