Dynamic Effectiveness: Improved Industrial Distribution from Interaction Between Marketing and Logistics Strategies

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ABSTRACT. Based on different observations, in theory as well as in practice, we have identified strategies and operations following two different tracks, striving in different directions, despite it being well known they should go hand in hand. For companies challenged by a more and more dynamic business environment with heavier market segmentation, additional marketing channels, increasing globalisation on supplier and customer side, and high pressure on profit margins, the result from this is competitive weakness.

The purpose of this article is to switch focus from operational effectiveness and strategic positioning as static success concepts on how to improve industrial distribution, to dynamic challenges of how to continuously manage the interaction between marketing strategies and operations (e.g., logistics) under the influence of a dynamic business environment.

From theories in market strategies, logistics, flexibility, and marketing channels together with empirical experience from a best practice case study, we are introducing a model for dynamic effectiveness, de-
scribing the different characteristics of a company and what to focus on in order to become more dynamic.

In order to constantly move to new market positions, and at the same time, restructure logistics and improve operational effectiveness, we have identified the dynamic capabilities of an organisation to be the key to success in industrial distribution. We define dynamic effectiveness as “how fast-and-well a company can go from one strategic positioning and productivity frontier to another.” It tells that a frequent interaction between new strategic moves and actions for higher operational effectiveness is required to be in pace with the dynamic and changing business environment and to stay ahead of competition. As a part of this, best practice logistics performance makes it possible not only to be more agile to new strategic moves, but also to drive strategic development from a high operational level. This is achieved by designing logistics to be a resource base to support and be an enabler for new strategic moves on the market.

KEYWORDS. Dynamic effectiveness, strategic flexibility, industrial distribution, marketing and logistics interaction

INTRODUCTION

Research in industrial distribution has, during the last decades, too often adapted to one or the other of two different theoretical perspectives–industrial marketing or logistics–and have been lacking an explicit view of the important interface between the two disciplines (see e.g., Abrahamsson & Brege, 1997). One reason for this separation of perspectives and disciplines is academic specialisation and another reason is also a lack of integration in industrial practice. Industrial marketing has a focus on issues such as customer segmentation, value creation and development of customer relationships and logistics has a more operational view on issues concerning productivity and efficiency. However, during the last decade the interface between marketing and logistics has attracted increased academic attention (i.e., Langley and Holcomb, 1992; Innis and La Londe, 1994; Mentzer et al., 2001). Our own research interest is to add a strategic and more dynamic perspective
to this marketing-logistics interface and to point out the importance of industrial distribution to the overall strategic development of industrial companies.

Three empirical observations, indicating lack of integration between marketing and logistics strategies together with the importance of a dynamic perspective, have been of vital importance to our research in industrial distribution:

1. **In most mature organisations, two main tracks of actions can be identified with different focuses between marketing and operations managers.**

   On the operation side, focus has been on rationalisation for cost reduction and shorter lead times. Driven by a surplus of resources and need for downsizing and rationalising operations, the results have been merely an increased focus on operational effectiveness, with a virtual butchering of lead times, stocks, and whatever waste that could be identified.

   During the same period of time marketing managers have been busy with strategies for positioning, value add concepts, and market segmentation, driven by the increased globalisation of markets and intensive development of new products. Relationship marketing is at the very core of industrial marketing.

   In practice these two tracks have very often been applied independently, resulting in marketing strategies and the positioning of a company being developed with no or little influence from operation capabilities, as well as the design of operational concepts lacking the influence of market forces and customer needs.

2. **In a static situation most companies can show high productivity together with a strong strategic position on the market. However, when more dramatic changes are introduced on the market, over time two companies that initially are similar in terms of products manufactured and concepts used for marketing, manufacturing, and logistics, then differ in terms of proactive adaptation to changes and ultimately in performance and bottom-line results.**

   The mobile phone divisions from Nokia and Ericsson are good examples. At the end of the 1990s both companies held strong positions with high market shares supported by efficient production, using the latest technology for manufacturing and assembly. But considering the inher-
ent dynamics of the mobile communication business, entering new customer segments together with a shift from boom to recession in the business cycle during 2000 and 2001, Nokia totally outperformed Ericsson and the other competitors. Ericsson was caught by surprise by the establishment of a volume segment for cheaper mobiles (the youth segment) in combination with a slow down in overall demand, and was forced to react to heavy losses with extensive downsizing programmes. Nokia, on the other hand, proved their dynamic capability leading the way into this new volume segment with very good profitability and an aggressive strategy to beat their competitors by further expanding, once the business recession was a fact. For Ericsson the dynamic business environment was a big threat, for Nokia it was a positive challenge that proved that the concept for dynamic capability, called “The Nokia Way,” was right. In the beginning of the year 2001 they wrote:

The year 2000 was characterised by the relentless pace of change, as the whole industry fought to adapt quickly to the changing requirements of customers, emerging technologies and high expectations. We feel confident and challenged by this environment and have set ourselves the highest ambitions for success. . . . In order to be able to be successful in a dynamic environment the capability to change according to the changes on the market has been formalised in The Nokia Way. (Nokia annual report for the year 2000)

3. The two-track pattern, development of operations, and marketing strategies, more or less independently, has been acceptable as long as there has been room for improvements in both fields, which has been the case in many industries. However, when the easy pickings in rationalisation and positioning are over and the business environment is getting more and more dynamic, there is an increasing need for continuous interaction between strategic and operational processes.

A basic hypothesis in this article is that most organisations and companies today find themselves facing an increasingly dynamic business environment. For example, there is an obvious globalisation going on both on customer and supplier sides and together with increased customer focus comes tighter segmentation and customer driven product development. We are facing new technologies, new business processes and new actors that are implementing different kinds of business logic, e.g., “mega retailers” and e-commerce companies. In addition to all this,
most companies are facing continuously decreasing profit margins because of increased competition driven by, e.g., IT/IS development (See e.g., Sinha, 2000).

The purpose of this article is to switch focus from studying operational effectiveness in the field of logistics and strategic positioning in the field of industrial marketing as separate concepts, to how to improve industrial distribution and competitiveness. The challenge is how to continuously manage the interaction between marketing strategies and logistic operations as a proactive response to an increasingly dynamic business environment.

**METHODODOLOGY**

The conceptual approach on dynamic effectiveness presented below is based on approximately ten years of research on best practice in the area of industrial distribution with focus on the integration of logistics and marketing strategies.

In this article one major case study represents our empirical foundation for an explanation building approach as discussed by Yin (1994). The Atlas-Copco case is a longitudinal case study, describing developments up to the present time. It has been selected for its repeated structural changes in logistics and its interaction with the development on the marketing side. The development for a period of ten years is described. Collection of data has been made through extensive semi-structured face-to-face interviews with several people in the company, mainly managers in the departments of Logistics and Marketing & Sales. The Atlas Copco-case has been presented in other scientific reports and journals, but with a somewhat different focus, e.g., Abrahamsson and Brege, 1995 and 1997; Abrahamsson et al., 1998; and Abrahamsson et al., 2003. However, in this article we have undertaken an empirical follow up and a new analysis focusing on the dynamic interaction between marketing strategies and logistics development.

Our scientific approach is theory generation in an explanation building approach (cf Yin, 1994). For that purpose to be fulfilled, one case study is sufficient. Even though a multiple case approach can be considered better fitted to for the development of a conceptual model, compared to one single case study, theory generation is not basically a question of the number of cases, but rather that the cases are interesting and generative for model building. In that respect it differs from theory validation, where the question of generalising from representative sam-
Theoretical framework has gathered influence from four different disciplines. Industrial marketing and marketing channel theories together with logistic theories are combined with corporate strategy and to a minor degree change theories, to help us understand the strategic and dynamic aspects of industrial distribution and the interface between industrial marketing and logistics.

At the end of this article a model of dynamic effectiveness is introduced. The model is conceptual of character and it should not be looked upon in a mathematical sense. We have no ambition in this article to present measures of dynamic effectiveness on a numerical scale, nor to grade different dynamic capabilities.

**THE TWO EMPIRICAL TRACKS ARE WELL FOUNDED IN THEORY**

Marketing channel theories are at the very centre of our understanding of industrial distribution. This line of research deals with the structure of the market channel and more specifically the functions performed in order to close different gaps between production and consumption. An important issue is the division of labour between different actors in the marketing channel and especially the use of intermediaries. The gaps to close are separating production from consumption in different ways (time gap, geographical gap, quantity gap and variety gap), because the producers and the customers operate almost independently from each other. There is a mismatch between large production batches and customer demands for small quantities and specific assortments. Similarly, there are mismatches between the time and place of production and the time and place of the customer demand. Therefore, different middlemen are expected to create utilities in place, time, quantity, assortment and possession by performing specific distribution functions, like sales, physical handling, order handling, financial transactions, etc. (Kotler, 1988).

The distribution functions are considered as indispensable and, therefore, “must be performed” (Walters, 1977). They are also considered as mutually independent. The question is rather which institution within
the distribution structure takes responsibility for each specific function. If one institution is eliminated, its functions will be shifted either forwards or backwards in the channel, because “You can eliminate the middleman but you cannot eliminate his function” (Stern & El Ansary, 1988).

In consequence, according to marketing channels theories, the distribution channel will be long and wide, with many warehouses or stock locations in order to be geographically close to the customer if (Jackson et al., 1982):

- The number of customers is large
- The customer-structure is geographically dispersed
- Industrial concentration in the market is fragmented
- The customers purchase small volumes
- There are many competent middlemen available
- The products are standardised

The basic assumption in marketing channel theories is that the actor best suitable to perform a specific function should be responsible—a specialisation of the division of labour in the distribution structure. As a consequence, this line of thinking is supporting a split between marketing and sales activities, that are developed independently from logistics activities. In our view a weakness in traditional marketing channel literature is the lack of integration between marketing and logistics.

The logistic theories are in the case of distribution focused on the materials flow from the point-of-origin (supplier) to the point-of-consumption (the customer) and how to integrate this supply chain. It implies that the physical distribution must be co-ordinated with the in-process flow and the materials management in order to reduce costs by trade-offs. Increased costs in one function can result in decreased costs in other functions, and thereby reduced total distribution costs (Christopher, 1986).

Also driven by cost reduction and effectiveness, physical distribution has been under a heavy centralisation during the last decade, stressed by time to customer instead of geographical distance to the customers. In consequence, instead of the traditional one or more warehouses in each country integrated with the local sales company, the physical distribution has been centralised to only one or two warehouses in Europe with direct deliveries to final customers in different countries (Abrahamsson, 1993 and Abrahamsson & Aronsson, 1999).
Marketing Mix Theory and Relationship Marketing

Important issues in marketing can be found in the marketing mix model (Kotler, 1988), which identifies the four Ps–product, place, price and promotion. The product parameter deals with different aspects of a product line and how to differentiate specific offerings to specific customer segments. Also, the question of creating customer value is at the centre and what mix of hardware, software and services that constitutes a competitive offering to the customer. The promotion parameter includes personal selling advertising, etc. The price parameter deals with price issues and also how to build total financial solutions to the customer. Finally, the place parameter deals with distribution aspects of marketing and is in literature often described as the interface between marketing and logistics (see e.g., Stock & Lambert, 1987). The question of geographical scope is also important. The four Ps model is a useful tool when discussing the interface and interaction between marketing and logistics. Our case analysis will show that logistics not only is integrated with the place parameter, but also has substantial influence on the product line, price and how to organise (specialise) personal selling.

A complementary perspective to the four Ps model is the relationship approach to industrial marketing (Håkansson, 1982; Gummesson, 1998). The main rationale for relationship marketing is that a close and trusting relationship between customer and supplier is both efficient and effective. The relationship in itself is more long-term than specific offerings and business transactions. For instance, could different kinds of integrating logistics solutions such as JIT and EDI be implemented in a better manner within the structure of a trusting relationship.

The Marketing-Logistics Interface

In literature, research on the marketing-logistics interface is dominated by the question of how to create logistics customer value. Logistics is supposed to produce a high level of customer service in traditional terms, e.g. availability, short and reliable lead times and place utility. Innis and La Londe (1994) report customer service provided by physical distribution to have a significant and positive impact on customer satisfaction, cognitive attitudes and repurchase. However, they also identify a need for better integration and coordination between logistics and marketing in order to improve the overall performance of a company and its market share and profitability. A similar approach is presented by Langley and Hocomb (1992), who argue that logistics should
be considered as one of the “strategic supra-systems” of a company that are responsible for creating customer value. Customer value is then achieved through a traditional marketing approach, including finding out how customers perceive the organisation, determine and assign responsibility for systems and processes. Creating customer value and incorporate the basics of marketing into the process of logistics delivery are central issues.

Based by studies in the automotive industry, Flint and Mentzer (2000) highlight the importance of logisticians as marketers in a dynamic business environment in terms of reacting on changes in customer’s desired value. In nine propositions, they argue that logisticians will need to market their expertise internally to marketers and sales professionals in order to work along-side them in marketing to external customers, e.g., by using traditional marketing tools like the marketing mix. Their idea is to “understand, create and communicate logistics value to external customers.” However, they also identify lack of empirical evidence and suggest additional qualitative research and long-term case studies to better understand the area.

Operational Effectiveness versus Strategy

The influence from management concepts such as Time Based Management (TBM), Business Process Reengineering (BPR), and Supply Chain Management (SCM) on operations and logistics management literatures have been heavy during the 90s. Under the influence of e-business, this trend on how to rationalise logistics in the supply chains and marketing channels has grown even stronger. Following this track towards “best practice operational effectiveness,” the development is characterised by more standardisation of operations and technology, followed by increased outsourcing and more virtual organisations (see e.g., Bauer et al., 2001).

In an HBR article, Michael Porter (1996) warns of this overbuy of concepts and focuses on the short-sighted search for operational effectiveness without considering the strategic consequences, which, he argues, can lead to hypercompetition caused by a failure to distinguish strategy from operational effectiveness. In another article (Porter, 2001) he continues this warning, this time based on the development of e-business which is driving towards increased standardisation and outsourcing of operations. Best practice in operational effectiveness is turned into a commodity, possible to buy on a market and in a longer time perspective this can only undermine a company’s—and indeed an entire indus-
try’s, core values. If competition is based on improvements open to anyone, little will distinguish one company from the others and ever more lean companies will starve one another out of profitability.

Hamel and Prahalad (1994) present the same warning. Success requires a company to be different, not just smaller and better, is their basic line of reasoning. They also make another distinction, what they term smaller versus better being achieved through downsizing and reengineering, respectively. In the first case, improvements stem from reducing surplus resources, in the other from working differently.

According to Porter (1996, 2001) a company can gain competitive advantages and outperform a rival only if it can establish a difference that it can maintain, which demands strategic positioning in order to create greater value to customers and/or create comparable value at a lower cost. Hamel and Prahalad (1994) present a similar approach to the drive for uniqueness. To be able to go beyond restructuring and reengineering (principles for reaching high operational efficiency) a company also has to be capable of being different (strategic positioning). They describe the quest for competitiveness in terms of being smaller (restructuring the portfolio and downsizing the headcount), better (reengineering processes and continuous improvement) and different (reinventing industries and regenerating strategies).

To establish a competitive advantage through superior strategic positioning there are three alternatives according to Porter (1996). First, a company can focus on the capability to design a unique activity system in terms of variety (offering a set of products or services which are of interest for a wide array of customers). Secondly, strategic positions can be established in terms of better need fulfillment (serving one particular group of customers with all their needs) and/or, in the third place, in terms of access (to optimise the activity system to be able to reach customers the best way).

Adding Strategic Flexibility to the Picture

There are several indicators on market dynamics with influence on industrial distribution. Two trends affecting the dynamics are globalisation and consolidation of industries to fewer and larger firms. In turn this causes increased uncertainty both for the firm implementing these changes as well as their competitors. The customers have changed towards increased sophistication in terms of new or increasing customer demands. There is a trend towards an increased customer focus replacing a more traditional product focus, requiring adaptations to customer
demands instead of supporting the ability to extend an existing core product with additional services. This marketing strategy involves tighter segmentation, e.g., striving for a 10 percent market share on ten markets, rather than market dominance (ultimately 100 percent) on the home market. (e.g., Demkes et al., 1999). There has also been an increasing cost pressure in most industries with decreasing profit margins.

With new actors on the market and electronic commerce as an additional marketing channel it requires supply and distribution systems, that are more dynamic than before. Bauer et al. (2001) argue that extensive strategic impact on logistics from e-business will come from, e.g., visionary leadership, balancing business analysis with ideas from inside the company and network based value chain constellations. A more dynamic business environment with new demands like this, puts demands on having an increased number of strategic options for the firm, i.e., in terms of different marketing strategies. Inspired by Porter, Stank et al. (1998) argues that a company that seeks to attain competitive edge through customer closeness has to be more dynamic with its customers. This requires a more flexible logistics set-up, based on a strategic rather than operational flexibility to exercise these options when needed, Figure 1. At the same time there are still very high demands on operational effectiveness in terms of cost, quality and delivery precision, perhaps even more in a more global and competitive business environment.

The definitions of strategic flexibility are somewhat similar in literature. Aaker and Mascarenhas (1984) have defined it as “the ability of the organisation to adapt to substantial, uncertain, and fast occurring environmental changes, that have a meaningful impact on the organisation's performance.” Carlsson (1989) suggests that strategic (long-term) flexibility reflects how the company positions itself with respect to a menu of choices for the future, e.g., in terms of the types of products it wants to manufacture and/or sell, where it wants to locate production, what geographical markets to target for, what types of threats to guard

FIGURE 1. Strategic Flexibility to Exercise Different Strategic Options
against, what type and magnitude of effort should be devoted to re-
search and development, etc., Sanchez (1993) claims that strategic flex-
ibility becomes a viable conceptual basis for firm strategy when it is
articulated into a well-defined set of strategic options that a company
might be able to exercise on its markets.

Based on the discussion above, a strategic flexible logistics should
interplay and support strategic options in marketing strategy such as
(Abrahamsson et al., 2003):

• Broadening of assortment, which requires the handling of a large
variety of products and new demand patterns.
• Additional marketing channels, e.g., electronic commerce require
that logistics structure and set-up can support new ordering and de-
livery demands and, in some cases, deliveries to a large number of
end customers instead of deliveries to a few wholesalers or retail-
ers.
• Expansion geographically to new markets, which requires a re-
geonial or global logistics set-up in order to be able to add a new
market to marginal costs, e.g., deliveries to the Baltic countries
from the same distribution centre that supports the Nordic coun-
tries.
• Support global customers as a global supplier, as well as local cus-
tomers on their specific market, requires that customers with cen-
tralised purchasing, buying large quantities to be delivered to
several receptions, can be supplied from the same logistics plat-
form as well as local customers on different markets buying small
quantities.
• Expansion by company acquisition requires that synergies in pro-
duction distribution and supply to be efficiently taken care of.
• Downsizing when needed, i.e., to adapt and reduce the logistics
platform and related costs (capacity, structure and set-up) quickly
when needed, e.g., in a recession when the market drops.

In literature over the years, flexibility has been discussed on different
levels. At an operational level flexibility is used to solve short-term
problems, e.g., ability to speed operations in cases of rush orders (e.g.,
Carlsson, 1989). On a tactical level flexibility is used to describe how to
respond to special customer service requests, e.g., consolidate daily or-
ders to a fixed delivery day or value added services. In Carlsson’s
(1989) words, tactical flexibility is a “built-in flexibility” that in logisti-
cal terms would correspond to a logistics set-up, that deals with changes
in the demand or assortment without major efforts. It also includes some idea of the cost trade-off between excess capacity at certain stages and the cost of later additions.

Das (1995), among others, suggests that strategic flexibility needs to be understood in terms of three major dimensions—speed of change, cost of change and amount of change. Upton (1994) adds an important part of flexibility when he defines flexibility as “the ability to change or react with little penalty in time, effort, cost or performance.” Sanchez (1993) concludes that “Thus, in dynamic markets, it is often the case that the value of a firm’s strategic options may be increased if the firm can devise ways to exercise its options faster than its competitors.” The cost of change or the speed of change is a critical issue concerning strategic flexibility. Normally it is regarded that the greater the strategic flexibility, the greater the costs. Sanchez (1993) states, “If acquiring the strategic options that bring strategic flexibility were costless, any rational manager facing uncertainty would seek to acquire every conceivable strategic option the firm could possibly use in responding to uncertain future events.” This seems even clearer in the words of Das (1995) who argues, “Strictly speaking, traditional cost/benefit analyses should not be applied here, as the flexibility does not just offer incremental revenue, but also sustainable competitive advantage necessary for long run survival of the firm.”

Strategic flexibility is in a sense close to the concept of agility that has been discussed as a comparison to the concept of lean manufacturing and logistics. According to Christopher (2000) “agility is a business-wide capability that embraces organisational structures, information systems, logistics processes, and, in particular, mindsets.” Goldman (1995) uses similar dimensions of agility: enriching the customer, cooperating to enhance competitiveness, organising to master change and uncertainty, and leveraging the impact of people and information.

**The Atlas Copco-Case**

During the last two decades, Atlas Copco Industrial Techniques has made a “strategic journey,” which step by step has improved its ability to manage logistics and marketing in an increasingly dynamic business environment. Today, the company has built up a very efficient industrial distribution system that significantly differentiates from its competitors.
At the beginning of the ’80s, Atlas Copco Tools, a manufacturer of high quality pneumatic and electrical tools, had been showing red profitability figures for several years. The solution was to redesign its production platform by reducing the number of production units from 7 to 1, in order to reduce costs and gain economies of scale. This downsizing process took about two years to accomplish and was successful in terms of lower costs and higher flexibility in production. The company was now not only profitable, it had also acquired management skills and learned the mechanisms behind operational effectiveness by centralisation and building flexible operational platforms.

The logistics, however, was still decentralised as a part of the responsibility of the production unit and the local sales companies in every country in Europe and the physical distribution function was organised in logistics departments at the production companies. The sales companies, which at that time mostly acted as autonomous local companies, were responsible for their own warehouses, inventories, and transports. Atlas Copco Tools also had two central warehouses, one situated in Sweden and the other one in Finland. Some countries were further divided into regions, each with local warehouses. The effect of this dispersed structure was very high inventory levels because of not less than 28 different warehouse locations. From a marketing point of view, this distribution structure resulted in different assortments in different countries and local marketing strategies, with less or no central coordination.

A Centralised Logistics Platform

In 1987, Atlas Copco Tools introduced a distribution concept called the DDD-concept (Daily Direct Distribution). In a centralisation process, similar to what had been done in production, they started to centralise all physical distribution to one Distribution Centre (DC), at that time located in Sweden. The aim was to reduce the number of warehouse locations and at the same time to increase delivery performance. After an introductory period with daily deliveries to customers via the sales companies, deliveries were sent directly to the customers all over Europe. In January 1992, the company moved its DC to Belgium, in order to reduce the transportation costs and to be more close to the main markets in central Europe. The effects from the centralisation was total distribution costs reduced from about 15 percent to 7 percent of sales and delivery performance increased from 70 percent to 93 percent because of a complete assortment stored in one place instead of 28 different locations (Abrahamsson, 1993).
Another result from the centralisation was that the logistics was organisationally separated from the local sales companies. Economies of scale were attained in physical distribution and the local sales companies could focus on sales only. The separation of logistics and sales showed, ironically, to be the key to improved interaction between marketing and logistics development over time, because the different functions where now more specialised (Abrahamsson & Brege, 1997).

Expansion by Acquisition

With the new pan-European logistics system in place, the company was strengthened in its positions on the market. The centralised logistics platform allowed them to change into an expansion strategy, with acquisitions of several competitors like George Renault, Desoutter and Chicago Pneumatics and also the manufacturer of electrical tools, AEG, and the business area Atlas Copco Industrial Techniques was formed. In order to get the synergies out from the expansion strategy, the acquired companies’ physical distribution was incorporated into the same logistics system. The increased volume had further improved economies of scale at the DC. Total distribution costs had decreased from 7 percent to about 4 percent of sales. Now, with a very high degree of operational effectiveness the company was not only profitable, it was also the market leader with an outstanding customer service (short lead times and high reliability). Parallel to (and, as a consequence of) this centralisation process, Atlas Copco Industrial Techniques had built a dominance position in the European Market.

Introduction of an Administrative Centre

One of the major competitive advantages of Atlas Copco Industrial Techniques has been their competence in developing and implementing new operational platforms to support their marketing strategies. From this competence, they continued their reengineering process by centralising the administration from the local sales companies to an administrative centre, AC, which handled all financial transactions in Europe.

The goal was to create a local sales organisation focusing on developing sales and customer relationships, not administration and bureaucracy. Other driving forces for the AC-concept were cost reductions, to minimise and set free local assets, and to get better quality of information and business control. During this phase, the legal status of local
sales companies also was changed from autonomous companies to asset free branch offices.

The business area Atlas Copco Industrial Techniques is today a highly specialised company with regard to all functions—manufacturing, logistics, sales and administration—co-ordinated by sharing information. All logistics activities are centrally co-ordinated from the DC, which performs the role as a service centre, supporting both production and sales. The DC works as an internal consultant in order to co-ordinate sales and production activities. The DC is a legal company and organised as an independent cost centre, responsible for total physical distribution costs, and the sales companies are local profit centres.

The decisions regarding logistics are highly centralised. It is not up the sales companies to decide whether there should be a local stock location or not. The same goes for administrative activities. However, the freedom to develop local sales within these frames is high and supported by central marketing activities.

**Expansion to the US/Market**

The next marketing move was to increase the sales on the US market. The first location plan, which were put forward as a requirement by the US sales companies, was a separate DC in North America. But, because of modest lead-time demands from the US-customers, it was possible to use the same European-based platform and the existing DC in Belgium also for daily direct deliveries to all customers in the US. The same goes for customers in Asia getting weekly deliveries from Belgium. In consequence, the distribution to US could be accomplished to marginal costs, using the same concept, assets, processes, etc. When the customers in US later on required shorter lead times for parts of the assortment, the solution from the logistics platform was to add a satellite for a limited and well-defined part of the assortment in the US in order to fulfil customer demands. The satellite was (and is) controlled, managed and replenished centrally within the same logistics platform.

**E-Commerce as an Additional Marketing Channel**

With the operational platforms in terms of a flexible production, centralised logistics and an administrative centre, the next move was to introduce e-commerce as an additional marketing channel. Atlas Copco was not first in doing this, but they were prepared and could do it to marginal costs and with rather short implementation time. The logistics as
well as the IT/IS-capabilities was already in place and did not need more than a fine-tuning to support the e-commerce platform.

**Integration with Key Customers**

The latest strategic move is an integrated distribution solution with one of their major key accounts, Ford Motor Company. A result from this co-operation with Ford, Atlas Copco has been assigned to co-ordinate and control all supplies of this kind of tools to their manufacturing plants, including tools from Atlas Copco’s competitors. An Atlas-engineer is employed by Ford to replenish tools when needed, based on Fords purchasing agreements with different suppliers. However, all tools shall be delivered via Atlas Copco’s logistics platform and distribution centre in Belgium. The reason for this is that Ford considers Atlas to be the best supplier from a logistics point of view. From a marketing perspective, of course Atlas Copco is having a very strong position, practically controlling the market to one of the major buyers of such equipment.

**ANALYSIS—DIFFERENT DIMENSIONS OF EFFECTIVENESS**

In Atlas Copco the concept of Direct Daily Deliveries was a new and innovative structuring of a centralised logistics system. From this, the operational effectiveness increased dramatically when measured in terms of cost and timely deliveries. Since Atlas Copco was a pioneer within its industry, at least for some time this also lead to a substantial strengthening of the strategic effectiveness and it also opened up for additional competitive advantages in a broader product line. Later on, Atlas Copco has used their dynamic capabilities in an ongoing interaction between logistics and marketing strategies to gain competitive advantages in a dynamic business environment. The Atlas Copco case gives us a good illustration of different dimensions of effectiveness.

**The Strategic and Operational Dimensions of Effectiveness**

Porter (1996) defines strategic positioning as “either performing different activities or performing similar activities in different ways.” In consequence, strategic effectiveness concerns the definition of which products should be sold on which markets and to which groups of customers. In our vocabulary, do strong positions that are long-term and dif-
difficult for competitors to imitate lead to a high degree of strategic effectiveness? It is reached if the company with the “right timing” has “the right offering” on the “right markets,” selling to the “right customer segments.” Uniqueness or a high degree of strategic effectiveness could also be achieved through a new and innovative structuring of resources and activities, a special kind of strategic effectiveness, which according to our reasoning is overlapping with a high degree of operational effectiveness. In our view, Porter is not specific enough regarding this overlap between strategic and operative effectiveness. Especially the example of the American low price airline, Southwest Airlines Company, has very strong ingredients of innovating new structures for operational effectiveness that is turned into a strong strategic positioning.

Porter (1996) defines operational effectiveness as “performing similar activities better than rivals perform them,” which includes not only efficiency or productivity, but a number of practices that allow a company to better utilise its resources and inputs. Operational effectiveness includes, but is not limited to, efficiency. However, even if effectiveness is a broader concept than efficiency, we think this definition of operational effectiveness is too narrow and static and should also include performing activities in new ways. Adopting this broader definition, we will have this overlap that was described above, i.e., innovations within operations that will lead to strategic positioning by pushing forward the productivity frontier (the trade-off between non-price buyer value delivered on one hand and relative cost position on the other).

In our definition a high degree of operational effectiveness is achieved by designing and implementing structures and (activity) systems for the fulfillment of visions and overall strategies of the company:

- Supply (e.g., supplier structures and purchasing systems)
- Manufacturing (e.g., structures of production units and production systems)
- Distribution (e.g., distribution channels, organisation of sales and physical distribution structures and order fulfillment systems)

This implies that operational effectiveness is measurable in terms of efficiency (output/input), total costs, lead times and customer satisfaction.

**The Static and Dynamic Dimensions of Effectiveness**

A common pattern in both Porter’s (1996) and Hamel and Prahalad’s (1994) discussions is that they focus on what has to be done in order to be-
come competitive—to be different from rivals and to work with both operational effectiveness and strategy. We agree that the challenge for companies in a highly competitive environment is to find ways to be different, establish a unique and defendable strategic position that is long-term. However, based on our empirical study, our opinion is that the question is not only about establishing strategic positions and operational effectiveness (productivity frontiers) in a static sense. We also have to take into account how the increasingly dynamic business environment will force the company to “add” new elements to their strategies and operations over time in order to stay ahead of competition. It could be visualised as a gap between how fast the market is developing in different important aspects and how fast the focal company can reposition itself in terms of new marketing strategies, supported by new logistics and other functional/operational capabilities. The ability to fill this “dynamic gap” is equally important and in industrial distribution this is accomplished in the interaction between marketing strategies and logistics development.

The static vs. dynamic dimension of effectiveness mirrors “the degree of dynamism” of the business environment in which the organisation is operating. Static effectiveness is a matter of how well an existing business is administered according to a fixed and given business environment. The typical case (in the past) has been the public sector and other highly regulated markets with limited competition, for which the market is a given and more or less constant, as well as the resources. In this case, high static effectiveness will be reached by:

- Optimising the resources available according to a given market situation.
- Being up-dated on and adapting new techniques in order to perform operations more efficiently.

In other words, high static effectiveness is reached by implementing the best combination of strategic and operational activities in a static business environment. Productivity frontiers are quite stable over time and defined by technological development rather than market changes.

In a dynamic environment, however, competitiveness is a matter of how fast a company can reposition in order to adapt to new customer demands faster than competitors and to manage the operational change process to reach a higher productivity frontier.

In summary, the ability to define new strategic positions and new productivity frontiers as a one-time shot (Porter, 1996; Hamel & Prahalad, 1994) is only one side of the coin. Adding a more dynamic business envi-
ronment to the picture, the importance of high strategic flexibility is obvious as well as the capability to create strategic options in the marketing strategy. Therefore, the other side of the coin is the capability to interact between marketing strategies and logistics development in the pace set by the business environment. Inspired by Porter and Hamel and Prahalad, but also by the theories on strategic flexibility (Das, 1995 and Sanchez, 1993) we have identified the dynamic capabilities of an organisation to be the difference between success and failure in industrial distribution. Accordingly, we have to add dynamic to the terms, smaller, better, and different, used by Hamel and Prahalad (1994).

By doing this, we also go one step beyond the traditional opinion that defined strategies should set the operational structures and activities in an organisation (Chandler, 1962, “structure follows strategy”). The “opposite” sequence between operational platforms and strategic positions is equally important. We are arguing that increased dynamic capabilities together with outstanding operational performance are important prerequisites and “drivers” for the establishment of new strategic positions, and sometimes strategic and operational effectiveness are overlapping at least for some time until competitors reach the newly set productivity frontiers. As will be discussed later on, the Atlas Copco case shows rich illustrations on how operations are driving strategy.

Dynamic effectiveness is in this case the rate and quality by which new strategic and operational challenges are identified and met. If we identify the two frontiers of strategic and operational effectiveness, dynamic effectiveness is a measure of an organisation’s proximity over time to the two curves. To attain the skill to manage interplay between logistics improvements and new marketing strategies faster than the competitors, and acquire the ability to repeat this interplay over and over again, is on our opinion the main challenge.

Dynamic effectiveness, then, can be thought of as the effectiveness over time in both strategic and operational dimensions. Empirically, we have found four measurements for dynamic effectiveness:

1. Timing: In this case the ability for creative thinking, together with a constant monitoring of the market for analysis of business opportunities, potential directions to move and when.
2. Strategic flexibility: The ability to adapt, in strategy and operations, to new market situations in order to use high operational effectiveness not only for low costs and flexibility, but also to support new market strategies.
3. Speed: The ability to manage the changes necessary faster than competitors.
4. Repetitiveness (constantly moving): The ability to create and manage a continuous change process and to expand the content of change and repeat the change process over and over again.

We define dynamic effectiveness as how fast—and well—a company can go from one strategic positioning and productivity frontier to another. It tells us that success in a dynamic business environment with pressure on profit margins requires a combination of high strategic effectiveness to create volumes through increased customer satisfaction, and high operational effectiveness to increase different kinds of productivity and efficiency and to ultimately create profitability on the bottom line. The faster the interaction between strategies and operations is, the higher the dynamic effectiveness.

A CONCEPTUAL MODEL FOR DYNAMIC EFFECTIVENESS

In our conceptual model for dynamic effectiveness, Figure 2 below, we have included the strategic/operational, as well as the dynamic/static dimensions of effectiveness and identified four different states in which companies can be positioned:

FIGURE 2. A Conceptual Model with Four Dimensions of Effectiveness
1. The rationalisation corner: Operational capabilities are in focus and high productivity in the operations is given priority in order to increase the operational effectiveness (production oriented companies).

Companies, narrowly focused on high productivity and low distribution costs, are improving by moving along the X-axis to the right in the rationalisation corner, to an accordingly higher level of operational effectiveness. Here we find most of the highly specialised engineering companies, one-sidedly focused on low operating costs and high productivity from management concepts such as TQM, TBM and BPR.

2. The positioning corner: Strategic capabilities are in focus and sales and marketing activities are given priority in order to increase strategic effectiveness (sales oriented companies).

Companies narrowly focused on positioning are improving by moving left along the X-axis into the positioning corner, using segmentation and marketing strategies in order to stand out, and/or strategies of expansion or acquisition. Here we find many of the companies representing the “new economy” one-sidedly focused on sophisticated methods for market segmentation and market share, but lacking from operational effectiveness.

The Y-axis mirrors the degree of dynamics in the business environment. If the business environment is getting more and more dynamic, a company has to match this with an increasing dynamic capability, moving upwards along the Y-axis in the dynamic corner.

3. The dynamic corner: Rationalisation and positioning reinforce each other. High operational effectiveness feeds the company with prospects of gaining position on the market from new strategies, e.g., expansion by company acquisition, broadening of assortment or new marketing channels in a competitive and changing business environment.

In the dynamic corner challenges are met and the strategic and operational elements reinforce each other in a process where the dynamic capabilities are in focus. Changes are considered as a natural part of the business, not as a threat or a rescue programme.
4. The optimisation corner: Rationalisation and positioning are integrated in a static situation in order to administer a business in a not changing environment.

If the business environment is more static, a company will be positioned in the lower part of the model. Within existing structures and activity systems, both the strategic and the operational effectiveness have reached their peaks. This corner is typical for monopoly companies, where competition is absent but also for companies in industries where tradition and business logic have established a way of working that is hard to change.

That’s why the optimisation corner is very often temporary. As soon as the stable situation changes, the demands of either rationalisation in order to cut costs or a new strategic position in order to live up to new customer demands have to be faced. Because of a confident feeling of security, however, any awakening can be very rude.

Most Companies Are Two-Legged

According to our observations reported in the introduction above, most established companies are “two-legged” with a tradition of being efficient both in marketing/sales (positioning corner) and in production and supply management (rationalisation corner). The problem is that activities in these two corners are typically being performed independently of one another. The marketing managers are running their part of the business more or less independently of production or logistics managers with their rationalisation projects, and vice versa. In consequence, as the market gets more and more dynamic, they are striving in different directions, moving apart instead of upwards into the dynamic corner (Figure 3).

Market driven strategic positioning and the low cost driven operational improvements have been working with different agendas. The strategists have neglected the inner operational reality and the operational people have shown their inability to translate operational effectiveness into greater strategic performance.

When using the model on business seminars, recognising companies in the model, about 65% consider themselves as two-legged, 25% one-legged in either the positioning or rationalisation corner. About 5% think they are in the static corner, even if they are in a dynamic environment. Only about 5% consider themselves as being in the dynamic corner, where they should be according to themselves.
Strategic and Operational Resistance

The strategic resistance in the model represents the limit of what it is possible to achieve in terms of operational effectiveness without interacting with any strategic activities. In the same way the operational resistance represents the level of what it is possible to achieve from positioning without reinforcing operations. While most companies are in the positioning and/or rationalisation corner, they have to overcome this resistance in order to reach the dynamic corner. Breaking the strategic or operational resistance and moving into the dynamic corner have the effect of starting the process of continuous interaction between rationalisation and positioning.

Changes that to some extent are major but trivial to perform with established methods and within existing structures and systems, e.g., rationalisation, are in most cases not enough to break the strategic resistance. Very few companies have been able to turn these improvements to any real competitive advantage. Researchers have pointed this out for a long time. Voss (1988) shows that a production system’s technical success seldom results in a business success and Rose and Sharman (1989) and Harrari (1997) came to the same conclusion in the logistics and TQM fields.

As in the Atlas Copco case, the changes in logistics development needed to make the operational effectiveness to support new marketing are extensive and when the company has used its high operational effectiveness to reposition itself on the market, the strategic resistance is broken.
On the other hand, many organisations are stuck in the positioning corner, e.g., in the case of mergers between companies, often driven by potential of scale effects in operational activities, but lacking the ability to realise these effects. Any expansion strategy will sooner or later require high operational effectiveness in order to be able to take advantage of economies of scale as a result of acquisitions. When a company deliberately transforms the merger strategy into an operational restructuring and reengineering programme the strategic resistance is broken.

In the same way the potential of value added services for the customer, multinational branding of products, regionally instead of nationally based marketing and sales, etc., are maximised only when supported by an effective operational activity system, that provides high levels of customer service at the lowest possible cost.

**Interaction Between Operational and Strategic Processes**

Once the dynamics corner has been entered, the challenge is to stay there. This can only be done if the strategic positioning is feeding operational development and vice versa, in an effective interaction between the marketing and logistics strategies over time. From our perspective, this is one of the most important fundamentals in the model. The model as a whole should be considered as a strategy model. This means that increased operational effectiveness is a strategic move, equal to improved strategic effectiveness. Logistics and, e.g., supply chain management is in our model used to improve the operational effectiveness and is in that sense operational. But, for a company which need to improve their operational effectiveness to be more competitive, logistics is of major strategic importance. Researchers have argued that the operational and strategic processes must be integrated and of course this is true (Carlsson & Sarv, 1997). But the logic has often been only one way— which the formulated strategy must be translated into new operational performance (Pettigrew, 1997). In many companies, top-managers have acted the same way. While marketing strategies have been on the top managers’ agenda— they have not considered operational effectiveness as strategic activities. In consequence, responsibility for improved operational effectiveness has very often been delegated to lower levels in the corporate hierarchy. The result has been a mismatch between marketing and logistics strategies. In the dynamic corner however—the marketing and logistics strategies match each other and breakthroughs in operational effectiveness will be foundations for new strategic positions.

Characteristic for organisations in the dynamic corner is that they are continuously searching for possibilities in the interplay between strategic
positioning and operational rationalisation. Strategic positioning driven from market analysis will demand support from improved operational capabilities. A high level of operational performance will in turn be a foundation and a resource base for new strategic moves (Abrahamsson et al., 2003). This is exemplified in Figure 4, with some of Atlas Copco’s different changes on the strategic and operational side over time.

It is when moving upwards in the dynamic corner and at the same time letting the spiral fill up the whole space in the dynamic corner, improvements are achieved in all three dimensions. Resulting in not only higher dynamic effectiveness, but also higher strategic and operational effectiveness at the same time, see Figure 4.

From a static point of view, the operational concepts used by Atlas Copco in their distribution are well known among consultants and are quite easy to describe and to copy. However, from a dynamic point of view, the knowledge of how new logistics strategies and operational concepts can be used to support new marketing strategies, the timing when to use them and the skill to manage the change process, is unique in their business. The Atlas Copco case shows a crucial point—that the interaction is not a static matter but interplay over time. By improving the operational processes step-by-step, new logistics solutions were identified and realised, and from this new strategic opportunities had been identified and realised.

**FINAL DISCUSSION**

To better understand why and how companies can manage the interaction between marketing strategies and logistics development under the influence of a dynamic business environment, we have presented a

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**FIGURE 4. On-Going Interaction Between Marketing Strategies (new market positions) and Logisitics Strategies (operational platforms) to Stay in the Dynamic Corner**
conceptual model, where strategic and operational effectiveness has been complemented with the dimension of static and dynamic effectiveness. Arguing that in a dynamic business environment, companies need corresponding dynamic capabilities in order to be competitive. We have defined and outlined four measurements for high dynamic effectiveness—timing, strategic flexibility, speed and repetitiveness.

In the Atlas Copco case the important interaction between marketing and logistics strategies has been illustrated. Reengineering and restructuring of the production and distribution allowed them to add new products to their assortment and to expand to new markets. With a common logistics platform as a resource base, they could change to an expansion strategy where acquired companies could be integrated into the same logistics system. The restructuring of the administration into an administrative centre gave them the operational platforms needed to add e-commerce as an additional marketing channel. Another fine-tuning of the logistics allowed them to integrate with their key customers and in this way stay ahead of the competition.

We have also identified that breakthroughs in operational performance are a very important foundation for new strategic positions, compared with the traditional approach, where formulated strategies are transferred into new operational concepts. Best practice logistics performances are supporting a high dynamic effectiveness in two ways. First, strategic flexibility is a prerequisite to match new strategic positions. Secondly, high operational effectiveness is in practice driving new strategies. In other words, strategy follows operational structures not only the opposite. This, however, requires operational platforms and set-ups with the focus on strategic flexibility for a company as a whole rather than flexibility in operations. Logistics in this context is considered as a resource base for strategic development.

In our case strategic flexibility in logistics has been reached through a logistics set-up based on centralisation and a common corporate logistics platform. Of course strategic flexibility in logistics can be reached also in a more decentralised structure or in hybrids of centralised and decentralised structures or logistics systems. However, centralised logistics management and control seems to be a prerequisite to support new marketing strategies in a dynamic business environment (Abrahamsson et al., 2003).

To understand the different dimensions on effectiveness is crucial in order to understand how to design industrial distribution in a dynamic business environment over time. Our model on dynamic effectiveness opens up for future research into how to work with marketing, as well as operations and logistics management, to increase an organisation’s dy-
namic capabilities and to improve industrial distribution even further. However, it is still conceptual and needs to be further developed in its different dimensions.

In many industries we have seen new companies grow rapidly with new business models combining excellence in logistics and marketing, but with vague ideas on why they are able to outperform their competitors. Another area for future research is to use the model to analyse not only on a specific company but also to analyse an industry, e.g., position different companies in an industry in the dimensions represented by the model. In that sense the model is a useful tool to understand the differences between companies in an industry and also the business logic in that industry. A logic step from that is to compare different industries in the dimensions represented by the model.

REFERENCES

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