

MANAGING FLEXIBILITY STRATEGICALLY: A CASE-STUDY ON REPOSITIONING

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Thomas Friedli¹, Stephan Billinger², Michael Kickuth³, Elgar Fleisch⁴
Institute of Technology Management ; University of St. Gallen
Unterstrasse 22; CH-9000 St. Gallen
Email: stephan.billinger@unisg.ch; michael.kickuth@unisg.ch

Abstract

The fashion industry requires rapid reaction to changing market demands, and therefore apparel manufacturers place emphasis on developing methodologies to enhance speed, dependability, quality and flexibility at the operational level. However, existing studies have suggested additional research is needed into strategic aspects of, in particular, issues of flexibility and agility. We first describe challenges facing the apparel industry; next we develop a conceptual literature-based strategic flexibility framework to support management decision making within a manufacturing enterprise; we then use findings of an action research project within a major European apparel manufacturer to show how the reconfiguration of an existing value chain can lead to an organization with enhanced strategic flexibility. We conclude by arguing that strategic flexibility can be separated into market and resource flexibility, which are orchestrated through a firm's coordination ability. Utilizing these dimensions along the value chain allows apparel manufacturers to take advantage of increasing demand variability and to reposition themselves as a flexible vertically integrated firm.

¹ Dr. **Thomas Friedli** is managing director of the Transfercenter for Technology Management (TECTEM) / University of St.Gallen.

² **Stephan Billinger** is a research associate at the department of Operations Management at the Institute for Technology Management (ITEM) / University of St.Gallen.

³ **Michael Kickuth** is a research associate at the department of Operations Management at the Institute for Technology Management (ITEM) / University of St.Gallen.

1 Introduction

Declining mass markets and volatile demand characteristics determine major parts of the European apparel consumer market. Sustainability, therefore, largely depends on the ability to respond quickly to demand or on establishing or adapting to fashion trends and so meet opportunities afforded from niche markets. Such market challenges have been achieved by few firms, that include Inditex / Zara (Ghemawat and Nueno, 2003), Benetton (Camuffo et al., 2001) and H&M (DeutscheBank, 2002). In addition, many traditionally operating companies with their own production facilities have failed. Alternatively, some have outsourced their production in order to concentrate on what they identified as their core business: distribution and marketing. As a result, an “outsourcing paradigm” lead many European apparel manufacturers to outsource their production to, principally, Asian countries (Gereffi, 1999).

The percentage of consumer spending for clothes has been decreasing for several years (DeutscheBank, 2002). Lingerie and under-garment producers operating in Europe are, especially, facing a difficult market environment. The general trend supports the belief that department stores are gaining market share, at the same time as independent specialist clothing and underwear retailers are losing market share (DeutscheBank, 2002). Furthermore, the medium price segment of the total market has seen a decline, while the low price and, especially, the high price segment have continued to increase (DeutscheBank, 2002). As a result, the apparel industry is undergoing a permanent process of identifying competitive supply chains, which are mainly driven by cost, speed and flexibility (Chazen, 1996, Gereffi, 1999, Williams et al., 1995).

⁴ Prof. Dr. **Elgar Fleisch** is a director at the Institute of Technology Management / University of St.Gallen and co-chair of Research Auto-ID Labs at MIT.

Quality, meanwhile, is a factor with secondary importance, since most competitors have fairly similar quality standards (Gereffi, 1999).

These major shifts in operational focus have modified the structure of the apparel industry and, in turn, this has required that many firms now need significant changes in their business models. Subsequently, firms realize that an imperative of “cost and efficiency” is no longer adequate (Skinner, 1974); and that the market environment of a “nature of uncertainty” requires various *types* of flexibility (Gerwin, 1987). Flexibility, being: “the ability to change or react with little penalty in time, effort, cost or performance” (Upton, 1994) is therefore a major driver for strategic repositioning.

In the following sections we discuss the results of our action research, which was a continuous, iterative process of conceptual knowledge creation and analysis (Ellis and Kiely, 2000). The following research process is divided in four sections. First, the methodology used during the research process is presented; second, we develop the theoretical Strategic Flexibility Framework (SFF); third, we describe the firm Fashion Inc. and use the SFF to illustrate how the competitive position of the firm was modified. Finally, by drawing upon our results we conclude with a discussion of flexibility in a manufacturing environment.

2 Research Method

The research process follows the methodology of single-case study (Yin, 1994, Eisenhardt, 1989) and action-research (Greenwood and Levin, 1998, Ellis and Kiely, 2000, Chakravarthy and Doz, 1992), carrying out inductive inquiry and field studies over twenty months which are applicable to our single-case study with a major European underwear manufacturer. During this period (commencing May 2002), we undertook fifty company-based reengineering workshops at senior executive management and middle level management. These

workshops covered various topics: strategy development and implementation, reengineering, and process management. All workshops were documented using company-approved minute-taking. In addition, we conducted and documented 116 structured interviews with employees; this allowed us to investigate the perceived major operational challenges for the firm. Findings from the interviews were consolidated by using surveys administered to participating employees; with identified issues being ranked in order of perceived importance. All documentation was reviewed by the participating employees and managers, in order to ensure accuracy and authenticity. Also, several progress reports were published that gave a summary of ongoing status of the research progress. This also had the added benefit of guaranteeing a common mindset for the repositioning process and research focus. This combination of “*bottom-up*” interviews and “*top-down*” workshop participation enabled us to observe the ongoing transformation process of the organisation and develop theoretical conclusions. The observation process also included analytical, semi-structured review discussions with the reengineering team, middle management and the senior executive management.

3 Strategic Flexibility Framework

Drazin and Van de Ven (1985) suggest that all contingency models “share in common an underlying premise that context and structure must somehow fit together if the organization is to perform well” (p.514). They consider *fit* as the “key concept in a contingency proposition” (p.515) and suggest the further examination of systems approaches to fit and multiple contextual elements on fit (p.536). This leads to a “manufacturing contingency theory” (Kotha and Orne, 1989), which links business unit strategies and a firm’s manufacturing structure while implicitly representing a manufacturing strategy.

For a vertically integrated firm, any advantages from vertical integration depend on the firm and the industry condition, and thus can change over time (Harrigan, 1983). The basic issue is whether successive activities within one firm or the use of exchanges between separate firms minimize agency and transaction costs (Richardson, 1996). As pointed out by agency theory, separate firms along a value chain have a greater incentive to innovate and to adapt to changing circumstances than fully integrated firms (Richardson, 1996), which correlates with a basic trade-off between the improved information, but results in reduced performance incentives due to vertical integration (Riordan, 1995). While on one side the discussion views vertical integration as “a critical part of manufacturing reform” (Kumpe and Bolwijn, 1988), the other side suggests that “less vertical integration frees capital and makes management task easier, while more vertical integration ties up capital, is hard to manage, but yields in-house know-how and a supply of strategic components” (Burt and Doyle, 1989). For a firm that is confronted with an increasing competitive environment, flexible organizational forms “can respond to a wide variety of changes ... in an appropriate and timely way” (Volberda, 1996) and be the foundation for building strategic flexibility (Hitt et al., 1998). However, an open issue is how to establish a flexible organizational form that is meeting market needs without having the trade-offs of vertical integration.

The theories discussed above are the basic considerations for the development of the conceptual Strategic Flexibility Framework (SFF), which develops existing studies on flexibility (Sanchez, 1995, Gerwin, 1987, De Meyer et al., 1989, Olhager and West, 2002, Beach and Muhlemann, 2000, Volberda, 1996). It builds on the concepts of resource based management and coordination flexibility, and illustrates how a firm’s strategic flexibility and competitive position correlate (see Figure 1: Strategic Flexibility Framework).

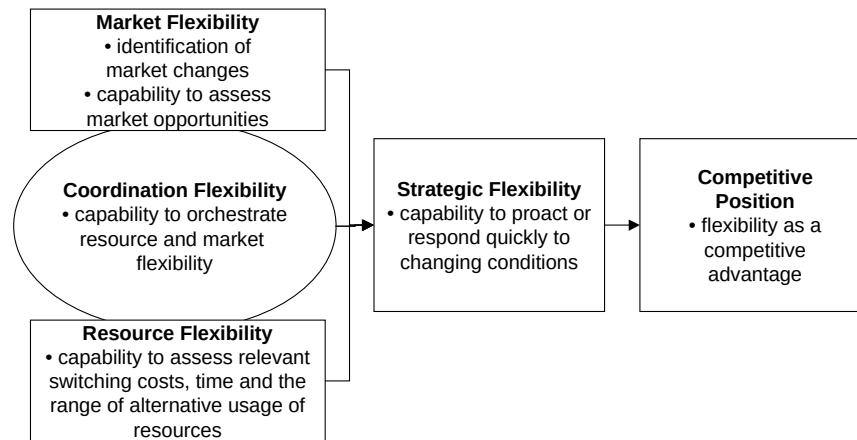


Figure 1: Strategic Flexibility Framework

Market flexibility: Dynamic environments call for consideration of relevant changes in strategic management (Ansoff, 1975) and require responsive flexibility in order to be able to accommodate increased competition (De Meyer et al., 1989, D'Aveni, 1994). This is especially true for product manufacturers (De Meyer et al., 1989), which are confronted with various types of external flexibility dimensions (D'Souza and Williams, 2000). Other studies further specify these types of flexibility (Slack, 1987, Suarez and Cusumano, 1995), such as “readiness” (Bartezzaghi and Turco, 1989), new product flexibility (Suarez and Cusumano, 1996), expansion flexibility (Chen et al., 1992) or delivery speed flexibility (Chambers, 1992). However, these types of flexibility invariably refer to one specific market and do not consider potential intermediary markets along a manufacturer’s value chain. These markets can arise from the commingling of a firm with entities in its external environment (Srivastava et al., 1998) and have their foundation in a firm’s potential market power along its value chain (Caves et al., 1977, Porter, 1979). We therefore describe market flexibility as a firm’s capability to identify market changes and assess market opportunities within the optimum constraints of its value chain.

Resource Flexibility derives from a resource-based view of the firm (Wernerfelt, 1984) and closely correlate with a firm’s “asset specificity” (Riordan and Williamson, 1985). Resource

flexibility links firm resources with competitive advantage (Barney, 1991); or identifies firm resources as a primary determinant of firm value (Makhija, 2003) and firm performance (Williams et al., 1995). This leads to the introduction of concepts on resource flexibility (Gerwin, 1993, Olhager and West, 2002, Slack, 1983), which specify potential changes in the deployment and utilization of internal resources. Other researchers further subdivide resource flexibility into mix, product and volume flexibility (Suarez and Cusumano, 1995) or place these in the context of further determinants, such as firm's abilities or objective measures (Olhager and West, 2002). Sanchez (1995) characterizes resource flexibility using three dimensions: the range of alternative use of resources, the cost and difficulty of switching resources, and the time for switching from one to another resource. In our research, we use these three dimensions to characterize resource flexibility.

Coordination flexibility balances market and resource flexibility. Sanchez (1995) characterizes coordination flexibility as being able to “redefine a firm's product strategies, to reconfigure a firm's chain of resources and to redeploy the reconfigured chain of resources” effectively (p.139). This coordination flexibility is closely linked with the discussion of dynamic capabilities (Teece et al., 2000, Griffith and Harvey, 2001), which support the balancing a resource-based and a market-based view (Griffith and Harvey, 2001). In addition, Madhok (Madhok, 2002) argues that the “triangular alignment between the triumvirate of (the firm's) governance structure, transaction and resource attributes demonstrates how the identity and strategy of a particular firm influences how its resources interact with the transaction and how the firm chooses to govern it”. Therefore, we describe coordination flexibility as a firm's capability to orchestrate resource and market flexibility.

Strategic flexibility is often used to explain how a market-based view or how coordination or resource flexibility can be utilized to strengthen a firm's competitive position in its marketplace (Hayes and Pisano, 1994, Sanchez, 1995, Aaker and Mascarenhas, 1984). In our research, we use the following definition, which characterizes strategic flexibility as "...the capability of the firm to be proactive or respond quickly to changing conditions and thereby develop and/or maintain competitive advantage" (Hitt et al., 1998).

Within this context, a firm's *competitive position* determines a market position where competitive advantage can result in superior performance. While D'Aveni (1994) argues that competitive advantages are never sustainable and that every advantage erodes over time. Therefore, strategic flexibility becomes a major challenge for manufacturing firms (De Meyer et al., 1989). Consequently, we view a firm's competitive position as the superior goal, for which an increase in strategic flexibility is a pre-requisite requirement. The degree of flexibility needed to ensure a competitive position is commensurate with the volatility of the environment; and therefore needs continual assessment.

4 The Case Study

Fashion Inc.

The single case study is based on a firm that we refer to as Fashion Inc. It designs, manufactures and sells underwear for women, men and children to independent retail and department stores that have a main focus on the European market. In 2002, Fashion Inc., generated revenues of approximately €250 million and employed over 4000 people in Europe, most of them at production facilities in Eastern Europe. In 2002, Fashion Inc., sourced some 50 percent of its finished products from their own production facilities and a further 50 percent from external suppliers. The major production facilities are vertically integrated and cooperate with

nearby workshops, which perform most of the labour-intensive sewing activity. All garments are sent to a central distribution center at the headquarters in Western Europe.

The former market situation

Fashion Inc. has been affected by all trends described in the introduction. It has a strong foothold in the German speaking area of Europe and its main sales channel has traditionally been the, now, declining independent retail stores. Because its own brand is positioned in the medium price segment, it has also been struggling with the ongoing change in consumer behaviour towards low or high price garments.

The former internal situation

In addition to the difficult market situation, Fashion Inc., was facing several organisational challenges. After displacing their main production facilities to low-wage countries, the firm struggled to transfer the highly developed production system to their new production sites in Eastern Europe. In terms of quality and lead times, the new production sites were lagging compared to the former production site in Germany. As well as the problems in the production process, the coordination and management across the supply chain was deliberately confused and sophisticated.

Whilst expenditures associated with logistics coordination increased significantly, Fashion Inc. maintained its established internal structure. While the network structure of its supply chain became highly decentralized, the supply chain planning process was highly centralized and coordinated by its logistics department. Concurrently, little capital investment was made for IT and logistics, which resulted in high coordination costs due to the high amount of manual handling of orders placed at the internal production facilities. Due to the ongoing problems with its internal supplies, senior executive management increased the quantity and

range of products sourced from external suppliers. As more products were sourced externally, the internal production facilities focused upon products that were not as profitable for external suppliers. These products were characterized through having high complexity and low production lots. In terms of price, quality and lead-time, it became questionable whether internally sourced products were still competitive. The question of outsourcing the whole production became a relevant issue for senior management, since the yield of in-house know-how and the supply of strategic products was limited.

Characterizing the former situation

Utilizing the SFF, the former situation of Fashion Inc. is shown in Fig. 2.

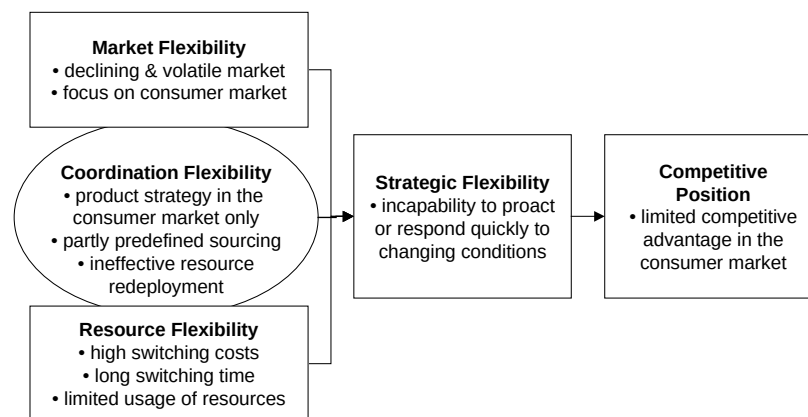


Figure 2: SFF - Fashion Inc. former situation

Prior to the transformation process commencing, the firm had not anticipated the change in consumer behavior, and consequently concentrated on its own brand; which was positioned in a declining market. Hence, its market flexibility was highly restricted and struggled with declining sales. Based on this single market strategy, the internal structure and resources were focused to supply the single market with a portfolio of similar products. However, the limited resource flexibility constrained Fashion Inc., in its scope to penetrate new markets. While its main competitors had a fully outsourced production, Fashion Inc. was vertically integrated,

which appeared to become its main constraint. It has been argued that as soon as wages rise at the current locations in Eastern Europe, facilities need to be relocated to new low-wage countries (Gereffi, 1999). This leads to high switching costs, since the implicit and explicit knowledge (Nonaka, 1994) of effectively operating an apparel production site has to be transferred. In the case of Fashion Inc., this usually resulted in production delays and bottlenecks. Hence, the direct and hidden costs of switching and relocating production facilities outnumbered the costs of switching a supplier. If Fashion Inc., wanted to expand its product range, it had to either have to outsource its production or adjust its internal structure to significantly increase its resource flexibility. In addition to the high switching costs, Fashion Inc.'s coordination flexibility was limited due to its highly dispersed production network, its poor IT infrastructure, its functional organization and the cultural differences between the headquarter and the various production facilities in Eastern Europe.

While the declining consumer market forced Fashion Inc., to reconsider its business model, its resource inflexibility constrained the scope to respond to changes in the market. Its overall competitive position became critical to its operational sustainability.

The transformation process

The senior executive management of Fashion Inc., launched a major initiative, in order to activate a determined evolutionary change process of the entire organization (Van De Ven and Poole, 1995). This long-term initiative launched a strategic realignment that was based on an analysis, which identified two major findings:

- The traditional boundaries of the apparel value chain are blurring. Increasing competition leads many companies to strengthen marketing and de-emphasize the product related

aspects of their operations. As a result, the phases of the value chain in which companies are operating, alter. This opens new business opportunities for companies that offer services to help companies reposition themselves.

- Along the value chain, profits can derive from all phases. While the retail “end market” is highly volatile, the other phases of the value chain are relatively steady. Innovations and fashion trends are presented on a seasonal basis and even product or production technologies evolve stable. Therefore, investments in manufacturing assets are not subject to a great risk of obsolescence and could usually be redeployed or divested (Richardson, 1996). Closing or selling the own production facilities implies that Fashion Inc., would jeopardize the fairly stable part of its business and concentrate on a business which is subservient to high volatility.

This analysis leads to a central finding: outsourcing the own production would neither increase flexibility nor enhance the corporation’s competitive position. Fashion Inc., decided to keep the existing production facilities, in order to be able to oversee the entire value chain while targeting new business opportunities along the value chain. Thus, this new business model is identified as a *flexible vertically integrated manufacturer*.

The flexible vertically integrated manufacturer: Fashion Inc. transformed its internal production facilities into three distinct business units that offer their services and products to both external customers and within the Fashion Inc. corporation. The *Fabric Unit* offers its existing excess production capacities to outside customers and is able to exploit internal economies of scale, whilst offering small production lots to customers. Its objective is also to have fiber and fabric market knowledge, which includes external sourcing capabilities. The owned production encompasses every manufacturing step that transforms fiber into fabric. The *Textile Unit* also

offers excess production capacities to external customers. The production includes cutting, making, trimming and material handling of apparel. The textile unit is particularly aware of recent sourcing trends and has knowledge of upcoming textile manufacturing regions and countries. *The Service Business Unit* offers design, manufacturing, packaging and material handling to external branded marketers with branded products in the premium price segment and mainly sourcing and material handling to private label customers in the low price segment.

Characterizing the new situation

By launching the Service Business Unit, Fashion Inc. entered the premium and low price market segment by offering its whole portfolio of services to external, globally operating retailers and branded manufacturers. As it principally concentrates on European-wide or worldwide operating customers, it could shift its focus from the German market to the European market. The apparel and textile manufacturing units are now operating as mainly independent companies that offer services or finished products to external customers as well. By doing so, Fashion Inc. could increase its market flexibility as it managed to develop its capability to assess market opportunities along its value chain; and giving new opportunities. The business units helped to reduce the dependency on the weak German retail market. To reduce switching time and costs, Fashion Inc. started a number of major change initiatives. It formulated modular business, production and planning processes that were implemented in all of its business units. To support these initiatives it developed a training program that helped employees to handle orders in a standardized way from various types of customers in different business units. These processes were supported by a new integrated information system that allowed the business units to perform collaborative and decentralized planning, and to quickly react to changes in demand. All of these actions enabled Fashion Inc. to increase its flexibility at the operational level. However,

Fashion Inc. had to cope with long-term challenges, such as the high asset base and the ongoing relocation of its production facilities to low-wage countries. Anticipating that its current production facilities will be relocated when wages are no longer competitive, Fashion Inc. has highly structured and standardized its production system to enable speedy development of new production sites. By doing so, Fashion Inc. could reduce its asset base by outsourcing parts of its production to smaller workshops that could now perform jobs in accordance with the Fashion Inc. production system. This leads to a situation in which Fashion Inc. was able to reduce its short- and long-term switching costs significantly without jeopardizing its quality standards.

As Fashion Inc. started to penetrate new markets and use its assets more flexibly, it realized that it now has to balance its market and resource flexibility more effectively. It introduced a firm-wide planning process that continuously assesses new market opportunities, defines product strategies and assesses resource gaps that have to be filled. Simultaneously, production has to identify resource inputs needed to shorten switching time and lower switching costs to increase its resource flexibility. By developing the capability to orchestrate market and resource flexibility, the firm managed to increase its coordination flexibility, as it is able to respond to changing market conditions quicker than its competitors. Whilst Fashion Inc.'s overall management task is still demanding, due to more transparent responsibilities through the distinct business units it is no more complex than the former situation. Overall, strategic flexibility has become a competitive advantage for Fashion Inc.

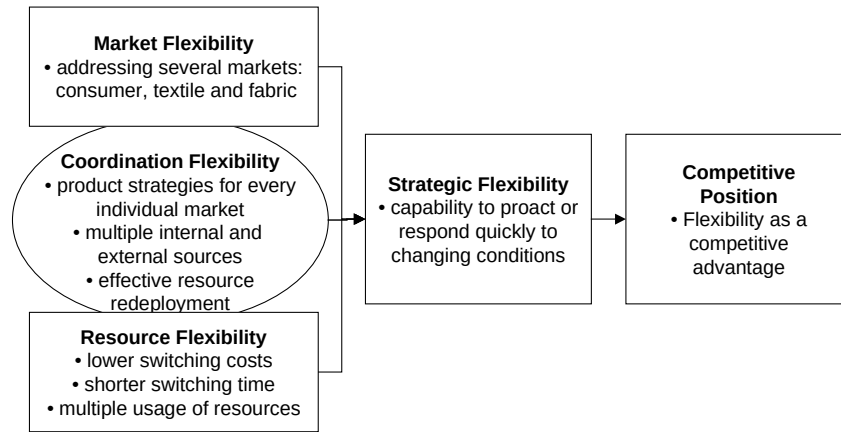


Figure 3: SFF - Fashion Inc. new position

5 Conclusion

This paper introduces a conceptual framework that indicates how strategic flexibility can become a competitive advantage for a firm that is operating in a volatile market environment. While existing literature places major emphasis on developing methodologies to enhance speed and flexibility at the operational level, we identified market flexibility as an additional operational strategy to strengthen a firm’s sustainable competitive position. While we define market flexibility as a firm’s capability to identify market changes and assess market opportunities within the optimum constraints of its value chain, resource flexibility is determined by the cost and time of switching resources and the capability to make multiple uses of existing resources. We conclude that both of these flexibility dimensions are closely linked, and can constrain one another. Hence, the capability to orchestrate market and resource flexibility becomes vital for the enhancement of strategic flexibility that is vital for a firm’s competitiveness.

The case of Fashion Inc. illustrates how the establishment of various business units along the existing value chain, can reduce “transactional failures in the operation of markets for intermediate goods” (Williamson, 1971) and increase market flexibility. Through Fashion Inc.’s

repositioning, market flexibility now derives from being able to deliver products and services to various markets along its value chain. It enables Fashion Inc., to optimise the trade-offs between reduced coordination costs and the reduced performance incentives that normally result from vertical integration. It is now able to yield in-house know-how and supply strategic components, while having residual management tasks, without capital tied up.

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