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Strategic Forecasting:
Theory, Practice and Strategy

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THEORY, PRACTICE AND STRATEGY

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STRATEGIC FORECASTING:
THEORY, PRACTICE AND STRATEGY

Abstract: Current changes in business conditions may increase interest in environmental scanning and external analysis within the area of corporate strategy. Thus, strategic forecasting is gaining prominence. Strategic forecasting can be defined as the area of business economics that deals with the study and the practical application of methods, theories, models and techniques for long-term analysis of the non-proximate environment of the firm with the purpose of conducting strategic innovation. This paper distinguishes strategic forecasting from other analytical approaches and develops its theoretical basis. Finally, challenges in future theoretical development and implications for business economic theory and practices are elaborated.

INTRODUCTION

Companies everywhere are facing turbulent business conditions that affect both their top and bottom line performance. The overall tendency is that this turbulence is increasing significantly as a function of four increasingly prevalent factors: increased internationalization, increased expansion of business market operations[1], increased use of financial markets and increased technological and scientific development. In addition, the ever-varying influence of business cycles and the political system further increases the turbulence (Oxelheim & Wihlborg, 1997; Duus, 1999, 2000a).

These factors indicate that knowledge and capital-intensive companies operating in internationalized business markets are probably those most exposed to turbulence. However, companies operating in financial markets and companies producing and selling consumer durables are also highly exposed. Least exposed to turbulence are producers and sellers of non-durable consumer goods. However, long-term so-called megatrend changes in consumers' preferences may have a significant impact on those latter companies (Duus, 1999, 2000a).

[1] Business markets (aka business-to-business markets), being the realm of vertical inter-firm production and sales, are significantly more sensitive to business cycles, more globalized and more technology, capital and knowledge intensive, than markets close to consumers (Skousen, 1990). They also constitute the major part of the economic system as measured by economic activity.

These conditions point to a clear and growing need to apply theories, models, methods and techniques that can enable companies to understand and act proactively on the increased business turbulence[2]. Yet the systematic use of these theories, models, methods and techniques is not given any particular attention in business economic theory and practice (Duus, 1999, 2000a).

This paper seeks to provide ideas for how to remedy this problem. First, strategic forecasting is defined and delimited as a theoretical and practical field of research. Strategic forecasting can be seen as a combination of corporate strategy and forecasting, but differs significantly from traditional perceptions of both. Second, a number of possible directions for future research in strategic forecasting are suggested. Third, current use of strategic forecasting is assessed on the basis of the history of corporate strategy and its possible future development. Finally, some implications for research and business practice are outlined.

STRATEGIC FORECASTING: DEFINITIONS AND DELIMITATIONS

In popular conceptions, strategic forecasting is intuitively seen as a portmanteau rubric for theories, models, methods and techniques that allow companies to understand and act proactively on future business conditions. This integrative view has actually been promoted by various business economists (Rangstrup, 2000; Jørgensen, 2001).

But a more precise and accurate definition of strategic forecasting may be possible. Strategic forecasting as an independent concept and area emerged in the mid-80s in the works of Capon & Hulbert (1985). These researchers defined and presented the area on the basis of existing theories and models as something that departed radically from both traditional strategic planning as well as from traditional forecasting.

[2] It should be noted that the aim is not to predict the future. That aim may be dismissed as too ambitious and perhaps impossible. Rather, the aim is to understand the future better. Such understanding will lead to a competitive advantage because by its very nature, competition is a discovery process conducted by economic agents, all of whom are imperfectly informed about the future. It is the relative understanding of future business conditions that is crucial and not the prediction of the future in any absolute sense (Hayek, 1984; Buchanan and Vanberg, 1991; Duus, 2000a, 2000b).

According to this view, strategic forecasting is neither strategic planning nor akin to strategic development or strategic management but an independent subset of the latter two areas. In essence, strategic forecasting deals with the creation of options, ideas and alternatives as the very prerequisite and/or starting point for strategic planning (Duus, 1997).

Keeping the practical qualification of the overlap of areas in mind, it is possible to look at the different parts of the strategic development process in companies. While strategic forecasting can be seen as the search for alternative modes of action, strategic planning can analogously be seen as the strategic choice between these and strategic implementation as the strategic effectuation of these. The total strategic development process is thus the unification of these three areas and the task of strategic management is the sum total of managing the areas attached to the strategic development process.

In the same manner, strategic forecasting can be seen as essentially different from the techniques, methods and models commonly associated with forecasting and market analysis, both of which have commonly been associated with and applied on the tactical and operative levels of the firm.

It is not a question of simple extrapolation from already existing markets, products, issues, and activities, but more a question of tackling radically new and often not yet existing markets, products, issues and activities. Forecasting on a strategic level is thus broader and deceptively different from the mostly quantitative calculations on the tactical and operative levels of the firm usually associated with forecasting and market analysis.

There are several implications of these definitions and delimitations that deserve to be underlined. By changing the nature and role of forecasting, an implicit change is effected in the nature and role of the firm. In a strategic forecasting context, the firm changes from that of a passive or reactive "adaptor" to an active "innovation machine". The view of innovation here follows the broad Schumpeterian definition of innovation as any novelty that adds economic value (Schumpeter, 1939, 1983; Duus, 1996; Sundbo, 2001).

In addition, since only parts of the process lend themselves well to quantification, much of the decision process necessarily involves creative and subjective elements, which are best described as entrepreneurship in the Penrosian sense, whereby the growth of the firm is seen as a function of the business opportunities its entrepreneurial managers can identify (Penrose, 1995).

Capon & Hulbert (1985) accordingly point out that systematic strategic forecasting has the following qualities:

- Strategic forecasting should focus on those elements in the environment that can exhibit structural change. Hence, simple extrapolations are banned.
- Time horizons should be long, but dependent on the nature of the firm. A service and/or consumer goods producing company can manage with a horizon of a few months, whereas a producer in business markets may be best served with a horizon of around 15 years[3].
- Conditional rather than unconditional forecasts must be used. Ask questions starting with "what if".
- Construct databases in key areas. Indicators showing development must be designed in advance and followed. Economic theory must be used in the design of indicators.
- Quantitative and qualitative methods must be combined.
- Exact point estimates are impossible and unnecessary. All that is needed for a competitive advantage is an understanding of the future that is fuller and more qualified than that of the competitors.
- Knowledge of the future must be made accessible in all parts of the company in order to secure its actual use.

On the basis of these qualities, strategic forecasting may be defined theoretically as the area of business economics that deals with the study and practical application of methods, theories, models and techniques for long-term analysis of the non-proximate environment of the firm with the purpose of conducting strategic innovation.

[3] Which also follows naturally from the longer investment horizons of business markets (see also Skousen, 1990).

Hence, strategic forecasting differs markedly from traditional market analysis and traditional forecasting, which are generally conducted on the tactical and operative organizational levels and focus on short-term analysis of the near-firm environment in relation to traditional products and activities.

Although a significant overlap is found between methods used on the various organizational levels, not least when it comes to the arsenal from the quantitative tool kit (Shim, 2000), many researchers point to the methodological diversity of the area (Makridakis, 1981, 1988, 1996; Naylor, 1983; Armstrong, 1985, 2001).

As mentioned, strategic forecasting also differs from other activities on the strategic level of the firm by being the starting point for all other activities at this level[4]. Strategic forecasting thus involves creating alternatives for action that form the basis for subsequent strategic choices (Duus, 1997).

This also indicates a strong overlap between strategic forecasting and theories, models and methods dealing with innovation, entrepreneurship, market orientation and corporate learning (Ackoff, 1981; Drucker, 1985; O'Hare, 1988; Itoh, 1996; Jaworski & Kohli, 1997; Tellefsen, 1995; Hougaard & Duus, 1999; Hougaard, 2004; Kim & Mauborgne, 2005). The difference is that strategic forecasting implies a stronger focus on the practical identification of threats, opportunities and action alternatives (Duus, 1997).

Figure 1 provides a general overview.

[4] The Abellian approach in corporate strategy has also claimed a position as the starting point of all strategizing in companies (Abell, 1980, 1993). The Abellian approach can be argued to be consistent with and complementary to the strategic forecasting perspective, as elements of the aforementioned may be seen as a proper subset of the elements of the latter.

FIGURE 1:
STRATEGIC FORECASTING
COMPARED TO OTHER FORMS OF ANALYSIS

Type of analyses / Properties	Traditional Market Analysis (including traditional forecasting)	Strategic Forecasting
Time horizon	Short term	Long term
Organizational level	Operative/tactical	Strategic
Object of analyses	The proximate environment of the firm	General business conditions
Application	Traditional products and activities	Innovation understood as economic value-increasing novelties.
Practical examples	Questionnaires to consumers, focus groups, media analyses, qualitative interviews, Lindberg's ontological method[5], neo-classical econometrics, etc.	Strategic business cycle forecasting, strategic warning, scenario analysis, futures research, technological forecasting, financial market analysis (i.e.. technical analysis), demographic forecasting, etc.

RESEARCH DIRECTIONS AND OPPORTUNITIES FOR DEVELOPMENT

A careful look at the field of strategic forecasting reveals several different research directions, each of which contributes to its continuous development (Rangstrup, 2000). Despite the fact that the borders between the various research directions are liquid, it is possible to identify three different main streams or research directions, each of which has sub-streams.

[5] Lindberg's (2001) very heterodox method can actually with a few minor changes be a valuable tool in strategic forecasting. The method deals with the investigation of consumer experiences with particular offers, but using the same method to ask experts and specialists about general developments may provide a valuable input to scenario building.

The first main research direction is grounded in *futures research*, under which we find expert panels, scenario writing, content analysis, demographic analysis, delphi technique and technological forecasting as non-exhaustive examples of methods (Ruby, 1971; Porter, 1985; Michman, 1987; Martino, 1992; Georgantzas & Acar, 1995; Heijden, 1998; Graf, 2002a, 2002b; Aligica, 2007).

Within this main stream we find several diverse sub-streams related to the researchers' preference for certain methods. The traditional demarcation between quantitative and qualitative methodology seems to be repealed as many methods exist in both quantitative and qualitative variations. This is especially evident within the areas of scenario construction and technological forecasting.

In practice, expert panels and scenario construction methodology seem to have gained immense popularity in large business firms and institutes of futures research (Printz, 1992; Printz & Olesen, 1994; Olesen, 1995; Duus, 2000b).

Significant atypical contributions within this main stream are the works of Martino (1992), Marchetti (1980, 1983a, 1983b, 1983c, 1983d, 1983e, 1986, 1993, 1997) and Modis (1992, 1998, 1999, 2002). All three researchers expand greatly, each in his own way, the quantitative methodological framework within this main research direction.

Another main research direction is the school of *strategic warning*, which has its roots in the works of Igor Ansoff and comprises the environmental scanning part of strategic market management (Aaker, 2006).

Such Ansoffian research includes the work of Printz and Olesen (Printz, 1992; Printz & Olesen, 1994; Olesen, 1995)[6], which has stressed *strategic warning* as an activity within the management system that is best facilitated through Organizational Development (in the sense of a deliberate highly method-bound activity conducted by change agents). Thus, the recommendation is that *strategic warning* activities are reviewed, developed and

[6] *Strategic warning* has traditionally been a strong theme for a specific group of researchers affiliated with Aarhus School of Business, most notably Th. Herborg Nielsen, Louis Printz, Henning Madsen, John P. Ulhøi and Frank Olesen (Madsen, 1989; Printz, 1992; Printz & Olesen, 1994; Olesen, 1995; Jørgensen, 2001).

renewed together with other forms of strategic and organizational development. This development and renewal should follow naturally from the company's existing values, history, culture and competencies. Thus a link is created between strategic forecasting and the new theories of the firm, which stresses the dependency of the firm on its history, resources, competencies and capabilities (Printz, 1992; Printz & Olsen, 1994; Duus, 1997).

A third main research direction is what may be called *strategic business cycle forecasting*, which does not exist as a well-defined area within the field of strategic management (Puggaard, 1987; Duus, 1992; Niemera & Klein, 1994; Duus, 1996, 1999, 2000a). This area[7] is mainly practiced by larger companies, a few market research firms and financial analysts specializing in so-called technical analysis[8] (Pring, 1981, 1985, 2002; Tvede, 1997, 1998; Duus, 2000b).

The underlying theoretical and methodological approaches within this research direction may be rather diverse, reflecting widely varying views among researchers and analysts. Such views are often reflected in the forecast horizons. While a short and medium term view may be taken, a long or very long-term perspective can be found in the work on long economic fluctuations (Marchetti, 1993; Freeman, 1996).

The difference between the three research directions can be highlighted by pointing to a prototypical characteristic of each research direction. Thus, the first, *futures research*, focuses on *analysis of the future*; the second, *strategic warning*, focuses on *the management system*; and the third, *strategic business cycle forecasting*, focuses on *business cycle analysis*.

Work within each research direction is often cross-disciplinary and none of the research directions is completely isolated from other directions. For example, research within the area of strategic warning includes techniques and methods from the area of futures

[7] Examples of Danish companies with a strong profile in this area are Danfoss, Bruel & Kjær, A.P. Møller-Maersk, IFKA (Institute for Business Cycle Analysis) and AlmBrandHenton (Puggaard et al., 1987; Duus, 2000b; Hochheim, 2006).

[8] Several investigations into financial market efficiency have cast doubt on the validity of this type of analysis; however, recent work by Peters (1994, 1996, 2001) has markedly challenged such views.

research; likewise, the work of Marchetti and Modis[9] combines models and techniques from futures research with long-range business cycle forecasting.

Within each of the three main research directions, some promising possible avenues of research can be specified.

The first main research direction is *futures research*, which has *analysis of the future* as its prototypical center.

Here, the work of Martino, Marchetti and Modis, which emerges as a combination of technological forecasting and systems analysis posits interesting possibilities for development, not least because emergent regularity can be shown – and proved – in the sense that empirical phenomena which appear indeterminate on the micro level appear as discernible regularities on the aggregate macro level (Duus, 1997). The point here is that structure and regularity in economic systems can be found with astonishing accuracy through top-down time series analysis, but only with great difficulty through bottom-up time series analysis[10].

The other main research direction is *strategic warning*, which has *the management system* as its prototypical focus.

A promising research avenue is how companies organize their work with strategic forecasting in practice. Two main approaches exist, which can be combined to one hybrid approach (Printz, 1992; Printz & Olesen, 1994).

The overarching research problem encountered here is that a cultural and organizational change process in the firm must be brought about in order to establish and build competencies and capabilities in strategic forecasting.

This is, as mentioned, a cultural and organizational task, involving cultural and organizational expertise quite different from the methods, theories and techniques of

[9] A noteworthy contribution is Erve (1994), who has made Modis' work an integrated part of a more general theory of management.

[10] Closely related to this is the research in business cycle regularity, i.e., the so-called Kitchin waves (50-60 months), Juglar waves (8-10 years), Kuznets waves (15-20 years) and Kondratieff waves (50-60 years). See, for example, Schumpeter (1939), Freeman (1996), Tvede (1997, 1998) and Pring (2002).

external analysis that are here sought implemented in the cultural and organizational practice of companies.

What is needed is people who can work in a cross-disciplinary fashion on tasks ranging from managing qualitative organizational change processes to handling various analytical approaches such as information gathering and knowledge creation. These latter analytical approaches may in themselves entail some cross-disciplinarity as knowledge of quantitative and qualitative methodology, information and communication technology, and economics and sociology are needed.

Not all people will be able to cover all areas, theories, methods and techniques. This indicates a need to create cross-disciplinary teams in companies embarking on the development of strategic forecasting capability in firms.

The task of strategic forecasting can be organized in three different ways in firms (Printz, 1992; Printz & Olesen, 1994; Duus, 2000b).

First of all, strategic forecasting can be established as a specific organizational function in line with marketing, R & D etc. – however, not necessarily in a special department for this purpose. The strategic forecasters must be situated close to management[11]; in larger companies, they may be based at the company headquarters (Kono, 2003).

As a second option, strategic forecasting may be made part of the organizational culture, for example, through an organizational change process formalized and implemented through some form of organizational development methodology – perhaps on a project basis. In this way, organizational support may be ensured.

A third possibility is a hybrid solution, in which the task of strategic forecasting is carried out by research staff close to top management as well as decentralized in units by analysts following directives from top management.

[11] This solution to the organizational location of the task of technological forecasting was an early recommendation of Beattie & Fraser (1967), who furthermore make the point that the result of a technological forecast that is communicated to the stakeholders and customers of the firm can be an independent part of the firm's market communication, since it makes stakeholders and customers aware of future offers from the firm.

Most companies handle the task of strategic forecasting internally. Outsourcing to consultants is seldom done. An empirical investigation of the part of the consulting industry dealing with – what we have defined as - strategic forecasting shows that it is limited to very few companies, which furthermore market very disparate products (Duus, 2000b).

The third main research direction is *strategic business cycle forecasting*, which focuses on *business cycle analysis.*

A turbulent business environment is, as previously mentioned, a special problem for knowledge and capital intensive companies in business markets (Puggaard, 1987; Skousen, 1990; Duus, 1994, 1996, 1999, 2000a). It is in business markets that we find the largest business cycle fluctuations, the highest degree of internationalization, the highest degree of technological change and the most knowledge and capital intensive firms[12].

Studies of business cycle fluctuations indicate that typical yearly percentage changes in supply and demand in business markets must be measured in tens (Duus, 1999, 2000a; Skousen, 1990). In contrast, the percentage changes on a yearly basis in supply and demand in consumer markets are often marginal. Exceptions are found in the supply and sale of long-term consumer goods such as cars, television sets, refrigerators etc., which due to the long period of consumption, may exhibit yearly fluctuations that in size are comparable to those of business markets (Skousen, 1990). As a rule, the sensitivity of production during a business cycle may be seen as proportional to capital intensity as expressed in the asset-to-sales ratio[13].

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[12] But at the same time, wide differences seem to exist between theory and business practice when it comes to the treatment of the problems faced by these businesses. The dominant paradigm is that of "domesticated markets" (Arndt, 1979), which has led to the perspective of networks and relationships in business markets that has gained popularity in recent years (Håkonsson, 1987; Hougaard & Bjerre, 2002). This perspective implies that companies can eliminate a large part of their forecasting needs by "negotiating" their way out of turbulence, risk and uncertainty through contacts with customers and other stakeholders. However, the problem is that it remains completely unexplained how a premise of stable long-term relations in business markets can be upheld, given that massive turbulence and wide business cycle fluctuations are the rule in such markets (Skousen, 1990; Duus, 1999, 2000a). Thus, prevailing theory on business markets appears to be extremely challenged by directly observable empirical facts.

[13] Firms situated close to end consumers in the production chain usually acquire their profits from high asset turnover (= low capital intensity) and cost minimization, whereas firms situated very far from end consumption acquire profits from high capital intensity and a high profit margin through product differentiation (Selling & Stickney, 1989). A connection between the vertical structure of production, generic strategies and accounting can thereby be established.

Thus firms operating in business markets are definitely those who stand to gain most from better forecasts of business cycles and adaptation to changes in the environment during the various phases of a business cycle (Puggaard, 1987; Tvede , 1997).

A superficial consideration of the business cycle, involving an empirical description based on various indicators of the rise and fall of sectors, industries and markets, seems to warrant the use of a large number of theories for explaining the cycle. These theories might in turn be useful in constructing even more and better indicators (Niemera & Klein, 1994)[14].

However, research in business cycle indicators has mostly been conducted by descriptive macroeconomists. Thus much research suffers from the simultaneous lack of a basis in a specific grand unifying theory and a business perspective.

It must be underlined that the task of *strategic business cycle forecasting* is not that of describing the business cycle as a macro phenomenon. That is the task of ordinary business cycle research. Nor is it the task of strategic business cycle forecasting to forecast the business cycle with the intention of providing inputs to political decision makers as is done in normative macroeconomics.

On the contrary, strategic business cycle forecasting is a normative discipline within business economics, and as such concerned with describing, understanding, explaining, and forecasting the business cycle so that useful knowledge for business firms emerges.

Hence, to be effective and useful, strategic business cycle forecasting needs to be seen as a theory-guided normative discipline within business economics. Here, one specific theory comes into prominence: the business cycle theory of Austrian economics, which sees business cycles as time-structured variations in a heterogeneous vertical structure of capital goods (Skousen, 1990). This has explicitly been named "the businessman's viewpoint" (Hicks, 1973).

[14] One leading approach within business cycle research has been the super-descriptive so-called "measurement-without-theory" perspective, as practiced by the American National Bureau of Economic Research (Mitchell, 1927; Moore & Shiskin, 1967). This somewhat derogatory term stems from the Nobel Prize winner Tjalling C. Koopmans (Niemera & Klein, 1994).

This theory may be seen as a general theory with the possible potential to reduce most other theories of the business cycle to special cases (Rothbard, 1969). It takes an explicit micro perspective and is easily integrated with notions, theories and models on learning, innovation and entrepreneurship. This ease of integration is not least due to the fact that Austrian economists played a central role in the development of research in these matters (O'Driscoll & Rizzo, 1996).

Furthermore, this theory has the major advantage of seeing economic processes as time-structured according to a specific order of occurrence. Thus, the theory can give important hints as to which products, markets, industries and firms will rise and fall during certain stages of the business cycle[15].

In point of fact, the understanding of the economic system as a system of time-structured processes (which is center stage in this theory) is of decisive importance for whether business cycle indicators may be described as leading, lagging and coincident (as is shamelessly done in other economic theories based on a more homogenous capital structure).

A further development of this theory for use in the strategic forecasting practice of firms would not least necessitate a rebellion against the practice of measurement found in the development of business cycle indicators today. This would imply that theory-guided design of indicators useful to normative business economics should be accepted. Since the work of the normative business economist and the descriptive macroeconomist are often worlds apart, this may, theoretically as well as practically, be very different from what is currently done in ordinary business cycle research.

Since the theory could be expected to indicate the existence of whole new sets of data, one immediate practical use could probably be increasing the level of detail (i.e. the number of indicators) that could be designed and followed on the level of each individual firm (Duus, 1999, 2000a).

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[15] In a bizarre twist of reality, the praxeology of the Austrian School of Economics (Rothbard, 1986) leads by direct application to business cycle theory (Wainhouse, 1982; Skousen, 1990, 1994) straight to conclusions close to those found by financial analysts working with technical analysis (Pring, 1981, 1985, 2002; Peters, 1994, 1996, 2001; Tvede, 1997, 1998).

CURRENT APPLICATIONS OF STRATEGIC FORECASTING

As mentioned earlier, strategic forecasting is not widespread in research, teaching and business practice. But the knowledge and use of strategic forecasting in business practice is far from uniform. Firms working with finance and investment, capital-intensive firms in business markets as well as some smaller firms in the analysis business are natural heavy-users of strategic forecasting with a remarkable knowledge of the subject (Duus, 2000b). But the prevalence of the area in ordinary business economic theory, teaching and the business practice derived from them is marginal.

Undoubtedly, the reasons for this must be found in the history and evolution of corporate strategy, which from an admittedly simplified perspective may be seen as having developed in three phases (Ansoff & McDonnell, 1990; Hax & Majluf, 1991; Mintzberg, Ahlstrand & Lampel, 1998; Aaker, 2006). These three phases can be shown to correspond to changes in the business environment coincident with the classical 50-60 year Kondratieff cycle in economic data (Mensch, 1979; Mensch, Coutinho & Kaasch, 1981; Marchetti, 1986, 1993; Freeman, 1996)[16].

The first phase in the 50s and 60s was pre-analytic in nature. In this phase the discipline was gradually built up through much input from practice and the researchers' use of intuition. Military operations research was a major, albeit indirect, theoretical influence.

The second phase in the 70s and early 80s was characterized by a refinement of methods, theories, models and techniques to the extent that the strategy area became more analytic in character. Economic theory came to play a larger role. The contributions from Michael E. Porter (se for example Porter, 1980) can be seen as ideal-typical contributions of that period. But also qualitative methods and theories from the area of organization, management and the humanities appeared (Mintzberg, Ahlstrand & Lampel, 1998).

[16] Within theoretical economics, some may harbor the notion that theories (here also business economic theories) develop in a deductive and autonomous way without much outside interference except perhaps for externally determined variations in research funding. The underlying premises of this notion seem to be that researchers always become more knowledgeable and that the development of science leads to the accumulation of a greater mass of true knowledge. This notion is probably incomplete and may easily be challenged, for example, by arguments like those found in this paper showing some level of correspondence between external events and the development of an area of business economics.

The third phase from the mid-80s and beyond was characterized by a departure in the form of new thoughts and ideas. Economic theories of corporate planning and strategy developed to focus increasingly on evolutionary processes in markets, firms and networks. Evolutionary economic theory, dynamic market theories, new theories of the firm, economic theories of organization and theories incorporating resources, competencies and capabilities, assets and path-dependency emerged (Duus, 1997).

The first and second phases of the theory development correspond quite well with the economic boom following World War II, which lasted until the stagnation of the 70s and early 80s. The third phase corresponds to the period from the early 80s nearly until the present, during which the search for new solutions to increase economic growth has gradually met with success.

In the first phase, the key success factors seem to have been high market share and mass production in large portfolio-managed conglomerate companies. Following the intermediate second phase, the key success factors in the third phase can be identified as efficient utilization of resources, the building of competencies and customer targeting in the single firm.

It was an integrated part of the research in the first and second phases that researchers dealt with the firm as part of a number of larger systems and thus became unable to explain differences in performance originating in firm-specific advantages. Conversely, the third phase witnessed a massive focus on analyzing differences of performance rooted in firm-specific advantages (Itami & Roehl, 1987; Carlsson, 1989; Pralahad & Hamel, 1990; Barney, 1991; Rumelt, Schendel & Teece, 1991; Porter, 1991; Jacobson, 1992; Hamel & Pralahad, 1994; Reve, 1994).

Simply stated, the development reflects a long-term shift from a focus on the external environment in the first and second phase to a focus on firm-internal conditions and the proximate environment of the firm in the third phase (Duus, 1999, 2000a)[17].

[17] The rhetoric of business economics has changed alongside these developments. Around 30-40 years ago, business economics and corporate strategy were dominated by buzzwords like long-range planning, strategic planning, technological forecasting, market-based portfolio modeling, demand analysis, industry analysis, futures research, business cycle forecasting etc. Today, more fashionable terms include core competencies, resources, capabilities, factor markets, transaction costs, relations, corporate culture, image, quality management, value management, network theory, etc. (Duus, 1999, 2000a).

It is thus fair to say that in business economics, the focus in research, teaching and the practice resulting from these activities has shifted from a concentration on "events and factors in the environment" to "the activities and actions of the firm" or more simply, from "what happens outside the firm" to "what happens inside or at the firm" (Duus, 1999, 2000a; Duus & Hougaard, 2000).

This is shown in Figure 2.

FIGURE 2: CORPORATE STRATEGY PREMISES BEFORE AND NOW

Period / Characteristics	BEFORE	NOW
Corporate environment	Somewhat predictable	Unpredictable, turbulent, complex
The corporation	Flexible, manageable and adaptable. The firm is a rational decision center	Rigid, inflexible and highly determined by history and resources
Information	Perfect and costless/given	Imperfect and costly
Competitive focus	Product markets, industry. The firm is described by performance and cost	Factor markets, the internal competencies and capabilities of the firm, competitive arena
Major factors to consider	Demand side	Supply side
Resources and resource characteristics	Capital, labor, natural resources. All seen as homogeneous and mobile	Financial, physical, judicial, human, organizational, infor-mational and relational. These are usually heterogeneous and imperfectly mobile
Competitive advantage	Develops through superior strategy choices that increase entry and mobility barriers. Competitive advantage exists as dominance and market power through cost minimization or product differentiation	Develops through the construction/development of rare, valuable, non-imitable and non-substitutable physical, human and/or organizational resources for innovative purposes
Typical normative prescriptions	Analyze the environment and adapt the firm correspondingly An external diagnosis in all details are of utmost importance, implementation is of only marginal interest because it is seen as relatively unproblematic	Analyze the long-term general conditions of the environment, and build the firm's competencies and capabilities in accordance with a long-term vision. Information gathering and implementation are both seen as problematic and of major interest

Here, the explanation seems to be evolutionary in the sense that theories are perennially created but staying value in any given period exists only for the theories with the best explanatory value and applicability in that period.

However, a critical aspect of the developments in the third phase has been that several insights from the first and second phases have been sidetracked. Not least, research and development of the tools for external analysis and their applicability in the firm have been left behind in light of the newer focus on the internal and proximate affairs of the firm. In this process, strategic forecasting has at least partially lain dormant.

But perhaps it may be fair to assume that an expanding economy with low cost increases, such as we have witnessed in recent years, may yet again facilitate the development of an increased focus on the firm's external environment and thus on strategic forecasting (Duus, 1999).

At the very least it is close to certain that the turbulence in the economic system will increase and that firms will end up being more exposed depending on their industry and its position in the total economic system.

DISCUSSION: IMPLICATIONS FOR RESEARCH AND PRACTICE

The previous considerations point to the need for new research and developments in business practice in a number of important areas.

In terms of research, there is a need to increase efforts in the three main research directions identified. Here, an imperative of the future development of the area of strategic forecasting should be to draw equally from all three directions – i.e. no research direction should initially be over- or under-prioritized.

In the academic organizational field there is a need for cross-disciplinary networks through which theorists and practitioners can meet across the three main research directions.

The distance between theory and practice within strategic forecasting is short - exceptionally so in comparison with other academic areas and other parts of business economics. Admittedly, there is some "geekiness" inherent in the area since speculations, creativity, structure, methodology, model building and theory can easily be coupled with

understandings of the future competitive space with immediate bottom line consequences.

The consequence is not only that theoretical insights in this area can be applied to practice very quickly but also that these theoretical insights are very much developed on a practical basis. Much research within the area can be seen as mode 2 research, characterized by cross-disciplinary and trans-disciplinary collaboration between academia and business (Gibbons et al., 1994)[18].

Several implications for business practice can be identified. This paper points first and foremost to the need for a cultural and organizational change process within each individual firm that sees a need for building strategic forecasting competencies and capabilities.

In addition, what is needed in both theory and practice is a continuous refinement and development of the array of methods, theories, models and techniques for the understanding of the future and the identification of new opportunities and threats. This is a task for both theory and practice and should involve action research (Gummesson, 2000) and/or mode 2 research (Gibbons et al., 1994).

Technological forecasting and systemic forecasting as presented by authors like Marchetti, Martino and Modis seem to have untapped potential in this context. The same can be said of the two interconnected areas of strategic business cycle forecasting and financial forecasting. Closely related to all these areas is the theory of quasi-regular aperiodic business cycles, according to which swings in technological and economic data create opportunities for identifying regularities (Duus, 1996; Freeman, 1996).

In addition, the economic theory of vertically organized business cycles seem to offer interesting opportunities for developing strategic forecasting in combination with the theories and models mentioned above (Skousen, 1990).

[18] One project dealing with that is the VISTRAFORN project (Virtual Strategic Forecasting Network), which establishes a common meeting ground for theorists and practitioners within Strategic Forecasting (http://www.strategicforecasting.dk). Problem-based dialogs are used to facilitate this work (Duus, 2006).

The task ahead for researchers and practitioners thus seem to be that of supporting the creation and/or further development of management systems and methods, which can enable strategic forecasting in firms.

Strategic forecasting might be seen as a functional capability in firms. In this light, the similarities to the traditional market analytic function appear to be marginal. The traditional functional role of market analysis is contrary to that of strategic forecasting as market analysis only deals with short-term analysis of existing products and activities on the tactical and operative levels of the firm. Furthermore, market analysis is often practiced in a specific department of the firm.

The proper organizational role of strategic forecasting is to operate close to management and the long-term decision making of management. Furthermore, it will probably in its use of techniques, model building and technology involve a combination of human and computer generated opinions and assessments, which resemble those found today within the domain of financial analysis. Economic theory will play a major role in this work.

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