Logistics and strategic management in global networks: recommendations for strategic logistics processes based on generic strategy options.
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**Title of the Master Thesis**

Logistics And Strategic Management In Global Networks: Recommendations For Strategic Logistics Processes Based On Generic Strategy Options.

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<th>Abbreviation</th>
<th>Full Form</th>
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<td>Fig.</td>
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<td>Tab.</td>
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<tr>
<td>e.g.</td>
<td>for example</td>
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<td>SCM</td>
<td>Supply Chain Management</td>
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<td>SMEs</td>
<td>Small and Medium Enterprises</td>
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<tr>
<td>i.e.</td>
<td>id est (this is)</td>
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1. **PROBLEM DEFINITION AND OBJECTIVES OF THE WORK**

In the last years, the inrush of more competitive companies in the global market has forced the use of practices such as value analysis, customer focus, reengineering, the introduction of technological changes in the production processes, the implementation of quality assurance programs, the introduction of new information technologies, strategic alliances, the training of human resources and the use of innovative management tools.

This new competitive reality makes the companies to reach a good level of flexibility, speed of arrival to the market and productivity. And it is here where logistics plays an important role, from the efficient managing of the flow of goods and services towards the final consumer. The term logistics introduces the management of the goods and services flow, from the acquisition of raw materials and inputs at their origin point to the delivery of the finished product at the point of consumption.

![Flow of goods from acquisition to consumption](image)

Logistic activities have to be coordinated in order to achieve a greater efficiency in the entire production system. For this reason, logistics cannot be viewed as an isolated function, but as a global process of generating value for the customer.

Logistics is a set of activities that goes horizontally through the whole organization, affecting all its functions and tasks, this is the reason why it is necessary to create an adequate information system for all the involved actors, as well as a good coordination between them. The value for the customer is not created in a specific point, but along the entire logistic chain, so in this way the logistics management becomes an important tool for the competitive strategy of the organizations. It is very important to fix a relationship...
between the logistic processes and the strategy of the organization. Each company has to select the most appropriate strategy based on their strengths and market segments it serves. Not all clients require the same, so here logistics plays an important role.

To fix this relationship cited, it is important to have a clear vision of the general aspects that interact for the good fortune of the organization and to find the explanations that best suit for the task being developed. These aspects have been cited in italics in this chapter of problem definition and are the competitive strategies, the supply chain management and the logistic processes. This is the start point (but not less important) of the study.
2. GENERAL ASPECTS

2.1. Competitive strategies

As said in the introductive part of Problem Definition and Objectives of the Work, the market competitiveness has become an important point to take into account. The companies have to be aware of their competitiveness and to achieve this objective, to be competitive in a sector or particular market, it is important to have a clear strategy, in order to maintain market share and sales. Attending to the competitive strategies given by Porter\(^1\), three generic strategies result. Michael Porter argued that a firm’s strengths fall into one of two headings: cost advantage and differentiation. Applying these strengths in either a broad or narrow scope, result the strategies cost leadership, differentiation and focus. In this horizon, an important point to take into account is the logistic strategy to carry out.

<table>
<thead>
<tr>
<th>TARGET SCOPE</th>
<th>ADVANTAGE</th>
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<tr>
<td>Broad (Industry Wide)</td>
<td>Low Cost</td>
</tr>
<tr>
<td></td>
<td>Cost Leadership Strategy</td>
</tr>
<tr>
<td>Narrow (Market Segment)</td>
<td>Focus Strategy</td>
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<tr>
<td></td>
<td>(low cost)</td>
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</table>

Tab.1. Porter’s Generic Strategies

Formulate a strategy is then important for the good development of a company. In this line, two forms of strategy can be found:

\(^1\) Michael E. Porter, “Competitive Strategy. Techniques for Analyzing Industries and Competitors”. Born in 1947 in the United States, Porter is perhaps the most academic of the great thinkers of the management. Mechanical and aerospace engineer from Princeton and MBA and Doctor in Business Economics from Harvard, received more than a dozen honorary doctorates from universities around the world. Owner of a methodical and structured approach revolutionized the notions of strategy with more than 18 books and 125 published articles.
1. **Corporate strategy** where companies decide which line or lines of business to engage in. A current example of corporate strategies can be seen in many companies (especially electricity companies like Iberdrola, BP or Sniace) that are diversifying or centering his competitive strategy on the sector of the renewable energies.

2. **Business or competitive strategy** focuses on the way that has a company of competing in a sector or particular market. If a company is successful and prospers in an industry, this one can establish a competitive advantage on his rivals.

   The purpose and objectives of a firm are not something elaborated to remain in the company's papers, but they have a practical application, in order to disclose in a clear way where the company is today and where is wanted to be in the future, information required by owners, investors, employees, suppliers, customers and general society. In this way, a strategic plan, well communicated to all members of an organization, offers the employees the possibility of having a clear vision of the purposes and objectives of the firm, which at the same time facilitates actions and desired results that would be difficult otherwise. From another point of view, a firm without a clear strategic plan becomes passive in front of external pressures and less effective at dealing with change and sometimes is likely to be overcome by its rivals, losing market share and sales.

   Now it is time to develop the different strategies defined by Porter, starting with the one that result of the combination of both low cost and broad scope, this is the cost leadership strategy.

### 2.1.1. Cost leadership Strategy

The strategy **cost leadership** consists of maintaining the lowest cost in front of the competitors and achieve a high level of sales. In this way, quality, service, cost’s reduction through more experience, efficient construction of economies of scale, rigid control of costs and particularly of variable costs, are important points to pay attention to. Companies following this strategy place emphasis on cost reduction in every activity in the value chain.
### Tab. 2. Other requirements and common implications of the cost leadership strategy

<table>
<thead>
<tr>
<th>GENERIC STRATEGY</th>
<th>COMMONLY REQUIRED SKILLS AND RESOURCES</th>
<th>COMMON ORGANIZATIONAL REQUIREMENTS</th>
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<tr>
<td><strong>OVERALL COST LEADERSHIP</strong></td>
<td>Sustained capital investment and access to capital.</td>
<td>Tight cost control.</td>
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<tr>
<td></td>
<td>Process engineering skills</td>
<td>Frequent, detailed control reports.</td>
</tr>
<tr>
<td></td>
<td>Intense supervision of labour</td>
<td>Structured organization and responsibilities.</td>
</tr>
<tr>
<td></td>
<td>Products designed for ease in manufacture.</td>
<td>Incentives based on meeting strict quantitative targets.</td>
</tr>
<tr>
<td></td>
<td>Low-cost distribution system.</td>
<td></td>
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</table>

To reach a position of low total cost, frequently requires a high relative market share or another kind of advantage, which could be the access to the raw materials. It could also require a product design that facilitates its manufacturing or serve larger segments of customers to ensure sales. On the other hand, implement a cost leadership strategy could involve large capital investments in high technology and aggressive prices. Examples of companies following a cost leadership strategy include **RyanAir** and **easyJet** in airlines, and **ASDA** and **Tesco** in superstores.

Developing the example of RyanAir, its objectives are to offer low fares that generate more traffic of passengers maintaining the attention on cost-containment and operating efficiencies. The key elements of RyanAir strategy are:

- **Low Fares**: These low fares are designed to stimulate the leisure and business demand, which might used another type of transportation or which might not travelled at all. The fares are fixed in conformity with the demand for particular flights and by reference to the period remaining to the date of departure of the flight.

- **Customer Service**: Ryanair’s strategy is to deliver the best customer service performance in its peer group by trying to reach a good level of punctuality and fewer lost bags and cancellations, as well as by operating in uncongested airports.
• **Frequent Point-to-Point Flights on Short-Haul Routes:** RyanAir offers frequent point-to-point services on short-haul routes to secondary and regional airports around important population centres and travel destinations. Short-Haul routes allow offering frequent service, avoiding services required in longer flights, like connecting passengers, with everything what it endures (e.g. baggage transfer and transit passenger assistance costs).

• **Low Operating Costs:** RyanAir tries to reduce or control four of the primary expenses, which are listed below: aircraft equipment costs, personnel productivity, customer service costs and airport access and handling costs.

• **Taking Advantage of the Internet:** RyanAir started to use the Skylights system, which allows internet users to access Ryanair’s host reservation system and to make and pay for confirmed reservations in real time through RyanAir’s website, which has also been really promoted in the media.

• **Improvement of operative results with auxiliary services:** RyanAir provides auxiliary services, like the in-flight sale of beverages, food and merchandise or accommodation services and travel insurance, as well as car rentals

With this strategy, RyanAir has become one of the most famous airlines in the world and has increased its demand exponentially, as can be seen in the next figure:

![Ryanair Passenger Growth in Millions](image)

**Fig. 2. Ryanair Passenger Growth in Millions**

Following the chart of Porter and maintaining the broad market, taking into account the product uniqueness, the next step is the Differentiation strategy.

---

2 Extract from the corporate information of ryanair.com
2.1.2. Differentiation Strategy

The strategy **differentiation** consists of the development of a product or service that offers unique attributes that are valued by customers and that customers perceive to be better than or different from the products of the competition. The value added by the uniqueness of the product may allow the firm to charge a premium price for it. The firm hopes that the higher price will more than cover the extra costs incurred in offering the unique product. Because these unique attributes, if suppliers increase their prices the firm may be able to pass along the costs to its customers who cannot find substitute products easily.

The risks associated with a differentiation strategy include imitation by competitors and changes in customer tastes.

*Xerox Corporation*, for example, in trying to compete against *Canon*, decided to differentiate its copiers by providing high levels of service for parts and repairs to minimize delay times when a machine needed repair. In some cases, that time frame for repair is fifteen hours or less. The company did not feel that it could match Canon’s prices. Then, differentiation through excellent customer service became its strategy.

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<tr>
<th>GENERIC STRATEGY</th>
<th>COMMONLY REQUIRED SKILLS AND RESOURCES</th>
<th>COMMON ORGANIZATIONAL REQUIREMENTS</th>
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<tbody>
<tr>
<td>DIFFERENTIATION</td>
<td>Strong marketing abilities.</td>
<td>Strong coordination among functions in R&amp;D, product development and marketing.</td>
</tr>
<tr>
<td></td>
<td>Product engineering.</td>
<td>Subjective measurement and incentives instead of quantitative measures.</td>
</tr>
<tr>
<td></td>
<td>Creative flair.</td>
<td>Amenities to attract highly skilled labour, scientists, or creative people.</td>
</tr>
<tr>
<td></td>
<td>Strong capability in basic research.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Corporate reputation for quality or technological leadership.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Long tradition in the industry or unique combination of skills drawn from other businesses.</td>
<td></td>
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<tr>
<td></td>
<td>Strong cooperation from channels.</td>
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Tab.3. Other requirements and common implications of the differentiation strategy
And at the end of Porter’s discussion, the focus strategy can be found, implying both low cost and product uniqueness.

### 2.1.3. Focus Strategy

The *Focus Strategy* concentrates on a narrow segment and within that segment attempts to achieve either a cost advantage or differentiation. The premise is that the needs of the group can be better serviced by focusing entirely on it. A firm using this strategy often has a high degree of customer loyalty, what discourages other firms from competing directly. Because of their narrow market focus, firms following Focus Strategy have lower volumes and therefore less bargaining power with their suppliers. Some risks of focus strategies include imitation and changes in the target segments and other focusers may be able to carve out sub-segments that they can serve even better.

This strategy provides the company the possibility to charge a premium price for superior quality (differentiation focus) or by offering a low price product to a small and specialised group of buyers (cost focus). Ferrari and Rolls-Royce are classic examples of focus strategy in the automobile industry, so they have a small percentage of the worldwide market.

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<th>COMMONLY REQUIRED SKILLS AND RESOURCES</th>
<th>COMMON ORGANIZATIONAL REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOCUS</td>
<td>Combination of the above policies directed at the particular strategic target.</td>
<td>Combination of the above policies directed at the particular strategic target.</td>
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Tab.4. Other requirements and common implications of the focus strategy

In the discussion of the strategies, Porter presents the *value chain*, where the company is divided into five primary activities and four support activities, which have to be coordinated in order to achieve that the value chain operate efficiently. Logistics is present in this value chain in the form of two of the five primary activities, namely inbound and outbound logistics. Therefore, it can be seen that logistics activities can play an important role in helping to develop or sustain competitive advantage.
2.2. **Supply Chain Management**

The second basic point to deal with is the Supply Chain Management. The strategies, as a course of actions, schemes or principal ideas through which an organization or individual hopes to accomplish a specific objective or goal have already been treated from the point of view of Porter, but logistics supply chains play also an important role in the strategic plans of companies.

Since **Oliver and Webber**\(^3\) gave their definition of Supply Chain Management (SCM) more than twenty years ago, numerous definitions have appeared, causing confusion in specialized circles. It is as easy as doing an Internet search for “supply chain management definition” to enter in this confusion, due to the appearance of 3,170 possible sources. It is important to find a suitable definition for the study among all this confusion and to have a clear idea of what supply chain management is. To achieve this objective, some definitions are quoted and commented, mentioning common characteristics and differences.

While some definitions agree that SCM includes coordination and integration, cooperation among chain members, and the movement of materials to the final customer, there are still different views of how SCM should be defined. Analysing definitions and descriptions result the identification of several themes and sub-themes that occurred repeatedly:

\(^3\) Oliver, R.K., Webber, M.D., “Supply-chain management: logistics catches up with strategy”,
Some definitions focus on strategy while others focus on activities, processes, or some combination of the three. The reason for the existence of supply chains is that there are very few companies that can produce end products for end-customers from raw materials on their own, without the assistance of other organizations. The company that produces the raw material is often not the same company that sells the end products to the end-customer.

Starting with the quotation of the different definitions, it is required to say that this is only a sample of the complex variety of definitions in the literature.

To start, Lee and Billington\(^4\) define a supply chain to be a network of facilities that procure raw materials, transform them into intermediate goods and then final products, and deliver the products to customers through a distribution system.

With this definition, Lee and Billington give an objective and practical vision of a supply chain, in the simple way of an aggregate of business organizations that deal with:

- Procurement of raw materials
- Transformation into intermediate and final products
- Delivery

In a similar way, Jayashankar\(^5\) defines a supply chain as a network of autonomous or semi-autonomous business entities collectively responsible for procurement, manufacturing, and distribution activities associated with one or more families of related products.


As Lee and Billington says, Jayashankar’s supply chain consist of:

- Procurement
- Manufacturing
- Distribution

Ganeshan and Harrison⁶ explain with other words what the two first authors quoted defined:

A supply chain is a network of facilities and distribution options that performs the functions of procurement of materials, transformation of these materials into intermediate and finished products, and the distribution of these finished products to customers.

Stevens⁷ analyses the supply chain in two ways, extending the definition with the flow of information:

The supply chain is the flow of both information and material through a manufacturing company, from the supplier to the customer. Traditionally the flow of material has been considered only at an operational level, but this approach is no longer adequate. It is now essential for business to manage the supply chain in order to improve customer service, achieve a balance between costs and services, and thereby give a company a competitive advantage. To develop an integrated supply chain means managing material flow from three perspectives: strategic, tactical and operational. At each of these levels, the use of facilities, people, finance and systems must be coordinated and harmonized as a whole.

Stevens gives also importance to the customer, which is always present as the final addressee in the business activity, as well as to the coordination of human capital.

In a simplified way, Cooper & Ellram⁸ present de supply chain as an integrating philosophy to manage the total flow of a distribution channel from supplier to ultimate customer.

On the other hand, quoting Battaglia & Tyndall⁹: Strategic concept that involves understanding and managing the sequence of activities—from supplier to customer—that add value to the product supply pipeline.

Moreover, Stenger & Coyle defined the supply chain as an Integrative management of the sequential flow of logistical, conversion and service activities from vendors to ultimate consumers necessary to produce a product or service efficiently and effectively.

---

⁶ Ram Ganeshan and Terry P. Harrison. “An Introduction to Supply Chain Management”
⁷ Graham C. Stevens, “Successful Supply-Chain Management”,
⁸ Lisa M. Ellram and Martha C. Cooper, “Characteristics of Supply Chain Management and the Implications for Purchasing and Logistics Strategy”
⁹ A. J. Battaglia and Gene Tyndall, “Implementing World Class Supply Chain Management”
All this three last definitions indicate the intercompany nature of the supply chain for the purpose of coordinating the flow of material from raw materials through the final product, whether it is purchased by a consumer or by another industrial company that might use it.

**Poirier and Bauer**\(^{10}\) defined SCM as follows:

> Supply chain management (SCM) refers to the methods, systems and leadership that continuously improve an organization’s integrated processes for product and service design, sales forecasting, purchasing, inventory management, manufacturing or production, order management, logistics, distribution, and customer satisfaction. SCM involves optimizing the creation and delivery of goods, services, and information from suppliers to business customers and consumers. It means to improve the enterprise’s competitive position within the market served by itself and the constituent members of its supply chain network.

Poirier and Bauer affirm that the SCM have to deal with the improvement of:

- Product and service design
- Sales forecasting
- Purchasing
- Inventory management
- Manufacturing
- Order Management
- Logistics
- Distribution
- Customer satisfaction

With what the company can obtain a better competitive position in his market

In another book, **Lummus**\(^{11}\) defined SCM as:

> [...] all the activities involved in delivering a product from raw material through to the customer, including sourcing raw materials and parts, manufacturing and assembly, warehousing and inventory tracking, order entry and order management, distribution across all channels, delivery to the customer, and the information systems necessary to monitor all of these activities.

---

\(^{10}\) Charles C. Poirier and Michael J. Bauer, “E-Supply Chain. Using the internet to revolutionize your business. How Market Leaders Focus Their Entire Organization on Driving Value to Customers”

\(^{11}\) Lummus R. R., Krumwiede D. W. and Vokurka R. J. “The relationship of logistics to supply chain management: developing a common industry definition”
Here Lummus quoted again the importance of the information systems along the entire supply chain.

Elmuti\textsuperscript{12} presented the following definition of SCM:

\begin{quote}
Supply chain management works to bring the supplier, the distributor, and the customer into one cohesive process. The manufacturers, suppliers, transporters, warehouses, retailers, and customers are involved in a dynamic but constant flow of information, products, and funds. SCM has also become known as the supply web because they show how each unit interacts with the others. The suppliers and distributors that were once adversaries are now becoming partners for the betterment of both corporations. Managing the chain of events in this process is called SCM. Effective management must take into account coordinating all the different pieces of this chain as quickly as possible without losing any of the quality or customer satisfaction, while still keeping costs down.
\end{quote}

This definition involves all the points mentioned along the different definitions quoted, giving emphasis in the cohesion of all the actors that interact in the business process, talking about them as a web which works for the common betterment. With a good management of the Supply Chain, it is possible to obtain the long-term, strategic goal of SCM, that is to increase customer satisfaction, market share and profits for all members of the virtual organization, and the short-term objective, that is to increase productivity and reduce inventory and cycle time. But the management of the supply chain affect key business processes involved in producing and delivering a firm’s product and service, so it imperative to link supply chain strategy to the overall business strategy. A firm must develop strategic objectives for managing the supply chain based on overall corporate objectives. This definition will be the one to take into account in the following study.

\subsection*{2.3. Logistic Processes}

Firstly, it is important to have a look in what is Logistics with the definition adopted by the Council of Logistic Management, which states “Logistic is that part of the supply chain process that plans, implements, and controls the efficient, effective flow and storage of goods, services, and related information from point of origin to point of consumption in order to meet customers’ requirements”. This part of the Supply Chain has many processes or activities related, which are important to know and that play an important role in helping to develop or sustain competitive advantage.

A simplified view of the logistic processes could be represented as follows:

\textsuperscript{12} Elmuti D., “The perceived impact of supply chain management on organizational effectiveness”
2.3.1. Transportation

For a firm to run without the aid of transportation is virtually inconceivable in today’s global economy. Most companies are geographically divorced from their supply sources, making them dependent upon transportation to connect the supply source to the consumption point.

The transportation system is the physical link connecting a company’s customers, raw materials suppliers, plants, warehouses, and channels members; permits goods to flow between the various fixed points of the logistics supply chain and bridges the buyer-seller gap. In order to minimize total costs and maximize the customer value, transportation integration is essential in the supply chain. Integrative transportation means getting the right assortments to the right place in perfect condition at the right time throughout the supply chain.

As an example of transportation’s relative importance in a company, a study of 1994 physical distribution costs revealed that total distribution costs represented 7.7% of sales and that the outbound transportation cost amounted to 3.09 percent of sales, or 39.0 percent of total distribution costs. Warehousing cost was 2.12% of sales; customer service and order processing accounted for 0.47% of sales; administration was 0.35% of sales; and inventory carrying cost was 1.93% of sales.
Outbound transportation was clearly the largest component of total physical distribution costs, so it may represent logistics management’s major concern. Transportation decisions directly affect the total logistics costs, costs in other functional areas of the firm, and costs within other logistics channel members. And the quality of the transportation service affects directly inventory costs, stock out costs, and operating costs. For example, if a company switches from rail to air transportation to move raw materials from the supplier to the plant, the lower transit time permits the company to hold lower inventories, to meet demand during transit time and to use less warehousing space. But the company realizes these advantages at the expense of higher transportation costs. So the decisions of transportation have to be made taking into account how they will affect other elements of the logistics system.

2.3.2. Storage

It implies two activities: inventory management and warehousing. Inventory management allows the manager to increase productivity of capital by reducing material costs, preventing blocking up of large working capital for long periods and improving capital turnover. It involves optimization of resources available for holding stock of various materials. Lack of inventory can lead to stock-outs, causing detention of production, but a very high inventory on the other hand can result in increased cost of production due to high cost of carrying inventory. The optimization of inventory should ensure that stocks are neither too low nor too high. On the other hand, warehouses play an important role in the supply chain. It can be seen in the following figure:

![Diagram of roles of warehousing in supply chain management](image)

Fig 6. The roles of warehousing in supply chain management
There are different types of warehouses, as shown in the figure:

- **Raw material and component warehouses:** Hold raw materials at or near the point of induction in a manufacturing or assembly process.

- **Work-in process warehouses:** Hold partially completed assemblies and products at various points along an assembly or production line.

- **Finished goods warehouses:** Hold inventory used to balance and buffer the variation between production schedules and demand. For this purpose, the warehouse is usually located near the point of manufacture.

- **Distribution warehouses and distribution centres:** Accumulate products from various points of manufacture in a single firm, or from several firms, for combined shipping to common customers. Such a warehouse may be located central to either the production locations or the customers.

- **Fulfilment warehouses and fulfilment centres:** receive, pick, and ship small orders for individual consumers.

- **Local warehouses:** Distributed in order to short transportation distances which allows fast response to customer demand. Frequently, single items are picked, and the same item may be shipped to the customer every day.

A close relationship exists between transportation and the level of inventory and number of warehouses required. For example, if firms use a relatively slow means of transport, they usually have to keep higher inventory levels and usually have more warehousing space for this inventory.

Some of the decisions related to storage, thinking of inventory management and warehousing are:

- How many warehouses
- How much inventory
- Where to locate the warehouses
- What size the warehouse should be

### 2.3.3. Packaging

The packaging is a logistic process that affects many actors and areas. Packaging is of interest of the marketing area, thus it can be a way of selling a product or at least of providing product information to the customer. Packaging also occupies production managers, since they are often responsible for placing goods into the package; but packaging is especially important for the logistic manager, because the size, shape and type of packaging will affect materials handling and warehouse operation.
There are three key areas to take into account in the package design. The first is the package’s physical dimensions. The design has to take into account spaces in terms of the warehouse, transport vehicle and pallets. The product’s physical dimension must also look for the company’s materials handling equipment. The second consideration is the package’s strength. The package designer must analyze the package’s height, handling, and the type of equipment that will handle the package. The final consideration is package shape.

Customer service is increasing its importance in logistics. Thus companies need to integrate their packages with customers’ materials handling equipment. If this happens, the customer service will be improved. But nowadays maybe one of the most important points of the packaging and that occupy more concerned minds is the waste that is produced. This waste can be reduced directly by reducing the overall packaging a company uses or by recycling. The last option is a measure stimulated by the governments, for example, taking the statistics of Spain:

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>PACKAGING WASTE GENERATED</th>
<th>RECYCLED MATERIALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glass</td>
<td>1677</td>
<td>745</td>
</tr>
<tr>
<td>Plastic</td>
<td>1565</td>
<td>325</td>
</tr>
<tr>
<td>Paper and paperboard</td>
<td>3133</td>
<td>2169</td>
</tr>
<tr>
<td>Metal</td>
<td>469</td>
<td>280</td>
</tr>
<tr>
<td>Wood</td>
<td>942</td>
<td>414</td>
</tr>
<tr>
<td>Other</td>
<td>12</td>
<td>ND</td>
</tr>
<tr>
<td>TOTAL</td>
<td>7798</td>
<td>3932</td>
</tr>
</tbody>
</table>


These statistics show that in the year 2005, 40.2 percent of the packaging waste was paper and paperboard, and a big quantity of the total waste, concretely the 43.5 percent, was recycled, due to the legislations to enforce business and community recycling.

2.3.4. Materials handling

The materials handling is important to the good warehouse operation. Logistics managers are concerned with the movement of goods into a warehouse, the placement of goods in a warehouse, and the
movement of goods from storage to order-picking areas and eventually to dock areas for transportation out of the warehouse.

The general objectives of materials handling, apply to areas besides logistics and have varying importance for the logistics manager:

- Increase effective capacity of warehouse
- Minimize aisle space
- Reduce number of times product is handled
- Develop effective working conditions
- Reduce movements involving manual labour
- Improve logistics service
- Reduce cost

Fig.7. General Objectives of Materials Handling

One basic materials handling objective is to increase the warehouse usable capacity. Using as much of this space as possible will minimize the warehouse’s operating cost. A second aspect of space utilization is to minimize aisle space, always maintaining aisles that allow the movement in the warehouse. Another material handling objective is to reduce the number of times a company handles goods to operate efficiently and the key to minimizing movements is control.

One important objective by handling materials is safety. All materials handling systems, whether in connection with logistics or manufacturing, should minimize danger to workers while improving productivity. Another part of this objective is to eliminate as much as possible short-distance warehouse movements, which are monotonous and involve heavy manual labour. Thus this objective suggests that companies should automate warehouses as much as possible.

Moreover, materials handling plays a key role in getting goods to customers on time and in the adequate quantities and effective materials handling can contribute to a cost minimization program by increasing productivity. Also, using space more efficiently and misplacing items less frequently will lead to decreased cost.
2.3.5. **Order Fulfilment**

Another logistics area is the order fulfilment that consists of the aggregate of activities to complete customer orders. One important physical distribution factor is the lead time, that is, the amount of time between the placing of an order and the receipt of the goods ordered. How the lead time is set, used and reviewed is a critical issue for a business. Realistic lead times are required to manage the business effectively but it is not often easy to establish what a realistic lead time is. For example, if when planning, unnecessarily extended lead times are used, this will cause material requirements scheduling to recommend manufacturing and purchase orders earlier than necessary, with the result that inventory will arrive too soon and stock levels will be inflated. Moreover, these excessive lead times have a direct impact on the customer, who will have to wait a not necessary long time to see his request fulfilled.

2.3.6. **Forecasting**

The manufacturer must forecast, or estimate, customer demand. This sales forecast should indicate the sales amount the manufacturer expects for each item and the time period the sales projection covers. Accurate forecasting of inventory requirements and materials and parts is essential to effective inventory control.

The next figure shows the companies’ sales forecasting and its integration with production scheduling activities:

![Integration of Sales Forecasting and Production Scheduling](image-url)
Trying to explain the figure, the first step is to develop a twelve-month forecast of demand by month using traditional approaches to a three-year history file of data on demand, price, seasonality, availability, deals, and promotions. In the second step, brand and product managers review the forecast and recommend changes. Then, a statement of gross market requirements is obtained. The third step involves developing aggregate production schedules for the next twelve months and finally the logistics function assumes responsibility for scheduling production on a short-term basis, in order to coordinate demand for finished product with the timing and availability of needed production inputs.

### 2.3.7. Production Planning

The process called production planning involves coordinating product supply with product demand. As the figure shows, the starting point of the production planning and control process is the demand for the finished product the company produces and sells. This demand is the process’s independent variable, since the seller cannot control customer demand.

![Fig.9: Overview of Production Planning and Control](image)

Production managers determine the number of units necessary to guarantee adequate market coverage.

### 2.3.8. Purchasing

Transportation cost has an important relationship with the geographic location of raw materials and component parts purchased for a company’s production needs. Talking about transportation and inventory costs, the quantities purchased would also affect logistics cost, thus the logistic activity of purchasing has an effect in the strategic part, focusing on its ability to create collaborative relationships for firm advantage.
2.3.9. **Customer service**

Customer service is the most important part of the supply chain. Having the right product at the right time, in the right quantity, without damage or loss, to the right customer is an important principle of logistics systems that recognizes the importance of customer service. If a customer does not receive a delivery as promised due to the bad running of the logistic system, the company could lose future sales.

A firm could achieve a competitive advantage by offering high levels of logistical customer service. Thus, is good to see the customer service as a product that may add significant value for a buyer. High levels of logistics customer service can become a strategic way for a company to differentiate itself from its competitors.

There are three levels of customer service involvement:

- **Customer service as an activity:** This level treats customer service as a particular task that a firm must accomplish to satisfy the customer’s needs.

- **Customer service as performance measures:** This level deals with the customer service in terms of specific performance measures, like the percentage of orders delivered on time and complete and the number of orders processed within acceptable time limits.

- **Customer service as a philosophy:** This level elevates customer service to a firm commitment to provide customer satisfaction through superior customer service. This interpretation involves a dedication to customer service that exists in the entire firm and all of its activities.

2.3.10. **Other activities**

Parts and service support, return goods handling, and salvage and scrap disposal.
3. RELATIONSHIP BETWEEN PORTER’S GENERIC STRATEGIES AND LOGISTIC PROCESSES

Having the basic points of the theme clear in mind, it is time to find relationships between two of the important basics of the topic, the generic strategies and the logistic processes. Depending on what is the competitive strategy followed by the company, the strategy to follow in the logistic processes will change, and a good following of the logistic processes strategy will allow the company to achieve competitive advantage in front of the competence. Let’s start with the cost leadership strategy, and all the logistic processes treated above.

3.1. Cost Leadership Strategy

3.1.1. Cost leadership strategy and Transportation

A company has the responsibility of taking many important decisions; one of them is to select the mode of transportation or the shipper that will take care of the movement of goods. The shipper selected is so important, that directly affects the operation of the logistics facility and other logistics system functions. The shipper selection decision, then, not only fixes its attention on the prices of different transportation methods, but also considers the other costs associated with how the transport method’s service affects the installation operation. The process consists of two parts. First, the firm selects a transportation mode. The choices include the basic modes of rail, water, truck, air, and pipeline and intermodal forms too. The second step in the decision is to select a specific shipper or carrier from within the chosen mode or intermodal form. The specific carrier selection requires the firm to choose the legal carrier type: common, contract, exempt, or private.

![Fig.10. The carrier selection decision](image-url)
The figure above shows the basics steps of the shipper selection decision, treating them as stairs that have to be followed in order. The second step, which as said consists of the concrete selection of the legal carrier type, gives the opportunity to choose between the following:

The *common carrier* is a for-hire carrier that serves the general public at reasonable charges and without discrimination. Is very regulated economically, which acts to protect the shipping public and to ensure sufficient transport service within normal limits. The common carrier operates under these requirements: to serve, to deliver, not to discriminate, and to charge reasonable rates.

The *contract carrier* is a for-hire carrier that does not serve the general public, but serves one or a limited number of shippers with whom it is under specific contract. Usually, a contract carrier’s rates are lower than those of common carriers. The contract carrier gives a specialized type of service to the shipper. Because the carrier does not serve the general public, it can tailor its services to meet specific shippers’ needs by using special equipment and arranging special pick-ups and deliveries.

The *exempt carrier* is a for-hire carrier exempt from economic regulation regarding rates and services. The primary reason for using an exempt carrier is lower transport rates.

The *private carrier* is essentially a firm’s own transportation. The private carrier is not for-hire and involves any person who transports property of which such person is the owner, lessee, or bailee, when such transportation is for the purpose of sale, lease, rent, or bailment, or in furtherance of any commercial enterprise. The basic reasons for a firm to enter into private transportation are cost and service. When for-hire carrier rates increase, many firms find private transport a means of controlling transportation costs. By using private transportation, a firm gains greater control and flexibility in responding to buyer and plant demands. This increased control and flexibility may result in lower inventory levels, greater customer satisfaction, and greater efficiency at the loading and unloading docks. The firm can also use private equipment as an advertising medium. On the other hand, the private carrier has also disadvantages, like big capital requirements and problems in labour and management.

The next table shows the relative importance of the carrier selection determinants for firms selecting motor carriers in today’s deregulated environment.
### Tab.6. Relative importance of the carrier selection determinants

As said before, a firm that follows a cost leadership strategy tries to maintain the lowest cost in front of the competitors and achieve a high level of sales. This strategy places emphasis on cost reduction in every activity in the value chain. Combining the strategy part with the carrier types, generally a firm based on low costs will do its own transportation, without hiring external logistics agents, this is, private transportation, achieving greats costs and service, flexibility and control.

![Fig.11. Visual Scheme of the relationship between cost leadership strategy and transportation](image-url)
It can be seen in a practical example. Aldi, with the principle “Qualität ganz oben - Preis ganz unten”, The highest quality - The lowest price, shows the basis of its philosophy. Aldi is the 9th largest grocery retailer in Europe by sales volume. This has been achieved by their simple business model: reducing company operational expenditure, this means purchasing only one line per item from the supplier, thus limiting choice for the consumer however, their transportation costs are kept to a minimum by delivering their stock straight from the warehouse to the store being merchandised in the pallets they arrived in. Through vertical integration, they can eliminate additional costs associated with dealing with external suppliers and producers and also erect barriers to entry for competitors.

Continuing with the strategy of cost leadership, it is time for continue the study of the different implications of the relationships with the next logistic process previously treated the storage.

3.1.2. Cost leadership strategy and Storage

Trying to reduce costs in every activity in the value chain, which is what the cost leadership strategy tries to follow, storage, implying inventory management and warehousing, plays an important role. With the cost leadership strategy, the inventory management has to work in the most effective way. The level of stocks can manage to suppose the biggest investment of the company, comprising even more than 50% of total assets in the distribution sector. Then, if a bad inventory management exists, significant financial losses can result. For example, independently of the form of inventory, the inadequate management of this inventory can result in excesses in the order of materials and in its loss. The wrong inventory management can even end with the theft. Companies that have firm control of their inventory, which means, a good inventory management, know their business value, the value of their product, as well as the products needed in the future. Companies that have an understanding of their inventory also find that in the future will never need additional storage space, unless the business itself expands, because they managed the space efficiently.

The following figure shows in a clear way the relationships and implications of the way that the inventory management is developed.
The other part of the process storage, the warehousing, also plays an important role in developing the cost leadership strategy. The use of the space of storage has to be used efficiently, due to the treatment of this space as a valuable asset. For instance, many warehousing facilities waste much space by not storing goods as high as possible. Horizontal warehouse space is usually the most obvious and easiest to fill. But the vertical dimension is also a cost factor, and a warehouse operation must use this space effectively in order to be efficient. Warehouse managers must focus on cubic space, not just on floor space.

A good way to maximize the use of the cubic space in the warehouse is using shelves with mobile bases. This provides compact shelving and significantly increases the storage capacity without losing direct access to each pallet, removing and opening corridors only when necessary, as the image shows:

Fig. 13. Shelves with mobile bases
The next step is to find relationships between the same strategy treated all along during this chapter and the next logistic process: the material handling.

3.1.3. **Cost leadership strategy and Materials handling**

The warehouses have as principal objective to give the materials an adequate protection. The principal resource of the warehouses is the space, so it is searched to cover the principal objective of the warehouse taking the maximal profit of the available space. Achieving this purpose with a careful planning will help the company to follow the cost leadership strategy. In the same way, if the warehouses are correctly distributed, the movement of goods inside will correspond with a minimization of costs. The form of organizing or administrate the department of warehouses depends on several factors like the size and the plane of organization of the company, the degree of decentralization wished, the variety of products manufactured, the relative flexibility of the equipments and facilities of manufacture and programming of the production. Nevertheless, some points could be common in all the distributions of warehouses:

- Place the articles of more demand near the doors of reception and deliver.
- Reduce the distances between articles and the staff, one way to reduce costs.
- Reduce movements and manoeuvres.
- Prohibit the entry to the area of storage to strange staff. Only authorized personnel for inventory could enter.
- Control the exits of goods of the warehouse with authorized documentation.
- Register the stocks every day.
- Eliminate superfluous documents.
- Reduce the waste of space, designing in proportion of what is being stored.
- The area occupied by corridors must represent a percentage of the entire storage area as low as the conditions of operation permit.

Following these points relative to the distribution in the warehouse, the concrete company can reach the possibility of achieving a competitive advantage following a strategy of cost leadership.

All the points treated so far are important in order to achieve the objective concerned, but at the end of the managerial activity is always the customer, who will be the main actor of the following point.
3.1.4. **Cost leadership strategy and Order Fulfilment/Customer Service**

As said before, to reach a position of low total cost, frequently requires a high relative market share. To achieve this objective is primordial to satisfy the customer, who is the final addressee of the managerial activity, by completing his orders in the time and in the space required.

The logistic activity of customer service can be viewed as having four dimensions: *time, dependability, communications and convenience*. The buyer thinks in the *dimension time* as the lead time, which is nowadays highly controlled. With the good managing of the basic elements of lead time, this means, ensure that order cycles will be of reasonable length, the company can reach a good level of customer service.

On the other hand, to some customers *dependability* can be more important than lead time, because with a fixed lead time the client can minimize his inventory level and would have no need for safety stock to avoid stock-outs resulting from changing lead times. The seller that provides a dependable lead time permits the buyer to minimize the total cost of inventory, stock-outs, order processing and production scheduling. But confidence refers also to delivering the order in safe condition and consequently with the customer’s order.

The third dimension, *communications*, involves the transfer of the order information from the order to the warehouse receipt with the use of EDI as well as the communication with customers. Without customer contact, the logistics manager is unable to provide the most efficient and economical service. But this contact must be bidirectional, thus the seller must be able to transmit logistic information to the customer.

And the last dimension of customer service, *convenience*, refers to the flexibility of the logistic service. Convenience recognizes customers’ different requirements but should not be taken too far, providing a specific service level policy for each customer.

In conclusion, a good customer service helps the company in the acquisition of new clients, as well as in the preservation of the already existing ones, which ends with the increase of the market share. Satisfied customers will support the company over time and recommend it to their friends, while disaffected customers will generate negative publicity for the managerial activity.

![Visual Scheme of the implications of good customer service](image-url)
3.1.5. *Cost leadership strategy and Forecasting/Production Planning*

It is important to make an accurate forecast of the needs of materials and inventory requirements, as well as of the plan of production. If this happens, there will be a better use of the investment and it will help the company prevent losses by making the adequate decisions based on relevant information. With a good forecasting, it is possible to maintain a rigid control of the costs, especially of the variable costs, which is an important point to take into account when following a cost leadership strategy.

To achieve an accurate forecast, it is important to have clear in mind the meaning of it, where the company wants to arrive. In this way, there are different forms of forecasting that serve different purposes. *Long-term forecasts* usually cover more than three years and are used for strategic purposes. These forecasts might go beyond customer demand to other key corporate resources such as production capacity and desired inventory asset levels. *Mid-range forecasts* cover between one and three years and are used for budgets and sales plans. Again, these might predict more than demand; and finally, *short-term forecasts*, the most important for the operational logistics planning process. They project demands into the next several months and in some cases more than a year out.

What concerns the production planning is to anticipate the factors of labour, raw materials, machinery and equipment necessary for the manufacture that is determined in advance, in relationship with the utilities that want to be achieved, the market demand, the capacity and facilities of the plant, and the jobs that are created. Production planning is the activity occupied on deciding the resources that the company needs for future industrial manufacturing operations and distributing these resources so that the desired product is manufactured in quantities with the lowest possible cost.

3.1.6. *Cost leadership strategy and Purchasing*

Having the logistic process of purchasing in mind and trying to reduce the logistic cost, the company can follow some strategies. In one hand, the quantities purchased affect logistics cost, so the company should buy large volumes, which would allow to achieve lower prices than others that buy less quantity. The sellers offer discounts for quantity to encourage customers to buy in large quantities. The reason of this discount is based on the fact that large purchases reduce the cost of shipping and sales and move the functions of storage, financing and assumption of risk to the buyer. Moreover, buying always from the same suppliers will allow being able to negotiate substantial discounts.
In this field, the purchasing manager plays an important role, whose responsibilities may include seeking reliable vendors or suppliers to provide quality goods at reasonable prices, negotiating prices and contracts, reviewing technical specifications for raw materials, components, equipment or buildings, determining quantity and timing of deliveries and forecasting upcoming demand.

At this point it is time to go a step further and see what happens when changing the competitive strategy to follow. The next strategy of Porter is the differentiation strategy, which will be related as well as the cost leadership strategy with the different logistic processes.

3.2. Differentiation Strategy

3.2.1. Differentiation Strategy and Transportation

As well treated in previous paragraphs, the strategy of differentiation attempts to find the authenticity of the product or service that will be valued by customers and that customers perceive to be better than or different from the products of the competition. To offer a unique product means extra costs, which are expected to be covered with higher prices that the customers don’t hesitate to pay. Then, unlike the cost leadership strategy, the differentiation strategy does not focus its attention in the cost reduction in every activity in the value chain, so the transportation will be the appropriate in each case, without taking care of how much does it costs. The important thing is that the mode of transportation helps to develop the uniqueness character of the product or service. An option of carrier type would be a contract carrier, that does not serve the general public, but rather serves one or a limited number of shippers with whom it is under specific contract and provides a specialized type of service to the shipper. Because the carrier does not serve the general public, it can tailor its services to meet specific shippers’ needs by using special equipment and arranging special pick-ups and deliveries.

Supposing high-value goods as the unique products, there is often more chance for damage with them. Damage to such goods will cost the transportation company more to reimburse. Transportation companies also trend to charge higher rates for higher-value products because their customers can typically afford to pay a higher rate for such products.
The next point follows the natural line of the topic and treats the relationship between the strategy of differentiation and the logistic process of storage.

3.2.2. Differentiation Strategy and Storage

In this time, it will only be treated the part of the storage corresponding to the inventory management. The inventory management is always a critical point, as could be seen in the case of the cost leadership strategy. But in this case is even more important, insomuch as the customer is waiting for a service or product that is irreplaceable, unique, and the fall of the stocks can end with discontented customers. The figure below, which illustrates the general relationship between inventory and customer service levels, suggests that increasing investments in inventory may result in higher levels of customer service.
This is the case of a company that has no disposition of all the pieces that it needs in order to complement the orders in the opportune moment. The ones that ordered the product can be completely dissatisfied with the service; or a company that announce certain products and does not have sufficient stock to satisfy the demand of the customers. Once again, the dissatisfaction of the customers is the result. So here the possible break of stock guides towards the customer service, seeing that all logistic processes are connected.

3.2.3. Differentiation Strategy and Packaging

The packaging seems to be the less important part belonging to the logistic process, but actually is an element that can help to differentiate the product from those offered by the competence. So depending on the managerial activity, to pay attention to the type of packaging can be important or not. The differentiation in this logistic process can be adjusted depending on groups of ages and socioeconomic groups.

An example of differentiation in the logistic process of packaging can be seen in one business area of Grupo SOS, nowadays the second Spanish alimentary group for turnover among the companies of the sector that quote in the Spanish stock\(^\text{13}\). In the oil market has a position of leadership with CARBONELL, the best-selling brand of oil in the world and in Spain has been the first big Spanish oil brand to incorporate a new package, the tetra pack, achieving competitive advantage in front of competitors with a differentiation strategy applied in the package.

3.2.4. Differentiation Strategy and Materials handling

With the differentiation strategy, there won’t be a special strategy to follow in the logistic process of materials handling, but will be kept the same procedure followed in the cost leadership strategy. Thinking in a possible definition of materials handling,

Efficient short-distance movement that usually takes place within the confines of a building such as a plant or a warehouse and between a building and a transportation agency.

it is clear that the firm must take the maximal profit of the available space into the warehouse with a careful planning, which is always important in order not to have unnecessary costs.

\(^{13}\) Font: Corporative Information from www.gruposos.com
3.2.5. Differentiation Strategy and Order Fulfilment/Customer Service

It is important to remember that the success of a company depends essentially on the demand of its clients. They are the principal protagonists and the most important factor involved in the business game. The market is totally different from before, when was very predictable and understandable. Today the situation changed dramatically. The pressure of the offer of goods and services and the saturation of markets forces firms from different sectors and sizes to think and act on different criteria to attract and retain the customers. So this differentiation can be found in the capacity of satisfy the customer. In this field, the company can try to offer a unique service with, for example, a wide after-sales service or maintenance of the product that the competence does not develop. Moreover, trying to complete the orders in the time and in the space required having more success than the others would also help to maintain a preferential position among the customers, as well as good treatment of the client.

A possible way to develop a differentiation strategy in the customer service is offering a special delivery to our customers that the competence does not perform. This affirmation can be seen well with an example: Domino’s Pizza established, unlike the competence, its own pizza delivery service, which in the late 60s was pretty minimal and decided to focus the managerial activity on that, reaching a profitable enterprise. Doing this, Domino’s Pizza achieved a position of uniqueness among this sector of the restoration and nowadays is the biggest second chain in this type in United States and counts with 9,000 establishments in more than 60 countries.14

3.2.6. Differentiation Strategy and Forecasting/Production Planning

Ideally, the firm differentiates itself along several dimensions. But in this case, as well as in the materials handling process, in forecasting and production planning the same strategy as in the cost leadership will be followed. Only develop an accurate forecasting in order to help the company prevent losses by making the proper decisions based on relevant information and to maintain a rigid control of the costs.

3.2.7. Differentiation Strategy and Purchasing

The product or service offered by the company following a differentiation strategy has unique attributes for the customer and due to this singularity, the costs are higher. To achieve a differentiation in front of the competence it is possible that, for example, the company had to buy raw materials from a location

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14 Font: Corporative information from www.dominos.com
that raise the costs. But with this strategy it is expected to cover these extra costs with a high price, so the purchasing will be the necessary in any case.

Putting an example, if in the process of differentiation of a car company in Spain it is necessary to buy some parts of the car from a supplier in Australia to give the product special attributes, the company would do it, expecting to cover the involved extra costs of the distance with high prices for the client.

At this stage of the study, two of the Porter’s competitive strategies have been treated and related to the different logistic processes. Now it is time for the focus strategy in all its forms, where some difficulties in the development of the relationships will appear, with the consequence of the search of other variables that help the ongoing development.

3.3. **Focus Strategy**

3.3.1. **Focus strategy and Transportation**

Although the cost leadership and differentiation strategies are aimed at achieving their objectives in the whole industry, the focus strategy is built around serving a particular target very well, and each functional policy is developed with this in mind. The strategy follows the premise that the firm is able to serve its narrow strategic target more effectively or efficiently than competitors who are competing more broadly.
Having this in mind, it is clear that a company with focus strategy will be based on meeting the specialized needs of the customers. Then the transportation will be the appropriate to move the raw materials and the finished goods in the quantities required for the particular target served, to stock only the narrow materials and products. Thus the carrier type that seems to be the adequate in this case is also the contract carrier, which does not serve the general public and can tailor specific services by using special equipment and arranging special pick-ups deliveries.

### 3.3.2. Focus strategy and Storage

With a particular clients’ group in the spotlight, the firm will stock only their narrow product lines and this market-oriented warehousing to the customer allows the firm to serve the customer with shorter lead times, this is, the amount of time between the placing of an order and the receipt of the goods ordered, which is an important parameter in order to maintain a good customer service and to serve the particular target very well. Moreover, the location of the warehouses will be affected by the situation of the reduced customer portfolio.

![Visual Scheme of the relationship between focus strategy, storage and customer service](image)

**Fig.18.** Visual Scheme of the relationship between focus strategy, storage and customer service

### 3.3.3. Focus strategy and Packaging

With customer service playing an ever-increasing role in logistics planning, companies need to integrate their packages with the materials handling equipment of the particular clients of the target served. If this is not done, the customer will have incompatible equipment that will prejudice their ability to receive and store those goods, which can end with losses in the customer service value. It is important to remember that all the managerial activities have to be performed in the precise way to satisfy the last step, this is, the
customer. Companies need to integrate the package with the material handling of the customer. For example, a special new package that can interface with a company’s innovative equipment may move products in a cheap way, but a customer’s incompatible equipment will prejudice their ability to receive and store those goods, and, as said before, customer service value may be lost.

3.3.4. Focus strategy and Materials handling

In a firma following the focus strategy, it is important to maintain the satisfaction of the customers that belong to the target served. And here materials handling improves efficiency by making the logistics system respond quickly and effectively to plant and customer requirements. Materials handling plays a key role in getting goods to customers on time and in the proper quantities.

The service objective receives much attention from the logistics manager, who must constantly ensure that the materials handling system will respond quickly and efficiently to customers’ orders and to production schedule’s requirements. Customer service improvements that may be possible through improvement in materials handling are easy to be missed.

3.3.5. Focus strategy and Order Fulfilment and Customer Service

With the premise that the needs of a group can be better serviced by focusing entirely on it, it is clear that it is necessary a good customer service in order to achieve a high degree of customer loyalty, what discourages other firms from competing directly. Today’s consumers are different than before. They have high standards for quality, and brand loyalty is not necessarily something that they support. They want products at the best price, with the best level of service, and at times convenient to their schedules. Successful companies have adopted customer service approaches that recognize the importance of speed, flexibility, customization and reliability.

3.3.6. Focus strategy and Forecasting and Production Planning

The firm following focus strategy is seen to have more control over the customers because of the strategy’s premise of serving a particular target very well. Thus the manufacturers’ task of forecasting or estimating customer demand will be easier than in the other cases and a more accurate forecast of the needs of materials, as well as of the plan of production will be obtained.
3.3.7. *Focus strategy and Purchasing*

The narrow market served by the firm following the strategy of focus means the movement of lower volumes in the raw materials as well as in the final products. From the purchasing point of view, this can be seen as a disadvantage, because of the less bargaining power with the suppliers.

After treating all the relationships between the focus strategy and the different logistic processes, a common point can be seen in the entire set of pairs. All the logistic processes are designed to achieve the particular needs of the target served; depending on what the customers want to obtain from the company, the processes will be developed in one way or another, so it is important to pay attention to the concrete market segment. This will be treated in the next pages.
4. MARKET SEGMENTS

4.1. Basis on market segmentation

As said before, a good way of applying the focus strategy is paying attention to the market segmentation. The market segmentation refers to the action of detecting and dividing the persons or organizations of the whole market in different groups that have similar characteristics. With this in mind it is possible to find a focus point to put all efforts in, in order to satisfy the customer in the most effective way. By improving customer orientation, market also has the potential to develop competitive advantage and improve business profitability.

The process of market segmentation can be seen as a set of steps to follow. First, it is necessary to delineate the market area, putting limits and having clear in mind where the market arrives. The next step is to identify the segmentation variables, that will be treated below in a concretely way. Then, using these identified variables, the natural next step is to segment the whole market and to identify the characteristics of each segment. Doing this, it is possible to obtain an appropriate market segment, which has to follow the characteristics listed below.

It has to be measurable with statistics of all its points, as well as homogenous: the group of entities or persons have to be strongly joined by several variables. It is also important the accessibility and manipulation of the segment; the segment cannot be closed, making it difficult to maintain marketing campaigns and other necessary activities. Finally, an adequate segment has to be stable. There are several benefits of the application of market segmentation. First, this segmentation permits the identification of customer needs within a sub-market and the design of the best marketing strategy to meet them. Moreover, medium-size companies can grow faster if they have a strong position in niche markets, and companies offer a more accurate product or service and put the appropriate price for the target audience. Finally, the company faces fewer competitors in a specific segment and new opportunities for growth are generated, as well as the company gets significant competitive advantage.

As previously said, an important point for the market division is to identify the segmentation variables. There are a lot of variables used in the market segmentation. But the more generic variables can be classified as follows:
### Tab. 7. Market segmentation variables

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>PARTS OF THE VARIABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geographic</td>
<td>Region, country, state, department, province, city, density of population, climate.</td>
</tr>
<tr>
<td>Demographic</td>
<td>Age, sex, marital status, religion, race, ethnicity, nationality.</td>
</tr>
<tr>
<td>Socioeconomic</td>
<td>Social class, income, occupation, educational level.</td>
</tr>
<tr>
<td>Psychographic</td>
<td>Values, life style, personality, level of sociability.</td>
</tr>
<tr>
<td>Conduct</td>
<td>Product knowledge, reaction and attitude in front of it, expectation, brand loyalty.</td>
</tr>
</tbody>
</table>

In the concrete case of a company:

### Tab. 8. Market segmentation variables in the concrete case of a company

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>PARTS OF THE VARIABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company size</td>
<td>Micro, Small, Medium, Big.</td>
</tr>
<tr>
<td>Type of organization</td>
<td>Manufacturer, wholesaler, retailer.</td>
</tr>
<tr>
<td>Type of corporation</td>
<td>Governmental, private, mixed.</td>
</tr>
<tr>
<td>Type of social object</td>
<td>Entity, foundation.</td>
</tr>
<tr>
<td>Relative location</td>
<td>Near, far.</td>
</tr>
<tr>
<td>Average and size of each order</td>
<td>Small, big quantities.</td>
</tr>
<tr>
<td>Credit history</td>
<td>Good, bad, regular.</td>
</tr>
<tr>
<td>Service frequency</td>
<td>Short, medium, long</td>
</tr>
<tr>
<td>Reliability</td>
<td>High, low.</td>
</tr>
<tr>
<td>Application of the product or service</td>
<td>Maintenance, production, component, implementation</td>
</tr>
</tbody>
</table>


Depending on the type of company attending to the different variables used to segment the market, the logistic processes will change. A small company will not have the same needs of transportation as a big company, as well as a wholesaler will not carry out the same storage activities as a retailer. For this reason, it would be good to concrete the relationship between the logistic processes and the different market segments.

4.2. Company Size

The size of a company is an essential parameter to know the power of it in front of third parties (manufacturers, wholesalers, retailers and consumers). So the companies are classified depending on their sizes as follows:

- **Micro companies**: the company and the property are of individual property, the fabrication systems are practically handcrafted, machines and equipments are elementary and reduced, as well as the issues related to administration, production, sales and finance, so the director or owner can attend to them personally.

- **Small companies**: independent entities, created to be profitable, that do not predominate in the industry they belong, whose annual sales do not exceed a certain threshold and the number of persons who shape them does not exceed a certain limit.

- **Medium companies**: this kind of companies involves hundreds and sometimes thousands of people and has well definite areas with responsibilities and functions, as well as systems and automated procedures.

- **Big companies**: they handle big capitals and financings with their own facilities, their sales are of millions of dollars, they have thousands of employees, as well as an advanced administration and operation system and can obtain lines of credit and important loans with national and international financial institutions.

The EU has established a criterion of definition of small and medium enterprises, SMEs, that consists of the following considerations:
- **Micro company:** if the company has fewer than ten employees, provided that the amount of turnover and the value of its assets does not exceed 2 million Euros.

- **Small company:** if the company has between ten and forty-nine workers, and the turnover and the value of its assets does not exceed 10 million Euros.

- **Medium company:** if the company has between fifty and two hundred forty-nine workers, net turnover not exceeding fifty million Euros and the value of its assets does not exceed 43 million Euros.

After talking briefly about the basic aspects of the company size, it is clear that this variable will affect the course of the different logistic processes; this is the reason why it is important to study the relationships between both of them.

### 4.2.1. Company size and Transportation

The transportation system is the physical link connecting a company’s customers, raw materials suppliers, plants, warehouses, and channels members; permits goods to flow between the various fixed points of the logistics supply chain and bridges the buyer-seller gap. In a small company the flows of goods are also small, in the raw materials as well as in the final products. For this reason, a good way to carry out the transportation in a small company is the private carrier, that is, the firm’s own transportation, which allows a strictly control of the transportation costs and a great flexibility in responding to the demand without a big complexity due to the low handled quantities. On the other hand, many disadvantages emerge, like large capital requirements or problems in labour and management, so at this point it should be evaluated the specific weight of both parts in the context of the company being analyzed.

In a big company, the flow of final goods and raw materials is also large. Therefore, the transportation will not be the same as in the small companies. A big company has more power over third parties; therefore, it will find easier a for-hire carrier not serving the general public, but adapting its services to the needs of this big business, this is a contract carrier, which provides a specialized type of service to the shipper. Because the carrier does not serve the general public, it can tailor its services to meet specific shippers’ needs by using special equipment and arranging special pick-ups and deliveries.

But not only is the logistic process of transportation affected by the company size. The storage, is also altered by this variable, thus it is important to analyse this relationship, which is done in the next point.
4.2.2. Company size and Storage

In small companies, the sales are elementary and reduced, so in this way the logistic activity of storage, involving inventory management and warehousing, is elementary too. Managing big quantities of goods is not done in the same way as with the small quantities handled in micro and small companies.

Nevertheless, it is important to carry out a good inventory management in order to achieve that a company works without problems and although the quantities of goods are reduced, they have to be warehoused efficiently, maximizing storage spaces, taking into account all the dimensions of the warehouse, insomuch as this space is treated as a valuable asset. In the case of micro companies, the director or owner would himself take care of the activities belonging to storage. Small inventories are generally easy to handle, but it is not the same in the big companies, with bigger warehouses and supplies, where it could be necessary to hire someone or something external, which would take care of these big inventories. This allows the company to focus in other aspects of the exploitation. Medium companies would create a special department whose members, directed by an inventory manager, would take care of all the aspects of the storage.

Talking about storage can be interpolated to materials handling, insomuch as managing small quantities of goods always involves the same.

4.2.3. Company size and Materials handling

As well as with the storage activities, the manager has to be concerned with the material handling, implying the movement of goods into a warehouse, the placement of goods there, the movement of goods from storage to order-picking areas and eventually to dock areas for transportation out of the warehouse, taking into account the simplicity that a micro or small company implies. But despite this simplicity, a well done materials handling will help the micro/small company to increase the effective capacity of the warehouse, minimize aisle space, develop effective working conditions and more generally to improve logistics service and to reduce costs. If this is working with small companies, the same can be seen with big companies, which can even be more important, due to the handling of big quantities.

4.2.4. Company size and Order Fulfilment/Customer Service

Remembering the activities involving the order fulfilment, they had all in common that they tried to complete orders in the most effective way, taking into account lead times and other parameters, always having in mind the customer and his treatment. If the orders are well respond, the customers will be more satisfied and this does not find distinction between small and big companies. The customer as final receiver is always the most important part of the managerial activity. But trying to find a difference between companies
of different sizes, micro and small companies have a closer relationship with the customer; this relationship could be even be seen as familiar, so the client would be always the same, if it is treated well.

4.2.5. Company size and Forecasting/Production Planning

At this point, it is easy to remember the inventory management, as the forecasting and production planning will be seen as well.

The manufacturer has to estimate (forecast) the customer demand, this is, the amount of sales and the period covered by the projection of them, to achieve an effective inventory control. This customer demand is an independent variable, since the seller cannot control customer demand. But the manufacturer has to coordinate the product supply with the product demand. These logistic processes are common in both small and big companies, but are treated differently.

As in the case of the inventory management, in a small or micro company the owner would deal himself with the forecasting and with the production planning, due to the simplicity of both parts. A medium company would create specific departments for these tasks, with the corresponding managers and a big company would probably hire a third part, to put all its efforts in other even more important activities.

4.2.6. Company size and Purchasing

A big company will always have more bargaining power over the suppliers, due to the big quantities handled, achieving special offers, which is not the same in the case of small companies. Moreover, buying always from the same suppliers will allow being able to negotiate substantial discounts. Being one of the carrier’s largest customers gives the shipper significant negotiating power: the fear of losing the shipper’s business motivates the carrier to comply with the shipper’s demands for better rates and service levels.

The concentration of freight in a limited number of carriers not only increases market power, but also permits a company to develop a strategic alliance with the carriers it uses. In a strategic alliance, the shipper and the carrier, recognizing their mutual dependency, strive to be efficient so that both can survive and prosper. In addition to reducing transportation costs, the improved working relations within the strategic alliance reduce other logistics costs such as information processing, inventory, and warehousing.

The next variable in the concrete case of a company is the type of organization. First, it is good to have clear in mind what this variable means, its basis, in order not to be lost through its relationships with the different logistic processes.
4.3. **Type of organization**

At this point, three types of organizations will be treated: manufacturers, wholesalers and retailers. Trying to give an explanation of each one, everybody knows what a *manufacturer* is: In terms of consumption, a manufacturer or producer is the person (normally juridical) dedicated to an industrial activity of production of products for its consumption by the final consumers. The manufacturers carry out their tasks of production in factories and have long series of obligations on safety and hygiene of what they produce, especially if it is a question of food for the human or animal consumption. But removing into the laws\(^\text{15}\), this legal concept of manufacturer can be seen:

\textbf{1\textsuperscript{st} Manufacturer of a product when it is established in the European Community.} Manufacturer will be considered to be also every person who should appear as such – stamping on the product his name, brand or any other distinctive sign, or every person who proceeds to the reconditioning of the product.

\textbf{2\textsuperscript{nd}} The representative of the manufacturer when it is not established in the European Community or, for lack of representative established in the Community, the importer of the product.

\textbf{3\textsuperscript{rd}} Other professionals of the chain of commercialization, in the measure in which his activities could concern the safety characteristics of the product”

The wholesaler’s role is broad and complex. This role includes selling goods to retailers or to industrial, commercial, institutional, farm, and professional business users. In addition to selling, wholesalers frequently perform some other functions, including maintaining inventories of goods, extending credit, physically assembling, sorting, and grading goods in lots, breaking up bulk lots for redistribution in smaller lots, and various types of promotion such as advertising and label design.

The principal function of *retailers* is to make production available for consumers and industrial users to purchase. Retail establishments may take the form of traditional stores and places of business or may sell through an innovative, non-store approach, such as by telephone, mail order, computer, door-to-door, or vending machine.

Retail firms are important channel participants for many products. They can significantly affect the manufacturing firm’s logistics function and the other activities of channel members. Given the trend among some of the large firms toward concentrating retail activity, other channel members have been pressured to

\(^{15}\text{Spanish Law 22/1994, civil liability for damage caused by defective products.}\)
absorb much of the responsibility for carrying inventory and ensuring that it is available for delivery to retail locations in a timely manner. Fortunately, many industries are developing effective vertical marketing systems, which can facilitate the streamlining of overall logistics and distribution activities within the channel.

With these definitions in mind, it is possible to establish relationships between the type of organization and some of the logistic processes.

4.3.1. Type of organization and Transportation

In this point, it is easy to find many differences between the transportation done by wholesalers and the transportation done by retailers. The wholesalers have the role of selling goods to retailers or to industrial, commercial, institutional, farm, and professional business users. So they will manage relative big quantities of goods in comparison to the retailers, which function is to serve the general final customer, which involves not handling such large quantities as wholesalers. Taking into account that it is not the same the handling of big or small quantities, the transportation will change depending on the type of corporation.

A well known example of wholesaler in Europe is the supermarket Makro\textsuperscript{16}, subsidiary of the german group Metro, which wholesales food products and other stuff in order to give an integrated service to the supply needs of professionals (caterers, restaurateurs, retailers, food retailers, large consumers and institutions). In 2008 reached 1,380 million Euros in consolidated sales. Makro Cash & Carry is the leader of cash & carry in Spain with a total of 34 warehouses distributed among 15 Autonomous Communities. Precisely, Makro Cash & Carry has reorganized its transportation through the logistic structure for further optimization of distribution platforms, reducing transportation time and costs, with maximum efficiency. The purpose of this change is a decentralization of the platforms for a better service to Makro centres.

4.3.2. Type of organization and Storage

Talking about one part of the logistic process of storage, the warehousing, the wholesaler will dispose of large warehouses to contain all the stuff needed by the addresses of its activity. As already said, the wholesalers manage big quantities of goods in order to satisfy the needs of the buyers, which imply also a more complex infrastructure of inventory management. On the other hand, the retailers will develop their activity of storage in a more simple way, due to the smaller quantities handled, also including an easier inventory management, which does not mean that less attention is needed in order to develop a correct an effective management to prevent stock-outs or the increase of production costs.

\textsuperscript{16} Font: www.makro.es
4.3.3. Type of organization and Materials Handling

The material handling is always strongly related to the activity of storage, they are dependant activities, and they will always evolve in the same direction. In this way, the handling carried out by the wholesalers will be also more complex than the handling of the retailers, due to the large quantities managed. However, the logistic managers will be always concerned with the movement of goods into the warehouse, the placement of goods in the warehouse, and the movement of goods from storage to order-picking areas or dock areas for transportation out of the warehouse.

4.3.4. Type of organization and Order Fulfilment/Customer Service

As seen before, to achieve a great level of customer satisfaction, one important point is to successfully carry out the aggregate of activities to complete customer orders, or what is the same, fulfil the orders. So it is clear that both logistic activities are related. When the order fulfilment is done correctly, the customer service will be improved. And this will work in the same way in the case of the wholesalers and the retailers. The customer, either retailer, industrial, commercial, institutional, farm, professional users or small consumers, is always the most important part to take care of, so it will be always important to maintain a good level of order fulfilment and customer service.

4.3.5. Type of organization and Forecasting/Production Planning

Accurate forecasting of inventory requirements and materials and parts is always essential to effective inventory control, either in the case of wholesalers or in the case of retailers. But searching some differences between both of them, it is possible to establish that the wholesalers manage larger quantities of goods, so it would be more complex to forecast the amount of sales expected or the period the sales projection covers.

The same can be observed in the case of the production planning, which remembering, involves coordinating product supply with product demand. This logistic process is always essential and necessary to the satisfactory progress of the company, so it has to be developed efficiently.

The next segmentation variable to treat that affects the behavior of the logistic processes is the relative location. First, as in previous cases, it is important to point out some basis of the variable which in this case will be a little more extensive, due to the large quantity of reference to this theme in the literature.
4.4. Relative location

The industry location theory has been developed during the twentieth century by several authors, from Alfred Weber to J.H. Von Thunen, through Edgar M.Hoover or Melvin L. Greenhut. In the following lines, their theories will be commented.

One of the first to write about location was Johann Heinrich von Thunen. For him, a German agriculturist, the location determinant was the cost minimization, this is, the transportation cost.

Assumptions

He assumed a separated city-state, surrounded by a plain of equal fertility. The plain ended in wilderness, and the city was the only market for the agricultural products. Production of any product could occur anywhere in the plain at the same cost. Von Thunen assumed equally accessible transportation to all locations in the plain, and the transportation cost was a constant rate per ton-mile for all commodities.

Development

Agricultural production would take place where the farmer would maximize profits. For Von Thunen the profits were the market price minus production costs and transportation costs.

With a given product’s market price and production costs the same at any production location, the transportation cost factor was the major location determinant. Following this line, locations farther from the market, would mean a bigger transportation cost. These locations would not be economically possible for producing low-value, high-weight products, so these products should be produced near the city to minimize transportation cost. Another location determinant for Von Thunen was the transit time. Talking about perishable products, these would not hold on long transit times, taking into account that at that time mechanical refrigeration did not exist, so they had to be produced near the city.
With all this considerations, Von Thunen made a set of concentric rings around the market, called *belts*, in which he separated the products to be produced at the different distances from the city. Perishable products and products of low value-to-weight ratios would be produced in the belts nearest the city. Products with high value-to-weight ratios would be produced in the rings farther from the city. Even though these theories seem to be obsolete nowadays, the general conclusions remain valid and applicable to modern firms.

A German economist, Alfred Weber, developed a location theory for industrial production facilities.

**Assumptions**

Unlike Von Thunen, Weber started with a given industry and determined its best location. He assumed equally accessible transportation and constant transportation costs with respect to weight and distance. Raw materials points and consumption points are known, and labour is geographically fixed and available at a given dollar amount. Like Von Thunen, Weber used the total transportation cost as the criterion to evaluate alternative plant locations. Weber recognized that raw materials were different from a logistics standpoint:

![Fig.20.Raw materials from the point of view of Weber](image)

- **Raw materials**
  - Geographic availability
  - Weight loss in processing
- **Ubiquitous**
- **Localized**
- **Pure**
- **Weight-losing**

There are two characteristics directly related to the total transportation costs they incur: geographic availability and weight lost in processing. Paying attention to the geographic availability, a raw material is either ubiquitous or localized. A ubiquity is a raw material that we find everywhere (i.e. water and air). A localized material is one that we find only in certain locations (i.e. coal). On the other hand, a raw material can be either pure or weight losing. A pure raw material does not lose weight in processing, whereas a weight-losing raw material loses weight during production.
Ubiquities occur everywhere and thus would not require transportation to the plant. A localized raw material does not occur everywhere, for this reason, it needs transportation, which means transportation costs. Usually, the bigger the plant’s distance from the localized material source, the bigger the material’s transportation costs. But it is necessary to take into account the weight lost in processing, which affects the total transportation cost. With a localized weight-losing material, a supply-source location can minimize the material’s transported weight and consequently minimize transportation costs. That is, by having the location at the supply source of the weight-losing raw material, a company avoids transporting the weight the material loses in processing.

Then Weber considered the difference of the labour costs between different locations. If labour costs less in a location other than the least-transportation-cost site, the firm will locate at the point with lower labour costs provided that the labour savings offset the increased transportation costs. But these are not the only variables that affect the location decision according to Weber. He introduces another location determinant called agglomeration, an advantage that a company gains through a common location with other firms, obtaining benefits such as a skilled labour supply, better marketing outlets, and proximity to auxiliary industries.

An American theorist dealt with factors not treated by Thunen or Weber. Edgar M. Hoover developed a theory that talked about distribution cost effects upon a product’s price and resultant demand. Talking about transportation costs, Hoover said that rates are not linear with respect to distance, most of them follow the tapering principle, this is, rates increase with distance, but at a decreasing rate. Instead of considering three location choices (market, raw material source, and anywhere in between), rate nonlinearity makes the location at either the market or the raw material source less expensive than one in between. Location in between would cause the rates of the two separate movements to be greater than the one rate from raw materials source to market.

Hoover also said that transportation companies are not uniformly available throughout all areas, companies desire locations with a high concentration of carriers, since they provide more alternative vendors to meet a logistics systems’ varied link requirements. But transportation costs, said Hoover, have not the same importance in all firms, and product characteristics also affect carrier rates and consequently influence the importance of transportation costs as a location determinant.
Another American theorist, *Melvin L. Greenhut*, emphasized demand as a location determinant. He said that demand is a variable that enables a company to realize different profits at different locations; thus, the location that maximizes profits is the optimum site, which may not necessarily coincide with the least-cost definition.

For Greenhut the location determinants are demand, cost and personal factors. The personal considerations partially determine demand or production costs.

Having in mind the two criteria cost minimization and profit maximization and assuming constant demand, both will result in the same location. Given differing demand at different locations, a high-cost location may provide higher profits because of the ability to charge higher prices.
5. RECAPITULATION

The heart of this work, around which everything else goes around, is logistics and its processes related, and of course their behaviours and conducts in front of characteristics of the concrete company, in this case, the competitive strategy followed. The starting point of the work was the clarification of how the market is today, and which paper plays the logistics in the development of the company competitiveness, taking the vision of logistics as a whole, where all the parts work together in order to achieve a great level of customer satisfaction. But it is complicated to establish the conducts of the different logistic processes in front of the different competitive strategies without having clear in mind the basics of the topic, i.e., the competitive strategies of Porter clarified with some practical examples, the supply chain management and the logistic processes. In the concrete case of the supply chain management, some authors’ definitions were quoted, to finally obtain a good explanation that really fit the principal theme of the work. In the part of the logistic processes, a small but concrete explanation of each logistic process was added. When the basic points were clear, the next part of the work was the analysis of the possible relationships and implications between the logistic processes treated and the competitive strategies, with also some practical examples that helped with the comprehension of the theme. Some of these relations were more important or had more points to bring to light than others, which is also obvious, due to the relative importance that each company gives to each logistic process. But also the difficulty when developing each relationship was different through the cases. This is clearly seen in the case of the focus strategy. At this point, it was necessary to develop the theme more deeply by treating the market segmentation. The first part of the market segmentation point was the exposition of the basis of the topic, included the different market segmentation variables, which were the starting point of another chapter of finding relationships, in this case relationships between the behavior of the concrete company belonging to a concrete market segment and the set of logistic processes treated from the beginning. Recapitulating, the objective of the work was to find implications between the strategy followed by a company and the logistic processes carried out, in order to know how a concrete company following a concrete strategy would behave during the development of its logistic processes, trying to achieve a competitive advantage in front of the competence in this market that over the years becomes more and more competitive with the inclusion of new competitive companies.
In this increasingly competitive market, the companies feel compelled to find new ways to develop a competitive advantage in front of the competence. In order to be more competitive, the companies have to be more flexible, productive and have to offer an even better service to the customer, which is always the final and most important step of any managerial activity. Depending on the market segment served, the company must have clear in mind the generic strategy option to follow. Once this part is clear, logistics can play an important role in the development of a competitive advantage by the efficient managing of the flow of goods and services towards the final customer. Depending on the strategy followed, the logistics formed by a set of different processes, will be done in one way or another.

A company following a cost leadership strategy places emphasis on cost reduction in every activity in the value chain, trying to reach the lowest cost in front of the competitors and achieve a high level of sales. To attain this objective, all the logistic processes have to be carried out in the easier and most effective way, without unnecessary costs and satisfying the customer in order to maintain a high relative market share. The planning and forecasting have to be accurate, to attain a better use of the investment and to prevent losses by making the adequate decisions at the adequate time.

A company following a differentiation strategy tries to find the authenticity of the product or service among the whole market. For this reason, all the logistic processes must be focused on finding something special and different from the competence or high-valued by the customers, for example in the processes of packaging or customer service. The management and the planning or forecasting has to be done accurately, insomuch as the customer is waiting for a service or product irreplaceable.

Finally, a company following a focus strategy does not serve the whole market, but focuses its attention in a concrete market segment, by trying to serve it in the best possible way. Then, each of the logistic processes has to be developed always having in mind the particular segment and meeting the specialized needs of the customers.

Only the companies having a clear idea of their strategies can develop the appropriate logistics. And only if this happens the companies could compete in this competitive global market.
BIBLIOGRAPHY


DECLARATION UNDER OATH

I hereby declare on my honour that I have made the present study or thesis without assistance, and only using the means allowed, and the indicated literature. I am aware that the transfer of rights in this works or extracts from this work to third parties needs the consent of Prof. Dr. Dr. hc Hans-Christian Pfohl.

Place, date

Authorized Signature