
Managing Performance: Objectives and Managers' Needs

Our ambition in this first chapter is to identify managers' objectives and, therefore, their needs (in terms of information, resources, etc.) in order to be able to meet them. In a context that is both turbulent and uncertain and where business models sometimes seem very different, it can seem ill thought out to wish to discern these objectives and therefore the needs associated with them. How do we compare a family SME and a broad group held by investment funds, knowing that the reverse situation is also entirely possible? How can we equally compare a business that has chosen to integrate all or part of its activities and another which, on the contrary, acts as a quasi-virtual business playing the role of skills broker by manufacturing at its sub-contractors? How, finally, do we assess the performance of a company? Is it by considering its capacity to be profitable today or, on the contrary, to be profitable tomorrow with or without borrowing money, as we mentioned in the introduction with the example of the emblematic unicorns? In the same way, can all business sectors be compared?

In order to not just answer all these questions but rather show that behind the differences there are recurrences in business management, we have chosen in this first chapter to deviate from our classic, three-part plan. We will therefore start with an initial section (section 1.1) which makes it possible to expand on the general trends in the economy further than we have in the introduction, then to illustrate this diversity of business models

in some emblematic sectors of our economy, and to benchmark the main managerial trends behind the variety of examples. At the end of this section, we return to our classical breakdown which defines the different levels of reading, i.e. directors, then financial directors and finally supply chain managers. The second section (section 1.2) is therefore centered on the implementation of business models in business plans with the associated management problems. The third section (section 1.3) focuses on the evolution of financial strategies that involve new ways of considering both the allocation of resources within the business in budget management and managing capital. Finally, in the last section (section 1.4), we show supply chain management and the opportunities that it represents in terms of managing flow while remembering that the practices observed are diverse, as the organizational examples are in fact very different.

1.1. Towards greater organizational agility

Whether it is a question of the financialization, digitization or greening of society, or indeed the sharing economy, these strong trends form constraints as much as opportunities for businesses (section 1.1.1). These changes, whether they affect the economic, financial, social or even political spheres, involve so many constantly renewed conditions of action that businesses should not only grasp these, but above all permanently integrate these, either under compulsion or more proactively, into their strategic and operational responses. Managing their performance has in fact become more complex. The goals to be reached are no longer simply financial. The relationships between cause and effect, which is necessary to understand to identify points of action, are intertwined involving a detailed knowledge of the performance behaviors of activities and processes, increasingly scattered between multiple businesses and countries. Whatever the industry, business models change, adapting responsively or proactively to these new conditions. If there are divergences between sectors and businesses, the examples developed (section 1.1.2) nonetheless make it possible to identify the main constraints and difficulties with which businesses are confronted today, as well as their most basic needs in performance management (section 1.1.3).

1.1.1. Some basic trends and their impacts on businesses

1.1.1.1. *The financialization of the economy*

The increased influence of the financial sphere on businesses' governance and strategic behavior is not a new issue. The appearance of corporate investors (e.g. pension funds, but also sovereign wealth funds) has however reinforced it. Maximizing the profitability rate of invested capital has led these financial actors to concentrate their investments while ensuring a rapid turnaround for their portfolio. The short-term view that they have thus favored has spread to large companies. These large businesses have therefore engaged in policies aiming to satisfy their shareholders before all else (increasing dividends and also palliating a drop in the value of their shares in the financial markets) or repurchasing their own shares (the growing phenomenon of "stock buy-backs") to the detriment, in both cases, of investment, even if in the second case, anticipating the capital gain to come can favor greater self-financing. Favereau mentions this "great paradox of financialization" and even speaks of the predation of the financial sphere on the economic sphere: "as the profit rate increases, the investment rate decreases" [FAV 16]. This reduction in investment and the constant search to maximize the profitability of capital or, more broadly, the yield of shareholders' capital, is not without consequence for supply chains, their structure and their management, a central question in this book.

To use the wording of Lazonick and O'Sullivan [LAZ 00], businesses have gradually switched from the traditional "Retain and Reinvest" model to the "Downsize and Distribute" model, which is more flexible and enables them to properly remunerate capital providers. In addition to consequences on employment, which have been extensively analyzed and discussed for many years, organizational forms as a whole have evolved under the simultaneous effect of competitive and financial pressures. The refocusing on core business can be explained as much by the search for specific skills [HAM 94] as by the desire to concentrate capital on the activities that create most value or even by "variabilization" of costs. More broadly, the emergence and development of Global Value Chains results simultaneously in a search not only for competitiveness in price (outsourcing in low-cost countries), or indeed for competitiveness in quality (specialist sub-contraction), but also for competitiveness in regulation

[FAV 16]. The choice of locations, whether for the headquarters of large groups, already including SMEs in some sectors, their units of production or their logistics centers, rests on the search for advantages linked to more favorable taxation and less restrictive legislation and regulation.

This new value chain architecture has created a need for Supply Chain Management whose goal is to (re)integrate activities and processes scattered across a myriad of businesses and countries and to manage their performance from a broad perspective are expressed in terms of not only cost, the quality level of product and of associated services, lead time, responsiveness and flexibility, but also reduction in taxes and charges, the cost of invested capital, cost of CO₂ emissions, etc. A variety of sometimes contradictory goals, which reveals the difficulty of the task and of the necessary changes to be made in a shifting environment effectively, calls for a sometimes antinomic organizational agility, as we will see, with the current structuration and performance of supply chains and of business in their entirety, both in the section on business models (see section 1.1.2) and in the section on supply chain managers' needs (see section 1.4).

Businesses' financial structures lay at the heart of these changes. Non-financial corporations' debt–equity ratios have increased with the crisis, encouraging them to remain cautious and to prefer self-financing when the financial margin permits them and when they are not able to raise new funds on the financial markets, like the unicorns mentioned in the introduction. In this context, optimizing Working Capital Requirement (WCR) is an important issue in the development of “cash management” programs, which have a direct influence on organizations and the management of supply chains as we will mention later (see section 1.4).

This financial context for businesses should not, however, make us forget that another movement, which is also strong, is rapidly changing our society. The digital revolution is indeed a hallmark of our era with already undeniable consequences on businesses' strategies and organization, and without doubt, un-thought-of potential.

1.1.1.2. *The digitization of society*

Everyone agrees that digitization is a fantastic vector of growth for businesses, moreover in at least three directions. The first concerns the

emergence and development of new business sectors essentially linked to new technologies and services associated with them. The second relates to the organization of work, the coordination within value chains, the relationship with customers and other partners, etc. and the performance gains linked to the creation of this network, this almost-instantaneous sharing of information or, more simply, the technological changes associated with it. Digitization is therefore a “tool” for improving business performance. The last direction, which is more developed in this section through some salient examples, focuses on the transformations in businesses’ offers made necessary and, more positively, made possible by the digital revolution.

The terms “multichannel”, “cross-channel” or indeed “omni-channel” have already entered contemporary language and have become the norm in businesses’ commercial strategies. In their wake, consumer behavior is changing in line with consumers’ acquisition of technology and their experiences of “cyber-shopping”. In particular, cross-channel shopping changes the commercial space, bringing together the label’s virtual and real spheres, involving the deployment of specific strategies “*aiming to eliminate ruptures, of whatever kind (physical, emotional, economic, cognitive etc.) when a customer changes channel during a single experience with a label*” [VAN 10]. Managing the performance of these different channels is more complex due to their potential overlap, the customer’s journey through the buying process and potential choice of a form of sale. The business can choose to guide the consumer journey or, on the contrary, leave the consumer entirely at liberty [CAR 07]. The latter strategy, however, involves great organizational agility to satisfy the customer while keeping costs under control as, if the channels have undergone a great deal of development, they are not always profitable for reasons that relate more to managing flow and logistical costs than their appropriation by the consumer.

Digitization also presents the opportunity to reduce logistical costs or to reduce problems with forecasting, production planning or indeed planning the cost of production by offering customers standard products with possible options for customization, for example, printing on demand, or directly by the customers (see Box 1.1).

SEB, a 50–75% reduction in stock in spare parts

Thanks to 3D printing

Extracts from an interview with Alain Pautrot, Director of after-sales service for the SEB group

(“Le bien public”, published online 8 March 2016)

The SEB firm has already been developing a policy on spare parts for some years and is committed to any replacement within 10 years. Starting 15 days ago, this commitment to “100% reparability” can be upheld anywhere in the world and for all the group’s brands. These parts, at least those made of plastic, could potentially be printed in 3D, first at SEB, then on site through outsourcing and eventually, by the repairers.

What is the advantage of the decision to print in 3D?

Ensuring the repair of all products within 10 years of purchase means storing spare parts. This has an undeniable financial impact. But moreover, even if a product stops being produced, parts must be stored for 10 years, and in sufficient number.

Will some plastic parts be printed from production?

It may be possible tomorrow to manufacture some parts, especially on preseries, using 3D printing. But this is not current project, especially not with old technology. And we will more probably print molds – to manufacture fifty or a hundred parts – rather than print a part directly”. SEB has not yet moved from there to thinking that we will perhaps create a kit apparatus that one builds oneself. The notion of an object that you construct yourself, is certainly not, in our line of business, part of the immediate future. On the other hand, there has been some thought on customizing accessories (esthetic components on products for example), but this will not happen just yet.

Box 1.1. SEB, reducing stock in spare parts

Aside from challenges in terms of the level of service and of cost-control, these technologies present real benefits for sustainable development. By proposing a ten-year guarantee of repair, SEB thus wishes to reduce programed obsolescence. In the field of publishing, where the office system

sometimes creates substantial flow that is then pulped, *Presses Universitaires de France* (French University Presses) has just launched an offer to print books on demand. The Expresso Book Machine, as it has been named, is a robot that makes it possible to print a book and bind it (in a format identical to that usually sold) in a few minutes (a book with 300 pages would thus be produced in 5–6 min). In addition to storage and transport gains, this robot makes it possible to overcome the problem of exhausted stocks and books no longer republished in view of the low demand on the market, thus avoiding having surplus production ending up being pulped as it is usually the case in this industry.

1.1.1.3. *The sharing economy and the functionality economy*

These fast, flexible solutions are also an attempt to respond to other trends that are gradually changing consumer behavior: the exchange of goods and services between consumers (CtoC), the sharing economy as some like to call it to highlight the profound changes that underlie it, is one. This economy, which has grown as a result of the crisis, is used in all domains: the sale of second-hand goods and the resale of services (hotel bookings, train tickets, journeys, etc.), taxi-sharing and the exchange of services between individuals in diverse and varied locations, from an evening dress, to a car, even a couch. Colored by sustainable development, borrowed from a circular, social or solidarity economy and above all, an economic rationale strengthened by the crisis, these exchanges between individuals actually transform our relationship with objects, goods, whether they are sustainable or not, from the value of possession to the value of use. Beyond the fact that the spare parts needed to repair a food processor can be found in a neighbor's cupboard and tomorrow on craigslist, that the book you're looking for, although out-of-print, will be sold next week by an Internet user on eBay, this change in values is a more profound change than it seems and probably, is of greater importance than businesses, from whatever industrial sector, are willing to accord it. According to PricewaterhouseCoopers, the "sharing economy" already represented 15 billion dollars in 2015 and could reach 335 billion dollars in 2025.

This switch towards usage value relates, more broadly, to the functionality economy, which is defined as the sale "of a solution that relies on a contractualized performance and based on the use of an integrated whole of goods and services" [GAG 11] which is part, as Lauriol indicates, "of a service economy in which the goods in the physical sense of the

term, are considered to be fixed assets (and no longer as a “consumable”)” [LAU 08]. These definitions reveal the magnitude of transformation within businesses. By stressing the example of Michelin, which offers contractual tire solutions to businesses enabling them to optimize their mobility and to make savings by means of an adapted maintenance and equipment that reduces fuel consumption, Lauriol summarizes in a few lines the changes that represent, within businesses, the deployment of such business models [LAU 08]: “To produce this offer, one must be able to design, organize and enliven a productive organization that mobilizes and coordinates the activity of its partners, who complement this offer, and which enables sustainable management of the service relationship”. In other words, businesses should, in this context, also evolve into the role of broker.

With regard to performance management, these offers involve a modification of cost calculation systems, in order to take into account the entire life cycle of a product included in a package of services carried out over time (maintenance and repairs) and also requiring the implementation of an effective after-sales service as a reverse logistic to ensure its recovery at the end of its life.

1.1.1.4. The greening of society

The management of products at the end of their life, of waste (retrieval, sorting, the recycling of recyclable materials and the disposal of others) is, beyond the problem of waste, a problem central to our societies and a great constraint for some sectors of industry, which have been regulated for a long time. Resource management, especially of natural resources, is another issue, which businesses have less trouble grasping as any economy of resources results in financial gains; which is not necessarily the case with measures concerning pollution reduction. It is, however, in the area of reducing negative externals that businesses have probably faced (and will face) the highest expectations, particularly that of greenhouse gas emissions.

Sustainable development has effectively driven business outside the economic (and financial) sphere in which classic management theories placed it. Stakeholder theory has highlighted the influence of actors (consumers, partnerships, the media and other think tanks, local communities, public authorities, etc.) other than those usually considered (the shareholder, management, employees, the customer, business partners, etc.) in the functioning of a business and its strategic choices. Taking

measure of the risks linked to ignoring these expectations and pressures, businesses have therefore integrated, in a constrained way, social and/or environmental performance objectives into their business policies. The digitization of the economy, networking and fast information sharing, has also given more power to pressure groups, while public authorities have been developing the legislative framework to change businesses' behavior.

Global performance [REY 03] thus worms its way, slowly, into businesses' concerns and strategies (see Figure 1.1). Pressure, whether it is regulatory or normative, is gradually leading a larger number of businesses to change their vision and behavior, depending on how aware they are, in the context of local acts and their potential gains on a larger scale (cost reduction, improving the business' image, etc.).

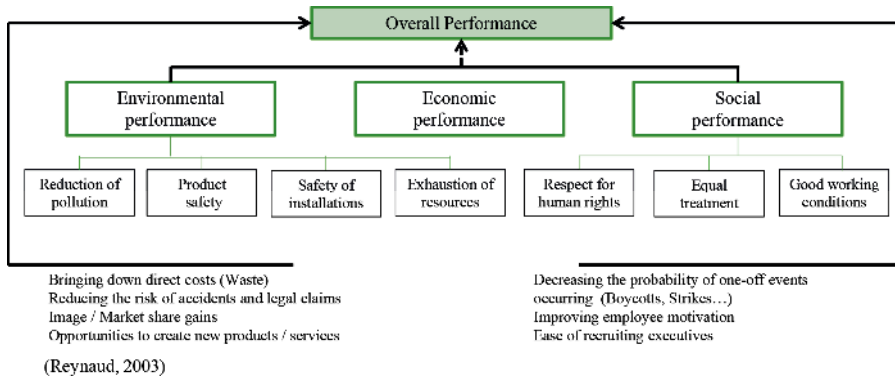


Figure 1.1. *Illustration of global performance [REY 03]*

Overall performance is thus a long way from being managed, but to gloss over it entirely, especially in a book on supply chains, would amount to completely denying its challenges even though they are not a priority in businesses. Diagnostic tools have however been developed in the wake of norms (ISO 26000, ISO 14000, OHSAS 18000, and Norm SA 8000, *Global Reporting Initiative*). They overlap with usual business management tools, forcibly much of the time as compulsorily relied on in their annual report (in the case of listed businesses). Some researchers have tried to develop management tools, such as the sustainability balance scorecard [BIE 01] or Skandia Navigator [EDV 97, EDV 99], aiming to integrate the RSE's

objectives to other dimensions of the business' performance. Their integration with existing supervision and management systems, already difficult to master, raises other problems linked, in particular, to cognitive overload in an already saturated information context [ESS 11].

This rapid overview of the main environmental trends better enables us to grasp the current constraints that weigh on business and the strategies and organizations deployed in different business sectors (section 1.1.2), to identify the dimensions on which business models diverge and the constraints that they share, especially in terms of operations management and, more broadly, the organizational capacities to be promoted (section 1.1.3).

1.1.2. The evolution of business models: some examples from different sectors

The economic fields that we present in this section have not of course been chosen at random. They make it possible to illustrate, with regard to their dynamic and the constraints and opportunities that result from them, the main trends in terms of value chain organization and supply chain management. These sectors are also characteristic of the diversity of situations that is possible to find in supply chain management in terms of performance management and also the dimension of service management for the latter. We have therefore chosen six sectors, which we will present relatively briefly, according to their characteristics: the luxury sector, aeronautics, automotive, clothing, fast-moving consumer goods and the provision of logistical services.

1.1.2.1. The luxury sector

1.1.2.1.1. The luxury model

The major, generalist brands in the luxury sector seek to broaden their offer around a traditional core business in order to increase their sales. If customers buy these products for their quality, beauty or uniqueness, it is also to acquire social status, or sometimes for their heritage value or investment, embodied by Christie's auctions. These offer of these houses is built around the following:

- high luxury collections that nurture the brand's prestige: these are the houses' icons, their "talking piece". These products are low volume and

make the rest of the collection saleable even though these items are not the most highly profitable in the collection;

- permanent products with quite restricted product ranges to add to the brand's rarity value. Through the regular sales they generate, and their margins, these products contribute a great deal to the brand's profitability: these are houses' "cash cows";

- entry-level products whose role is to bring new customers into the world of the brand;

- seasonal collections, which are inspired by fashion trends, and limited ranges which create an event around the brand: these products generate "traffic" in the brands' shops and enable them to attract customers.

Because the link between customers and luxury brands is based on emotional factors (emotion, a sense of belonging, the collection), it is crucial for the brand to create loyalty in its customers. The marketing strategy underlying this segmentation has several objectives: to ensure the constant availability of good references in good quantity in the shop, to widen the product offer and the customer profile, to renew the offer, to generate traffic in the stores, to increase the average total spend, and finally, to mutualize the risks incurred as the most exclusive products can meet random success. Distribution, especially when it is integrated, is therefore one of luxury houses' main costs, amortized by very remunerative but low quantity sales.

In terms of organization, one of the brands' main trends, for several years, has been to integrate distribution vertically. Integration consists of creating local subsidiaries across all the markets where the brand is present with their own network of shops. The sales development strategy, therefore, prompts large groups to strengthen their international profile and position themselves on markets that will be sites for growth in the future, such as India and Brazil, after China and Russia. This strategy enables brands to control the distribution of the entire offer by rebuilding the brand's world in the shop and by relying on sales forces shaped around the brand's values and codes. The brand can thus adapt its offer and enliven it locally by maintaining a direct link with its customers. Analysis of customer satisfaction criteria shows that the client attributes as much importance to service and their experience in the shop (during purchase, but also in after-sales service) as to the quality of the product. The quality of this

experience is even more crucial, as with digitalization the power of the customer is growing stronger: the impact of blogs on brand reputation is crucial.

Integration also concerns production carried out in small workshops whose capacity has moved from an artisanal level to more significant volumes, especially with the use of lean manufacturing technologies. This aspect is an integral part of the product offer and production is not out-sourced, or out-sourcing is limited often to very specialized components that demand very high levels of quality.

This integration model guarantees efficient management of the entire supply chain and optimal operational efficiency.

1.1.2.1.2. Markets trends/customers' expectations

The luxury market is a fast-growing market since it has increased threefold in twenty years to reach 220 billion euros today, with a significant growth potential. The very richest fringe of customers is steadily increasing:

- the number of individuals whose net worth exceeds 30 million USD (“Ultra High Net Worth”) stands at 200,000 people and is growing by 3% per year;

- the middle class, especially in China, also has access to luxury products. The consumption of luxury products in China, which amounted to 2% in 2000, is today equivalent to 30% of the market!

Expectations are not the same for a clientele increasingly split between the very rich and the middle class in developing countries undergoing expansion. The very rich seek the most exclusive and expensive products, while the middle class seeks, above all, to display their success by buying a product that carries the brand’s logo. The development strategy of large luxury groups and the growth of the market puts products at risk of trivialization throughout the sector. Since the 1980s, by selling to the greatest number of customers, some luxury brands have dented their rarity and exclusivity dimension. The divide between mass and luxury products sometimes becomes blurred. To compensate for this wider distribution and to not damage their brand’s value, luxury firms rely on maintaining “*rarity, the guarantee of quality and the feeling of privilege that are associated with them*” as Vincent Bastien and Jean-Noël Kapferer describe [BAS 12].

The channels on which consumers buy luxury articles are constantly evolving, forcing companies to understand their changing expectations and their new purchasing behavior. Customers who come from developing countries, particularly China, purchase in shops located in big city malls, or on the greatest avenues in the world, forcing brands to review the location of their shops. In parallel, the link between tourism and the consumption of luxury products is strengthening and leading brands to locate stores in airports. Although online distribution now only represents 5% of luxury groups' turnover, the rate of growth of online product sales should increase steadily in the coming years, especially via the arrival of multibrand Internet sites offering luxury products and through the growing demand of the new clientele. However, even if the act of buying still occurs on the shop floor, the buyer has increasingly often researched and prepared their purchase by consulting the Internet. The importance of the digital world thus extends far beyond online shopping. Despite this, most large businesses have a cautious strategy on multi-channel distribution which presents substantial risks, and where the difficulty lies in maintaining, for the customer, the prestige of purchasing a luxury product without entering into the world of the brand as they can in a shop. Trademarks should therefore invent new strategies by focusing more on the experience of buying and not only on the product itself.

The development of Internet sales in the luxury sector is not, however, just a growth relay to increase sales by recruiting new customers. It also makes it possible to develop the customer relationship by inventing new services through customizing the product on demand and through local services. As customers are also less and less prepared to wait for months before being able to acquire very high-quality products, Internet sales can also be a means of speeding up purchase, particularly for young consumers who represent a growing and significant percentage of the volume of sales.

This acceleration of consumption engenders a growing demand for new products. The number of collections has thus exceeded two-to-three or four per year in high-range ready-to-wear goods. In high-quality watch-making, a new product comes out every 2 years in contrast to every 5 years previously.

This development of the digital world thus reinforces current trends in the following:

- acceleration of the pace of the product cycle's renewal;
- increase in product availability;

- even faster delivery services;
- transparency in price, which should strengthen the opportunity effects (especially the exchange rate for purchases by tourists);
- guarantee of the product’s quality, origin and ethical nature.

1.1.2.1.3. Organizational models

These changes strongly impact the supply chain management of large luxury firms. The lifecycle of products is becoming shorter and shorter and the product mix’s great volatility carries the risks of obsolescence and “dead” stock. The supply chain should adapt extremely responsively to variations in demand whether this is in the quantity or the nature of the products sold. Stock is reduced to a minimum to lessen cash-flow and the risks of obsolescence and to control the quantities placed on the market depending on sales. To achieve this, businesses manage their supply chain with the help of transverse forecasting tools which make it possible to integrate sales forecasts with the management of supplies and distribution planning across the entire chain of shop suppliers.

Generally, production is organized according to the following process:

- in a workshop, the shop manufactures various articles demanding distinct sequences of operations. Lean manufacturing technologies in workshops have made it possible to reduce the manufacturing lead times and the sizes of lots without impacting competitiveness;

- in the medium series production, or batch flow, the units within a series are identical; the different series pass through workstations (CNC machines, etc.), but each series requires distinct adjustments or operations at each station. The contribution of techniques such as SMED have made it possible to reduce adjustment times.

Adjusting industrial capabilities often relies on implementing complex decisions which require a transverse vision extended to the providers, on a medium-term horizon which exceeds the horizon for operational planning. Through the sales and operations planning process, to which we will return in Chapter 2, a collaborative approach is implemented with the objective of balancing the load and the capacity. The Production Plan (PP) sets the quantities to be produced on a closer horizon by seeking to even out variations in demand and production. It defines the delivery rate required by the

customer (*takt time*), to which the workshop adapts by drawing the flows whenever possible using Kanban loops.

Permanent products are generally generated by using just-in-time manufacturing. Shops are stocked as and when according to sales. Seasonal and collection products, manufactured in smaller series, have low stock and restocking occurs on demand. Nevertheless, as the demand is rather volatile, workshops should be able to rapidly increase or decrease the quantities produced so as not to have too large a stock coverage. This adjustment is made daily by comparing sales in shops across the whole world and permanently adjusting forecasts. However, the workshops' production capacity is generally quite low with high lead times if the production is "make to stock". Some workshops are organized into "one piece flow" which has made it possible to reduce lead time even where the demands for quality are very high.

Specific products will be generated by using "make to order" and a product divided into several finishes on a common base by using "make to finish". "Make to finish" offers "customization" of the product far downstream, down to the distribution network, depending on the customer's choice and without added waiting time. These adaptations reserved for small finishes, at businesses that have qualified personnel on site, are developing, thanks to new manufacturing technologies (lasers, 3D printing, etc.).

Manufacturing workshops are very often located in Europe (France, Italy and Switzerland) while the main markets are in Asia and the USA. Most businesses have chosen a single central warehouse in Europe which consolidates the workshops' manufacturing and then directly supplies the continental platforms in turn responsible for supplying the network of shops in their catchment areas. The single, central warehouse makes it possible to reduce stock coverage due to the drop in the impact of variability, the sales being evened out at a global level and therefore to lower the cost of holding stock.

Consolidation of transport flow from the workshops to the single warehouse and from the single warehouse to airports or ports makes it possible to benefit from a completely controlled, effective transport network that benefits from the security conditions required for this type of merchandise. Export markets are supplied almost entirely by air transport, which simultaneously responds not only to the constraint of balancing sales

across shops on a daily basis, but also to the drop in the cost of stock, a day spent in transit by stock representing considerable sums. Respecting very strict security norms is a non-negotiable factor as it demands the use of specialized logistical providers and it can also be a limiting factor on the volumes transported (a definite ceiling value for the transported merchandise).

In some circumstances, when a subsidiary's stock no longer corresponds to what is sold or to what should be offered in the context of seasonal collections, it must be able to reallocate products between subsidiaries using effective reverse logistics to avoid the loss of turnover and the impairment of products at the end of the season.

In contrast to products known as "commodities", in the luxury sector, although controlling the cost of distribution is an important issue, the two critical points are:

- the absence of rupture in supply, which is extremely damaging for a luxury house, as the customer will seek another experience with another brand, disrupting their loyalty to the house that was not able to produce the required product;

- controlling the quantities distributed (especially in independent distribution) to maintain the product's rarity and therefore its value. Houses therefore need to be aware of, control and regulate the "sale out" of their distribution.

The effort to optimize transport is therefore constant, to gain in lead time and so to optimize the whole chain by reducing stock coverage, reallocating stock for all shops and the absence of rupture in product supply. The performance of these transport schemes also guarantees supply to shops for setting up not only seasonal collections but also brand events when launching limited series or for creating one-off events.

Luxury firms should therefore be able to adapt their production rapidly, in volume or in a product mix and be capable of launching new products or new collections rapidly when necessary. To respond to these changes in responsiveness and flexibility, flows should be generated on demand. The supply chain is therefore managed transversally by integrating supply management, and the distribution and production planning. By using live sales monitoring tools in the shops, it is not only possible to anticipate trends

and to check the reliability of sales forecasts, but also to inform shops of product availability and order statuses in real time. Large luxury businesses, which distribute their products partially or wholly via wholesalers, should be able to know not only the “sale in” but also the “sale out”.

Characteristics and key success factors in the luxury sector

- Most famous luxury houses’ upstream/downstream integration
- The growth of demand and also change in demand in terms of distribution channels and rapid range renewal
- Supply chain management based on “sales and operations planning” approaches
- The need to control management of different flows in order to avoid not only ruptures but also unsold stock according to the actuality of sales

Box 1.2. *Characteristics and key success factors in the luxury sector*

1.1.2.2. The aeronautical construction sector

1.1.2.2.1. The aeronautical model

The production of civil aircrafts is structured around segments defined by passenger aircraft capacity and by the radius of action. The development of long haul air travel companies in the Gulf and low cost companies among short-medium haul carriers has changed the balance of power and created a very strong competitive dynamic between air travel companies, which has led to profound changes in air transport. Companies position themselves along the following three main economic models:

- companies who are members of alliances that offer an international network of destinations with connections at “hubs”. Tariffs are established depending on the class of travel and the service expected by the passenger;

- low-cost companies that offer direct links from point to point from regional bases chosen depending on the airport charges paid. This involves mainly short-medium haul flights, even though offers for long-haul flights are developing. As the main sales argument is the level of price, the service is reduced to a minimum and all complementary services are charged;

– charter companies, which make all means available to carry out passenger transport from a single trip to a season. Tariffs are reduced by using the principles applied by low-cost airlines (optimized aircraft loading, complementary services charged, etc.).

These changes have impacted the aeronautics industry, which has adapted to the needs of air travel companies and particularly the two leaders, which are Airbus and Boeing. To achieve this, aircraft manufacturers have offered a large range of aircraft covering all sections of the market. They have focused on innovation and offers on aircraft, which enable companies to reduce their investment and operating costs not only by improving the energy yield, but also by developing a shared architecture across the aircraft range. Standardizing the range has not only brought savings on spare parts and maintenance, but also a gain in time and considerable savings in the education of navigation personnel (even on flight decks). Although the trend is moving towards the standardization of aircraft, the long-haul sector particularly calls for differentiation in terms of how the interior is furnished. Companies in the Gulf were the first to seek to differentiate themselves by the quality of high-range services and the comfort provided to the passenger. To respond to this demand, aircraft manufacturers have offered companies the possibility of deciding options for aircraft “à la carte” by answering almost to all their specifications, especially on the layout of the cabin.

Faced with the increase in innovation, technological complexity and investment in development, aircraft manufacturers have refocused their activity on marketing, commerce, design, supply chain organization and final assembly. Like the automotive sector (as we will see later in section 1.2.3), the aeronautics sector has developed a modular production, in which equipment manufacturers will make different aircraft equipment and systems and the aircraft manufacturer will assemble them. This organization has led to a separation of roles depending on the type of equipment or component and the level of integration: engineers and equipment manufacturers, designers and manufacturers of sub-systems and components and finally sub-contractors or specialists. Some providers can create some parts of the airplane entirely, as is the case with engines. The engineers are independent of the aircraft manufacturers, even though they develop engines on their behalf: these companies choose the aircraft engine themselves and it is rare for an engineer to obtain exclusivity. They may therefore have their own strategy for becoming vital to an aircraft order or form alliances between one another on a company program to mutualize risks. This is also a very

concentrated sector since only four actors share the civil aviation market: General Electric (USA), Pratt & Whitney (Canada), Safran (France) and Rolls Royce (UK).

The aeronautics industry is also the sector for airplane maintenance, repairs and overhaul (MRO for Maintenance, Repair and Overhaul) which represents around 10% of airplane manufacturing companies' operating costs. This market is much more competitive than the construction market and small and medium-sized businesses are very active in this sector. Maintenance, which should be carried out according to the constructors' specifications, is ensured either by the aircraft company or by specialist businesses or by the equipment manufacturers themselves. It is divided into the following five activities with specific characteristics: runway maintenance, structure, engines, components and equipment and finally upgrades.

1.1.2.2.2. Market trends/customers' expectations

The aeronautics sector is experiencing growth generated by high demand for new generation aircrafts (which consume less energy) and by a rise in passenger traffic, especially in Asia-Pacific and the Middle East. The potential for growth in the decades to come is considerable due to the exponential growth of the middle classes in not only developing countries such as China and India of course, but also, in the coming years, countries in South America such as Brazil and Mexico. The Asia-Pacific region should occupy the same global place in terms of traffic, ahead of Europe and North America, and the Chinese market will supplant the USA as the main global domestic market.

The aeronautics market has been dominated by American makers for a long time, but the importance of investment, development time and homologation time for a new aircraft has led the sector to become concentrated. Boeing, which held the uncontested position of leader, has gradually allowed itself to be caught up by Airbus. The two constructors now share the medium and long-haul sectors. However, new aircraft manufacturers, such as ATR (France/Italy), Bombardier (Canada), Embraer (Brazil), Comac (China), Irkut (Russia) or even Mitsubishi (Japan), are trying to penetrate the more accessible short-haul aircraft sector. Even though refinement of the industrial process will be long and complex and will require a very substantial investment, several factors suggest that in time

these makers will take parts of the market in the medium and long-haul sector. Primarily, for technical reasons as it is not certain that Boeing and Airbus have the industrial capacity to respond to needs, considering the growth in the market. Next, economic reasons as Boeing and Airbus have comfortable margins on medium-long haul. Finally, political reasons, as the aeronautics industry is strategically important, it is often financed by governments, e.g. Boeing and Airbus which have benefited from numerous subsidies. In this area, China is certainly the country that most displays a desire to develop its aeronautics industry. The chief domestic market in the years to come, China makes the sale of aircraft to its companies conditional upon the use of local construction sites to benefit from technology transfers. Airbus was the first to set up in China. Boeing, initially more cautious, has been obliged to follow its competitor so as not to abandon the market to Airbus.

In this more competitive context, industrialists should, more than ever, innovate and respond to their customers' needs to retain or develop their shares in the markets. The main aircraft manufacturers should refine good strategies for anticipating market trends in air transport, as the examples of A380 and B787 show. To respond to company needs with connecting flights at hubs, Airbus, with A380, offered a very substantial capacity in the number of passengers transported (500–850 passengers) with a radius of action of more than 15,000 km, making it possible to reduce services and costs by using economies of scale. Conversely, Boeing believed that very large carriers would not be the aircraft of the future as there is a trend towards the development of direct flights. Boeing therefore designed the 787 Dreamliner, a low capacity aircraft (210–330 passengers) with very considerable autonomy (more than 15,000 km). Faced with the commercial success of B787, Airbus will have to react by building an aircraft of the same type, the A350, with a 350-passenger capacity and a radius of action reaching 18,000 km.

Until now, companies offering connecting flights have used either short or medium-haul aircrafts with low capacity, or long-haul aircrafts with high capacity. By taking inspiration from the low-cost model, companies have understood that they can develop profitable, long distance direct links by choosing aircrafts with low capacities, if the aircrafts are optimally filled. This more flexible model also has the advantage of linking smaller-sized

airports with larger-sized airports in point-to-point flights. Some companies have chosen this strategy and are renewing their fleet to build, in the long term, large carriers to fly “hub to hub” as well as smaller aircrafts to provide direct flights. In this industry, where the investment budgets and development times for a new program are very substantial, this example shows the importance for makers of properly anticipating market needs.

Another major issue is that of reducing the time taken to manufacture new aircrafts, since aviation companies are thus undergoing a phase of the accelerated renewal of their fleet. Failure to meet commitments in delivery times on the last Airbus and Boeing programs was not only linked to problems with the technical refinement of new technologies but also to poor mastery of the supply chain. These delays had considerable consequences for the programs' cost and eventually for their profitability.

As for the MRO sector, here too, profound changes are underway. The MRO market was trusted by specialists, pure players on the market. Today aircraft manufacturers are enlarging their offers including maintenance services in their sale or location proposals. The offers hinge either on a Flight Hour Service with access to a pool in case of breakdown and a service guarantee or on a Tailored Support Package which includes complete fleet management including engineering, online maintenance and visits. According to the makers, this redefinition of roles should enable companies to concentrate on their core business as air operators and to optimize their operating costs through a higher usage rate for their fleets as well as to develop their assets better by increasing the aircraft's residual value.

Although engineers have for a long time imposed a comprehensive offer with a service that includes standard exchange, basic maintenance and online monitoring, aircraft manufacturers' offers have, for now, had limited success. Some companies have their own engineering and maintenance subsidiaries and others prefer to use independent MROs for economic reasons or so as not to depend totally on the maker. Like the automotive sector, it is likely that in the future this model will develop, as the complexity of the systems and equipment and the use of new composite materials will require methods and technologies that will make their makers impossible to ignore.

1.1.2.2.3. Organizational models

The modular organization model with vertical segments (cabin, landing gear, avionics, propellers, aero structure, electrical circuit, etc.) offers many advantages for aviation operators:

- out-sourcing development of ever more complex technologies entrusted to the expertise of specialist equipment manufacturers;

- the concentration of their human and financial resources on the design, assembly and sale of aircraft;

- economies of scale created by sharing the same equipment on one or several ranges of aircraft while still conserving the capacity to differentiate to adapt to customers' needs;

- the capacity to modernize aircraft and delay their obsolescence by offering the possibility to alter them by renewing equipment;

- sharing research and development costs and financial risks with equipment manufacturers;

- a contractual commitment on price for the duration of the program even if the cost of manufacture turns out to be greater than predicted;

- the transfer of responsibility for providing certification for the system provided and of safety obligations;

- the supplier's commitment to carry out maintenance operations in the guaranteed times.

For some years, the considerable pace of technological innovations and the increase in production have led to transformations in the organization and supply chains of manufacturers in the aviation industry.

Until recently, makers had specialized industrial schemes for each aircraft program, with outdated locations and flows that were not always optimized. The increase in volume and the new programs launched by makers have brought the sectors' problems to light. Suppliers, who had not made the necessary investments in their production methods, were not able to handle the new programs' raised cost, causing qualitative problems as their processes were not robust enough and there were delays in delivering aircraft. Suppliers' vertical segmentation was accelerated and aircraft manufacturers entrusted an increasingly substantial role to their first-tier suppliers by making them responsible for buying components from other,

lower-tier suppliers, for organizing supplies of these components and providing integrated systems. These suppliers therefore maintain greater levels of stock and run the risk of lower-tier suppliers defaulting, as Mathieu Bécue, Jean Belin and Damien Talbot describe [BEC 07]. To overcome these challenges, equipment manufacturers have had to invest, to finance both assets and a more substantial WCR, which accelerates a consolidation which had already commenced some years ago.

For their part, aviation manufacturers have also re-organized around poles of excellence specializing in the manufacture of aircraft parts, and final assembly lines (FALs). The makers' supply chains have become more complex, as the industrial Schemes are more and more diversified. Aircraft manufacturers have multiplied their FALs, which they have located in the dollar zone, in countries with low-cost man power, while still favoring greater geographic proximity to their customers. The example of the rise of Boeing 787 has revealed the fragility of aircraft manufacturers' organization. To build this airplane, Boeing externalized almost 80% of its production by calling upon sub-contractors distributed across 10 countries (Japan, Italy, Australia, Canada, China, South Korea, the UK, Sweden and France). Problems linked to refining the aircraft have been increased tenfold by the complexity of this supply chain with a substantial number of sub-contractors. Optimizing the supply chain is becoming a major tool for reducing costs and improving competitiveness.

Characteristics and key success factors in the aeronautics sector

- Standardizing aircraft with substantial modularity, which requires increasing recourse to equipment manufacturers and the development of new programs in the long term
- A growth in the demand and also changes in the expectations of aviation companies in terms of the type of aircraft and associated services (maintenance, etc.)
- Supply chain management based not only on effective aircraft sales, but also on high rates which place equipment manufacturers under tension
- The need to control management of different flows in international industrial models to avoid extremely costly delays

Box 1.3. Characteristics and key success factors in the aeronautics sector

1.1.2.3. *The automotive sector*

The automotive industry has been the subject of many presentations and is often regarded as leading in terms of industrial organization, since the establishment of a Fordist organization, socio-technical applications at Volvo in the 1960s, the Toyota Production System in the 1980s or innovations linked to project teams at the end of the 20th Century. The aim here is not therefore to present this sector in detail but rather to point out its main, current characteristics given that we will return, in Chapter 3, to the consequences of the 2008 crisis for makers in the sector by studying their reaction to it.

The automotive market first of all shows marked differences between developed and developing countries. In developed countries, the markets are mature and the possibilities for growth are weak. In this market, the makers who perform best are the premium and low cost makers. Generally, middle of the range makers are in difficulty as they occupy the ground with the most competition, where the main adjustable variable is the price. Fleets of vehicles, especially rental and leasing companies, represent a very substantial proportion of this market, which brings the makers significant increases in volume (close to 40% of sales, for example in France). Conversely, in developing countries, the prospects for growth are more substantial. In these countries, besides the more classic segments that are found in developed countries, it is the Entry Family Car (EFC) segment, which is the most important in terms of volume. It represents the vehicle adapted to local purchasing power and makes it possible for the middle classes to acquire a car.

The automotive sector is an industry with relatively weak margins with regard to the considerable industrial investment needed. Makers are therefore looking for a critical size to achieve economies of scale by producing an increasingly broad range of vehicles from shared platforms. This makes it possible to amortize the capital invested in the production equipment. To reach this size, some makers have grown organically (Toyota), whereas others have chosen to make acquisitions or to fuse (Renault/Nissan/Mitsubishi, VAG/Seat/Skoda, GM/Saab/Fiat, etc.). Alliances are also a means of producing sufficient vehicles, especially when accessing new markets, or of accessing production segments for specific vehicles with volumes of sales.

The segments of the market per category of vehicle (city, MPV, compact MPV, family, large MPV, executive, luxury sedan, etc.) are increasingly evolving and makers are constantly offering new models corresponding to changes in consumer expectations. Very high competition and acceleration in innovation contribute to the shortening of vehicle lifespans.

By applying the principles of value chain analysis, the automotive industry has flattened its organization. In the 1980s, makers focused on R&D tasks and activities, marketing and sales activities, the final assembly of vehicles, distribution and services. They transferred an increasingly large proportion of their manufacturing activity to equipment manufacturers, who today create almost 75% of the value added by involving a very atomized panel of second and third tier suppliers. This proportion should increase further in the future. Equipment manufacturers therefore produce entire *sets* that are delivered to makers' assembly chains. By shedding some of the first-tier suppliers, makers have simplified their manufacturing and supplying. Logistical operations to deliver the ensembles to assembly lines according to their *takt time* are carried out by the equipment manufacturers or their logistical service providers. By using this new supply chain strategy, makers have massively reduced their stocks and greatly decreased the capital invested. At the design stage, makers take into account logistical parameters, such as as the size and shape of parts for example, to improve the filling rate of trucks and thus optimizing transport costs. The optimal supply or distribution network is determined by comparing the possible scenarios and simulating for each the costs of transport and logistics depending on the topology and organization of flows (cross-docking, storage platform, etc.).

A second wave of optimization concerned localizing the activities of firms in the sector on a global scale. Large industrial groups' internationalization strategies are complex and are decided according to positioning, the markets targeted, the activities involved (R&D, marketing, production, etc.) and indeed the products. As Freyssenet and Lung indicate, *“homogenization of global demand remains limited and the failure of the attempt at globally integrating Ford's activities shows that automotive firms should seek adapted strategies and above all, innovative organizational models or forms that belong in regional spaces”* [FRE 01]. To reduce their costs, makers have implemented buying strategies based on sourcing

providers internationally and on a complete factory cost calculation. The constant search for better buying conditions enables them to benefit from opportunity effects on workforce costs, the prices of primary materials or the taxes and tariffs applied, depending on the origins of products. Organizations have been adapted to change easily and rapidly from foreign suppliers by retaking control of transport, customs issues and logistics and by dematerializing exchanges with authorities and suppliers. Second and third tier suppliers, who were more dependent on local markets, have clearly been impacted by competition from those countries with low-cost man-power. The largest equipment manufacturers have become global groups present on all markets, and offer their products to all makers. These first-tier suppliers participate in development and innovation, which often represent 5–10% of their turnover. Large equipment manufacturers aim to become the leader in their specialty and to become indispensable for a form of technology. This strategy results in very high levels of invested capital. Likewise, as Morin underlines, the acceleration in the pace at which vehicles are renewed forces them “*to amortize their investments over series of 300,000 or 400,000 copies, whereas previous vehicle models involved a number of units between 700,000 and one million*” [MOR 07]. These profound changes have led to the high consolidation of this sector.

The management of flow in this sector still corresponds to the just-in-time doctrines developed at the start of the 1980s. It is a question of trying to synchronize dealers’ firm orders and the market expectations needed to reduce customer waiting times. Management is therefore both drawn by demand and also pushed according to these expectations. On the Toyota model, supplies of parts and components occur in synchrony and in *kanban*, and they have been implemented across all families of parts.

Turbulence in the sector, after the 2008 crisis, caused increasing difficulties in synchronizing flow. The automotive sector, which for a long time led on management tools (pull flow) or continuous improvement (lean manufacturing etc.), is today embarking on a quest for competitiveness and renewal with questions on energy and also for the car of tomorrow, from its construction (with increasing recourse in the future to 3D printing, which will change supply chains) to its use (Google car’s self-driving car for example, and also car-sharing with models such as Uber, Drivy, Blablacar, Autolib, etc.).

Characteristics and key success factors in the automotive industry

- Standardization of models with significant modularity, which requires increasing recourse to equipment manufacturers and rapid development of new vehicles to “sustain” the market
- Stagnation of demand in western countries and change in the regulation (energy) and commercial (long-term rental) contexts. Change in business models with the importance of usage value compared to the initial value of possession in the sector and therefore the arrival of newcomers.
- Supply chain management based on synchronizing pull flow and push flow by market expectations, which is an increasingly difficult synchronization.
- The wish to reduce costs, in a hyper-competitive context, with levers for action linked to purchases, beyond the classic tools of industrial excellence

Box 1.4. *Characteristics and key success factors in the automotive industry*

1.1.2.4. *The clothing industry*

On 9 December 2015, Quicksilver placed itself under the protection of an American bankruptcy law in order to re-structure itself. On 5 October 2016, American Apparel did the same. The same year, Gap announced the closure of a quarter of its shops in the USA. The share price of Abercromby and Fitch fell by one-third between 2011 and 2015. At the same time, Inditex's net earnings did not stop growing (by more than 15% in 2015), as did those of H&M (Hennes and Mauritz), which saw a rise of 5% in 2015 in a competitive context which, already intense, saw the development of the Japanese group Fast Retailing (Uniqlo) and the Primark brand of the Associated British Food group (ABF).

Fast fashion, which involves the constant renewal of some parts of collections, is leaving havoc in its wake! On average, each woman buys 30 kilos of clothes per year of which 30% are never worn. Thus, even if the markup is declining, the volumes of sales sustain these groups' profitability: a 30% profitability on invested capital for Primark, which offers its customers 12 collections each year, an average 25% return on investment over 5 years for the sector leader (see Table 1.1) and the Inditex group that, for Zara alone, creates and sells nearly 12,000 new models each year.

Businesses (nationality)	Flagship brand	Capitalization (billion €)	Turnover (billion €)	Net income (billion €)	Number of employees	Number of shops
Inditex (Spain)	Zara	100	18.1	2.5	137,000	6,683
Hennes & Mauritz (Sweden)	H&M	53.7	15.9	2.1	132,000	3,511
Gap (US)	Gap	13.6	15.1	1.2	141,000	3,709
Fast Retailing (Japan)	Uniqlo	45.6	10.2	0.6	90,000	2,753

Table 1.1. Key figures for 2015 for the main players in the textile industry (<http://www.capital.fr/bourse/actualites/a-100-milliards-d-euros-zara-creve-le-plafond-mais-gare-a-h-m-et-uniqlo-1062635>)

Zara's value proposition is summarized in two words, which are in fact reminiscent of the luxury sector: trend and rarity, but at a price accessible to most. Rarity is created by the constant renewal of some of its ranges, with items that follow new trends as closely as possible, sent in small quantities to each shop and never reproduced. It takes 15 days to 3 weeks to create, manufacture and sell a garment! A challenge that the group, which is strong today with tens of brands and nearly 7,000 shops in the world, has achieved, thanks to the exemplary organization of its supply chain!

The aim of reducing lead time, from designing clothes to placing them on the shelves relies first of all on a vertical integration of the activities that form the value chain. Information on the shops' sales thus reaches commercial teams twice a day. Constant analysis of this makes it possible to define new models by following market trends as closely as possible. Beyond this detailed knowledge of demand, moreover in real time, designers travel the world following fashion shows to feed their "creativity". All this is a means of considerably reducing the design cycle in which, finally, the marketers are involved, who have 72 h to move from design to tailoring! The act of creating the prototyping directly at the group's headquarters also plays a role in this reduction of waiting times by enabling rapid decision-making.

Once the models are defined, it remains only to integrate their production into the lines of the group's 10 tailoring centers, which are located at La Corogne (50% of the group's production) or those of factories located in

Portugal and Morocco or again, at sub-contractors in Turkey or the East. Leaving the production lines at La Corogne, the clothes will join the group's entirely automated distribution warehouses, passing through the twists and turns of some 200 km of underground tunnels before being dispatched by airplanes for the international market and by lorries for European countries. Manufactured articles are also sent to the logistical center in Spain, which then handles nearly 950 million articles per year.

Reducing the production cycle relies, at least in part, on postponement. In this way, some clothes are pre-cut, with a laser, into an (undyed) fabric which will be dyed at the last moment depending on the trends across different markets. Beyond the gain in production time, the purchase of this fabric in large quantities makes it possible to reduce the cost of clothes as, even if they are rare, their sale price remains low. Profitability is at play essentially in the volumes that are finally "pushed" onto the different markets. Produced in large quantities, only a few items will reach each shop and trigger, in a consumer who has been alerted and socialized, an impulse to buy which is all the faster as she knows that she has little time to decide.

Thus, 15% of product references are renewed every 15 days to 3 weeks. This is the time that is needed on average between peak sales and the restocking of stores which today benefit from RFID technology integrated into the clothes to manage their stocks and free up time to focus on the sale and shelving of products.

Zara *Women's* teams thus manage an optimized value chain in an open space of 24,000 square meters, covering all the roles called on to coordinate: commerce and marketing, design and prototyping, industrial and logistical management. A business model that has enabled the Inditex group to see its turnover increase in 2015 by 15.4% and its net income increase by 15.9% (Zara represents 65% of the Spanish group's sales).

If the reduction in lead time is a key success factor in the sector, the architecture of the main brands' value chains varies substantially. While Inditex has chosen vertical integration favoring in-house production except for the third of items in the "basics" range manufactured in Asia or Turkey, H&M has based its competitiveness on purchase and sub-contracting in low-cost countries. The Swedish group has thus developed a global network of more than 1,000 providers managed by local production offices which constantly take care to adapt production to trends in the consumer markets,

overseeing not only the quality of clothes but also adherence to work regulations at the suppliers. Postponement is used at each stage of the production process (dyeing thread and fabrics, packaging, etc.) to adhere, as far as possible, to changes in sales in the consumer countries and absorb some of the shifts linked to the forecasts necessarily anticipated to optimize purchases and supplies and enable suppliers to plan and organize their own processes. Collections are thus created in Sweden, whereas the management center, which handles information on sales before transferring them to production offices, is in Hamburg like the central warehouse from which the regional distribution centers, who handle final delivery, are supplied.

The organization of Uniqlo, a brand belonging to the Japanese group Fast Retailing, or that of Primark, from the British group ABF (Associated British Food), is modeled more or less on that of H&M. While still sub-contracting its production to Asia for the “basics” and in Turkey and the East for items for the Fashion range, Primark thus renews nearly 10% of this each week with a lead time of 8 weeks.

Characteristics and key success factors in the clothing industry

- Hyper-competitive market dramatically renewed by the rise of fast fashion, which involves constantly renewing part of the collection to induce customers socialized to this practice to visit regularly and to make expensive outlets in large city centers more profitable.
- Management of an integrated (Inditex) or more out-sourced supply chain (other brands), which consists of pushing flow and practicing postponement to stay in tune with demand.
- Importance of synchronizing activities to avoid breaks and of the capacity to decrease overall lead time to launch new collections constantly while controlling costs all along the chain.

Box 1.5. *Characteristics and key success factors in the clothing industry*

1.1.2.5. Fast-moving consumer goods (PGC)

Fast Moving Consumer Goods or CPG for Consumer Package Goods comprises products bought regularly by households in distribution outlets. They are characterized by fairly short lifespans, and therefore by a high rate of rotation, and their sale price is relatively low. It includes not only food,

hygiene and maintenance products, but also products from the paper and tobacco industries (see Table 1.2).

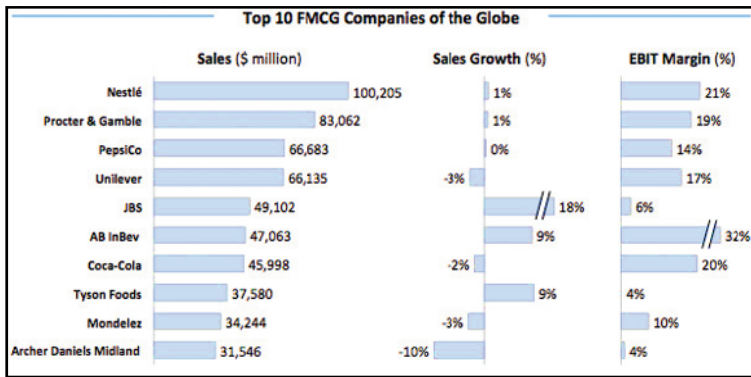


Table 1.2. *The main 10 groups globally in the FMCG sector in 2015 (Consultancy UK Analysis using data from OC&C Strategy Consultants)*

In France, according to Nielsen, the turnover generated by Fast-Moving Consumer Products rose in 2015 to 103.2 billion euros, of which 93% was in large and medium-sized stores (GMS). This market is currently undergoing a rapid change in offer in a very turbulent economic and competitive context.

Trends for Fast-Moving Consumer Products have been partly discussed in section 1.1.1. Among those trends with a significant impact on the flow management for the groups concerned, the increase in the pace of innovation is probably the most significant. Whether this concerns new products, new associated services or even new forms of sale and/or distribution channels, innovation is a key success factor, which costs businesses dearly. Between 2001 and 2014, there were nearly 12,000 new products launched in Western Europe! Beyond the investment needed, as much in R&D as in marketing and communication, nearly 75% of launches fail in their first year (*Nielsen Breakthrough Innovation Report*, April 2014).

The shortening of product lifecycles is clearly the counterpart to this innovation race, which considerably reduces the reliability of sales forecasts, and in consequence of planning within different activities whether this involves buying, production or even distribution. This reliability again breaks down with the deployment of new forms of sale (e-commerce) and new distribution formats (drive-throughs, convenience stores, etc.) making

classic planning tools, such as the Material Requirement Planning (MRP) that we will mention in more detail in Chapter 2, obsolete. The development of Sales & Operations Planning (S&OP) approaches, whose purpose is to reconcile medium-term planning and operational workloads in a single plan by meeting financial targets and the level of customer service, aims to reduce the problems linked to traditional planning tools, in particular their lack of responsiveness and flexibility (see section 2.3.3). In this line of thought, new DDMRP (Demand Driven Material Requirement Planning) approaches should enable businesses to shorten their lead time without increasing their levels of cost and their stock inventories. This therefore means re-dimensioning stocks at different stages of the supply process – production – distribution while putting in place “buffer stock” making it possible to rapidly absorb variations in demand (see section 2.3.3). This approach, which finally consists of uncoupling the different stages of the supply chain by means of stock that is less expensive, as it is formed of products that are half-finished and less risk-intensive as they are usable in several configurations of finished products, is however difficult to implement depending on the context. This “decoupling point” strategy also responds to issues linked to adapting products in the context of internationalization strategies or product customization.

Internationalization, which generally involves adapting an offer locally, reduces the economies of scale it is possible to make. This forces businesses to envisage more complex production configurations, based on uncoupling methods of managing flow, delayed differentiation, etc. in order to reduce their response time. This response time is the key success factor when faced with a consumer who is increasingly demanding about delivery times, and increasingly more volatile in terms of brands, forms of sale or distribution channels, without counting the fact that more and more consumers fragment their purchasing, preferring, for some categories of product, to take advantage of hard discounts, and for others to buy locally. To delivery times, to quality, to financial services or delivery services to the variety of forms of sale, can be added safety, which has become a significant worry for consumers involving a greater selection of suppliers, increased checks on the supply processes, production and distribution and ceaseless monitoring of flow.

In the context of a price war, where advertising pressure is still increasing (nearly 11% between 2011 and 2015 in French labels, and up to 25% for the Carrefour group, according to Retail Explorer’s Panotrade 2016), these

trends increase groups' difficulties, whether they are industrialists or distributors, in retaining their margins. The pressure exerted on suppliers and sub-contractors has naturally increased in all the links of the supply chain. Aside from tougher negotiations, the developments of buying centers or reverse bidding centers, postponement of stock or even penalties sometimes come to undermine more collaborative strategies such as the sharing of transport or logistics, although these carry economic gains.

The search for low prices has therefore led businesses that produce and/or sell fast-moving consumers products to gradually renew their strategies. Whether this involves buying or production, sourcing and sub-contracting in low-cost countries have gradually become almost unavoidable alternatives sustained, moreover, by the continuing drop in the cost of sea transport, especially on routes from Asia to Europe. However, the crisis that is currently facing the sea freight sector is not without potential consequences on carriers' performance. Aside from the drop in the level of service, linked to increasingly frequent delays or cancellations on some lines, the recent placing of Hanjin, the 7th largest shipping company globally, into receivership has immobilized 100 vessels and their 500,000 odd containers in port or at sea. As well as Samsung, which had 38 million dollars of merchandise on board company ships, between 10 and 20% of LG exports were also impacted, as with Manor, a Swiss retailer, or again Hyundai which feared that its assembly plants in Turkey and the Czech Republic would be halted due to a lack of items manufactured in South Korea. This event highlights the risks linked to buying strategies, the sub-contraction of production, relocation and the need for control from the activities that constitute supply chains from start to finish, in particular when they are managed by using "lean" manufacturing. Not only the risks of rupture, but also risks linked to product quality and safety, are risks again for the business' image, which forces them to monitor working conditions in suppliers' and sub-contractors' factories. So many risks and actions to manage, advocated in the context of Supply Chain Risk Management, including cost, which are not always measured correctly, can be dissuasive. Sticking only to the turnaround time required for orders in large imports, a gap of 6 months between the order and its shelving can, taking account of the reliability sales forecasts over such a substantial length of time and the hazards that can impact sales, transform a good bargain into a complete financial fiasco! The gardening sector has been especially affected this year. The influx of lawn-mowers from Asian countries coincided with floods in the north of France, and the temperature in the following weeks did not

make it possible to revive sales. The lawn-mowers will therefore spend the next year in distributors' warehouses and it is hoped that neither innovation nor new weather events will appear again to disrupt their shelving if not, they will be sold for any price or destroyed.

The events mentioned above are neither extreme nor rare. Traceability of costs, however, remains to be improved in order to reliably and accurately evaluate the real profitability of such organizations in an increasingly turbulent environment.

Characteristics and key success factors in PGC

- A hyper-competitive sector in which product lifecycles are shortened and which therefore makes constant innovation necessary
- Changes in consumer expectations and means of consumption as well as in distribution channels (the rise of the omni-channel), which make market expectations difficult
- Supply chain management with the classical objectives of not only costs and times but also safety in processes and products (traceability) in order to avoid product withdrawals or dramatic health problems in terms of image beyond the possible health consequences.
- Importance of information exchange throughout the chain

Box 1.6. Characteristics and key success in fast-moving consumer products

1.1.2.6. The sector providing logistical services

Provision of Logistical Services emerged in the 1980s. Resulting from the use of subsidiaries by firms (GEFCO, CAT Logistique, etc.), distributors (EASYDIS), European courier services (TNT, DHL, etc.) or transport companies' business expansion strategies (XPO, Geodis, etc.), these groups today form a business sector in their own right, which in recent years has undergone significant concentration. Two variables are enough to describe its structure. Firstly, the size of these groups, which reflects their international reach. DHL, the leading global logistics provider by turnover (32.193 billion dollars) in 2015, is present in more than 220 countries and has no less than 340,000 employees. Kuehne & Nagel, the second with regard to its turnover (23.293 billion dollars) is deployed in a hundred

countries with 66,000 employees. The second variable is the offering of services or, more generally, the positioning of the LSP within its customers' value chain. Two categories of logistical services providers (LSP) are then generally distinguished: 3PL (Third Party Logistics), who are responsible for the operation of activities considered "basic" (storage, preparing orders and transport), and 4PL (Fourth Party Logistics), who are the designers and managers of all or part of a logistical chain on behalf of one or more customers. They themselves can carry out physical activities or out-sourcing to other providers.

Whether it involves internationalization or expansion of the business or mission, logistics providers have for the most part opted for external growth strategies. One of the last remarkable takeovers to date in the French sphere, that of Norbert Dentressangle by the American XPO Logistics, has enabled the latter to enter the European market. In the 2000s, large mergers and acquisitions marked this sector, such as the one known as "3D" between DHL, Danzas and Ducros enabling Deutsche Post to become the global leader in the sector or again the takeover of ACR Logistics (one of the European leaders in contract logistics) by Kuehne and Nagel, marking this freight forwarder's entrance into the world of logistics. Several factors led these businesses to operate such development strategies. On the one hand, the quest for a critical size. The phenomena of concentrating on their customers' business sectors, manufacturers or distributors, has pushed them to increase their size to improve their negotiating power, even though the largest providers now suffer under the weight of their structural costs reducing their room for maneuver, their price positioning and their profitability. On the other hand, in order to support their customers that internationalized and globalized their supply chains, providers have also developed international networks, in particular where the countries concerned do not have a sufficient level of logistical maturity. Finally, whether it is their own wish to promote a global offer of services or a step by step development in response to the gradual out-sourcing of activities by their customers, they have extended their range of services to provide a complete offer covering the entirety of processes in a logistics chain by integrating, beyond physical activities, flow management activities (replenishment and management of stock, purchasing and transport management, etc.). These activities, which create more value, have enabled them to insert themselves, better and more permanently, in their clients' supply chains and this, moreover, when they mutualize activities on behalf of several manufacturers or distributors, thus playing the role of an integrator

of their respective processes as in the case of mutualized supply management (shared replenishment, storage and transport).

The physical, informational and intangible investment required to develop this global offer of value added services is however very substantial. Aside from the financial requirement generated by this development of resources and skills, the profitability of some activities has, since the crisis, greatly decreased, in particular that of historical activities, such as contract logistics or haulage. “Prisoners” of their contractual rationale, these providers are also trapped in a vicious circle today, reinforced by the need to cover fixed charges that have become very considerable (see Figure 1.2).

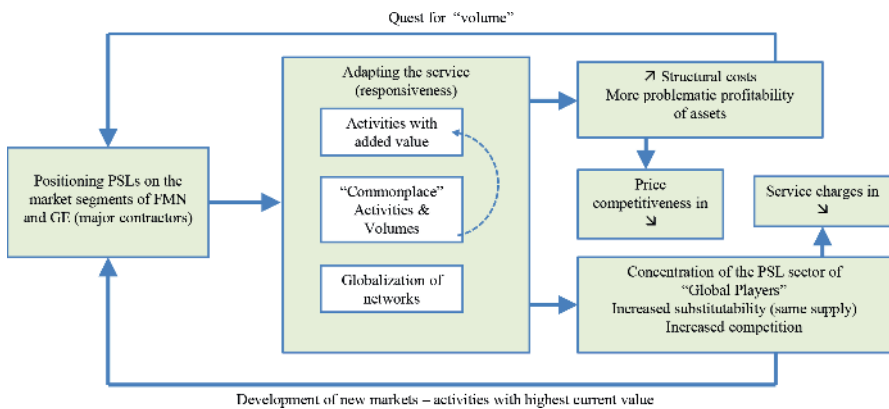


Figure 1.2. *Inertia strategy versus organizational constraints of large LSPs [CAM 13a, CAM 13b, p. 40]*

Even if LSPs are already seeking to develop in more promising sectors (urban logistics, hospitals, reverse, etc.) or to promote a “4PL” offer, they always remain positioned in their big business sector, which keeps them in the “sub-contractors – order-givers” relationship in the context of short-term contracts taken from the increasingly detailed specifications, in which processes and management systems are imposed.

In research on promising markets such as hospital logistics for example, clients’ lack of logistical maturity is a reason to co-design and manage a package of services. Profitability is higher as, beyond the skills sought by customers’, their capacity to challenge their providers is limited. The

industrial sector, which is more profitable as operations are more complex, is also an important focus for development, which requires a broadening of skills. It is also a sector of the market on which smaller providers position themselves, which, beyond relationships and expertise established in the industrial world, have cost structures that sometimes enable them to position themselves better than large groups.

Operational excellence is therefore a means of reducing the costs of optimizing quality service (OTIF – On Time In Full) to meet customers' increasingly demanding specifications. Lean management, improvements and the Six Sigma approaches have in recent years, therefore, undergone significant development among providers. It is thus all the more important that these are gradually inserted into the industry and are forced to align their methods and management tools with those of their customers. These managerial approaches have already been joined to thinking on automating activities to make productivity gains while still maintaining service quality, in the guise of also improving the ergonomics of employees' posts to reduce musculoskeletal disorders (MSDs). This quest for operational excellence is often constrained not only by clients, but also by the need to find points of margin which are squeezed each time a contract is renegotiated, a situation that is also leading providers to imitate their customers by resorting more and more often to out-sourcing.

Out-sourcing and sub-contraction effectively contribute to improve the profitability of providers. In transport for example, providers focus increasingly on management to define their "transport" schema by knowing a customer's recurrent flow, to optimize its quality/cost pairing through implementing regular lines paired with chartering, through increased sub-contracting with SMEs or TPEs and/or increasingly aggressive transport buying strategies. Beyond transport, 4PLs are developing the same rationale with other activities, especially those labeled as "basic" (storage and preparing orders), restricted more and more often to "low cost" or small providers, whose performance and operational running are then managed by dedicated "control towers" for each customer. They thus become architects of logistical chains deploying the management systems needed to achieve the level of service required by the customer and the profitability objectives expected by directors by limiting their investments. This architecture of their value chain and this new role in relation to their customer involves developing specific skills as much in terms of managing the customer and provider relationship (buying process), as controlling inter-organizational

management systems (information systems, calculation, and cost traceability). Developing such an offer also means relying on an in-depth knowledge of customers' supply chains, and the changes within them, to be a driving force for making suggestions, as well as increased management of the risks linked to out-sourcing (lower quality, changes in cost, loss of operational and strategic skills and increased dependence on sub-contractors).

Characteristics and key success factors of providing logistical services

- A hyper-competitive sector with a large number of mergers and acquisitions to reach a global level.
- The profitability of classic logistical activities is low in relation to the capital involved for two main reasons: contract logistics tends to downplay the services provided and creates a choice based on price, the costs of the structure drag profitability down.
- Importance of improving operational performance through standardizing processes and applying tools from the industry (lean, operational excellence).
- Importance of a strategic initiative for businesses which have developed on the basis of their ability to adapt and to be flexible, but whose increasing size can today pose a handicap unless they reinvent their business model.

Box 1.7. *Characteristics and key success factors in the provision of logistical services*

At the end of this presentation of a number of emblematic sectors in the diversity of supply chains, it makes sense not only to summarize the main variations but also to highlight the main trends in terms of performance management.

1.1.3. *Divergences, but above all, major trends in performance management*

Research into these different sectors, and also our experience in others, leads us to believe that although the constraints that weigh on many

businesses have shared characteristics, the responses provided are in the end dependent on the business models chosen and therefore on their respective constraints and difficulties. However, in this hyper-competitive environment, it is businesses' ability to change that emerges as a distinctive skill. This organizational and inter-organizational agility, introduced in section 1.1.3.2, is a strong element in businesses' sustainable competitiveness.

1.1.3.1. Identical constraints, different business models

Today, it is one of the most used expressions in the business world. By using the model in Lecocq, Demil and Warnier's *Business Model* [LEC 06, DEM 10], named RCOV for "Resources, Competencies, Offer and Activities" (see Figure 1.3) and in light of the examples developed above, the main variations in terms of organizational and inter-organizational configuration and the management of value chains are summarized here.

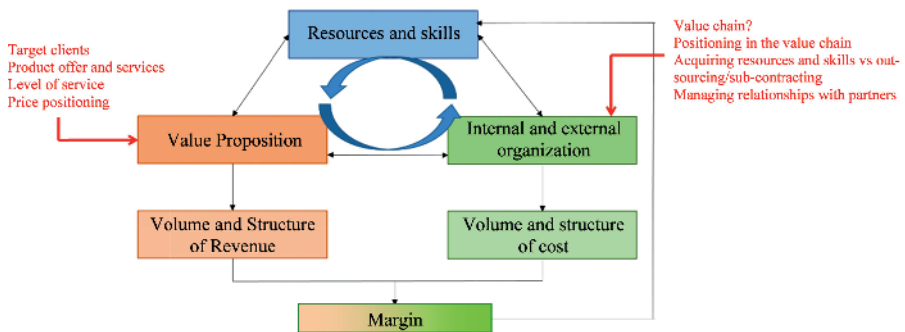


Figure 1.3. The RCOV (Resources, Skills, Offer and Activities) from Lecocq et al. [LEC 06]

1.1.3.1.1. Internal and external organization: what are the changes? What are the constraints?

The organization of the value chain and the position of the business within in it are effectively the two decisions that make it possible to distinguish the strategies currently used by businesses; the organizational

and inter-organizational configurations that result from this strategic decision are inseparable from the financial questions (see section 1.2).

Some seek to control the entirety of their processes. This is, for example, the case with Zara, which thus wishes to reduce to the lead time for products in its fashion range as much as possible and to remove any time lag behind market demand by integrating the management and implementation of its operations. This is also the case with the luxury industry, within which the unique and original character, the quality and traceability of products (reducing the risk of counterfeited goods) are some of the key success factors and/or main risks to manage. If there is out-sourcing, it is primarily in the quest for specific skills, for expertise on quality that guides it; relationships with these sub-contractors are part of a collaborative rationale, which does not detract at all from the need to manage the processes' overall performance. Others such as Uniqlo or Primark in the textile sector, and also the aeronautics and automotive industries, will in contrast prefer to concentrate on the upstream stages (R&D, creation and design) and the downstream stages (marketing and final assembly) of the process by sub-contracting all or some of the activities that form their value chain (notably production, and also transport, storage, distribution and indeed buying outside of strategic product families). The automotive sector is exemplary in this respect. Over the years, the proportion of activities carried out by car-makers has greatly diminished in favor of the formation of networks of equipment manufacturers and service providers whose production is managed, coordinated and synchronized by constructors. Logistical service providers have gradually engaged in the same out-sourcing strategies by means of "control towers", retaining the activities that create most value, i.e. design and the management of all or part of a customer's logistics chain.

These value chains whose activities are already supported by multiple businesses are moreover globalized. The aeronautics sector is also exemplary on this point, just like the H&M network formed of more than 1,000 providers located in more than 25 countries. Here too, the reasons are diverse. Although for Airbus Industries, the reasons are, above all, political and linked to the distribution of production between countries included in the European consortium, for others it is often a question of searching, as mentioned in section 1.1.1, for competitiveness – on price and/or regulation whether these involve a more flexible employment law, advantages in taxation or preferential rights at customs. The means of managing relationships with suppliers and other partners in the value chain therefore

varies according to the main objectives sought (quality of products and/or service, specific skills vs. cost reduction). On the question of cost reduction, the development mentioned in section 1.1.1 of cash management programs is having an increasing impact on the management of relationships with suppliers. As Bowersox, the founding father of logistics in the 1960s, has already underlined the relationships within the transaction channel (tougher negotiations to lower prices, extended payment periods placing commercial partners in difficulty, postponement of stocks, penalties) influence not only the supply chain's performance, in particular its level of service, but also, if this is measured at all, its overall level of cost. Supply Chain Risk Management, as well as the more recent but rapidly expanding Supply Chain Finance, highlights these difficulties and seeks, primarily to identify them and to take them into account in the overall management performance of these "quasi-organizations", and secondly, to remedy this by deploying payment solutions within supply chains which make it possible to alleviate, in particular, the cash shifts.

1.1.3.1.2. Value proposition: what are the changes? What are the constraints?

In businesses' offers, the points of similarity are eventually more numerous than the differences. In product ranges, they tend again to develop in line with an increasingly refined segmentation of markets and the need, in a hyper-competitive context, for constant renewal, which considerably shortens product lifecycles. The rate of growth of the number of product references sold in retail illustrates this trend. According to Nielsen (March 2016), this rate would have been 78% in 18 years with an average rise in the number of references in hypermarkets and supermarkets of 2.6% in 2015! The development of new distribution channels (drive-throughs, e-commerce, etc.) tends to increase the number of references offered again. Moreover, customization, which is more significant, increases not only the number of references processed, whether these are in buying, in production or in logistics and sales, but also the complexity of industrial processes and of managing them. The question of series size, decoupling points within the production process, levels of stock, its positioning and obsolescence at all points in the chain, and also of recovering unsold goods and recycling or destroying them, prompts the overall cost of the products' lifecycles to be taken into account. Another challenge, also reinforced by the development of new distribution channels, particularly e-commerce, which, beyond the problem of sales provision linked to that of changing consumer

behavior (section 1.1.1), exacerbates the difficulties of managing flow as much in terms of the level of service as of cost. Advertising has also become an essential element in businesses' strategies. In retail, in some product categories, competition in advertising is already dragging down profitability despite a rise in volumes (Nielsen, July 2015).

1.1.3.1.3. Complexity of cost and revenue structures

In sum, the extension of product ranges and the development of new distribution channels and service offers (delivery, funding, after-sales services) result in unprecedented complexity in managing industrial and commercial flow, and additionally financial flow, of which forecasting is itself becoming more problematic, posing the question more generally of the structure of businesses' funding. Given the variety of offers, as much in terms of products as of services, businesses' cost and revenue structures have become considerably more complex. The reconfiguration of the Carrefour group's supply chain in the framework of its Caravelle project illustrates, for example, the synergies to be operated between distribution channels. Although originally distributors were organized through a sales format from supply to distribution, the development of local trade, drive-throughs and e-commerce as well as geomarketing, which results in an extension of the ranges offered, obliges them to use the possible synergies in order to remain competitive. The Caravelle project, for example, primarily involves reducing the cost of transport by organizing delivery in different sales formats from a single warehouse to optimize vehicle loading rates. This rapid reconfiguration of the Carrefour group's supply chain (opening of new warehouses and sharing stock in different sales formats) is witness not only to a greater imbrication between the processes that form the supply system, but also to the organizational agility needed in an increasingly restrictive context.

1.1.3.2. Organizational and inter-organizational agility

By relying on works, mainly in English, focusing on organizational agility, Charbonnier-Voirin [CHA 11] suggests the following definition: “[...] a capacity to adapt the organization constantly, enabled not only by a rapid reaction to change, but equally by a potential for action intended to anticipate and seize the opportunities offered by change, especially by means of anticipation, innovation and learning”.

Taken mainly from the work of Amos, the gyroscope (see Figure 1.4) identifies the main levers for organizational agility [AMO 00]. Based on a

stable base (shared vision and values, shared performance criteria) that guides changes, organizational agility relies mainly on a constant capacity to reconfigure its structure, its processes, its technology and its human resources. The eleven dimensions of organizational agility unveiled by Charbonnier-Voirin [CHA 11] highlight not only the equilibrium to be found – between stability and change – to develop this capacity for adaptation, as much internally as with partners, but above all the organizational competencies to promote:

- knowledge of customers and anticipation of customer changes;
- proactiveness, responsiveness, creativity and continuous improvement;
- communication of the strategic vision;
- performance evaluation and recognition;
- development of competencies and knowledge sharing;
- delegation of responsibilities;
- internal and external cooperation.

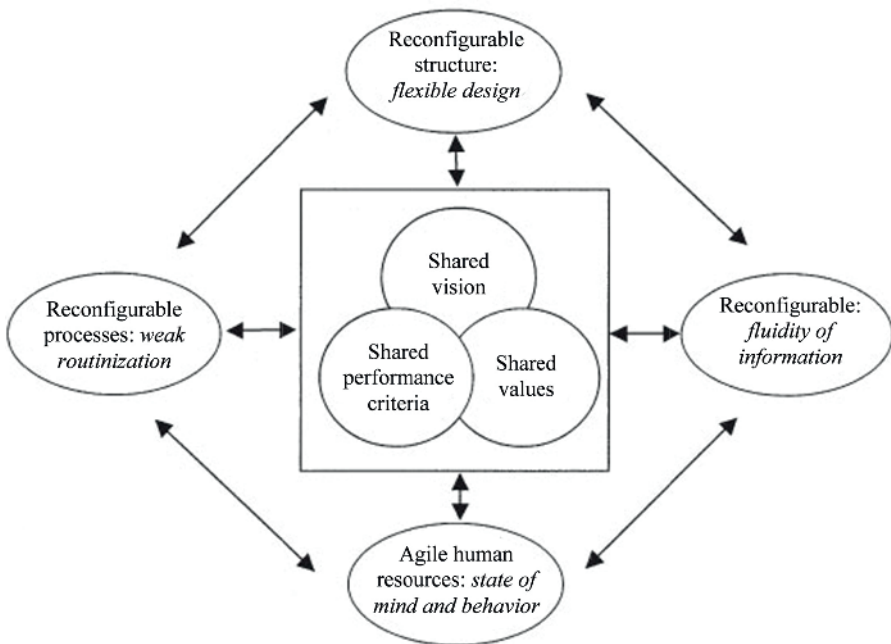


Figure 1.4. The gyroscope – adapted from Amos [AMO 00]

Agility is also an important theme in supply chain management. Christopher [CHR 00a] defines agility as “*an organization’s ability to respond rapidly to changes in demand both in terms of volume and variety. The market conditions in which many businesses find themselves are characterized by volatile and unpredictable demand. Hence the growing urgency to seek agility*”. This frequently cited definition reflects an operational approach to agility, even though among the levers for action making it possible to deploy agile management of merchandise flow in line with changes in demand, the configuration or technological upgrading of supply chains are often mentioned. Cap Gemini’s barometer [CAP 11] on the agility and robustness of supply chains reflects the “best practices” deployed by businesses to improve their agility and robustness. These are in order of occurrence, new information and reporting to make operations’ performance viable, relocation, diversification of suppliers and the specialization of production sites according to products and/or technology to reduce the supply chain’s overall cost, and finally the improvement of forecasting to plan activities better and size stocks more accurately to meet the final demand. The key success factors mentioned reflect organizational dimensions by calling for more transversality not only between the business’ functions to improve forecasting and planning, but also between businesses. Increased integration would proceed via both much more agile information systems making it possible to react much more quickly to changes in demand and a “supply chain” culture involving upgrading competencies.

The question of managing supply chains’ overall performance in line with the strategic and financial performance of the business and the management systems associated with it is, finally, rarely mentioned, although management systems are one of the basic mainstays of agility. As the gyroscope (see Figure 1.4), an integrated theoretical model of organizational agility, mentions, the reconfigurations to be made are guided by a stable foundation of visions, values and evaluation criteria for shared performance. Shared by all roles in charge, at their levels, of carrying out the activities that form a supply chain’s core processes and also shared between the directors and the supply chain teams so that the reconfigurations and/or readjustments to be made, quickly and continually, are guided and in line with the business’ performance objectives, whether this means, classically, respecting financial targets already set as in the “Sales and Operations Planning” process or enabling more agile performance management, also facilitating a continuous redeployment of resources.

Defining shared performance evaluation criteria and managing them together to maintain and develop this organizational agility, which effectively requires “agile” deployment of resources, particularly financial resources, depending on the strategic, organizational or operational changes to be made is not easy however. The role of CEOs, financial and supply chain directors within organizations, just like the scope of their decisions, on which the following sections will expand (sections 1.2, 1.3 and 1.4), are as different in terms of organizational (and, increasingly often, inter-organizational) boundaries and of the stakeholders to be considered, as they are in terms of duration, or even the level of uncertainty and reversibility. Translation is however needed to facilitate appropriation of the performance objectives, by the whole organization, and identification of all the levers for action that may improve value creation.

In the following sections (sections 1.2, 1.3 and 1.4), our goal is therefore to identify business, financial and supply chain directors' objectives, taking account of the trends that we have just mentioned. It is not for us to list all objectives and needs. As we mentioned in the introduction, the present book is neither a strategy nor a finance nor a supply chain management manual. An interested reader will find enough to satisfy their curiosity in this area, given the number of books on these subjects. However, we wish to identify the main, associated objectives and needs to show, in the following chapter, that existing tools are insufficient in this area and therefore to suggest in the last chapter a new way of managing performance within businesses.

1.2. Needs and objectives of the CEO and the Board

In order to tackle the question of objectives, and the associated difficulties, of a group or an SME's management by its directors, it is appropriate to ask ourselves briefly about the objectives of shareholders, above all when these are not the same actors. In Figure I.1, shown in the introduction, we had established the general framework of business performance by introducing this relationship logically. Of course, the question of aligning shareholders' and directors' objectives has been the subject of many studies and some recent examples illustrate the diversity of possible situations. This is the case, for example with the recent conflict between Carlos Ghosn (CEO of the Renault–Nissan group) and his reference shareholder, the French state, through the Minister of the Economy and Industry (Emmanuel Macron), which, beyond the very symbolic question of

the CEO's pay, involved the State's double voting rights and in the end, this shareholder's relative power in the group's strategic choices. The recent complaints lodged by a number of the German *Länders*, shareholders in the Volkswagen group, also illustrate the differences in performance appraisal expected by shareholders depending on the investment time horizon and the consequences of strategic choices. The drop in share prices of more than 20% has caused the loss of nearly 15 billion euros of market capitalization. In the same way, the Carrefour group's shareholder instability over the last decade, with differences between historic shareholders and the Arnault Group – Colony Capital Europe alliance, has led to regular changes of CEOs (Daniel Bernard, Jose Luis Duran, Lars Olofson and finally George Plassat) which have weighed on the group's strategy since the Carrefour – Promodès fusion. Georges Plassat's stable post (he has a second three-year mandate until 2018) is enabling him to rethink the Carrefour group's strategy and thus to register its shares in a time frame more suited to the scale of such a group. The question of tools for facilitating this alignment has also been studied repeatedly and the literature on this theme is copious, especially on stock-options and their sometimes perverse effects as in the case study in this area that Moulinex has presented. Overall, most CEOs are interested in the profitability of the invested capital, or indeed, more simply, in the cash generated or the variation in share price by means of stock options.

Considering, in the rest of section 1.2, that CEOs act together with shareholders, we will begin by presenting the main objectives that they pursue here (section 1.2.1) before mentioning needs in terms of supplying the process of formulating and deploying strategy (section 1.2.2).

1.2.1. The objectives of the CEO and the Board

After having established a framework for analyzing a business' overall performance, which consisted of aligning shareholder expectations with the business' strategy, its core business and financial manifestations, which we then called the business strategy and the financial strategy. The aim of this section is now to define these different points, from shareholder expectations (section 1.2.1.1) to business models (section 1.2.1.2) and financial aspects (section 1.2.1.3) using the DuPont model shown here.

1.2.1.1. *Shareholder expectations and the DuPont model*

By providing funds for a business' capital, whether this is during its creation, after an increase in capital or via the secondary market, shareholders anticipate a return on the capital invested (see Table 1.3). This return is formed of two elements: the return on the dividend and the return on the capital in a strict sense. The first is more or less a reflection of the business' current performance, even if calculating the amount of the dividend sometimes tends to obey the rationales of marketing in relation to investors in terms of the Share's appeal or payment of return on capital. The second reflects the realization of future changes hoped for in the shares in terms of dividends to come but also changes in the price subject to risk constraints specific to the business and systematic risks concerning the economic environment. What makes up the business' value, its capitalization, is therefore the sum of the future cash flows generated by operating and valuing its future projects. If the process of setting the dividend can be influenced by other elements as we have just indicated, the same is also true for the yield on the capital as we mentioned in the introduction with the "phenomena" of the unicorns and their very speculative market capitalization.

Return on the dividend	$\frac{\textit{dividend}}{\textit{current price}}$
Return on capital	$\frac{\textit{current price} - \textit{price at the start of the period}}{\textit{price at the start of the period}}$
Total return	Return on the dividend + Return on the capital

Table 1.3. *Sources of profit for the shareholder*

Directors' objective will therefore be to contribute to improving this overall return. Compared to other objectives fixed by shareholders such as making the business economically sustainable or making its ability to remain independent sustainable for example, the profitability objectives will not of course be the same. To reach this objective, directors need to identify the strategic levers for action available to them.

As Chereau and Meschi recall, the model developed by F. Donaldson Brown, then financial executive of the DuPont de Nemours group, is one of the best suited to grasping the strategic levers for profitability [CHE 14]. Although we have decided to introduce the tools and techniques in the second chapter, showing this model enables us here to detail the needs and objectives of CEOs, in line with those of financial and supply chain directors. This model (see Figure 1.5) identifies three main levers, which are the profitability of operations, the profitability of assets and financial leverage (borrowing) for improving equity profitability.

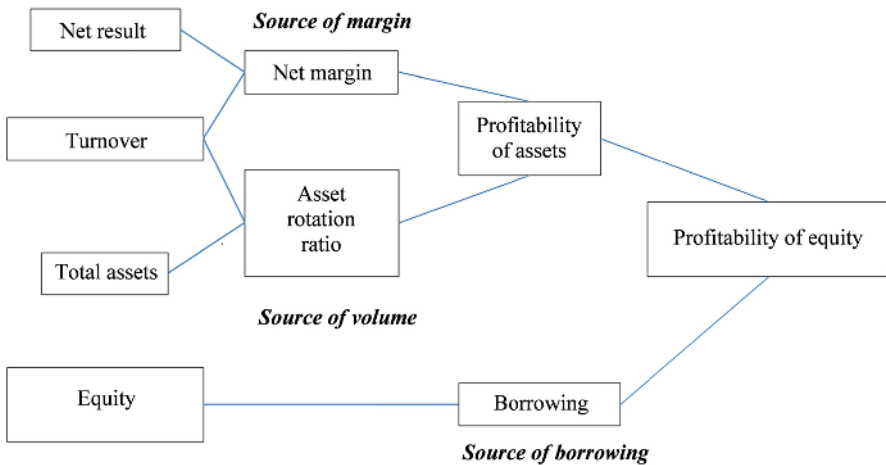


Figure 1.5. The DuPont model in “Russian doll” form [CHE 14]

Starting from the objective of improving the profitability of equity, we briefly show the sequence of calculations below (see Table 1.4 for the different formulae) relating to the different levers for action and their meanings.

The profitability of equity thus makes it possible to assess the business’ profitability in relation to the capital invested by shareholders, bearing in mind that the result obtained should be interpreted with regard to the business’ policy in terms of the distribution of dividends and self-financing from investment.

The profitability of assets is an indicator that measures a business' ability to create value from its operations. In order to make it easier to interpret, it is possible to break it down into two, as shown in Figure 1.5: the net margin and the stock rotation ratio.

The net margin is an indicator of the business' capacity to draw profitability from its business and from its operations. It indicates not only its control of operating costs but also its pricing power, i.e. its ability to distinguish its offer and so to develop its turnover. Pricing power represents a business' or brand's ability to increase its prices without this affecting the demand for its products or services, since its competitive position on the market in no way prevents its customers from continuing to buy its products. It therefore has power over the price of its products or services. This ratio is a key indicator of operational performance in the context of its business, an indicator that the supply chain manager has responsibility for improving.

The asset rotation ratio measures the business' ability to generate turnover from its assets. It thus primarily conveys the productivity of the assets and the business' control of the volume effect. In an environment such as the one we described in section 1.1, the question then arises of how to interpret such an indicator in the case of business models based on approaches without serious recourse to assets or indeed without assets at all (non-asset model) in the case of virtual businesses.

The debt ratio measures the significance of the business' debt in relation to its assets, more exactly the proportion of the business' assets financed by the business owners. Although a lever of two is generally considered satisfactory by financial institutions, it is, above all, the question of the lever effect of this borrowing that should be considered. Once again, some current models have very good recourse to borrowing, given low interest rates, but the entire question is to know if these businesses' profitability and so their solvability will eventually be guaranteed. In this area, the business model developed by Patrick Drahi at SFR-Altice increasingly questions financial managers on its sustainability but can be an excellent illustration of this lever effect.

$Return\ on\ equity = \frac{Net\ result}{Equity\ capital}$	
$Asset\ profitability = \frac{Net\ result}{Total\ asset}$	$Debt\ ratio = \frac{Total\ asset}{Equity\ capital}$
$Net\ margin = \frac{Net\ result}{Turnover}$	
$Asset\ rotation\ ratio = \frac{Turnover}{Total\ asset}$	

Table 1.4. *DuPont model financial ratios*

The interest of the DuPont model lies in providing a representation of the business' overall performance, which articulates the professional components (what the business does, what it offers its customers in terms of value?) and financial components (how does it do this in terms of mobilizing capital and efficient use of capital?). In this sense, it fits well with the business model as defined by Magretta, i.e. the method of organizing activities to produce value and the way of selling this value [MAG 02] even though its approach gives the financial component a lesser place. Moreover, in section 1.1, we have broadly mentioned the diversity of business models according to business sectors. Development and translation of directors' objectives is therefore consolidated by, in the first instance, building business models, an exercise framework for the business' strategy with which they cannot be confused, then by implementing business plans, which are its concrete manifestation – operational and calculated as we will illustrate later.

After having initially identified the key success factors for the chosen strategy, the directors' aim is then to implement this strategic vision in the business model, as Figure 1.6 illustrates, according to the following approach:

- Identifying and describing the human means of research, development, distribution and production which flow from the strategic model.
- Translation in terms of value created, generally represented by a cash flow statement illustrating the future cash flows resulting from the strategy,

actualized by a shareholder remuneration rate and rate of debt (according to the gearing, which is the ratio between the medium and long-term financial debts and the capital belonging to the business).

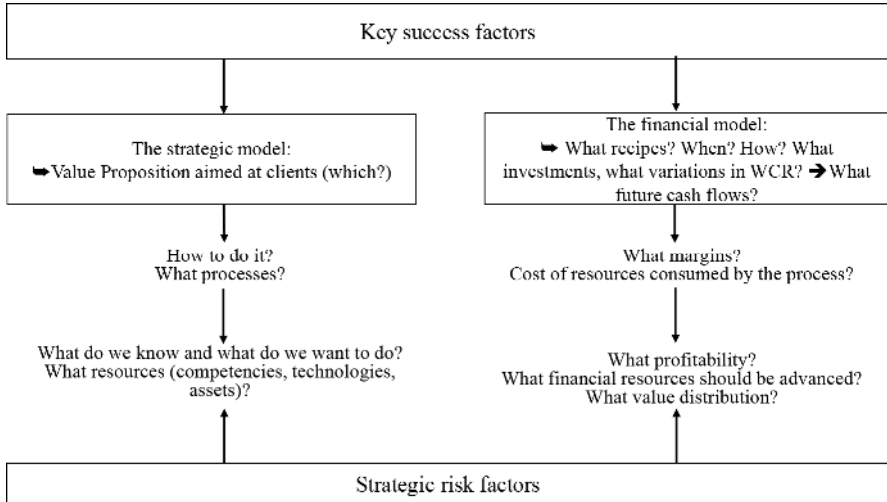


Figure 1.6. *Questions underlying development of a business model*

But, before finalizing a business model, it makes sense to take the strategic risk factors into account. In fact, only a comprehensive risk strategy makes it possible to manage the development of a business and ensure its sustainability. Identifying these risks and measuring their criticality (in terms of probability of occurrence and the expected consequences) amount to protecting the business' legacy and creating value for it and its stakeholders.

What are the causes or sources of these risks?

- Strategic risks, generally linked to strategic errors, to weaknesses in terms of the strategy's deployment, to the absence of competitive intelligence, likely to alter the flow of revenue.

- Operational risks in relation to the economic model, to its implementation, to its value chain. Any alteration in a process' functioning causes a pause in the continuity of activities and a resulting loss of value.

– Human risks, a consequence of a loss of expertise, of the absence of or ineffectiveness of skills management, are sources once again of a loss of value.

– Financial risks resulting from reporting errors and/or the absence of reliable information.

– Risks in governance relating to the exercise of power at all levels of a business.

1.2.1.2. *Implementation in terms of the business strategy*

Six key stages can contribute to implementing the business model in the business strategy. They are summarized below, listing the questions to be asked, above all, in order to anticipate the directors' associated needs.

– Identifying segments of the market, the business' targets, and describing them as segments of niche, innovation and/or mature markets. This therefore involves:

- knowing customers' real expectations and prospects;

- identifying actors in the process and the conditions of their collaboration in achieving the business' objectives.

– Defining the quality of service to offer according to customer type. This depends on the intensity of effort to be made depending on how customer loyalty is sought, developing additional sales or even acquiring new customers. Hence the following questions are to be asked:

- *What relationships have we established with our customers?*

- *Are they satisfactory for customers or not?*

– Defining value propositions aimed at different stakeholders, for example in a supply chain. These are the different product-service combinations likely to create value for the different segments of customers targeted. This means analyzing their contributions to the respective expectations of each of these segments of customers, in order to target a cost structure for each of these product-services. Hence the following questions to be asked:

- *How much are the customers prepared to pay for this product – service?*

- *What customer value added is pertinent either to make our clientele sustainable or to acquire non-customers?*

- *What skills can be contributed by some actors in a process or network, with a view to increasing customer value?*

- Identifying core activities indispensable to implementing targeted value propositions, in other words, identifying the skills that form the core of the value propositions. It is therefore necessary to establish a hierarchy between the different activities, making it possible to make offers satisfactory to the customer type. This point is doubly important, as much from the perspective of the means of outsourcing this or that activity, as from that of investment choices. Hence the following questions to be asked:

- *What are the core activities depending on the chosen value propositions?*

- *Are these core activities to be developed internally or as partner contributions?*

- *Should we predict specific investments to acquire or develop certain core activities?*

- Choosing key partners. Here, it is a question of considering the partners' network (service providers and suppliers) according to their respective contributions to the success of the chosen business model. The hierarchy established between core activities is decisive here, where it concerns the missions entrusted to each of these partners. Hence the following questions to be asked:

- *What core activities do certain actors develop?*

- *What is their contribution of customer value added?*

- *With what resources should we provide them in the context of a partnership?*

- Defining distribution channels for products and services for each segment of clientele. These channels play the role of not only delivering products, but also facilitating communication for all the prospects and customers, as well as the services expected by these customers, especially after-sales service. Hence the following questions to be asked:

- *What are the customers' preferred channels?*

- *What is their effectiveness in terms of customer value? Is this a tool for differentiation?*

- *Is the channel a strategic means of harnessing adaptation to customer need and adapting to it in real time?*

- *What should be improved on the other channels, or should they be abandoned?*

1.2.1.3. Implementation in terms of financial strategy

Like the business strategy and of course in concert with it, the business model also contains a financial component of which we summarize the main stages below. At this stage, our proposal will be summarized since these elements will be developed more substantially in section 1.3. Essentially, it is therefore a question in this financial component of quantifying the necessary resources, judging sources of finance and then evaluating the flows generated and managing the cost structures.

- Developing the tangible and intangible assets that the business should finance, which strongly impacts the amount of investment to forecast in the business model (which will be listed in the forecast balance sheet), on the economic asset side as well as in the forecast income statement, for the depreciation expense. Hence the following questions to be asked:

- *Which investments for which key resources?*

- *Should these investments be made internally or with the support of partners (out-sourcing, subcontracting, etc.)?*

- Identifying and evaluating different sources for financing the investments mentioned above, and also working capital requirements depending on elements of the operating process and the cash-to-cash cycle. This therefore means evaluating financial needs in the long term but also in the short term, thus adopting a top-down and bottom-up approach. Hence the following questions to be asked:

- *Which financial methods should be favored? Self-financing or recourse to external finance?*

- *Which external finance should be favored? In the long term? In the short term for cash flow?*

– Evaluating the revenue streams generated by each of the segments of clientele chosen. Depending on the coherence between the value propositions (defined combinations of product-services) and customer expectations, the business will be able to predict a fairly reliable revenue stream. Hence the following questions to be asked:

- *For what values will customers be prepared to pay?*

- *What revenue stream per customer segment depending on the performances to be provided?*

- *What contribution does each of the activities bring to revenue streams relative to the resources mobilized?*

– Determining a cost structure according to customer type or market segment to reach the target objective and fixing a profitability rate. This involves precisely establishing the breakdown between fixed costs and variable costs per customer type, measuring valuation of the activities that form the processes and, finally, choosing the key indicator in the area of managing costs: economies of scale for a business model based on the growth of volumes and economies of scope according to Chandler for a business model based on diversification [CHA 77]. Hence the following questions to be asked:

- *What are the costliest key resources?*

- *What is the hierarchy of costs per activity?*

- *What minimum revenue stream would make it possible to cover the fixed costs?*

1.2.2. Needs in terms of information quality and responsiveness

Implementing the business model in terms of business strategy and financial strategy illustrates not only the obvious relationships between these two dimensions but also the needs created for improving their management. We return, in this section, to two aspects by presenting first the inter-relationships between the business model's different parameters (see Figure 1.7) before mentioning the needs created for directors managing the business' performance.

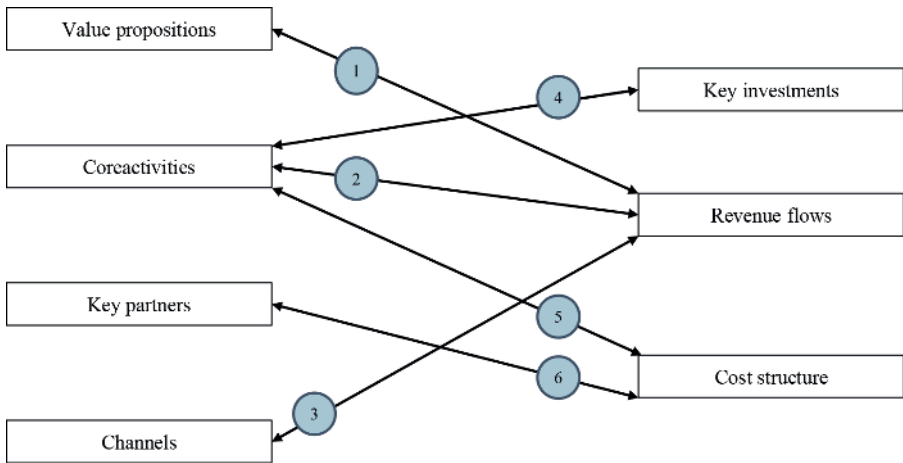


Figure 1.7. *The inter-relationships between a business model's parameters*

– Inter-relationship 1 highlights the weight of value propositions and the different product–service combinations on the revenue stream. The double arrow shows that there is indeed a movement back and forth between these two parameters, in the sense that not reaching a target in terms of revenue flow can lead to changes in these value propositions.

– Inter-relationship 2 involves arbitrating between the choice of core activities and the levels of revenue flow. Here again, the business model should predict what the core activities will be and what their impact is on the revenue flows, which illustrates the need to build both the strategic and financial models simultaneously and therefore the constant consultation between the different stakeholders in the governance of the business.

– Inter-relationship 3 comes from the same perspective, but involves coordinating the operations and therefore management that integrates the different actors in the supply chain, posing the question of how to manage it.

– Inter-relationship 4 is linked to the choice of core activities, which in large part determines the levels of investment to forecast, which necessarily has consequences for the business' profitability.

– The last two inter-relationships (5 and 6) hinge on the choices of activities and key partners and strongly influence the cost structures adopted, with a return to potential arbitrages in case of breakdowns in the levels of profitability.

To reach (or exceed!) the hoped for turnover objectives, directors therefore have the mission of implementing the strategic vision, developed across a business strategy and a financial strategy, which follow the perspective of the business model. Behind the proposal's apparent simplicity, there are of course many difficulties, even beyond the difficulties inherent in the choices of strategy and competitive game in turbulent markets and, to succeed in it, directors have many needs that can be summarized on three levels.

The first concerns the quality of the initial diagnostic, which has a decisive influence on the development of the strategy and the business model. To do this, the directors need the information feedback to be reliable to clarify the decision process as well as possible. This is the whole challenge of the strategic diagnostic and of formulating this, which has been the subject of numerous books and manuals tackling the different underlying theories. Where our proposal is concerned, we will not emphasize this component, in order to concentrate more on the two following levels.

The second concerns deploying the business model in the business strategy and the financial strategy. In this case, it involves the whole question of management systems, to which we will return in the second chapter with the tools available not only to CEOs, but also to financial directors and supply chain managers. The challenge is, as we have been emphasizing since the introduction, to succeed in aligning the business' overall strategy with its professional and financial manifestations, not only at the moments when strategy decisions are made but also, above all, when managing performance. It is over time that the difficulty of alignment is most perceptible.

Finally, the third level is performance management. This is the challenge of reporting operations that are also financial, not only in terms of quality but also in terms of speed to ensure that good decisions are taken and to ensure organizational cohesion not only at a business level, but also at a financial level. It is finally the whole question of organizational agility that appears here and which is at the center of directors' concerns in ensuring the business has a sustainable performance.

After having presented the challenges and structure of business models, we have been able to clarify the different inter-relationships between the parameters of the strategy model and those of the financial model, which form its two component parts. In the next section, the objectives and needs of financial directors will be tackled more precisely.

→ *Note to remember*

CEO's and Board's objectives and needs

The CEO and Board aim to contribute to improving overall turnover, considered to be the sum of the return on the dividend and the capital. To reach this objective, they can rely on models such as that of DuPont, who identifies three main levers, which are the profitability of operations, the profitability of shares and the financial lever (borrowing). The interest of the DuPont model lies in providing a representation of the business' overall performance, which shows the professional components (what the business does and what it offers to its customers in terms of value) and financial components (how it does this in terms of mobilizing and efficiently using capital). The development and translation of the CEO's objectives is thus consolidated initially by the construction of business models and the business' strategy exercise framework.

To reach these objectives, CEOs first need reliable information to grasp the process of formulating the business' strategy as well as possible. Secondly, they need management systems that facilitate coordinated deployment of the strategy and its implementation in the professional and financial strategy. Directors need to align these strategies and, above all, to maintain this alignment in accordance with decisions taken at all levels of the business. Performance management systems should therefore enable rapid and reliable reporting to contribute to maintaining this alignment and thus the organization's agility.

Box 1.8. *CEO's and Board's needs and objectives*

1.3. Financial directors' needs and objectives

For some years, numerous studies [ACC 14, CGI 14, CAP 11] have borne witness to the change in financial management, as much in terms of its boundaries as of positioning in relation to general and operational management. In a more complex regulatory context, the challenge of the

quality and reliability of information produced by financial management is, increasingly, to meet the demands of auditing and maintaining standards. But this is not the only reason. Environmental complexity and volatility in demand, like the volatility of financial markets, also contribute to an increased need for not only quality and reliability but also the rapid accessibility of financial information (reporting) to supply, constantly, the process of strategic decision-making, and enable financial directors to improve the business' overall performance by optimizing the achievement of their main objectives: increasing the business' profitability, its solvency and its ability to honor, in time, its short-term engagements (liquidity) by guaranteeing access to finance and by limiting risks in a more uncertain and volatile environment.

The organizational agility needed to maintain and develop the business on its markets occurs through greater responsiveness as much in terms of re-evaluating strategy options (value proposition and organization of value chains to ensure it materializes) as in terms of methods and, more broadly, financial structure to improve creation of overall value by reducing the cost of invested capital. Financial managers are gradually becoming, according to the studies mentioned previously, more active and are contributing more to the strategy decision process (section 1.3.1), while they are also playing a greater role, as catalysts and advisors for operations managers, through management control especially in improving their profitability.

Reporting remains essential in checking that operational management and activities are indeed heading towards the direction of realizing the strategy defined. This information production and analysis on the conduction and performance of activities (professional and financial) is, however, often deemed ineffective and inefficient because of its complexity and centralization. A growth in the (financial) skills of other managers and operational directors is therefore desirable, to simplify this process by focusing everyone's attention on some key performance indicators (the main levers for value creation). The objective is to enable financial directors to devote more time to their other missions, in particular optimizing the business' finance structure by managing the associated risks (section 1.3.2) and by deploying the financial policies that underlie the strategic objectives – the growth and sustainability of the business (section 1.3.3).

1.3.1. The involvement of a Chief Financial Officer (CFO) in the strategic process: from business model to business plan

The business plan is the concrete, operational and developed implementation of the business model. It is a document that describes and analyzes the way in which a value proposition that meets customer expectations will be fulfilled by the business (value chain) by producing, in the end, a detailed projection, over several years (3–4 in general), of expected income, finance needs, and the business' financial structure. Aside from formalizing the business' project (customer value proposition, organization of the value chain, etc.), the business model, to evaluate its feasibility and sustainability with regard to the value creation generated, therefore includes:

- a provisional income statement;
- a forecast balance sheet;
- a cash flow plan;
- a cash flow statement.

This information and analysis, which integrates methods of finance depending on the business' capacities and is produced by the financial management, thus makes it possible to evaluate the pertinence of choices concerning the business model's main directions: value proposition for customers, organization of the value chain and the choice of partners with which the business is likely to work to optimize value creation.

1.3.1.1. Value, value added and overall value creation

The concept of value is polysemic [BRE 01], which does not make it easy to define or measure. Table 1.5 lists some dominant approaches to value [CAP 04].

The business model is in the end only the reflection of the arbitrages and balances created by the business to optimize its overall value creation by activating the levers underlying these different conceptions of value depending on the objectives of different stakeholders (shareholders, customers, the business' employees, suppliers, banks, etc.). Evaluating the value added generated by the customer value, which is necessary for creating a target margin, amounts to evaluating the competitive value (organization of the value chain and the cost structure that results from it), which also leads us onto the organizational value and the partner value (managing

relationships with the partners in this value chain, which impacts not only the cost structure, but potentially the short term, financial needs via the cash-to-cash cycle, for example). The formation of the value added is apprehended through the provisional income statement which also makes it possible to set a target in this area to guide the decisions and actions of managers.

Shareholder value	The objective of maximizing shareholder wealth via value creation. The increase in the value of the business' shares of course remains central, but shareholders argue (or think) primarily in terms of opportunity cost. This means that the foreseeable profitability of an investment, material or immaterial, is at least equal to the profitability hoped for from another investment.
Partner value	Defined by Charreaux [CHA 98], partner value relies on a representation of the business <i>“as the contracting center of co-operative game that it organizes in such a way as to acquire the maximum created value. This representation assumes that the created value is distributed between the different actors in the game and that this is only sustainable if each actor eventually benefits”</i> [CHA 07].
Competitive and strategic value	The business creating value by correctly positioning itself in its different strategic domains, by organizing and managing the performance of its value chain(s) [POR 86].
Customer value	Offering customers quality products meeting their expectations (in terms of usage and brand) by optimizing the quality/cost ratio to retain the margin. <i>“The overall value of a product results from the combination of the benefits and sacrifices linked to consuming it. It is defined as the overall evaluation of the usage of a product founded on perceptions of what is received and given”</i> [AUR 04] Just as for other conceptions of value, this is also relative. In fact, <i>“the relative value that a given product offers the consumer [...] is the maximum amount that he would be willing to pay, assuming that he is perfectly informed about the product and competitors' offers”</i> [TEL 99].
Carrying value or fair value	Valuing a business' shares, either on a historical basis (depreciation) corresponding classically to its carrying value, or at a <i>“price that would be received from the sale of a share or paid for the transfer of a liability during a normal transaction between participants on the market on the date of evaluation”</i> (Norm IFRS 13) corresponding finally to its market value.
Organizational value	The business' capacity to reduce its running costs (transaction costs and organization costs). It can be measured especially by means of evaluating hidden costs [SAV 79, SAV 92] linked to organizational problems; costs that are “traced” in the business' information systems. This approach, called “socio-economic” by its designers, takes account of the potential gains from taking account of failings linked to the conditions and organization of work, to the means of coordination and communication, to time management and to the development of skills.

Table 1.5. Some dominant approaches to value in businesses

1.3.1.2. Income statement and provisional intermediate management balances

The provisional income statement thus makes it possible, with regard to organization of the business' value chain (potential cost structure), to

evaluate the value added generated by a desired customer value proposition (estimating potential revenue streams). It is thus intended as a tool for deploying the strategy for the business' different managers, to accompany implementation of the strategy by fixing targets to reach in terms of the level of value added.

Intermediate management balances (see Figure 1.8), resulting from the income statement, thus make it possible to identify the main indicators and levers on which directors can act with regard to the choices used in the business model (value proposition and organization of the value chain) and with regard to their financial capacity and their profitability objectives.

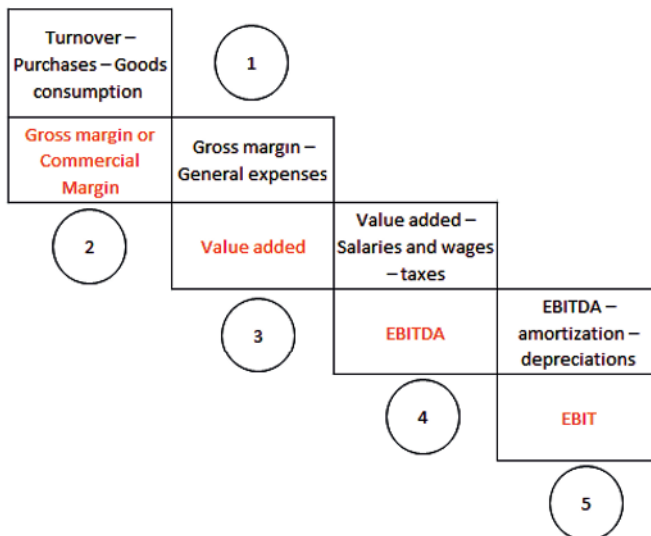


Figure 1.8. *Intermediate management balances*

Creating provisional turnover or revenue streams relies on the effective use of methods that make it possible to obtain the expected customer value, which is the result of the usage value and the sign value [CAP 04]. In a differentiation strategy, customer's perception of the differentiating criteria and evaluation of the price they are prepared to pay to obtain this differentiation is, for example, a basic element. It makes it possible not only to appreciate the potential turnover but also, taking account of the changes in competitors' offers, and of the erosion of factors in differentiation etc., to

understand the actions to be carried out over the period considered as much in terms of the change in the value proposition as in terms of investments to maintain the differentiation and the competitive advantage.

Strategies for out-sourcing and sub-contraction will have an impact on merchandise sales and service provision. Configuration of the value chain (choices of activities in which the business wishes to position itself), linked to the resources and strategic skills considered to be strategic in realizing the business model, is a decisive element in forming a raw margin. Beyond the rise in purchases, and also the payroll, arbitrages between integration and out-sourcing and/or sub-contracting impact the level of investment and therefore, the amount of amortization (also dependent on the duration of the depreciation), which enter into determining the Gross Operating Income (GOI).

The value added, created by the two previous indicators (turnover and gross margin), should therefore be sufficient to cover not only the costs of buying and/or production and third-party consumption, but also human resources costs, taxes and charges to enable the business to generate a GOI that measures the wealth created after payment of employees. The GOI/VA ratio makes it possible to measure the performance of operational activities, i.e. their ability to generate resources to finance the development or the improvement of the business' production capacities and to remunerate the invested capital. It therefore enables directors to establish a rise in the value added available after payment of employees, taxes and charges as a target.

The Self-Financing Capacity (SFC) is calculated, in the context of a provisional income statement, from the Net Result (NR) to which is added the sale of endowments and recoveries from depreciations and provisions, measures the financial resources that the business can mobilize, at the end of its accounting period, to invest, in order to develop, maintain or improve its production tools, pay back borrowing from banks or debts (to suppliers, the State, etc.) and remunerate shareholders through dividends. With regard to its SFA and to financing opportunities (the lever effect, for example), the business will then evacuate its financial needs to realize the necessary investments, nonetheless taking care to optimize its financial structure to reduce the cost of invested capital.

1.3.1.3. Evaluating the business model's profitability

The business model's overall profitability thus corresponds to the business' ability to produce, by using it, a profitability greater than the cost

of the financial resources that it mobilizes. To evaluate this overall profitability and to identify the levers for creating potential value, the Weighted Average Cost of Capital (WACC) mobilized should be considered (including the cost of financial debts – current interest rates minus tax on businesses – and the cost of equity corresponding to the return expected by shareholders in comparison to the remuneration that they could obtain from an investment showing the same risk profile on the market). MEDAF's Capital Asset Pricing Model proposes a measure of the cost of equity including the risk taken by the shareholder and their remuneration.

$$\text{WACC} = \left(\text{Cost of equity} \times \frac{\text{Equity}}{\text{Invested capital}} \right) + \left(\text{Cost of debt} \times \frac{\text{debt}}{\text{Invested capital}} \right)$$

Table 1.6 details, over a given period (3–4 years), the steps for calculating the Excess Value Flows (EVF) and relies on items in the income statement and the balance sheet, forming interactions between the result and the capital invested, thus enabling either:

- with regard to the remuneration expected by shareholders, testing the pertinence of the business model taking account of the potential cash flows (initial evaluation of the strategy option);
- with regard to the potential cash flows actualized, evaluating the potential shareholder remuneration.

	N	N+1	N+...	TOTAL
Gross Operating Income (1)				
– Variation in investments				
– Variation in Working Capital				
= Cash Flows or liquidity flows (2)				
Amount of Invested Capital (3)				
(2)/(3) = Return on invested capital (4)				
Cost of equity				
+ Cost of financial debt				
= Weighted Average Cost of Capital (5)				
(4) – (5) = Excess Value Flows				

Table 1.6. Return on invested capital and the cost of capital

The business model's profitability therefore relies on the business' capacity to have the capital needed, to mobilize it and to use it efficiently in carrying out activities requiring investments (fixed assets – from the top of the balance sheet) and in generating a Working Capital (WC – from the bottom of the balance sheet).

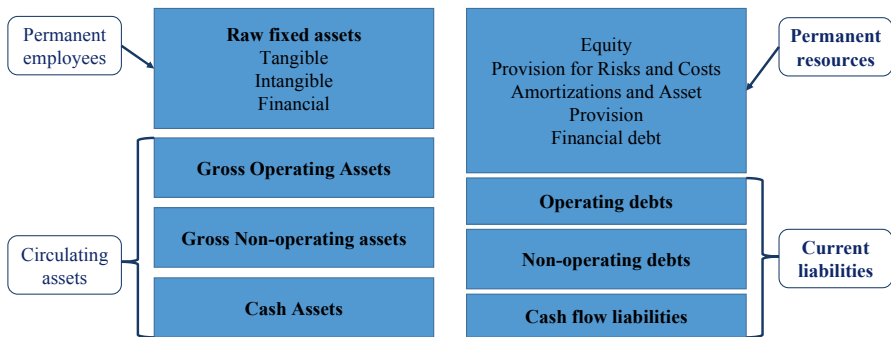


Figure 1.9. *Main balanced sheet components*

By relying on these provisional documents (income statement and balance), the DuPont model ratios (section 1.2.2.1) thus make it possible to answer directors' questions concerning the creation of the envisaged business model's potential value (return on dividends + return on capital) and to identify potential levers (section 1.3.3).

Whatever the levers used, one of the financial directors' main missions is to balance the business' finance structure to optimize the Weighted Average Cost of the Capital (WAVC) by controlling the associated risks. The quality and reliability of the initial evaluation of the WAVC, which is also the discount rate of the flow generated, are therefore necessary to helping directors in their decision-making. Beyond this stage of making strategic and operational choices, the profitability of the business model thus relies on the financial management's ability to arbitrate between diverse sources of finance and to control their risks (section 1.3.2) while still however taking care to maintain the business' liquidity, so that its short-term engagements can be honored.

The cash surplus, the business' capacity to generate liquidities, will also be evaluated, to establish a provisional cash flow plan. It is calculated from

the Gross Operating Surplus, from which the variation in the OWCR is subtracted. To optimize the OCF, two non-exclusive rationales are possible:

- reducing the OWCR, which amounts to bottom-up financial management and which occurs through actions (reduction of stock, optimization of the cash-to-cash cycle, etc.) that directly involve supply chains managers (sections 1.4 and 2.3);

- an increase in the Working Capital (long-term capital – fixed assets), which involves top-down financial management. The Working Capital Surplus makes it possible to finance Working Capital Requirement, and, if there is residue, it can then feed into the business' net cash flow (Working Capital Requirement).

These two categories of lever finally reflect the change in Financial Directors' missions mentioned in the introduction to section 1.3. The studies mentioned (Cap Gemini, CGI, Accenture, etc.) effectively highlight two trends:

- more frequent and denser interactions with operating functions to optimize, dynamically, the WCR by enabling rapid evaluation of the potential gains of improvement solutions in the area of flow management, cost reduction, quality of service, optimization of the cash-to-cash cycle, etc.;

- greater expertise to optimize the overall structure of the business' finance dynamically (section 1.3.2) through involvement in the choice of investments, but more broadly, in organizing the value chain and in choosing the business' activities.

1.3.2. Optimizing the business' finance structure

Once the short, medium and long-term financial requirements are determined, it falls to the financial director to arbitrate between the different possible sources, while meeting the business' objectives (financial independence, control over decision-making, levels of risk, etc.) and by taking care to optimize the turnover of capital raised.

1.3.2.1. Sources of finance

The aim here is not to be exhaustive nor to provide a detailed description of the potential means of finance (Table 1.7). In keeping with the book's theme, in this section, we are rather interested in the objectives of the Financial Directors, touched upon between the lines in the first few paragraphs of section 1.3.

Equity	Quasi equity	Borrowing
Self-financing Increase in capital Disposal of fixed assets	Associates' current accounts Equity and equity loans Subordinate securities Subsidies	Borrowing from credit institutions Bonds Leases

Table 1.7. The chief methods of financing businesses

These different sources of finance do not of course present the same advantages and disadvantages (Table 1.8).

Self-financing	This has the advantage of maintaining the business' financial independence and does not incur financial costs, especially when interest rates are high. It can however limit the business' capacity for development, especially when interest rates are low and/or limit use of these funds for other ends that are more profitable for the business.
Increase in capital	This does not represent a debt (an increase in equity), but still has a cost for the business (turnover rate demanded by shareholders depending on the level of risk and turnover on financial markets). It presents a strategic risk for the business linked to the dispersion of capital and control. Moreover, the risk of a takeover bid should be evaluated. In this case, a high dispersion of capital will protect the business. The sustainability of this method of finance and the investments to be made also depend on the profitability of the capital invested by shareholders.
Disposal of fixed assets	This corresponds to the strategic choices made by the business: either to invest in new activities that need to be financed or to re-focus on its core business by means of out-sourcing. The risk lies in selecting activities to discard with two rationales: strategic where the analysis of strategic skills and resources is concerned (position in the value chain) and financial (managing a portfolio of activities whose future profitability should be estimated before the opt-out).

Participating and subordinated certificates and loans	<p>These can be beneficial when the business needs to invest and when financial markets are not favorable (financial crisis).</p> <p>They make it possible not to break down the debt ratio, while still representing a cost for the providing business depending on the risk taken by the investor (priority of repayment in the event of collapse in the face of other higher level investors, level of liquidity on the markets, etc.)</p> <p>These are the stable resources, which are not however attached to the right to a vote; there is therefore no dilution of control.</p>
Borrowing	<p>A flexible means of finance, which however demands that some structural rules are respected to access it (debt–equity ratio).</p> <p>It makes it possible to maintain the business’ independence in terms of governance.</p> <p>Recourse to borrowing will be favored when interest rates are low (the lever effect).</p>
Leases	<p>Initial investment is less than for borrowing from banks, which demand a level of self-financing. Recourse to leasing can therefore be a good option when the business does not have a cash flow or when its solvency ratio is low.</p> <p>As it does not appear on the balance sheet, the business’ debt ratio is not affected. The cost can however prove to be higher (rents + residual value) than a classical borrowing to finance investment, but flexibility (change in materials and extension of the contract or reduction in rent) is possible by means of a cost negotiated when the contract is signed.</p>

Table 1.8. Advantages and disadvantages of different sources of finance

To these “traditional” means of finance can be added alternative solutions currently under development. Aside from solidarity-based finance or microcredit, which tend to involve small structures and support for business startups, often in particular contexts, “direct loans” to business are starting to develop.

Crowd-funding or participatory finance, thanks to online lending platforms (crowd lending), makes it possible for individuals or, increasingly, professional investors, to finance attracted businesses, even though interest rates are high (around 9%), through the simplicity of operating, the absence of guarantees and the speed of obtaining funds. These platforms for disintermediation have developed strongly over recent years by directly

competing against banks in a number of their activities: payment by direct debit from customers' accounts, mobile payment solutions, currency exchange between individuals, credit for businesses, asset and savings management, factoring services, etc. The "FinTech" sector, (a contraction of Financial Technologies), which is experiencing a spectacular rate of growth, is already offering businesses new opportunities, as much in terms of financial investments as in terms of optimizing their cash-to-cash cycle.

While still evaluating and controlling risks, financial directors should first integrate these new means of accessing funds (which can potentially contribute to reducing the cost of capital), just as they should interest themselves in and take advantage of the services offered by these new actors on the financial markets that make it possible to speed up transactions and reduce the costs of intermediation.

1.3.2.2. Balancing the finance structure

The advantages and disadvantages of each source of finance have also highlighted the risks associated with decisions on how to finance the business and its projects. This risk management is at the heart of financial directors' missions.

Helping directors in their investment choices and in defining their business model effectively comes down to their capacity to evaluate risks that can impact the achievement of the provisional income, which relies on the business' ability to generate provisional cash flows (operating risk) and to mobilize borrowing, given the cost, to good effect (borrowing risk) [COH 91].

– The business' ability to generate cash flows (operating risks) makes it necessary to control the cost structure. This operating risk increases when the fixed costs increase, as the income becomes more sensitive to variations in activity (level of sales and production). One of the explanations for sub-contracting and/or out-sourcing strategies thus lies in the search to reduce the operating risk by transferring it instead to other partners in the business' value chain. We speak elsewhere of the "variabilization" of costs. One indicator that makes it possible to measure the impact of a variation in turnover is variation in income.

The *exchange rate risk* should also be taken into account, as it impacts the business' income even when the volumes of sales and production are maintained.

– The finance structure itself creates a debt risk. The greater the *debt ratio*, the more it testifies to the business' dependence on borrowings from financial institutions. The debt service therefore compels the business to generate a higher turnover of invested capital, and so more substantial cash flows. However, where there are low interest rates or the business is able to generate, through substantial volumes of production and sales, an economic profitability greater than the cost of borrowing, it is sometimes preferable to have recourse to borrowing to profit from the *lever effect*.

In all cases, financial directors will take care that financial debts do not represent more than 25% of the self-financing capacity and that they do not exceed equity. Ideally, permanent employees should be funded from permanent resources. These indicators are monitored closely by banks in the matter of granting loans.

The *interest rate risk* should be taken into account here. Variations in interest rates can impact the debt service and the business' income.

For the business plan to be reliable, evaluation of these risks is therefore necessary and should be taken into account in calculations, especially income calculations (probability of realization, volatility, dispersion, etc.) and calculations of potential change in the cost of capital, which beyond the cost of debt, is also impacted by shareholders' demands for turnover. As an illustration, according to data processed and made available by Aswath Damadoran, Professor of Corporate Finance at the Stern School of Business in New York in January 2016, the average cost of capital (for all sectors together) in Europe and the USA lay at around 6.3% for respective Costs of Equity of 9.95 and 9.06% (<http://pages.stern.nyu.edu/~adamodar/>).

1.3.3. New objectives in financial strategies

After practices aiming to make the business plan viable (forecasting, risk evaluation, financial diagnostics, etc.), this section takes stock of financial strategies (section 1.3.3.1) and their potential impacts on the business' budgetary rationale, and more broadly, on methods of performance management (section 1.3.3.2).

1.3.3.1. Potential financial rationales

Bastch's [BAT 02] financial overview of business strategies (see Table 1.9) enables him to identify levers for value creation to optimize shareholders' returns, calculated as follows:

$$\frac{\textit{Profit}}{\textit{Equity}} = \frac{\textit{Profit}}{\textit{Turnover}} \times \frac{\textit{Turnover}}{\textit{economic assets}} \times \left(1 + \frac{\textit{Financial debts}}{\textit{Equity}} \right)$$

We find the main ratios of the DuPont model (net margin, asset turnover ratio and the debt ratio) on which business' strategies, depending on whether they are focused on optimizing the margin, on the effective use of assets and shareholder wealth or the risk/profitability pairing (Table 1.9), can act to optimize the profitability of equity.

The *competitive strategy* refers to the strategic or competitive value (section 1.3.1.1) which, in line with Porter's work, aims, by means of combining resources and activities in the value chain [POR 86], to optimize markup or the rate of profitability. Two main levers for creating value can therefore be mobilized:

- increasing turnover (which reflects Customer Value) with regard to improving product attributes and the attributes of associated services, their availability and differentiation factors recognized by customers, etc. or through developing new markets (new customers or internationalization);

- improving the business' overall productivity can also support an increase in sales on condition, of course, that the market supports this and the level of quality is maintained to guarantee their development (encouraging loyalty, new customers, etc.). In the opposite instance, this gain in productivity could, in the absence of methods for managing the altered flows, result in an increase in the level of stocks with a consequent increase in the Working Capital, impacting the total assets and more broadly, the number of ratios in the DuPont model (profitability of assets, asset turnover ratio and debt ratio), without counting the reduction in the business' net cash flow.

This strategy is generally measured using the GOS/current value ratio, which makes it possible, as mentioned above, to evaluate the proportion of the value added remaining after payment of employees, taxes and charges, and the strategy therefore emphasizes operational performance. It is currently sustained by lean management approaches, which, in full, aim to reduce waste in activities ("dead time", breakdown of equipment, equipment usage rate, loss of materials, etc.) and, consequently, aim to optimize use of resources (human,

material, energy, entering production as primary materials). The methods used effectively correspond entirely to the goal of optimizing the GOS/current value ratio. They make this possible especially by improving productivity (either by a volume effect linked to the sales development or by actions within the organization, employee posts, etc.) to minimize the cost of the payroll, generating an increase in the proportion of value added that can be mobilized to finance development of the business and remuneration of shareholders.

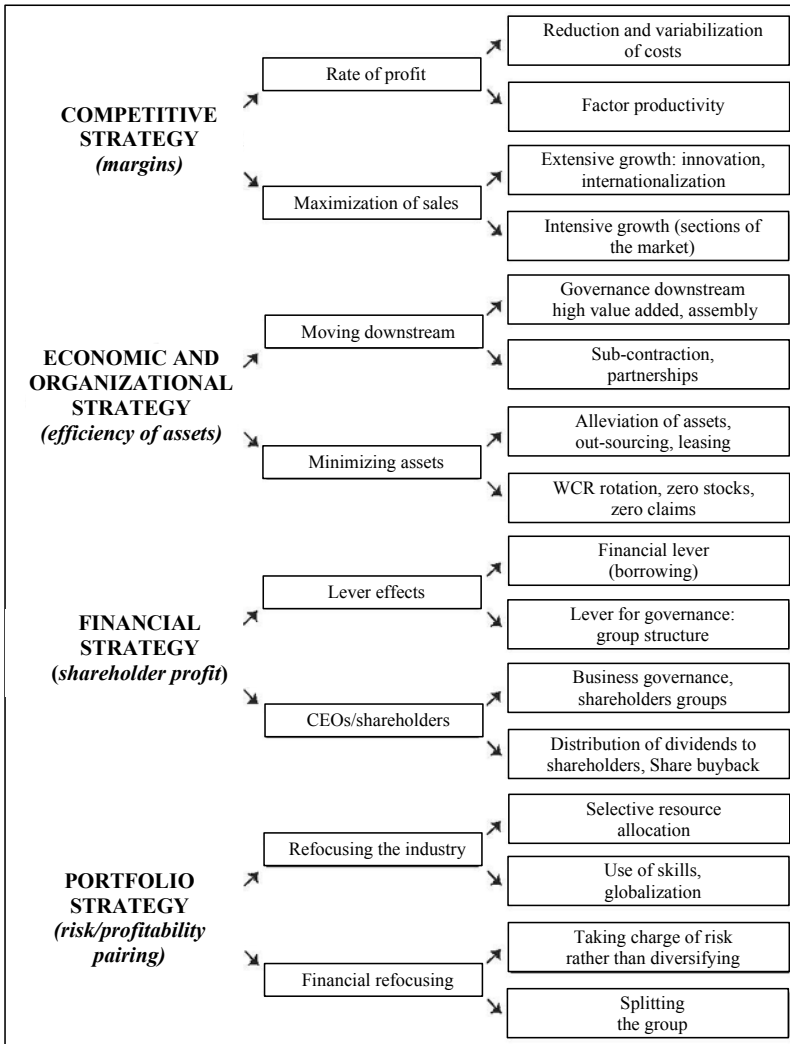


Table 1.9. Financial strategies (source: L. Batsch [BAT 02])

The *economic and organizational strategy* has as its essential aim the profitability or effectiveness of assets. To achieve this, several levers can be used:

- In the first place, the same actions mentioned previously will make it possible to optimize the business' net income (raising customer value in line with expectations and controlling costs in carrying out activities);

- In the second place, asset-reduction is a strong trend, as the automotive, aeronautics or even textile sectors have illustrated (section 1.1.2). It involves increased out-sourcing and/or sub-contraction of activities, or indeed total out-sourcing where operations are concerned (supplies, production, distribution, etc.) in what is already commonly known as fables manufacturing (Box 1.9). The business will however have to take account of a number of risks, such as maintaining operational and strategic flexibility, [BAR 07] and take care to develop relationships with suppliers and sub-contractors who allow global performance management (needed to maintain customer value) without increasing transaction costs too much. Coordination will be facilitated by an increased integration of processes by means of adapted management systems (sections 1.4 and 2.3). If out-sourcing and sub-contracting support a reduction in assets, the costs of buying merchandise and services are however increased. An arbitrage is therefore needed to evaluate the pertinence, both strategic and operational, during a divestment;

- Finally, reducing the Working Capital also makes it possible to reduce the total assets. Accelerating the cash-to-cash cycle, as well as managing lean manufacturing and reducing stock levels are levers available to supply chain managers. However, care should be taken not to deploy contradictory action plans, with, for example, suppliers and sub-contractors with whom it may be tempting, in this case, to postpone stocks at the risk of creating difficulties and denting the capacity to maintain levels of quality in the stock. An inter-organizational transversal approach to performance will be a necessary change (sections 1.4 and 2.3).

MICHEL AND AUGUSTIN'S MARKETING:

***L'AGROALIMENTAIRE* (Food industry) 3.0**

Online magazine "1mn30" (extracts) – 12 November 2016

The change is towards that of a core business centered on creating values; the concepts and ethics surrounding products have become the main axes for innovation. Moreover, they are very basic recipes to which the Michel and Augustin label brings real innovation. Compared to the food industry, the model is completely different!

The customer is no longer attracted using the rational of the *process* of fabrication or constant innovation in the same product ranges, they are attracted using brand value, a history shared right to the moment of consumption.

One idea should be remembered: “story telling”! At each stage of the communication plan, we find communication articulated around and relying on a smooth discourse involving prospects. Proper storytelling, well done and centered on values that always keeps the spirit of the business and products in the same vein. The stages of this history: content management (blogs, newsletters and invitations), community management (social networks repeat and relaying the blog’s stories and Michel’s, Augustin’s and their tribes’ adventures), event marketing (their bananery, a social hub that hosts numerous events accessible to all, in which the two founders regularly participate). The history generally ends with a direct link to the brand’s products, in agreement with long-stated values and to which the public may be converted and made loyal to transform them, finally, into regular consumers.

Managing risks to keep your head above water

This is really what characterizes these new firms who are not true industrialists; the economic model of Michel and Augustin will be described as inbound marketing, good recipes and sub-contracting. In other words, how do we reduce fixed costs and run only on marginal costs? Not very logical at first glance, but in terms of organization, this permits a strong degree of out-sourcing. The risk lies for the most part with the sub-contractors, for example production: biscuits, cookies and yoghurts are all produced just-in-time outside the business. A very well-thought out logistics chain moreover makes it possible to evade the costs of storage and move directly from production into the distribution chain in France or abroad. Is it really a good idea? Michel and Augustin of course operate in distribution, but the targeted market is not very numerous; this sector is rather more like a niche market where the risk of reversal is significant and the market’s growth, dependent on this sort of buzz and fascination with the brand, is not easy to assess. No-one knows if loyal consumers will come to love another competitor’s recipes and branding in 6 months’ time. In short, not producing oneself remains a means of developing sufficiently through new products. Once the critical size and sufficient demand are reached, we will surely then see a rational of reducing costs and perhaps democratizing the business.

<https://www.1min30.com/inbound-marketing/michel-et-augustin-marketing-agroalimentaire-3-0-8448>

The *financial strategy* amounts both to the lever of borrowing and more broadly, the business' funding structure (through equity and borrowing), whose impact on the profitability of capital and the associated risks (dilution of control and governance) were expanded on in the previous section (section 1.3.2). When interest rates are low, which is currently the case, it makes sense, as mentioned in the previous section, to have recourse to borrowing to benefit from the lever effect.

The *portfolio strategy* also focuses on how the value chain is organized, but from a different perspective to the competitive strategies (moving variabilization of costs and reduction of assets downstream). Industrial or financial refocusing lies at the heart of this strategy, which aims to control the profitability/risk-pairing as indicated in Table 1.9 [BAT 02].

In line with shareholders' objectives, both these financial rationales amount to arbitrages made to minimize the risks linked to assets held by the business just like the risks of borrowing. It therefore makes sense to take care of:

- the profitability of assets through a selective and diversified choice of investments and potential equity investments and ensuring increased control over their management;
- the liquidity of asset portfolios;
- the business' overall financial structure, in particular, as Batsch underlines by evaluating the potential impact of recourse to borrowing (by means of the lever effect) on the profitability of capital invested by shareholders [BAT 02].

Figure 1.10. identifies the potential impacts of decisions on both these financial and portfolio strategies (Table 1.9) on profitability for shareholders.

Arrows 1 and 2 highlight the potential impact of interest rates on rates of borrowing and the rate of return on investment. In fact, when interest rates are low, as is currently the case, it is beneficial to have recourse to the lever of borrowing. The risk of borrowing, however, becomes more substantial. This strategy is therefore only tenable if the business can effectively generate an economic profitability greater than the cost of borrowing (section 1.3.2.2). It involves control of the business and the use of actions aiming to optimize its operational performance to increase profit.

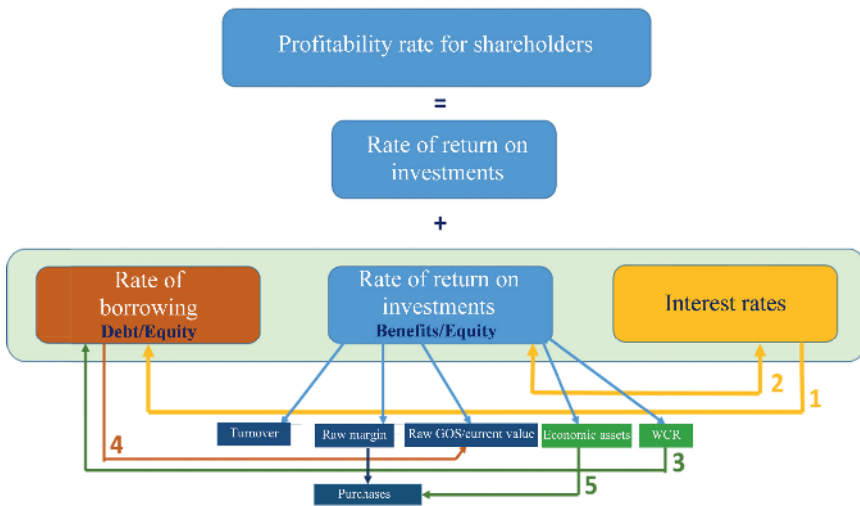


Figure 1.10. Financial and portfolio strategies: what impacts are there on the profitability rate for shareholders? (source: elaboration on Batsch [BAT 02])

Arrow 3 shows the impacts of an action on Working Capital (WC) concomitant with reducing equity to increase profitability for shareholders. This rationale, which then leads a business to reduce its assets and to seek ways of optimizing its WCR, in fact encourages:

- a reduction of fixed assets (property, materials and technologies, etc.);
- increased out-sourcing and sub-contracting of activities;
- management of leaner physical flow to reduce stock levels, indeed an increased pressure on commercial partners, especially suppliers, for whom it can therefore be tempting to make the partners carry the stock financially;
- management of the optimized cash-to-cash cycle which can also occur through an abusive recourse to inter-company loans.

In line with the business model, this rationale amounts to organizing the value chain (controlled activities, positioning in the supply chain, choosing and managing relationships with suppliers) with the aim of orchestrating rather than emphasizing the development of fables (section 1.3.3.1), whether it is of a concept (in the case of Michel and Augustin) or a technology (an information system for example), marketing products and/or services by deploying and managing a networks of suppliers, sub-contractors and service providers. Without investing, these businesses can then be

deployed on new markets, sometimes much removed from their original business. Service and Engineering Companies in Computer Science have, for example, developed on the market for providing logistical and transport services by means of software for Transport Management and Optimization (TMS). They propose a service offer that enables businesses to reduce their transport costs. The companies forward their flows (volumes, origin-destination, physical characteristics and level of service to customers, etc.), which are then integrated into the TMS with the aim of calculating how to optimize the circuits (sometimes by pooling them with those of other businesses. SSII then seeks out providers and negotiates tariff conditions before entrusting them with operations. The software makes it possible to trace activities and manage them. By doing this, it reinforces, through its role as broker, its position within the supply chain.

The previous example illustrates the mechanism highlighted by arrow 4 in Figure 1.10. By reducing capital by means of such a positioning (without the business' own fleet of vehicles), the business also entrusts all or part of its activities to specialists (transporters) including those activities that form the core of the value proposition (transporting merchandise entrusted by the customer in time and ensuring the level of service required). It therefore seeks also to act on profit by optimizing the GOS/current value ratio, making it possible to evaluate the value added available after subtracting the payroll. Increasing out-sourcing, including that of core competencies, can therefore be explained by this double action which aims to increase profitability for shareholders: the reduction of equity by reducing fixed assets and increasing the value added by reducing the payroll while taking care, of course, to evaluate the impact of this strategy on increasing sales (arrow 5).

Financial and portfolio strategies, aiming to optimize profitability for shareholders, can effectively incite business to disengage from some activities in line with Lazonick and O'Sullivan's "Downsize and Distribute" model [LAZ 00] or indeed to modify, as Artus underlines, the "*concept of a business that is no longer that of a center for production and employment, but that of a center for managing a portfolio of activities, subsidiaries, sub-contractors etc.*" which may be optimized and flexible. In the extreme, the business no longer has out-sourced, de-localized manufacture etc., and so differs fairly little from an investment fund" [ART 09]. Whether this behavior is dictated by a competitive need (competitive, economic and organizational strategy,) or by increased pressure on financial investors (financial and portfolio strategy), the fact remains that it has an impact on

the budgetary rationale by aligning budgets on the chosen scenario of Excess Value Flow (EVF).

1.3.3.2. *The impact of these financial rationales on management of the business' budget*

The levers for creating value, identifiable from the business model's provisional Excess Value Flow (Table 1.10), are therefore both the income statement (level of turnover, levels of cost – cost of buying, cost of salaries, etc.) and components of the balance (improving the management of flow vs. offsetting stock at sub-contractors and/or suppliers, impacting the Working Capital, decreasing the quantity of fixed assets by means of out-sourcing and similarly decreasing equity and borrowing required to carry out activities, engendering a drop in the cost of capital).

	Levers for creating value
G (1)	Adapting levels of costs and budgets to optimize the RBE, given that choices in the area of out-sourcing and sub-contracting will have different impacts on the cost categories (buying, personnel, etc.)
Variation in investments	Choosing the activities in which the business wishes to remain or not (a decision on how to organize its value chain and its positioning within the value chain) and durations of amortizations of investment.
Variation in Working Capital	Means of managing flow, levels of stock (effectiveness and efficiency of the supply chain) and optimizing the cash-to-cash cycle
= Cash Flows or liquidity flows (2)	
Amount of capital invested (3)	Development and improvement of activities in which the business still positions itself and to manage what it out-sources or sub-contracts
(2)/(3) = Return on invested capital (4)	
Cost of equity	The business' shareholders' demand for remuneration depending on the level of risk
+ Cost of financial debt	Financial costs (interest)
= Average weighted cost of capital (5)	The business' financial structure: proportion of self-financing, from equity and debts.
(4) – (5) = Overall profitability of the business model	

Table 1.10. *The business model's levers for creating value and profitability: a synthesis*

Two scenarios arise:

– The first concerns *top-down management* which essentially consists of acting on the amount of capital invested and optimizing the cost of funding (the lever effect, self-financing, disinvestment, etc.). This management rationale results in deciding a level of cash flow (and, therefore, the level of budget) that makes it possible to obtain a profitability of invested capital greater than the average weighted cost of capital.

– The second is *bottom-up management* which then consists of acting, at an operational level, on the different components of the GOI, the levels of investment and the Working Capital to optimize the cash flow. This rationale aims, especially, to impart another dynamic to the organization by relying on greater involvement of operational managers in financial management. In other words, the ability to optimize the Operating Cash Flow (OCF) makes it possible, in a bottom-up approach, to optimize the financing of investments and activities much more dynamically by also authorizing, through management more responsive to cash flow, the creation of financial products that optimize the net income and self-financing capacity. In a more uncertain and shifting environment, this management rationale then makes it possible to use the strategic and financial margins for maneuver, in which the predictions needed for the first rationale, often based on historic factors (sales, levels of cost, etc.) whose reliability is limited (as much in terms of predicting volumes of activity, of Turnover, and of risk evaluation as of estimating the cost of capital), sometimes do not even make it possible to identify or if they do, do so with less responsiveness.

These last remarks reflect, more broadly, the proper performance of the performance management system. To enable the organization to be more responsive and more agile, the performance management system needs to be both. The change in financial directors' missions, mentioned in the introduction, reflects this necessity. Although in the past, it was more anchored in management control and the handling and formalizing of accounting data, their expertise is now engaged in optimizing businesses' finance by leading them, on the one hand to mobilize more varied and complex sources of finance, and on the other, to interact more with operational directors (buying, production, logistics, sales, etc.) with who they must also join in improving their skills.

→ *To remember*

CFO objectives and needs

The first mission for Financial Directors consists of producing, in the context of defining the strategy, a business plan and a financial diagnostic for the business that is reliable in helping CEOs to define their business model precisely by identifying the impacts of their strategic decisions on overall profitability. The Financial Directors should assure themselves, and the General Management, that the strategic choices made (value proposition, organization of the value chain, choice of partners), effectively make it possible to optimize the profitability of invested capital, to maintain the business' solvency in the short term (liquidity), and in the long and medium terms. They should therefore evaluate (and then master) the operating risks and the risks of borrowing to produce valid "simulations" for the business' profitability, enabling directors to identify levers for value creation to use in order to reach the desired overall turnover. Two rationales of performance management are therefore possible:

- the first consists of optimizing the amount of invested capital and the financial structure and setting cash flows (and, in consequence, budgets from the predicted turnover) to be generated to reach the desired profitability;

- the other consists of adjusting the business' structure and funding methods depending on the cash flows actually generated, taking account of activity and its variations and taking care to empower operational managers and to direct them, by means of indicators linking their performance and the desired overall financial performance, so that they can optimize their activities and processes to reach the desired level of profitability. If there are budgets, they are however only provisional which makes it possible to reduce budgetary slack and to exploit new opportunities quickly, as much from a strategic point of view (redeployment of resources) as from a financial one (cash flow management).

In an uncertain and shifting environment, the second method of management, without however completely excluding the first as it is necessary to evaluate the investments to be made, is more responsive and so better able to improve organizational agility. However, it involves raising the skill level of operational directors (buying, production, logistics, sales, supply chain managers), to optimize the overall performance of the business' value chain (section 1.4) by identifying the levers for action pertinent to the overall turnover expected.

Box 1.10. DAF's needs and objectives

1.4. Supply chain management and operations management

In the first section (section 1.1), we illustrated, through examples from sectors and businesses, the gradual transformations in the value chain architecture and the essential questions in managing them. These changes highlight the need to organize the strategic vision (section 1.2) around the questions on funding that we have just seen in section 1.3 (financial strategy) and operations management, which we will tackle now (section 1.4). This operations management poses the question of the place and role of Supply Chain Management (section 1.4.1) and the need for a truly transversal approach from organizations (section 1.4.2).

1.4.1. Supply chain management: definition and positioning

Is it still necessary today to define supply chain management in a book on management, moreover one that places this approach at the heart of its subject matter? Unfortunately, we feel this is still necessary. Of course, the abundance of works on the subject, as Ellram and Cooper indicate in the literature review [ELL 14] that a search on Google Scholar returns references to more than 1.7 million articles and books, has had the merit of developing a globally shared vision. However, among the works shown, few focus on a real, deeper reflexion on the questions of professional territory and leadership that have in the end slowed its spread according to the authors of this book. We will therefore start by quickly recalling the origin of supply chain management before giving its globally accepted definition (section 1.4.1.1) and then we will mention this question of visions more traditionally anchored in the business' functions (section 1.4.1.2).

1.4.1.1. Origin and definition

The term “supply chain management” appeared for the first time in 1982 in an article by R. K. Oliver and M. D. Weber, consultants in the firm Booz Allen Hamilton, published in the *Financial Times*. In a context of low competitiveness among American businesses, and Western businesses as a general rule, faced with the rise of Japanese firms, they consider the decompartmentalization of the business' traditional functions (buying, production, sales and distribution) to be a necessity. Role silos, as they appear in the figure below, are critiqued in the sense that they allow efficient coordination of operations only with difficulty. Oliver and Weber then suggest integrating these functions through an approach known as “supply

chain management”, which in their view is the responsibility of business’ management and involves an integrated strategic approach. They define it as “an approach to planning, deployment and control of operations in the supply chain of which the objective is to satisfy the final customer in the most efficient way possible”.

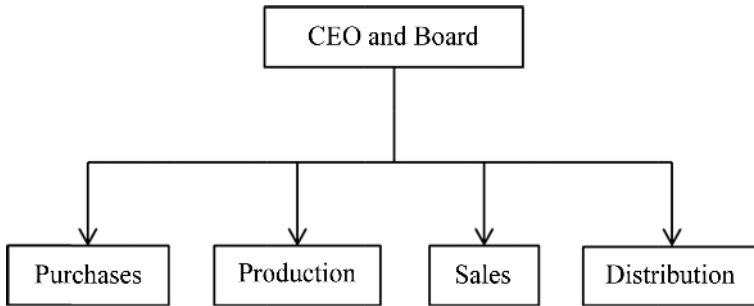


Figure 1.11. Classical role structure described by Oliver and Weber

If we mention the more than 1.7 million articles and works written on supply chain management since it was formulated in 1982, the real expansion in publications rose at the end of the 1990s to make it the most cited concept at the start of the 2000s. Many authors still endeavored at this time to understand supply chain management better and suggest a definition for it. In one of the first meta-analyses made, Mentzer *et al.* [MEN 01] list more than a hundred different definitions, bearing witness not only to this enthusiasm but also to the deeply polysemic nature of the term and the debates to which it gives rise. They conclude that a construction of management cannot be used effectively if there is no agreement on its definition. The coming years are therefore going to see a large number of studies endeavoring to clarify this definition.

In 2007, the Council of Supply Chain Management Professionals (CSCMP), a North-American association uniting professionals and academics coming initially from the world of logistics, suggests, after a survey carried out among all the actors involved in this field (professionals, consultants and researchers), a definition that global scientific and industrial communities will gradually adopt. For the CSCMP, “supply chain management encompasses the planning and management of all the activities pertaining to the search for suppliers and supplies, processing and all logistical activities. It also includes coordination and collaboration between

partners in the chain who may be suppliers, middlemen, logistical service providers and customers. Management of the supply chain thus involves, in essence, managing supply and demand in and between businesses”.

A quick analysis of this definition makes it possible to spot the organizational fields involved as well as the levels of management. By mentioning the search for suppliers and the questions linked to supply, purchases are, logically, integrated. In the same way, processing activities refer to businesses' industrial role. Finally and clearly mentioned, logistics is also integrated. Supply chain management is understood globally, by considering a management that involves suppliers “upstream” and customers “downstream”, with a diachronic vision between planning activities and concretely carrying out and managing them. Compared to the spectrum mentioned initially by Oliver and Weber, CSCMP's definition seems however to “forget” sales and, more generally, marketing.

Gibson *et al.*, who carried out a survey on behalf of CSCMP, give an interesting explanation for this “absence” [GIB 05]. Another, very similar definition, had in fact initially received greater approval from respondents. This definition further involved items relating to the “marketing-sales pairing”, linked in particular to the creation of demand and the processing of orders. This has not, however, been kept as, according to CSCMP's managers, it would have meant the partial integration of the field of marketing and commerce into supply chain management. If this integration was logical within businesses, as validated by professionals themselves, it would give rise to the question of the relationships between professional associations and, in particular, the most important of them, i.e. the American Marketing Association (AMA). Acting on such a definition would generally amount to integrating the field of the AMA in the CSCMP's giron, a predatory approach, especially when we recall the role played by the AMA at the CSCMP's startup as Camman and Livolsi recall [CAM 16].

This anecdote illustrates the divergences that exist on the edges of approaches to supply chain management and is witness more broadly to conflicts over professional territory, whether they are between associations, or between roles within businesses, which have through their practices, participated in the emergence of this approach.

1.4.1.2. *Multiple origins and visions or the quest for leadership*

When Oliver and Weber formalized their concept of supply chain management at the start of the 1980s, they did so in a context of a profound challenges to traditional organizations which were at this time called bureaucratic. Role silos were deemed to be slowing down business' responsiveness to markets (already) perceived as turbulent and were, furthermore, synonymous with inefficiency. From there, many managerial approaches aimed to reduce this lack of responsiveness and efficiency rapidly. Among these delayering techniques, the one which consists of reducing the number of managers has proved attractive to many businesses. Its application is potentially simple as it is enough to enlarge a manager's skill set to eliminate another. Thus, in the case of France, a business that had a regional breakdown based on administrative regions thus had 22 regional directors. A delayering approach made it possible to envisage a different breakdown with, for example, more than five regional directors in charge of the Ile de France, the North-East, the South-East, the South-West, and the North-West. The gains in the payroll linked to this structure are obvious and very many businesses applied this technique. The territorial administrative reform undertaken in France with the re-grouping of regions so as to have no more than 13 large regions belongs entirely in the same managerial vein, beyond the challenges of course in terms of the size of these regions. Another approach has also been almost systematically applied within businesses to gain in responsiveness and, always, the payroll. This is downsizing, which means *flattening* organizations. Here, too, the principle is simple since it involves decreasing the number of hierarchical levels within the business. If these techniques and approaches have made it possible to obtain results in terms of lowering costs rapidly, they have not remotely changed businesses' role structure and so make it possible to overcome criticism of these silos. Hammer and Champy have, for their part, this ambition [HAM 93]. By suggesting a reconfiguration approach for organizations around these processes, they developed a method whose aim lies in "the fundamental challenging and radical redesign of organizational processes, to carry out spectacular improvements in current performances on costs, services and speed". In this sense, the method of re-engineering management processes (Business Process Reengineering), suggested by Hammer and Champy, belongs to the supply chain management perspective. Beyond the criticisms directed at the effective implementation of the

approach, in particular in its capacity to ignore organizations' histories, their symbolic dimension, and to neglect to take their values into account, the real source of difficulty lay in the question in the actors' strategies and power plays in this reconfiguration. Thus, in the domain of supply chain management, the question of reconfiguring processes stumbles against that of management and leadership, which we mentioned previously. By returning to the business' main functions, the question asked is finally that of knowing if buying, production, logistics or marketing-sales is the most able to manage this supply chain?

Without entering here into a detailed presentation of the arguments for these domains, we would like, quickly, to sketch the evolution of each of these roles and disciplines, to show the structure of the arguments that lead them to believe that they are the most able to manage the supply chain with the aim of creating value for the business.

Logistics is naturally the most inclined to take this perspective through its anchorage on physical flows and, naturally, it crosses over the business' traditional roles and even its boundaries by involving suppliers "up-stream" and customers "downstream". The logistical process is in fact transverse by nature, from supplying from suppliers to distribution to customers, via industrial logistics between possible production sites. This transversality of the process makes it possible to consolidate the questions linked to managing flow with the questions of fluidity (continuity and flexibility), responsiveness and level of service that are posed by stock levels all along the chain and, more generally, the associated costs. A logistician's territory is naturally the supply chain and logisticians therefore believe they have a legitimate role in managing it.

The question of fluidity is generally at the heart of industrial managers' concerns in the area of production management. Although tradition anchored this role in an approach involving searching for local optimizations in line with work done at the start of the 20th Century in terms of operational excellence, the change occurred with the arrival of Japanese doctrines (from just-in-time to lean management). Far from first considering local *optima*, industrial managers turned first of all to optimizing internal and then external industrial processes with policies of out-sourcing and sub-contracting, developed *en masse* from the 1990s in an attempt to reduce the capital

invested. The argument for industrial managers managing the supply chain is therefore simple and comes down to the profitability of invested capital. It is the capacity to secure supplies, to avoid halts in chains, and in parallel to make economies of scale in production, which guarantees businesses' profitability. APICS's (dictionary, 2004) definition of production management is as such representative of the place claimed since it is "the effective planning, programming, use and control of an organization thanks to the study of concepts coming from design and industrial engineering, management of information systems, quality, management of stocks, control of management and other roles that affect the business".

What can form industry managers' flagship argument can however turn against them from the perspective of a non-asset business model, i.e. one that does not require its own assets to exist. In a market where the out-sourcing of operations, requiring substantial capital to be tied up, has almost become the rule, just like recourse to sub-contracting, in order to re-focus on the business' core competencies, the role of buying occupies a growing place. It is evolving into the management of external relationships (sub-contraction, out-sourcing, etc.) and finally embodies supplier management, i.e. the management of supplier relationships. This semantic ambivalence with supply chain management therefore places buying in a central position to assume leadership in this area. Its legitimacy is assured even more as, in many sectors, the proportion of what is already called the purchasing turnover in businesses' turnover is consequently increasing. Thus, the gains obtained at the level of buying materialize in the business' profitability. In this context, in which businesses further formalize their buying policy, buying is assisting in a change in the market that involves seeing the general conditions of buying overtake the general, classical conditions of sales and thus the materialization of a transition from a seller's market to a buyer's market.

Even if the CSCMP's definition has reduced, a little, the place of marketing and commerce in its content, it nevertheless remains that the customer is really at the center of concern in supply chain management. In globally saturated markets, where supply tends to be greater than demand, it makes sense of course to know the consumer better in order to better respond to their needs. However, we are far from the historic vision of marketing being responsible for defining a "good" product, marketed in the right place, at the

expected price with the necessary promotional support. This classic vision of the “4Ps” of marketing has given way not only to wider consideration of its field of application, from internal marketing linked to approaches to quality, to business to business marketing (BtoB), but also the increasing involvement of the customer in co-constructing suggested products. The customer is therefore central to supply chain management and marketing, of which they are the foundation and the most able to ensure leadership. M. Christopher even advocates changing the term and instead favoring either Demand Chain Management or Customer Relationship Management to confirm this centrality [CHR 05].

This quick overview of the domains involved in supply chain management illustrates the desire of each to present itself as more entitled than the others to assume management. Reasons can certainly be found in the activities of actors within organizations and the associated questions of power. It is also possible to consider, as we illustrated in the first section of this chapter, the specific points relating to sectors, with sectors in which it is entirely natural to leave management to this or that domain. However, another explanation also lies in the differences in representations of performance and the associated levers for action. In a pamphlet, Mintzberg condemns MBA type training courses for their ability to “manufacture” specialists, who reproduce the compartmentalizations that have been condemned for nearly 20 years [MIN 05]. He therefore condemns the responsibility of the teachers who teach these specialists, who perceive business performance with the blinkers associated with their field of expertise to the detriment of a more transverse vision. Christopher [CHR 05] thus pleads for an amended vision that consists of, at least, developing what he calls T skills, i.e. professional expertise guided by a transverse reading of performance. Teachers are not however the only ones responsible, as career management systems within businesses tend to reproduce this mode of evaluation and thus, find themselves in difficulty when it comes to recruiting a supply chain manager. In research on offers of employment for supply chain managers in France, it clearly appeared that recruiters had difficulty in defining the ideal profile in terms of professional background, and they often chose to describe the role’s responsibilities to enlighten potential candidates on the skills expected [LIV 11]. The fact that it is stated, in half of the offers, that past experience as a supply chain manager is expected, bears witness to the difficulty of creating profiles.

The definition and creation of supply chain management show the importance of the question of organization although this, curiously, has been least researched as Ellram and Cooper note [ELL 14]. Creating a real supply chain organization within businesses thus means, according to us, returning to the objectives of this approach and, therefore, to the needs associated with deploying it.

1.4.2. Objectives that require a transverse approach

The objectives of supply chain management are certainly to decompartmentalize role silos, but this is more of a means than an end in itself. The approach's real objectives lie in improving operational performance (section 1.4.2.1), which in fact requires greater transversality anchored on processes (section 1.4.2.2).

1.4.2.1. Objectives in terms of operational performance

The professional (or disciplinary) origins of supply chain management, which we have just introduced, make it possible to envisage the diversity of performance indicators from the cost of buying to the customer satisfaction index and turnover, via supplies or the cost of production to cite only a few examples to which we will return in the second chapter. However, taken in isolation, the wish to optimize these is in no way guaranteed to obtain an optimal overall result. This is the whole challenge for supply chain management – to highlight the indicators that make it possible to align the overall objective of the supply chain with the business' strategy. The metaphors traditionally used to describe a supply chain manager's work in this context take on their full meaning as the manager embodies either an orchestra conductor responsible for making all the musicians play together, or a skipper announcing and coordinating maneuvers in match racing for the America's Cup or the Jules Vernes Trophy! The performance is above all collective and occurs through coordination of different actors in the supply chain within the business first of all, and then with suppliers and customers.

The supply chain manager's objectives thus materialize in an attempt to acquire the best efficiency possible in terms of operational performance in the business. Measuring this performance means implementing a dashboard with some synthesis indicators. Three categories of indicators are needed for supply chain managers, and beyond this, finally, for any manager in charge of managing an operational process, as Table 1.11 indicates.

Categories of indicator	Examples of synthetic indicators
Operational performance	Level of service
	Overall cost
	Lead time
Organizational performance	Responsiveness
	Flexibility
Financial performance	Level of stock
	Working Capital Requirement (WCR)
	Cash-to-cash cycle

Table 1.11. *Synthesis dashboard for a supply chain manager*

The first category concerns the operational performance of processes in the supply chain, which can be discerned through three indicators. In line with the business model, it makes sense first to measure the overall level of service offered to customers and/or consumers. This rate of service is of course a synthetic indicator, which therefore covers both the differences between the demand forecast and the production carried out (“lost” turnover), and all the quality indicators linked to operations (delays, missing items, inversions, etc.). A second indicator is just as strategic as it is the overall cost calculated by combining all the costs inherent in the process linked to manufacturing and marketing a product of service. Behind the apparent simplicity of displaying this indicator, there is in fact the whole question of the traceability and allocation of costs that is posed here and therefore the question of the method of monitoring the management applied. Academic, like professional literature, on management control abounds in works that have either criticized traditional methods or suggested new approaches such as those we will mention in the second chapter. This question is absolutely crucial for supply chain managers, who need reliable, rapidly understandable data to be able to manage flows by making the right decisions. The examples from different sectors introduced at the beginning of this chapter show the importance of knowing costs precisely in order to arbitrate priorities between customers, distribution channels or even products. Finally, the last indicator in this category is a measurement of the time span in the supply chain between supply and delivery to customers, if we reduce this to the spectrum of a single business. This flow time or lead time, to use the more common expression, makes it possible to have an idea of the process’ duration and therefore, potentially, first to reflect on the more

organizational and/or financial questions that form the two other categories. Supply chain managers, therefore, have the objective of offering the best level of service with shortest lead time, at least cost.

The second category covers two indicators that further reflect the supply chain's organizational performance, even if we retain an operational perspective for the moment. Much more than simple indicators, they are in fact often mentioned as real core competencies for businesses. In fact, in a context where there is turbulence and uncertainty on the markets, responsiveness and flexibility appear to be significant sources of organizational efficiency. There is, however, the question of how to measure them in the framework of a dashboard for a business' supply chain. Very often, the measurements suggested appear complex or, on the contrary, partial, taking either the rate of service or the lead time. It in fact makes sense to return to the indicators in the first category in this measurement. Thus, responsiveness is measured via a business' capacity to maintain its rate of service and its unit cost, in the context of an additional order that will be delivered within a timespan acceptable to the customer, for example. In the same way, flexibility, whether in production or distribution, is a business' capacity to maintain its unit cost, its rate of service and its timeframes regardless of the volumes involved.

The last category comes from the more recent perspective of financial consideration of the supply chain, which is what the Euro Banking Association calls supply chain finance, i.e. "the use of financial instruments, practices and technologies to optimize management of the mobilized capital and of the cash flow needed in the supply chain processes between different partners" [EBA 13]. The financial challenge, mentioned in section 1.3, breaks down greatly at the level of supply chain management. Although traditionally, the level of stock was the benchmark indicator, it is now complemented by calculating the operating working capital requirement (OWCR) linked to the operating cycle, the supply chain's operational functioning, and the cash-to-cash cycle. These three indicators however merit some expansion. Doctrines linked to lean management of flows correspond to a rationale of decreasing stock all along the logistical chain, from primary materials via works in progress to finished products. The question therefore arises of how to arbitrate between this reduction of stocks and the chain's vulnerability resulting from recourse to more or less complex optimization models. Financial analysts therefore have a critical eye on stock by involving this constraint in their diagnostic. This can however sometimes

lead to (completely legal!) practices that we will term “balance sheet cleaning” when, at a distributor for example, flow management tightens the entire supply chain before account closure periods to record a very low level of stock and then to rush (taking account of the transport tariffs accepted in these periods) to the road to restock from suppliers and avoid ruptures! The question arises, in a similar case (given that we could give multiple similar examples), of the overall pertinence of these choices, which form the link between financial evaluation and operational performance. Still concerning stocks, it also makes sense to make the analysis more nuanced with the question of speculative stock linked to price volatility. Of course, this possibility is more the prerogative of large businesses, but it corresponds to a reality that must not be dismissed in the context of significant fluctuations in the price of some primary materials. Some years ago, the owner of a Michelin-starred restaurant in the south of France, which specialized in truffles, was distressed to find that their bank did not allow them to buy substantial quantities while prices were particularly low, given the exceptional truffle season. The second indicator, for evaluating the supply chain’s financial performance, is a classic in financial analysis (see section 1.3). Indeed, the OWCR is part of the cash flow analysis and consists, to express it more simply than it is presented in section 1.3, of studying the need for liquidity caused by the operating cycle (stocks) and time frames for payment from customers (accounts receivable) and suppliers (accounts payable). Supply chain managers’ objectives, to decrease OWCR, are therefore to contribute to the drop in stock, while accelerating the process of recovering amounts owed by customers and while trying to slow the time frames for paying suppliers while following the Law on Modernizing the Economy (2008), which fixes a framework for this with a maximum time limit of 60 days. The difference between the moment when the suppliers are paid and the moment when the customers pay corresponds to the cash-to-cash cycle, the third financial indicator for the supply chain, whose optimization requires recourse to increasing abstraction of invoicing and payment tools between actors in the chain.

The objectives assigned to the supply chain manager, such as those we have just described in the dashboard, should not make us forget that supply chain management is not limited to the business’ boundaries. Without denying the existence of conflicts and opportunistic moves between actors in the chain (to illustrate, see, for example, the research of Camman *et al.* [CAM 12, CAM 13a, CAM 13b] on logistical mutualization), a supply chain

manager's role is also to think of upstream and downstream collaborations to improve their business' operational performance.

The first domain for collaboration is unarguably sharing information on changes in the market and, more prosaically, sales. Forrester [FOR 58], in 1958, has shown stakes in inter-organizational information sharing for avoiding the consequences of false predictions and reactions that are excessive in terms of rupture or, on the contrary, the constitution excessive stocks. These consequences, and this is Forrester's real contribution, increasingly appear the further we move upstream in the distribution channel, as the figure illustrates. This effect is at the root of one of the first serious games (the Beer game) in management that makes it possible to manifest the difficulties of management without sharing quality information. However, despite this research, over the years, adages on controlling information ("whoever holds information, holds power") remained fixed within businesses until the arrival of the Effective Consumer Response (ECR) steps which, from the end of the 20th Century, has finally made it possible to move beyond these compartmentalized visions.

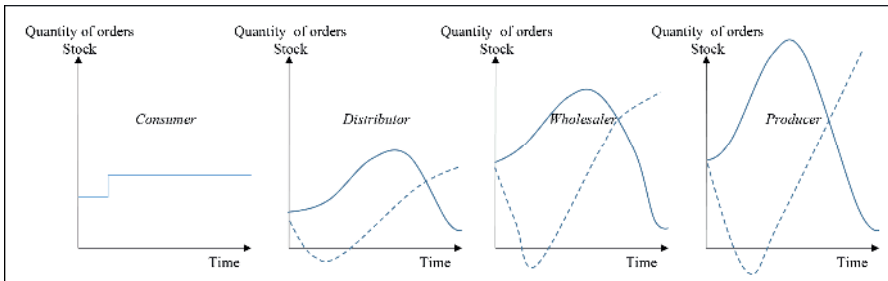


Figure 1.12. *Illustration of the Forrester or bullwhip Effect (source: J.W. Forrester [FOR 58])*

Although sharing information between actors in the supply chain is essential, it is not enough. Despite this, these questions often occupy all the attention, from reflection on the nature of the information exchanged, exchange protocols, or even support technologies. The example of a distributor launching a Joint Supply Management (JSM) project with one of their suppliers is illustrative in this respect of the risks of directing attention exclusively towards information systems. After having properly built the inter-organizational information systems needed, the project is launched and the data collected. When it is time to analyze the data, the two businesses

involved realize that they did not have sufficiently well designed or shared management control systems to enable them to analyze the relevance of the organization put in place in detail. This example is not unique and is not the prerogative of the fast-moving consumer goods sector. It is enough to remember the struggles of aeronautics manufacturers, be that Boeing or Airbus to mention only the largest groups, when launching complex programs such as Dreamliner or A380. To be managed effectively, supply chain managers' internal/external dashboards therefore require an approach more anchored on the different constitutive processes, internal as well as external.

1.4.2.2. *Needs in terms of decompartmentalization and processes*

Although, as we have just shown in the previous section, it is possible to develop the supply chain manager's dashboard to improve the business' operational performance, its effective management assumes the capacity to trace and share information whether it relates to markets (sales forecasts, consumer expectations, etc.) or costs, among other examples. Without this capacity to identify the different processes that constitute supply chain management, it is not only impossible to ensure the best coordination of operations but, above all, it is impossible to conduct arbitrages between, if not opposing, at least divergent visions in terms of levers for action within the business involved and, therefore, between the businesses involved. This difficulty further increases as the management systems (budgetary or payment policies) tend to reinforce compartmentalizations and so limit the possibilities for action in favor of more transversality in the business.

Given the three categories of indicators illustrated previously (corresponding to the triptych of operational, organizational and financial performance), it thus makes sense to identify the associated processes. By relying on the figure below, created by Lambert *et al.* [LAM 98a], we show a summary of supply chain managers' needs in this area.

Generally, operational performance is measured using the three indicators we have listed: the level of service, the overall cost and the lead time. As we have already underlined, these indicators are synthetic in the sense that they potentially summarize the performance of several linked or nested processes. Thus, the level of service measures overall consumer satisfaction with the processes in the supply chain. However, this satisfaction relates to the development of new products (Lambert *et al.*'s "product development and

commercialization” process), as well as to the associated services in commercial supply and to customer relations (“customer relationship management” and “customer service management”), or even to the availability of products (“demand management”). This availability is evidently linked to the process of production (“manufacturing flow management”) and its continuity and fluidity constraints, and so the process of supply from suppliers (“supplier relationship management”) to controlling the costs of this. The question of costs is essential to be able to assess the organization’s pertinence and to be able to proceed to arbitrages when managing overall performance. There is therefore a need for traceability of cost inherent to different products in the different distribution channels if we take the example of fast-moving consumer goods. In this area, the important thing is to be able to have access to fast and reliable information, which raises the question of the pertinence of current management control models such as those we will mention in Chapter 2. Finally, the flow time measures the supply chain’s overall lead time but it can of course be broken down into the different constitutive activities, or sub-processes.

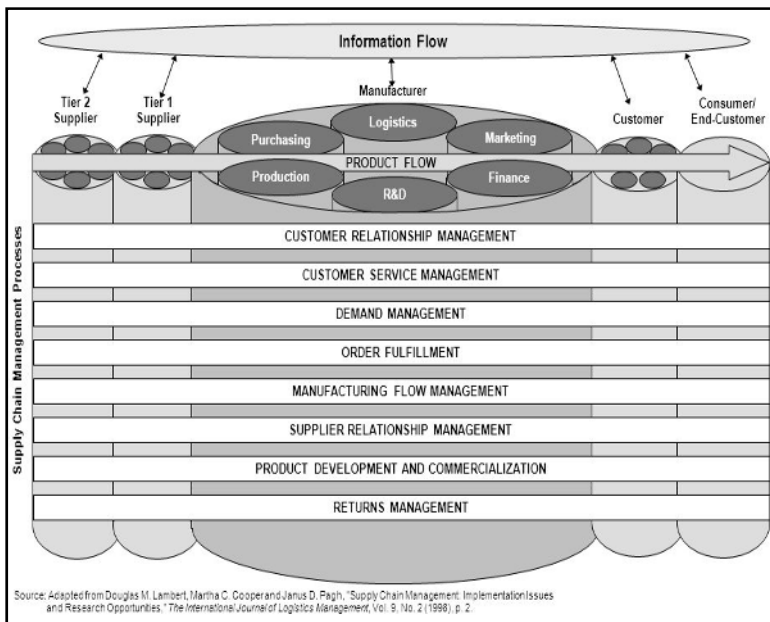


Figure 1.13. *The processes involved in supply chain management*

The supply chain's organizational performance is measured from the same perspective as the indicators for responsiveness and flexibility. We showed in the previous section (section 1.4.2.1), that measuring these indicators consisted of taking indicators of the level of service, of costs and of timeframes in the context of particular processes such as additional orders for responsiveness or extreme levels of activity (high vs. low season, holidays, etc.) for flexibility. This measurement of a supply chain's capacity to be responsive and flexible is often less formalized when these two elements constitute core competencies. Identifying support processes, and how to manage them, is therefore an important stake for supply chain managers.

Finally, the third category relating to the supply chain's financial performance also requires the core processes linked to the indicators unveiled previously (stock levels, WCR and cash-to-cash cycle) to be identified. Without going into details here, the question of stock levels mobilizes several processes, not only from sales forecast to supplies (which we will identify in Chapter 2 with the "sales and operations planning" approach or industrial and commercial plan approach, even if the latter is less comprehensive), but also production processes, knowing the cost of which can encourage the making of stocks if these mean economies of scale greater than the associated costs. For the WCR and the cash-to-cash cycle, we are at the heart of the emerging supply chain and the processes will relate to the administrative processes of sending and recovering invoices to and from customers and of payment to suppliers. Recent attention to these questions has sometimes, always in this context after the 2008 Law on Modernizing the Economy, given rise to sometimes dubious practices, slowing payments to suppliers and so reducing the WCR of the supply chains involved. Recent condemnation of these practices, and the businesses that engage in them, by the French Minister of Economy, has therefore aimed to make the law better respected in this area, while businesses, particularly SMEs, often have cash flow difficulties and do not have the same capacities to procure cash at the lowest cost.

This overview of the processes involved in the supply chain's performance bears witness to the underlying organizational difficulties. Although it is possible to clearly identify the objectives to be reached, it is clear that the nesting of the processes creates many difficulties for clear governance and the associated arbitrages. The hyper-segmentation desired by consumers thus calls for the very regular launch of new products, which leads potentially to an increase in production costs and in stock levels with slower flow times for some product references. In the same way, managing

omni-channel strategies requires supply chain managers to know each channel's specific processes and the arbitrages to be made in organizational terms. We could multiply these examples, which finally illustrate the difficulties of implementing supply chain management within businesses and makes it clear that, despite the progress made, there is still a long way to go to truly decompartmentalize businesses. This overview also illustrates needs in terms of tools and methods to support supply chain managers.

→ *Note to remember*

Supply chain managers' needs and objectives

“Supply chain management covers the planning and management of all activities covering the search for suppliers and supplies, transformation and all logistical activities. It also includes coordination and collaboration between partners in the chain, who may be suppliers, logistical service providers and customers. Supply chain management therefore involves, in essence, managing supply and demand in and between businesses” (CSCMP).

The objectives assigned to supply chain managers are measured in terms of operational performance and appear in a dashboard that summarizes three categories of indicators:

- Indicators of performance in the strict sense: level of service, overall cost and lead time
- Indicators measuring organizational performance: reactivity and flexibility
- Indicators measuring financial performance: stock level, Working Capital Requirement (WCR) and cash-to-cash cycle

To reach these objectives, supply chain managers need to identify the processes that contribute to carrying out operations and make it possible to decompartmentalize role silos in most businesses. Beyond the information systems needed in operations management, it is above all the information linked to the methods engaged and the associated costs that are vital to arbitrating better, and thus improving the supply chain's efficiency.

Box 1.11. *Supply chain managers' needs and objectives*

1.5. Conclusion

The aim of this first chapter was to identify managers' objectives and thus their needs in terms of the information and resources required to reach them. As we have explained, we have departed from our traditional plan (CEO and Board – financial director – supply chain manager) to show the main trends in the economy, then to illustrate the diversity of business models in some sectors that are emblematic of our economies to finally mark the main managerial orientations that exist behind the diversity of situations.

Although hyper-competition has become the rule, it seems that businesses' value propositions are in the end quite similar despite Kim and Mauborgne's [KIM 05] quest for a Blue Ocean. However, what differs between businesses is the complexity and diversity of cost and revenue structures. These are the organizational differences in the value chain, dependent on the business models chosen, which generate the main differences in business governance. Thus, organizational choices in terms of out-sourcing, the more or less resultant recourse to sub-contracting, and their consequences in terms of the mobilization of financial resources (from recourse to the lever effect based on borrowing, to a 2.0 – or 3.0 – model, which is very economic with equity) will engender different methods of performance management. However, whatever the choices made, organizational and inter-organizational agility is a necessity for all businesses today.

The overall performance management that is incumbent on directors thus involves deconstructing the strategic vision in the favored business model and, above all, ensuring effective implementation of the financial and business aspects in conjunction with one another. It is the entire strategic alignment between the different elements that is revealed here, and which assumes there are management systems, technologies and tools to ensure efficient deployment and management. In their turn, financial directors, like supply chain managers, will need tools not only to enact the strategies developed, but also to take the right decisions in managing their domain of responsibility to coordinate and maintain the overall alignment as well as possible.

The aim of the next chapter is therefore to introduce the tools, technologies and steps available to managers to reach the objectives decided.

