

# STRATEGY ROLE FOR MANUFACTURING INDUSTRY

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## Abstract

The objective of this paper is to analyse the role of the strategic management for manufacturing industry in Latvia. Paper explains current strategic approaches and shows strategic management development, describing it based on the technological evolution approach. Firstly, authors use exploratory research to determine current behaviour of the industry. At present manufacturing industry have been missing proper strategies and the necessary orientation for export promotion for the products. The growth of the export of manufacturing products depends on identification the proper strategy, by analysing the present market factors. In order to compete in international markets well-defined strategy, establishing sustainable development for the industry is necessary. The development of strategic management in industry as breakthrough innovations or technological standard of the industry are observed. Once the standard is clear and market demand is growing, competition starts as “economy of scale” for efficient process and lower costs. This paper is analytical study of different aspects of export for manufacturing industry in Latvia.

*Keywords:* strategic planning, strategic theory of the company, industry development.

*JEL Classification:* E01, E23, E64, O31, O33, O38.

## Introduction

Nowadays currently developing countries have high tax rates and government shares relative to their state of development. The analysis also shows that high tax rates and government consumption at early stages of development can slow the structural transformation and economic growth, and thus business environment for innovations are not favourable. Manufacturing emphasis is migrating from the product that helps to increase competition level of the brand and technology, developing an industry standard, to production process mostly decreasing cost level. Technology and innovations improves the standards and manufacturing process, but requires a lot of investment (R&D), that is why is easier for companies to focus on decreasing the cost level.

Paper presents general overview of the general strategies for manufactures and its role. Observing Latvian export structure, we see that Latvia’s exports mostly the goods with low added value are dominating it seems that local strategy is based on lower cost level rather than on innovation and technology development. In the foundation of Latvian national economy growth lies an unstable, traditional and reacting to consumption, model of economic development, rather than innovation, modelling alternatives, the choice of sustainable growth and consumption. Existing competition and unequal position of the countries (between developing and developed ones), leads to the fact that experience of short-term competitiveness and short-term planning prevails over the principles of sustainable development. There are several empirical connections between economic development and industry strategies.

To ensure successful sustainable development industry needs to keep planning process of existing strategies, local companies has gradually moved from short, intuitive ad hoc decision-making, to understanding that making decisions must be a deliberate process, predicting future scenarios, weighing the benefits and costs in the short, medium and long term.

As well as a long-term perspective, the concept of competitiveness and sustainable development entered in the Latvian system of planning under the influence of international commitments and planning practices. The concept of sustainable development in the Latvian public space appeared only around 1995 and its increased use is observed only since 2000. Sustainable development is most often seen declarative as a question of environment and natural resources quality; as a problem of a single ministry, not reflecting in planning policies of industry.

In the 1980s Porter’s models helped companies to analyse the industry and gave vectors to their strategies, companies now need new models to create and manage knowledge and learning from market. Firms now compete in a very complex and dynamic environment, where knowledge and information is increasingly becoming the most valuable resource. The impact of technology, innovation and globalization increasingly defines that high capability of companies to transform, create knowledge and to be innovate is crucial to compete successfully.

## **Development of strategy role**

The first industrial revolution started intense competition among industrial companies but, companies did not have much individual influence on competitive results. Adam Smith describes market forces as an “invisible hand” that is beyond the control of individual companies. The small and medium industrial and manufacturing companies that were established required little or no formal planning or strategy in the modern sense.

Nowadays is widespread agreement among scientists that development of the company is a multidimensional system, with economic, political, and social aspects, and that the different dimensions of development are interconnected with one another in complex ways. The fact that these different dimensions have influences on one another would suggest that companies need to integrate economic, political, and social approaches, and to think strategically about how to achieve their goals.

After improved access to solid capital and credit, mass markets and globalisation encouraged large-scale investment to use economies of scale in production and economies of scope in distribution. Adam Smith’s “economies of scales” gave to large companies lot of resources for planning, new approach for running businesses Alfred D. Chandler, Jr., has termed the “visible hand” of professional managers. New type of companies began to emerge, the vertically integrated, multidivisional (or “M-form”) corporation that made large investments in manufacturing and marketing, and in management hierarchies to coordinate those functions. Over time, the largest M-form companies managed to alter the competitive environment within their industries and even across industry lines. (A. Chandler, 1990)

Strategic thinking implies prioritization and sequencing, seeking the algorithm which is necessary or helpful to achieve goals. A strategy helped to define a clear objective, and then assesses constraints that prevent the achievement of this objective. Strategic thinking helped to find instruments how to overcome those constraints.

The need for a corporate strategy was the most important factor that helped to research new forms of company management. Alfred Sloan researched a strategy that was explicitly based on the perceived strengths and weaknesses of Ford.(A. Sloan 1963). In the 1930s, Chester Barnard, a top executive in AT&T, pointed that managers should pay especially close attention to “strategic factors” which depend on “personal or organizational action.” (C.Barnard, 1968)

Harvard Business School, founded in 1908, was one of the first to present the idea that managers should be trained to think strategically and not just to act as functional administrators. Beginning in 1912, Harvard offered a required second-year course in “Business Policy,” which was designed to integrate the knowledge gained in functional areas like accounting, operations, and finance, thereby giving students a broader perspective on the strategic problems faced by corporate executives. (Harvard University, 1917)

## **Need for a strategy**

War challenges involved in World War II were a strong stimulus to strategic thinking. The problem of allocating poor resources across the entire economy in wartime led to many innovations in management science. New operations research techniques (e.g., linear programming) were devised, which opened the way for the use of quantitative analysis in formal strategic planning. In 1944, John von Neumann and Oskar Morgenstern published their classic work, *The Theory of Games and Economic Behavior*. World War II stimulated the use of strategic thinking to guide management decisions. Peter Drucker argued that “management is not just passive, adaptive behavior; it means taking action to make the desired results come to pass.” He noted that economic theory had long treated markets as impersonal forces, beyond the control of individual entrepreneurs and organizations. But in the age of M-form corporations, managing “implies responsibility for attempting to shape the economic environment, for planning, initiating and carrying through changes in that economic environment, for constantly pushing back the limitations of economic circumstances on the enterprise’s freedom of action.” (P.Drucker, 1954) This insight became the base for business strategy—that by using formal planning, a company could get some positive control over market forces.

In the early 1950s, George Albert Smith Jr., and C. Roland Christensen, were analysing the company’s strategy matching its competitive environment. (G.Smith, 1951) In the late 1950s, Kenneth Andrews, built continued this approach by arguing that “every business organization, every subunit of organization, and even every individual need to have a clearly defined set of purposes or goals which keeps it moving in a deliberately chosen direction and prevents its drifting in undesired directions.” (K.Andrews, 1971)

These conclusions were backed by company cases that Andrews prepared on Swiss watchmakers, which uncovered significant differences in performance associated with different strategies for competing in that industry. (E.Learned et al, 1961) This format of combining industry notes with empirical results in company cases, became the norm in Harvard's Business Policy course. Later Kenneth Andrews put these elements together in the "The Concept of Corporate Strategy". This framework gave birth for a SWOT analysis that was a major step forward in bringing explicitly competitive thinking to answer the questions of strategy thinking.

### Technological changes

In the 1960s, diversification and technological changes increased the complexity of the strategic situations that many companies faced, and double their need for more sophisticated measures that could be used to evaluate and compare many different types of businesses. Corporations turned elsewhere to satisfy their craving for standardized approaches to strategy making. (A. Bandenburger et al, 1996) To solve these problems, strategists had to decide what aspects of the company were "enduring and unchanging over relatively long periods of time" and "those that are necessarily more responsive to changes in the marketplace and the pressures of other environmental forces." This distinction was crucial because "the *strategic* decision is concerned with the long-term development of the enterprise" (emphasis added). (K. Andrews, 1971) When strategy choices were analyzed from a long-range perspective, the idea of "distinctive competence" took on added importance because of the risks involved in most long-run investments.

In a classic 1960 article, "Marketing Myopia," Theodore Levitt argued that when companies fail, "it usually means that the product fails to adapt to the constantly changing patterns of consumer needs and tastes, to new and modified marketing institutions and practices, or to product developments in complementary industries."(T.Levitt, 1960)

Another scientist Ansoff defined the common thread as a company's "mission" or its commitment to exploit an existing need in the market as a whole. Ansoff noted that for a company to maintain its strategic focus, Ansoff suggested the following categories for defining the common thread in its business/corporate strategy: Ansoff's Product/Mission Matrix.(I.Ansoff, 1965) Ansoff and others also focused on translating the logic built into the SWOT framework into a series of concrete questions that needed to be answered in the development of strategies.(M.Porter, 1982)

### Increasing the role of strategy for manufacturing industry

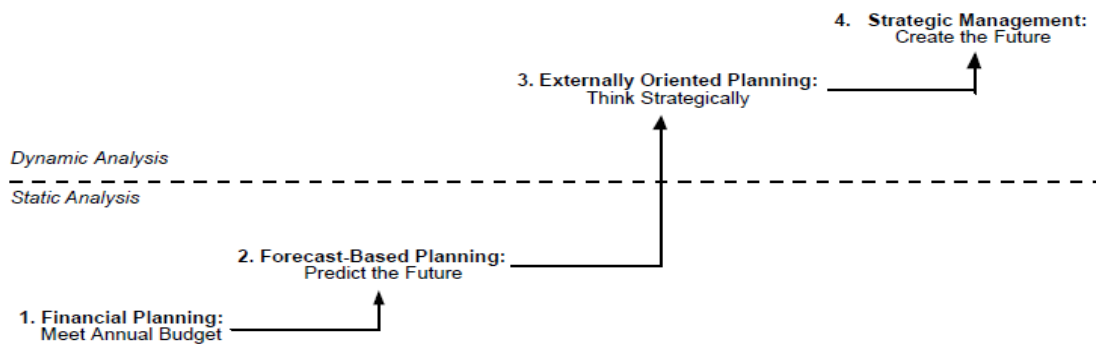
The 1960s and early 1970s were the rise of a number of strategy consulting practices. In particular, the Boston Consulting Group (BCG), founded in 1963, had a major impact on the field by applying quantitative research to problems of business and corporate strategy. (B. Henderson, 1984) Bruce Henderson (the founder) was utterly convinced that economic theory would someday lead to a set of universal rules for strategy. As he explained, "in most firms strategy tends to be intuitive and based upon traditional patterns of behavior which have been successful in the past." However, "in growth industries or in a changing environment, this kind of strategy is rarely adequate. The accelerating rate of change is producing a business world in which customary managerial habits and organization are increasingly inadequate." (B. Henderson, 1979a)

BCG came to be known as a "strategy boutique" because early on, its business was largely based, directly or indirectly, on a single concept: the experience curve. Given that decision making is necessarily a complex process, the most useful "frame of reference is the concept. Conceptual thinking is the skeleton or the framework on which all other choices are sorted out." (B. Henderson, 1979b) As BCG consultants studied manufacturing industries, analyzing why "one competitor outperforms another". They were searching for rules to be successful, and they relate to the impact of accumulated experience on competitors' costs, industry prices and the interrelation between the two."(Boston Consulting Group) Bruce Henderson defined that with the experience curve, "the stability of competitive relationships should be predictable, the value of market share change should be calculable, and the effects of growth rate should also be calculable." The strategic implication of the experience curve, according to BCG, was that for a given product segment, "the producer...who has made the most units should have the lowest costs and the highest profits."(P.Conley, 1970) By the early 1970s, the experience curve had led to another "powerful oversimplification" by BCG: the so-called "Growth-Share Matrix", which was the first use of what came to be known as "portfolio analysis." Later, another, more quantitative approach to portfolio planning was

developed under the flag of the “Profit Impact of Market Strategies” (PIMS) program. It was thought that with such approaches, “strategic thinking was appropriately pushed down to managers closer to the particular industry and its competitive conditions.”(F.Gluck, 1979)

Another problem was pointed by William Abernathy and Kenneth Wayne, which argued that “the consequence of intensively pursuing a cost-minimization strategy is a reduced ability to make innovative changes and to respond to those introduced by competitors.” This means, that very popular strategy amongst manufacturing industries in many developing countries has its limits. Abernathy and Wayne pointed to the case of Henry Ford, whose obsession with lowering costs had left him vulnerable to Alfred Sloan’s strategy of product innovation in the car business.

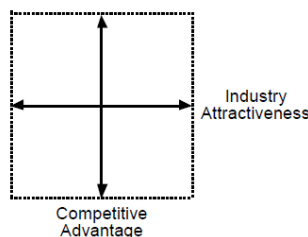
This research stated for mixing up different sources of cost reduction with very different strategic implications. Gluck and his colleagues sought to loosen some of the constraints imposed by mechanistic approaches by proposing that successful companies’ strategies progress through four basic stages that involve grappling with increasing levels of dynamism, multidimensionality and uncertainty and that therefore become less amenable to routine quantitative analysis.(W.Abernathy&K.Wayne, 1974) (Figure 1)



**Figure 1.** Four phases of strategy

Robert Hayes and William Abernathy also pointed that new principles of management, despite their sophistication and widespread usefulness, encourage a preference of long-term development of technological competitiveness rather than short-term cost reduction.(R.Hayes&W.Abernathy, 1980)

These studies and others have led to Competitive Strategy framework. Joe Bain, advanced the research program of uncovering general relationships between industry structure and performance through empirical work focused on a limited number of structural variables— most notably, in two studies published in the 1950s. The first study found that the profitability of manufacturing industries in which the eight largest competitors accounted for more than 70% of sales was nearly twice that of industries with eight-firm concentration ratios less than 70%.(J.Boe, 1951) Bain identified three basic barriers to entry: (1) an absolute cost advantage by an established firm (an enforceable patent, for instance), (2) a significant degree of product differentiation, and (3) economies of scale. In 1980, Michael Porter continued this framework by his book, Competitive Strategy, framework for the structural analysis of industry attractiveness. The biggest conceptual advance, was one proposed in the mid-1990s by two strategists concerned with game theory, Adam Brandenburger and Barry Nalebuff, who argued that the process of creating value in the marketplace involved “four types of players—customers, suppliers, competitors, and complementors.” (A.Brandenburg&B.Nalebuff, 1996) Since then competitive position vs industry attractiveness has been of great interest to business strategists. (Figure 2)



**Figure 2.** Two basic dimensions of strategy

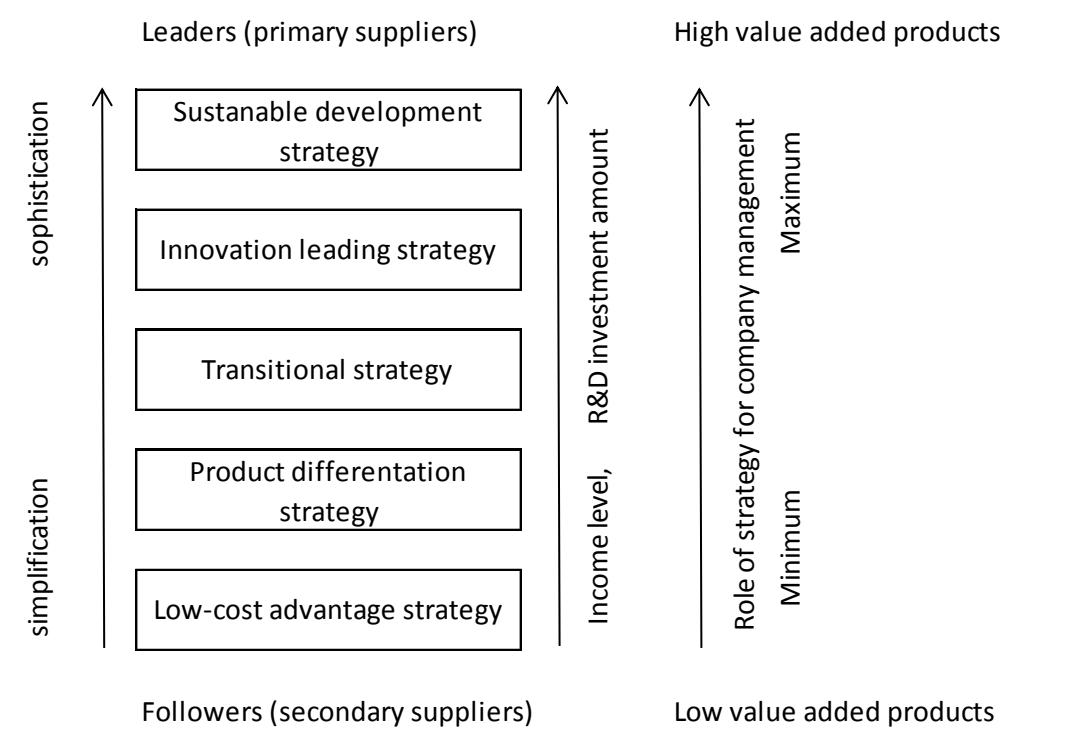
Porter’s 1985 book, *Competitive Advantage*, suggested analyzing cost and differentiation via the “value chain”(M.Porter).

**Dynamic nature of strategy vs sustainability**

In the late 1980s and early 1990s, both academics and consultants started to find answer to the dynamic question of how businesses might create *and* sustain competitive advantage in the presence of many competitors and dynamic environment. Published in the *Harvard Business Review* in 1988, Stalk argued that “Today the leading edge of competition is the combination of fast response and increasing variety. Companies without these advantages are slipping into commodity-like competition, where customers buy mainly on price.”(G.Stalk, 1988) For some, such as Stalk himself, the lesson from this and similar episodes was that there were no sustainable advantages: that “Strategy can never be a constant. . . . Strategy is and always has been a moving target.”(G.Stalk, 1993) Taking dynamic capabilities also implies that one of the things that is most strategic about the firm is “the way things are done in the firm, or what might be referred to as its ‘routines,’ or patterns of current practice and learning.”(J.Gao&B.Pratima, 2006)

And finally an approach to thinking about the dynamics of competition in the past 20 years, societal demands on companies to address social and environmental problems have increased significantly (Margolis & Walsh, 2003). Accordingly, companies engaged in corporate social responsibility (CSR) and environmental management must deal with diverse stakeholder expectations. To date, the academic literature has largely focused on business performance and sustainability at the firm or industry level (Bansal & Gao, 2006; King & Lenox, 2000). However “firms alone cannot become sustainable in an economic, environmental and social sense as they merely contribute to more sustainable patterns of production and consumption within society” (Roome, 2006). Despite the growing awareness of the systemic nature of our sustainability problems, empirical research that examines the strategic practices of business to structurally change the way societal systems operate in order to address persistent environmental and social problems is not well developed (Porter, 2006, Starik & Marcus, 2000).

After overviewing series of literature authors present strategy model which explains the role of different strategies for manufacturing industry according to income level. (Figure 3) It is also important to understand the performance and profit output implementing these strategies.



**Figure 3.** Model of Strategy role for manufacturing industry

## Conclusions

Our findings provide insights into how firms become leaders and successful in innovative and dynamic environment. We provide a new perspective on strategic business development in correlation with the development of modern sustainable systems, which shifts the simplification and low value added products to sustainability and sophisticated innovation and sustainable development strategies.

A new era in strategic management was generated by the idea of competitive advantages based on core competencies and resources. Over time, the increasing attention given to intangible and invisible assets has emphasized the role of new sources of competitive advantages. The growing role technological advantage represented in strategic management, as technological cycles become shorter and innovation becomes critical for survival, contributions in strategic management require a renewed integration of their perspectives and a closer connection with the business world.

Sustainability issues are too complex and interconnected to be managed by small and medium companies. Usually only large companies could afford such complex and sophisticated strategy system.

As such, we argue to focus for government and company's management on evolutionary mechanisms, for small and medium companies growing from low value added products to more larger and more valuable company in creating a more sustainable system. In industry, breakthrough innovations, or technological discontinuities, initiate eras that end when a dominant design, or standard of the industry, starts an era of incremental change. The emphasis on product that helps in developing an industry standard is replaced by an emphasis on process. Once the standard is set by industry's leaders, as demand grows in amount and sophistication, there is for efficient processes that satisfy this demand at increasingly lower costs which usually involves secondary suppliers. This cycle is dominating while process technology improves the current standards innovated by leaders, a seemingly passive product technology evolution is already giving birth to the next technological discontinuity. The theories and concepts of strategic management in fact follow evolutionary cycles that explain alternating emphasis on process or content research as well as shifts of attention, first to the environment, then to the firm, now to new paradigms explains Farjoun's conclusion that 'mechanistic (*content*) models and ideas are losing their potency, while organic (*process*) ideas have not gone far enough to renew them or to provide an alternative and more current perspective'. (Farjoun, 2002)

Whereas in the 1980s Porter's models helped firms analyze the industry and streamline their strategies, firms now need new strategic models to create and preserve knowledge and learning. Companies now compete in a complex and dynamic environment transformed by instant information, where knowledge is increasingly becoming the most valuable and competitive resource and advantage. The impact of technology and globalization increasingly affecting on capability of firms to acquire information, create knowledge and innovate that is essential to competing successfully. The current trends of strategic management will in the future stress individual and organizational capabilities to learn and innovate. (Huff 2000; Rynes *et al.* 2001).

We analyse the role of strategy for manufacturing industry based on hypothesis that growing role of strategy and its sophistication for specific company could led to a better performance. This research is currently in the data-gathering stage. The sectors we are examining are in metal manufacturing. We are starting from the innovations themselves and then moving to more general levels of analysis, that is to the industry and national levels. Our concern is to characterize the evolutionary pattern of strategy and innovation. The question is of how quickly a government and companies adapts to a changing competitive environment we leave. We expect that the findings of strategy evolution will indicate that the company's behaviour is in correlation with strategy company implements when managing innovation and transformation and role of strategy within company. In particular, we are concerned with how local companies manage and implement strategy evolution. The findings at this stage indicate that despite the increasingly international nature of R&D and globalisation, partly due to the rise of taxes and complexity of modern strategies, national companies continue to implement more simple low-cost strategy and to maintain secondary supplier's role.

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