6 Strategic practices in business

6.1 Globalization

One of the most far-reaching developments in the world economy has been the process known as globalization. Globalization has been set in motion by the following factors:

- the liberalization of international trade and capital markets
- technical developments in ICT and transportation
- rapid economic development in emerging markets.

Businesses operate in a real-time global marketplace and their focus is upon maximizing comparative advantage through sourcing and supplying products. Maximizing the competitive position of a business requires two seemingly conflicting strategies:

Minimizing cost. Economies of scale can be created by centralizing business activities. Furthermore, standardization in production components, low transportation cost and the revolution of information and communication make it possible for global companies to source raw materials and product components from all over the world and to bring together and assemble raw materials, parts, and semi-finished products at a single or few locations, to reduce the overall cost without any interference in product quality.

Maximizing flexibility. Creating flexibility to respond to customers' demand is achieved by decentralizing business activities. Changes in the cost/quality trade-off from a customer's perspective, reduced lead times and shorter product life cycles require customization and postponement of final assembly in or close to the market.

Economies of scale and the cost of investing in site, plant and equipment favour centralization. Pushing factors to decentralize are transport costs, flexibility and proximity to the customer. Depending on the balance of these two forces, the company will serve markets at regional, national, continental or even at a worldwide level.

In the recent past, corporate decision makers did not face such conflicting choices. Location decisions were a simple trade-off between cost and quality. High quality, high value added goods were manufactured in proximity to the customer. Products produced in larger volumes with a lower added value moved to low cost locations. The relocation of business activities to an offshore location was mainly driven by minimizing investment and operating cost. The 'raison d'être' for the establishment a FTZ has been, and very often still is, to offer business a lower cost manufacturing base.

In this chapter we will see that deciding on a location has become a far more complex process. Old assumptions about locating a business offshore should be set aside as illustrated by Case Study 6.1

Case Study 6.1 When offshore manufacturing doesn't make sense

Ron Ritter and Bob Sternfels of McKinsey's recently investigated the operations and performance of companies in the state of California to gain a better understanding of the complex process they go through when deciding to offshore. Their research indicated that for manufacturers in Europe and the United States, offshoring can make good sense, but that they should look carefully at their economics before they send production overseas. Too many companies overestimate the savings to be had from going abroad and fail to recognize the problems, such as dealing with inventory, obsolescence, and currency exchange rates.

One reason is that for many manufacturers the importance of direct labour is declining rapidly. Since it often accounts for just 7 to 15 per cent of the cost of goods sold, hard-goods and high-tech manufacturers often say that wage rates are hardly the most critical determinants of their overall economic performance.

Examples:

At an apparel company based in Los Angeles labour costs were 3 per cent of the retail price. Moving operations offshore, logistics costs might well swallow up any savings from lower wages. In this industry with its unpredictable demand, the five-month lead times that accompany offshore production can leave manufacturers with excess inventories of fading styles or shortages of hot items. As retailers penalize suppliers for late orders by as much as 2 per cent a day, the cost of miscalculation can be high.

A consumer electronics manufacturer had stripped away roughly 60 per cent of its labour costs from production and reduced lead times from weeks to days. Even if an offshore competitor drove down its own labour costs close to zero, this manufacturer would still have an insurmountable advantage in logistics. Long lead times also stand out in the high-tech electronics industry, where the need to send products by sea can translate into price declines of 2 to 6 per cent. (NB. that this example refers to sectors of industry historically choosing a location in an offshore FTZ.)

(Ritter and Sternfels, 2004)

The response of companies is to redesign supply chain and manufacturing strategies. To remain competitive and keep costs down, they are constantly reviewing and re-evaluating the current business location set-up in search for the best possible location.

This constant reassessment of location has the following impact on business activities:

- There is greater industrial mobility, as firms are more willing to undertake new investment when it is backed by long-term contracts.
- 'Clusters' of economic activity are created around large plants, as suppliers migrate to be close to their main customers.
- There is greater need for local representation in national markets, either on an agency basis or, more commonly, through a regional office, partner firm or franchise.

6.2 Creating competitive advantages: Order qualifiers and winners

Any strategic corporate decision, whether concerning the location or relocation of a plant or the designing or redesigning of the supply chain, needs to result either in the creation of a new or the strengthening of an existing competitive advantage.

Strategic management and survival require the raising of key issues, such as what is it that brings business to the company? Why do customers buy a company's products? How has it succeeded in the past? Order 'winners' and 'qualifiers' focus on those factors that can determine one's competitive advantage.

Order winners. According to the APICS[50] dictionary (2004), *order winners* are the competitive characteristics that cause customers to choose one firm's goods and services over those of its competitors. Order winners can be considered to be competitive advantages for the firm. Order winners usually focus on the following strategic initiatives:

- price/cost
- quality
- delivery speed
- delivery reliability
- product design
- flexibility
- after-market service
- image.

Order qualifiers. APICS defines *order qualifiers* as the competitive characteristics that a firm must exploit to be a viable competitor in the marketplace. For example, a firm may seek to compete on characteristics other than price, but in order to 'qualify' to compete, its costs and the related price must be within a certain range to be considered by its customers. To provide qualifiers, companies need only to be as good as the competition; whereas to provide order winners, companies need to be better than competitors. Qualifiers are not less important than order winners: they are different and complimentary.

Manufacturing must provide the qualifiers to get into or stay in a marketplace, but these alone will not win orders. They merely prevent a company from losing orders to its competitors. Once the qualifiers have been achieved, manufacturing then has to turn its attention to ways in which orders are won and ideally to provide these better than anyone else.

Historically, for operations locating in a FTZ, low cost was the only order winner. Nowadays, both low cost and quality are required to be competitive in the market. The challenge for the future is that all five factors (Figure 6.1) will become standard. The case studies throughout this chapter illustrate clearly how to create a competitive advantage in a globalized world.

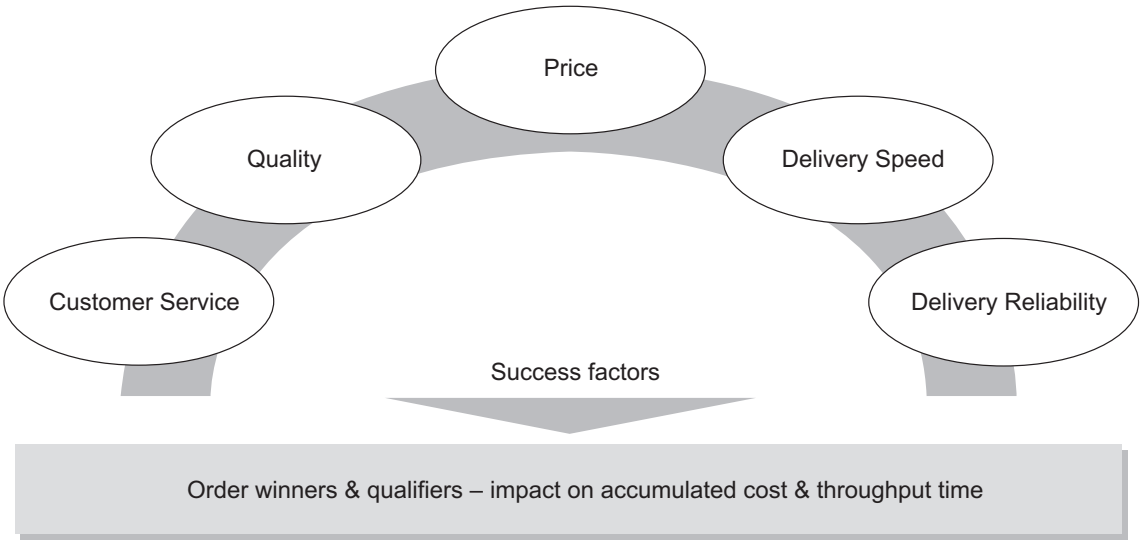

Figure 6.1 Success factors in selling goods (ESCAP secretariat)

[50] The Association for Operations Management (http://www.apics.org)

6.3 Locating businesses

Why do companies move overseas? In 2002, the Multilateral Investment Guarantee Agency (MIGA) organized a survey into the Foreign Direct Investment (FDI) trends and location strategy issues of the world's top companies. The study focused on, amongst other things, key factors and considerations that influence companies' location strategies.

A majority of respondents cited improved market access as the most important objective in their foreign expansion strategies (55 per cent). The next most frequently cited primary objective was reducing operating costs (17 per cent). All other objectives were cited by a relatively few number of respondents (see Table 6.1). A key secondary objective however was consolidating operations (16 per cent).

Table 6.1 The top 20 critical location factors (per cent cited as 'very influential')

Factor	%
Access to customers	77
Stable social and political environment	64
Ease of doing business	54
Reliability and quality of infrastructure and utilities	50
Ability to hire technical professionals	39
Ability to hire management staff	38
Level of corruption	36
Cost of labour	33
Crime and safety	33
Ability to hire skilled labourers	32
National taxes	29
Cost of utilities	28
Roads	26
Access to raw materials	24
Availability and quality of university and technical training	24
Available land with all services in place	24
Local taxes	24
Access to suppliers	23
Labour relations and unionization	23
Air service	23

Source: MIGA, 2002.

Whereas improved market access is rated as the pivotal factor by the majority of companies in both the manufacturing and service sectors, the two sectors have different second and third-level objectives. Manufacturing companies are much more likely to rank reducing operating costs as number two in importance, and cite sourcing raw materials third. Service companies rank developing new products as an important objective in their overseas investments. In manufacturing companies, the goods earn the revenue (produced by employees or machines), but in a service company it is the employees who are the actual earners. Thus, reducing operating costs (salaries) in a service company could prove counter productive.

Companies that have domestic expansion plans are more likely to cite developing new product lines as a key objective; whereas companies with plans to expand abroad are more likely to cite reducing operating costs as a primary objective.

As noted earlier, North American companies rank improved market access as their primary objective for expansion. However, they are less likely to move abroad than their counterparts in Western Europe and the Asia/Pacific Rim, preferring instead to reduce operating costs. North American companies are also more likely than their counterparts to view improved productivity as a key objective.

Western European companies are the most concerned with improved market access, but the least likely to choose reducing operating costs as their primary objective. Among their secondary objectives, Western European companies were most likely to select reducing costs, followed by consolidating operations.

6.3.1 How are location decisions made?

Before making a location decision, a careful assessment of potential risk factors of a location must be made. Indeed, the characteristics of a chosen location are not static but are subject to changes overtime and in an emerging market these changes can be very abrupt.

- **Market demand.** Some countries have more stable markets or are more responsive to demand management techniques than others.
- **Reliability of suppliers.** Reliability is dependent on distance from suppliers, the reliability of suppliers and their transport links, the development of special relationships and the number of alternative suppliers.
- **Economic risks.** Inflation, interest rates and foreign exchange rates all present economic risks to a firm.
- **Labour market risks.** There are labour market risks when there are substantial differences in supply and demand.

Location decisions are made on the basis of a top-down approach starting from a decision on a global level as to where companies want to do business, right down to the selection of a site.

6.3.2 Steps in locating business activities

Step 1. Where does the company want to develop new business activities? On which continent or subcontinent do we expect the economy to grow? At a global level, *strategic location decisions* are driven by market potential and growth of market share. Today companies want to have a presence in Asia – more specifically in China – because there the economy has grown at unprecedented levels consistently since the 1980s.

Step 2. Once strategic decisions on where to do business have been taken, defining the geographical levels of the activities is the next step. What will be the size of the *geographical area* to be served by the new facility? Does the company opt for a larger but centralized operation or will the activities be spread over several decentralised locations?

Step 3. A decision on a new location automatically invokes a *redesign or adaptation in the supply chain* which will have an impact on the location of activities elsewhere in the chain. Setting up an operation in a new location may result in relocation or closure of other business activities.

Step 4. At a national and a regional level a location decision is driven by the proximity to the customer base, the quality and cost of labour, incentives, affinity with the host country, and the quality of transport services. Although current trends may favour positioning a new setup in China due to its expanding economy, a detailed location analysis may lead to choosing a location in a neighbouring country.

Step 5. When selecting a site at a local level, next to incentives, the availability of real estate is the main issue since the sites must meet the technical and logistical needs of the company.

6.3.3 Location factors for manufacturing operations

Numerous studies have been conducted on the pertainent factors contributing to location decisions for firms.

The survey carried out NEI/Ernst & Young (1993) for the European Commission large multi-national companies across Europe were interviewed. Respondents were asked to assess the importance of a range of criteria in location decisions relating to five different types of economic activity manufacturing, offices, distribution, services and research and development.

The survey asked respondents to rank the 'most critical location factors' when locating operations overseas. Access to customers stands out as one of those single factors which was ranked as 'very important' by 77 per cent of the respondents. The next most cited factor is a stable social and political environment, followed by ease of doing business and reliability and quality of utilities (all cited by a majority of respondents).

The results for manufacturing plants are shown in Table 6.2. There are few cases where a single factor stands out as the primary determinant of location because of the considerable diversity in the combination of factors influencing location choice.

Likewise, there is little difference evidenced among the location priorities of manufacturing and service companies, with the exception of the relative importance placed by manufacturing companies upon access to raw materials and service companies upon on national taxes.

When viewed by company size, larger companies are less likely to identify labour relations and unionization as critical location factors, and more likely to focus on labour cost. They are also more likely than smaller companies to select national taxes as a key factor. Smaller companies more often select the ability to hire skilled labourers, technical professionals, and management staff as very important issues. They are also more likely than larger companies to be concerned with the availability of fully serviced land as well as the reliability and quality of utilities.

Table 6.2 Industry preferences on location of a FTZ

	% of companies considering factor important in			
	Choice of country		Choice of region	
	Critical	Important	Critical	Important
Business factors				
Proximity to markets	34	51	19	31
Availability of raw materials	9	23	12	17
Proximity to major customers	17	14	18	6
Availability of suitable sites	5	5	17	17

Table 6.2 *(continued)*

	% of companies considering factor important in			
	Choice of country		Choice of region	
	Critical	Important	Critical	Important
National and local characteristics				
Financial assistance	11	20	19	20
Promotion/government support	6	19	9	23
Language	15	14	2	2
Corporate taxation	6	15	3	–
Labour				
Availability of general labour	8	26	15	32
Availability of skilled labour	9	19	11	22
Quality	8	22	9	29
Labour relations	6	17	5	6
Labour attitudes	8	14	–	17
Cost factor				
Premises	5	17	11	18
Labour	11	22	9	17
Infrastructure				
Quality of road/rail services	23	20	15	32
Proximity to port	8	11	6	15
Proximity to major airport	9	14	6	31
Quality of telecoms	5	12	2	11
Quality of life and personal factors				
Cultural factors	5	17	–	23
Expatriate schools	2	11	2	9
Educational facilities	–	6	2	12
General attractiveness of area	5	6	6	8

Source: NEI/Ernst & Young, 1993.

6.3.4 Degree of mobility of manufacturing operations

Attracting business to invest and setup operation in an area such as a FTZ is the first step in managing that service. The next key task of FTZ-management is aftercare: how to keep the businesses that are already located in the FTZ? An important issue is to understand to what extent business activities are mobile or, in other words, what is the degree of complexity involved in the relocation of a manufacturing plant, distribution centre or any other facility?

Three factors have an impact on the degree of mobility of a manufacturing plant:

- **the cost of relocation**

  Closing and relocating a plant generates several costs: potential losses from selling real estate, moving equipment and stocks, the cost associated with relocating people and redundancy payments.

- **skill level and the learning curve**

  Accumulated know-how and specialised experience are difficult and costly to replace. However, when the required skill levels for a particular job are low, retraining new employees takes little effort.

- **strategic importance of the facility**

  The role operation plays in the supply chain and the weight it has in strategic decision-making can be strong influencing factors.

Specifically for manufacturing plants, an *offshore factory*, a low-cost production site where management has limited impact on strategic decision-making is far more mobile than a *contributor factory*. A contributor factory is aimed at regional markets, but its management has some competence concerning local product and process development. The least mobile is the *lead factory*. Lead factories have full strategic competence for the product chain for which they create new products, processes and technologies; these facilities are located near technological sources and have a close relationship with customers, suppliers and research institutes.

Generally activities at the start and end of the supply chain are less mobile than those more in the middle:

- At the **start** of the supply chain activities are 'source-related'. They are linked to a source or sources of unique or specific resources.
- In the **middle** of the supply chain activities are related to production and logistics and these can be relocated easily.
- At the **end** of the supply chain activities are 'market-related' and these are more difficult to relocate because of links with the all-important customer base.

Another factor to consider when analysing the mobility of a manufacturing plant is the location of the client order decoupling point in the supply chain. The client order decoupling point is the point in the supply chain which provides a buffer between the customer order driven (customise-to-order, CTO) goods flow and the production or distribution forecast driven (make-to-stock, MTS) goods flow. CTO-plants are more mobile because the product supply chain after the client order decoupling point is much more dynamic because it is more sensitive to logistic changes in the product chain.

6.4 Managing the modern supply chain

6.4.1 The complexity of making supply chain management decisions

Making supply chain decisions is a complex matter since decisions to optimise the supply chain are concerned with:

- the structure of the entire supply chain including the location and size of production or processing plants, or storage sites
- the alignment of the supply chain by breaking down the chain into different processing segments, the number and location of supplies and ultimate destination of the product
- the scheduling of the product flow, including the frequency of delivery, the mode of ordering and delivery
- the management of logistics resources, such as the size of vehicles used, types of handling and storage systems and their effectiveness of use
- the product configuration, as changes in the design of a product can mean that the relationship between the value of a product and its weight may change due to technological or consumer response.

Optimising the supply chain requires finding the right balance between several and often conflicting considerations, for example:

- management of **raw materials and supply sources** where the objectives are to guarantee adequate capacity, reduced cost and sufficiently reliable
- management of **production** which involves planning the inputs and fine tuning/adjusting the processes (capacity)
- decisions on **outsourcing** involve the question of 'make-or-buy' decisions based on cost of an activity, focus on core competency, displacement of financial risk, service levels and reliability of operations
- **transportation and consolidation** in function of the distance between sources, manufacturing operations, distribution facilities and the market
- Reducing **inventory** costs through coordination and timing of the different flows is an important element in the design and management of the supply chain.

According to a Deloitte & Touche study, supply chains are becoming increasingly complex at a time of shorter product life cycles and ever-rising customer demands. In addition there is the increasing spread of distribution, manufacturing, sourcing and engineering operations around the globe making it ever more difficult to synchronise all the pieces. In their study Deloitte & Touche identified three critical trends that act to pull apart supply chains and make them more difficult to manage:

- **the pressure to drive down supply chain costs**

  To reduce costs companies are forced to relocate and outsource pieces of the supply chain. The customers have amassed huge buying power through the emergence of mega stores and submarkets resulting in immense pressures to cut costs.

- **the pursuit of new lucrative markets**

  Companies increasingly look at the whole world as their market.

- **the quickening pace of product innovation**

  Marketing products worldwide requires products adapted to local tastes. Product life cycles are getting shorter and shorter, forcing companies to design supply chains that can effectively deliver suitable products on time, in the right quantity and quality at the right cost.

6.4.2 New trends in supply chain management

As can be seen, the environment in which businesses operate and compete is subject to continuous and accelerating change. In order to remain competitive, to attract new investors and to retain current investment, management of FTZs must have detailed insight into modern supply chain management. The way the supply chain is managed has a big impact on a company's location strategy.

Supply chain decisions are no longer taken on location at every step of the supply chain, companies now take a global perspective on supply chain management and the same decisions are now made on a worldwide scale. This will have a huge impact on, amongst others, the choice of a location for a manufacturing plant or a distribution centre and will only increase the degree of business mobility. Relationships between local companies servicing each other may be harder to maintain as decisions move beyond the control of the local parties.

When designing the supply chain from a global perspective, a company configures factories, warehouses, engineering activities, transportation routes, marketing, sales, headquarters, R&D facilities and other operations in a way that maximises the value of the network as a whole. Plants may serve multiple

markets, distribution routes may carry multiple product lines, and product development, production, distribution and marketing capabilities may be shared with other companies, even competitors (Deloitte Touche Tohmatsu, 2003).

Decisions to locate an operation in a FTZ will be taken from completely different perspectives and the typical drivers behind the decision to locate in a FTZ will change. In this context, the design and optimisation of supply chains will require:

- **an integrated approach to costs**, focusing on reducing total costs for the whole supply chain leading the relocation of individual activities, outsourcing to specialist suppliers and changes to business processes.
- **an emphasis on reliability**, which leads to the development of risk management strategies resulting in closer and stronger relationships with customers and suppliers, reducing the supplier base and contingency plans for the replacement of non-performing partners or unsatisfactory transport and communications links.
- **visibility in the supply chain**, meaning that 21st century supply chain managers want to manage the supply chain as a single virtual entity across the world, in real time, end-to-end and in concert across technology platforms. This has resulted, and will further increase, the need for information and requires evermore analytical and data processing skills. The multiple dimensions of a decision, such as location, size, timing, process or linkages can be considered simultaneously instead of in isolation. Thereby the decision-making process becomes depersonalised.

Recent developments in supply chain management techniques include:

No waste in the supply chain. A lot of focus goes to streamlining the supply chain by eliminating waste. Waste is defined as any activity that does not add value for the customer. It is the use of resources in excess of the theoretical minimum required (manpower, equipment, time, space, energy). Waste can be excess inventory, setup times, inspection, material movement, transactions or rejects. Essentially, any resource that is not actively involved in a process that adds value is in a waste.

The famous seven wastes according to Shigeo Shingo are:

- waste of overproduction
- waste of waiting
- waste of transportation
- waste of stocks
- waste of motion
- waste of making defects
- waste of processing itself (when the product should not be made or the process not be used.

Accumulating capital costs in the supply chain. While goods are moving through the supply chain, they are incurring capital costs that are a function of transportation time, the value of the goods and considerations related to the production planning.

New logistical concepts, like *merge-in-transit*, make use of this by not only finding a balance between transportation, consolidation and keeping inventory, but even integrating them into one concept. Merge-in-transit is a service that collects shipments from multiple origin points and consolidates them, in transit, into a single delivery to the customer. The logistics concept optimises the flows of components or products. The components or products are put together to an order just-in-time en route to the

destination. Specific merge-in-transit processes direct the interrelated component flows in such a manner that the flows converge at the same place at the same time.

Postponement in manufacturing. The application of postponement allows for some activities nominally associated with production to be performed downstream in the supply chain, delaying the point in time when goods become dedicated to particular markets or customers. Postponed manufacturing is a specific combination of the three generic types of postponement:

- **Form postponement** refers to the postponement of final manufacturing or processing activities.
- **Time postponement** refers to the delaying of the forward movement of goods until customer orders have been received.
- **Place postponement** refers to the positioning of inventories upstream in centralized manufacturing or distribution operations to postpone the forward or downstream movement of goods.

Postponed manufacturing combines these types: final assembly and manufacturing activities are postponed until customer orders have been received (time postponement) and are performed from central operations in the international supply chain (place postponement), to include customer and country-specific characteristics in the finished product (form postponement), frequently followed by direct delivery to retailers or customers. The combination of three areas of postponement often allows for customer service enhancements through customization and operating cost savings through lowered inventory carrying costs.

Value added logistics. Value added logistics (VAL) is a combination of logistics and industrial activities whereby in order to meet customer requirements operations are carried out as much as possible downstream in the supply chain. The objectives of VAL are to increase the manufacturer's flexibility and reduce logistics costs, obsolescence risks and import duties. VAL encompasses the following activities: product configuration, blending and mixing, adding parts, packaging, labelling, sterilising, preparing documentation, billing customers, customer service by phone, quality control, repairs and the handling of returned goods.

6.5 21st Century taxation and supply chain management

Reorganising the supply chain has generated substantial savings. However, opportunities for further savings exist when considering the tax implications of supply-chain decisions.

According to tax experts at Ernst & Young, supply-chain improvements alone result in a 40 per cent increase in earnings, but the company actually nets less as these savings are subject to corporate taxes. Optimising corporate taxation increases profitability by 10 per cent. Combining supply-chain optimization with tax planning creates a multiplier effect that results in far greater benefits that either of these strategies separately by boosting net profits with as much as 87 per cent (NEI/Ernst & Young, 1993).

The tax rules that determine how much profit has to be reported in a given country are based on the location of assets, functions and risks. In order to reduce the worldwide effective tax rate functions, risks and income must move into tax jurisdictions with a lower tax rate. By shifting risks and minimizing some of the functions that a manufacturing facility performs, it is possible to realize significant tax savings without relinquishing operating flexibility.

A method for doing this is *contract manufacturing* whereby a factory does not need to be located in low tax location. The selection of a location can be done independently from tax considerations and focused on operational and cost considerations only. The risk associated with the manufacturing activity is transferred to another company in the group, usually a centralized trading company, which purchases the

products from the factory. The manufacturing facility never becomes the owner of the products. It becomes a provider of processing services and, as a result, the factory will generate much less revenue. The key is to put the trading company in a low-tax country because it will realize most of the profit from the manufacturing activity.

6.6 Reverse logistics

Reverse logistics covers all the activities associated with the return of **goods**, regardless of condition and the reason for return, as well as **packaging materials** for the purpose of extracting value and ensuring proper disposal. The wide range of return options creates a unique set of challenges and opportunities. Pressures to improve customer service satisfaction and demands from environmental groups are just a few of the factors pushing reverse logistics higher up on the supply chain agenda.

The characteristics of the reverse supply chain are:

- unpredictable demand; little advance notice of return quantities, quality and routing
- non uniform product quality and packaging; often returned individually instead of on pallets
- many choices of product routing; including return to stock, return to vendor, repair, recycle, scrap
- difficulty in determining profit maximising methodologies
- negotiations involving more details and contingencies than for forward supply chain logistics
- typically no one department taking responsibility for reverse logistics
- often an ad-hoc process with little budget and attention.

The growth of reverse logistics is further illustrated by the emergence of third party reverse logistics solutions and the development of technologies to better track returns and enhance reverse logistics capabilities.

Typically, when a customer returns an item, it does not just retrace its steps back home. Rather, the return is treated as a special item that can travel along numerous routes depending on a variety of factors, including return reason and timing. Some of these channels may be identical to the forward chain, but many require new paths. Determining the optimum path for returns is a complex and resource intensive effort that must consider numerous factors including economics, speed, safety and environmental impact.

Efficient reverse supply chain management can mean happier customers and higher profits. According to Gartner, reverse logistics is estimated to consume 4 per cent of overall logistics cost in the United States and to destroy 35 per cent of profits.

6.7 Conclusions

Which trends and developments form threats to FTZ, which ones present new opportunities? In order to assess the impact on managing a FTZ, the point of departure is the definition of a free trade zone. In Chapter 2 free trade zonse were defined as a business estate that offers investors:

- an offshore location
- above average business infrastructure
- flexible business regulations
- attractive tax incentives and lower investment and operating cost.

Are these characteristics still relevant in the business world of the 21st century? Do they allow the FTZ to create a competitive advantage in comparison to industrial estates without the status of a free zone? Some of these issues will be analysed here.

Increased mobility. Increased mobility means that management is less reluctant to relocate operations from one location to more attractive locations allowing increased returns. FTZ will be forced to carefully, proactively and continuously analyse and strengthen their competitive position. Aftercare strategies to secure existing business will be needed.

Cost-quality trade-off. The changing cost-quality trade-off is both an opportunity and a threat. Nowadays, it is required to combine, in one location both low cost and high quality. Most FTZs started out as low-cost manufacturing sites shipping products to overseas markets. FTZs will be forced to develop into sophisticated logistics zones to remain competitive, attract new investment and secure existing operations from relocation. Case Study 6.2 illustrates this very clearly.

Tax incentives. Due to sophisticated tax management techniques, the tax benefits no longer create a competitive advantage for a FTZ. Smart global tax planning allows the reduction of tax liability without the need for locating manufacturing or distribution activities in a tax free zone. This is not to say that they will or have become irrelevant. Tax incentives are no longer a feature that can be used by a FTZ to create a unique selling proposition.

Lean manufacturing and the 'no waste' approach pose a threat to many FTZs. Limiting waste in the supply chain means that the number of locations where goods are stored and the number of transhipments must be kept to a minimum. Ideally, manufacturing, or at least final assembly of goods, takes place in the marketplace or, if technically required, near the sources of raw materials. Many FTZs are located at an intermediate point in the supply chain. Low operating and investment cost no longer compensate for the cost of capital added to goods when they are not moving or going through a value adding process. Plenty of decisions to move operations offshore are, in a rather static way, based on a simple comparison of local investment and operating cost. The point-to-point analysis of cost structures in the supply chain gives way to a calculation of landed cost spanning the entire supply chain. This takes the focus away from low cost/low taxation at one point in the supply chain.

The importance of reverse logistics and the pressures to return packaging are serious threats to FTZs that are not serving the host country or nearby markets. Both will have a very substantial impact on total cost to the customer and profitability. The impact can only be kept to a minimum when the manufacturing plant is located in the market it ships its goods to.

Case Study 6.1 Rapid-fire fulfilment

Kasra Ferdows, Michael A. Lewis, José A.D. Machuca

Harvard Business Review, November 2004

Zara is a Spanish clothing company with over 650 stores in some 50 countries. From 1991 to 2003, sales grew more than 12-fold from €367 million to €4.6 billion, and net profits ballooned 14-fold from €31 million to €447 million.

Zara has developed a super-responsive supply chain focusing on controlling what happens to products until the customer buys them. The company can design, produce, and deliver a new garment and put it on display in its stores worldwide in a mere 15 days. As a result, it achieves a substantially higher net margin on sales than its competitors.

Unlike so many of its competitors choosing to outsource, Zara keeps almost half of its production in-house. Far from pushing its factories to maximize their output, the company intentionally leaves extra capacity. Rather than chase economies of scale, Zara manufactures and distributes products in small batches instead of relying on outside partners, the company manages all design, warehousing, distribution, and logistics functions itself.

Rapid transfer of information from shoppers to designers and production staff such hard data as orders and sales trends and such soft data as customer reactions and the 'buzz' around a new style. Zara's organization, operational procedures, performance measures, and even its office layouts are all designed to make information transfer easy.

Zara's designers sit right in the midst of the production process and work next to the market specialists and procurement and production planners which increases the speed and the quality of the design process.

Zara has an informal policy of moving unsold items after two or three weeks. This can be an expensive practice for a typical store, but since Zara stores receive small shipments and carry little inventory, the risks are small; unsold items account for less than 10 per cent of stock, compared with the industry average of 17 per cent to 20 per cent.

Zara relinquishes control over very little in its supply chain – much less than its competitors. It designs and distributes all its products, out-sources a smaller portion of its manufacturing than its peers, and owns nearly all its retail shops.

Against conventional wisdom Zara produces roughly half of its products in its own factories and has a high degree of vertical integration. This leads to a level of control impossible when outsourcing or offshoring.

Thanks to the responsiveness of its factories and distribution centres, Zara has dramatically reduced its need for working capital. Because the company can sell its products just a few days after they're made, it can operate with negative working capital.