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RESHORING PATHS: ITALIAN CASES FROM THE APPAREL INDUSTRY

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"L'addivari fa l'amuri".

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Introduction

Nowadays companies compete in a global and interconnected scenario and managers have to face big challenges related to the shift from local to global value chains.

The *offshoring phenomenon* is one of the forces that *"flattened the world"* and, since the 90s, it is implemented by companies that want to be competitive and realize cost savings (especially the labour ones). However, offshoring is not an easy strategy to realize, because it hides several risks that very often threaten the benefits that could derive from this decision.

The aim of the thesis is to investigate whether *reshoring* can be conceived as a "*correction mechanism*", to the previous offshoring decision, or as a "*simply change in strategy*", given by the mutations in the external environment.

Comprehend the nature of reshoring is complex, and the only way to understand it is to consider and study the entire internalization paths undertaken by the company.

The thesis is organized into five chapters.

In the *first chapter* I will illustrate the principal futures of the "offshoring phenomenon", analysing the *motivations* that push firms to transfer abroad the production or part of the value chain. The Global Value Chains (*GVCs*) created the new concept of *global factory*, an innovative structure used by Multinational Enterprises that allows them to integrate their global strategies. In this regard, a focus on the apparel industry will be provided. Finally, I will talk about the possible *governance configurations* that offshoring can assume.

The aim of the *second chapter* is to provide a framework for preparation and planning of the offshoring strategy. The high rate of failure among firms that have experienced offshore is caused by their incapability to manage the "*dark side*" of this operation, that is to say, their inability in the overall related costs and risks estimation. Thus, I will highlight the importance to conduct a preliminary risk analysis, a Total Cost of Offshoring estimation and to arrange some coordination methods able to ensure the knowledge transfer among activities, quality and productivity standards.

In the *third chapter* I will analyse the *reshoring phenomenon* and its characteristics, and I will present some data to understand the resonance of the phenomenon, with a particular focus on the apparel industry reshoring scenario.

In the *fourth chapter* I will present two business cases. The scope of the analysis is to identify the main motivations that pushed the companies to offshore and then to come back to Italy in order to determine whether their reshoring strategy represented a correction mechanism, to their previous offshoring operation, or simply a change in their strategy. I will analyse the cases underlying also the new technologic wave that is changing the way garments are produced and firms compete.

In the *fifth chapter* I will examine critically the "*next-shoring*" phenomenon, that is to say the new trend of firms to stay closer to the demand and to the innovation hubs and I will provide the example of Sip-Italy, an Italian company that produces high technological solutions for the apparel industry production (as innovative sewing machines). To conclude, I will suggest some managerial proposals to better face these big challenges and changes in the competitive scenario.

Thus, my work will try to provide a wide knowledge about the phenomenon, highlighting the importance of using practical frameworks of analysis and managerial tools of coordination in order to implement a safe offshoring and reshoring strategy. The business case analysis will provide some insights to further research.

1. CHAPTER: "THE OFFSHORING PHENOMENON"

1.1. Introduction

This chapter will illustrate the principal futures of the "offshoring phenomenon", described as one of the forces that "flattened" the world. It will explain how the new global and interconnected scenario changed the way firms compete and how nowadays reengineer the value chain on a global scale (Global Value Chains, GVCs) and optimize the global production (taking into account all the risks and opportunities), represent the most important priorities for firms that want to be successful. In the chapter will be presented the companies' motivations to offshore to understand the underlying offshoring rationale and will be analysed the apparel industry value chain given the fact that is one of the sectors that offshored the most to realise cost savings abroad. Then will be presented the new concept of global factory, an innovative structure used by Multinational Enterprises that allows them to integrate their global strategies. Finally, the chapter will talk about the different governance configurations that offshoring can assume, illustrating some hybrid governance options that go beyond the classic trade-off between market and hierarchy.

1.2. The "World Is Flat"

Nowadays we live in an international environment, where the distances between countries and cultures seem to do not exist. Corporations have been affected by globalization and elaborated strategies to face the harder competition in the international arena.

Even if we all know what globalization is about defining globalization is not simple. This is a multidimensional process (Urzua, 2000) which embodies a transformation of the spatial organization of social relations and transactions (Held et al., 1999) because of the internationalizing of production and of the division of labour (Cox, 1994).

According to Friedman (2005) around the year 2000 we entered the era of "globalization 3.0".

"Globalization 3.0 is shrinking the world from a size small to a size tiny and flattening the playing field at the same time. And while the dynamic force in Globalization 1.0 was countries globalizing and the dynamic force in Globalization 2.0 was companies globalizing,

the dynamic force in Globalization 3.0 is the newfound power for individuals (and companies) to collaborate and compete globally" (Friedman, 2005:10).

Among the forces that "flattened the world", Friedman identified the offshoring phenomenon. In his book, "*The world is flat*", he affirms that China's joining the World Trade Organization, on 11 December 2001, gave a huge boost to offshoring with more companies shifting production offshore and then integrating it into their global supply chains.

China taking part of the World Trade Organization in 2001, turned itself into an attractive manufacturing platform. Indeed, after that date, foreign companies involved in offshoring processes in China, were protected by international law and by standard business practices. Offshoring to China was only the beginning. Offshoring process regarded other manufacturing centres (as for example in Eastern Europe) and different types of industries (e.g. textiles, electronics).

Friedman (2005:138) defines the offshoring as the practice of moving a factory abroad and then producing "*the very same product in the very same way, only with cheaper labour, lower taxes, subsidized energy, and lower health-care cost*". According to the author, offshoring constitutes a new way to collaborate (between onshore and offshore factories, and between high-wage, high-skilled workers and low-wage, low-skilled ones) and taking advantage of the "flat world".

As stated by Jensen et al. (2013:316), "from an evolutionary point of view, offshoring practice has shifted from the sole relocation of labour-intensive manufacturing activities to also encapsulate more knowledge-intensive business service activities. The combination of an intensified global competitive landscape, the liberalization of trade and investment regimes, and the dramatic drop in transport, data transmission, and tariff costs (Contractor et al., 2010) has made offshoring no longer only confined to restricted labour intensive firm activities such as scale production and call-centre activities, but essentially to comprise the re-location of firm tasks and activities from the entire value chain".

That is what distinguish this new wave of offshoring from the past. Of course the shift of production to developing countries is not a new phenomenon, but nowadays what is different is that firms, seeking low labour costs, redesign the value chain of industrial sectors as a whole (G. Baronchelli,2008).

Indeed, offshoring can be defined as the international relocation of disaggregated firm value chain activities in captive, collaborative or outsourced governance modes (Bals et al., 2013). Firms hope to reduce overall costs and risks by disaggregating their value chain activities into discrete pieces worldwide through different ways: some to be performed in-house others to be outsourced to external vendors (F.J Contractor et al. 2010).

At this point is important to have a clear distinction between offshoring and outsourcing. According to Ellram et al. (2008:149), "outsourcing is distinguished from retaining work inhouse in that work is performed by independent parties who are not part of the firm's employee base" while "offshoring takes into account the contractual/legal dimension in combination with an offshore location" (Jahns et al., 2006:222).

From this we derive that offshoring constitutes a crucial strategic decision that will determine the competitiveness of the firm in the long run. As argued by the world's leading scholar on industry competitiveness M. Porter (1990:73), *"in a world of increasingly global competition, nations have become more, not less, important. [...] Competitive advantage is created and sustained through a highly localized process".*

Because of this new global and interconnected scenario, managers have to face big challenges paying attention to the firm's production location decisions and to the resulting shift from local to global value chains. Only taking into account all the risks and opportunities that this change may lead, firms could be successful and competitive globally in a long term perspective.

1.3. Offshoring: an industrial location decision

Studying how firms decide where to relocate their activities is an essential aspect to be investigated in the offshoring phenomenon. Principally this *location evaluation process* is an economic decision: it tries to find the **"optimal" location** of a value chain activity considering the resulting economic advantages and opportunities. Optimal locations embody *location-specific advantages* able to maximise the profits (and minimize the costs).

Farrell (2004) says that firms, to determine their location-specific advantages, should look at variables like labour intensity, skill requirements, natural-resources intensity, and economies of scale and scope. According to Xiaoyuan Lu et al. (2009) the localization decision depends on the extent of price of products or goods, manufacturing cost differentials and also on demand size and uncertainty.

An interesting work of MacCarthy et al. (2003) revises all the literature of international location decision and identifies a fully comprehensive set of thirteen factors and sub-factors that are potentially relevant to international location decisions. Is remarkable to notice that, these factors and sub-factors cover **not only quantitative aspects** relevant to location decisions (as transportation and labour cost) but also and **qualitative ones**. In fact, nowadays, differently from the past, firms are involving in the process more qualitative aspects too, including operational, strategic, economic, political, social and cultural dimensions required to support the overall offshoring business strategy.

Major factors	Sub-factors
Cost	Fixed costs; transportation costs; wage rates and trends in wages; energy costs; other manufacturing costs; land cost; construction/leasing costs and other factors (e.g. R&D costs, transaction and management costs etc.)
Labour characteristics	Quality of labour force; availability of labour force; unemployment rate; labour unions; attitudes towards work and labour turnover; motivation of workers and work force management
Infrastructure	Existence of modes of transportation (airports, railroads, roads and sea ports); quality and reliability of modes of transportation; quality and reliability of utilities (e.g. water supply, waste treatment, power supply, etc.) and telecommunication systems
Proximity to suppliers	Quality of suppliers; alternative suppliers; competition for suppliers; nature of supply process (reliability of the system) and speed and responsiveness of suppliers
Proximity to markets/customers	Proximity to demand; size of market that can be served/potential customer expenditure; responsiveness and delivery time to markets; population trends and nature and variance of demand
Proximity to parent company's facilities	Close to parent company
Proximity to competition	Location of competitors
Quality of life	Quality of environment; community attitudes towards business and industry; climate, schools, churches, hospitals, recreational opportunities (for staff and children); education system; crime rate and standard of living
Legal and regulatory framework	Compensation laws; insurance laws; environmental regulations; industrial relations laws; legal system; bureaucratic red tape; requirements for setting up local corporations; regulations concerning joint ventures and mergers and regulations on transfer of earnings out of country rate
Economic factors	Tax structure and tax incentives; financial incentives; custom duties; tariffs; inflation; strength of currency against US dollar; business climate; country's debt; interest rates/exchange controls and GDP/GNP growth,

Figure 1: "Summary of major criteria and sub-factors affecting International location decisions"

	income per capita
Government and political factors	Record of government stability; government structure; consistency of government policy; and attitude of government to inward investment
Social and cultural factors	Different norms and customs; culture; language and customer characteristics
Characteristics of a specific location	Availability of space for future expansion; attitude of local community to a location; physical conditions (e.g. weather, close to other businesses, parking, appearance, accessibility by customers etc.); proximity to raw materials/resources; quality of raw materials/resources and location of suppliers
Source: MacCarthy at al	(2002)

Source: MacCarthy et al. (2003)

After having listed the thirteen factors, MacCarthy et al. (2003) employed them to conduct a Delphi study (that used a worldwide panel of experts) in order to investigate what factors affect international location decisions the most. In this way, the authors identified "**five major factors**" **that may strongly influence international location decisions** that is to say: costs, infrastructure, labour characteristics, government and political factors and economic factors.

Costs: in line with the study and to the literature, costs are the most important factor. Firms want simultaneously reach costs minimization and maximise customer service. This is reflected in location decisions, even if the importance given to the sub-factors of costs (*fixed costs; transportation costs; wage rates and trends in wages; energy costs; other manufacturing costs; land cost; construction/leasing costs and other factors -e.g. R&D costs, transaction and management costs etc.*- MacCarthy et al., 2003-) can vary among different countries and types of industries.

Infrastructure: according to MacCarthy et al. (2003) this element refers to the existence, quality and reliability of modes of transportation, utilities and telecommunication systems. Indeed, infrastructures represent a big concern in international location decisions for firms that want to compete in today's global business environment. The main challenges companies face is reducing the lead-time and to maintain standards of quality. For this reason according to the authors firms try to locate in countries in which facilities and utilities are reliable and in good conditions. However, the importance of sub-factors of infrastructure highlighted in the study (*existence of modes of transportation -airports, railroads, roads and sea ports-; quality and reliability of modes of transportation; quality and reliability of utilities -e.g. water supply, waste treatment, power supply, etc.- and telecommunication systems)* may vary from firm to firm. For example, infrastructure are fundamentals in telecommunication industry or having access to adequate utilities (as water and electricity) are key elements for other sectors.

Labour characteristic: location analysis is also driven by labour characteristics. The quality of the labour is fundamental because it has an impact on productivity, quality of the finished product or service, waste and rework. Before making international decisions, it is also necessary to investigate the availability of workers and to check their attitude and motivation for each alternative location taken into consideration in the offshoring decision process.

Government and political factors: according to the study of MacCarthy et al. (2003:814) *"the attitude of government to inward investment is a major contribution to the development of business"*. It is a factor difficult to capture, to measure and analyse but it is decisive for the company's success because it may affect (positively or negatively) the profit and the growth of the business.

Economic factors: this is the last factor cited by the authors. It has a broad value in location choices even if, the rankings of economic sub-factors (*tax structure and tax incentives; financial incentives; custom duties; tariffs; inflation; strength of currency against US dollar; business climate; country's debt; interest rates/exchange controls and GDP/GNP growth, income per capita*) could assume different levels of relevance for some geographical areas in which, for example, "*the fluctuations in exchange rates of currencies could directly affect many international operations*" MacCarthy et al.(2003:814)

Looking at the sector in which a firm operates (hence looking at its specific cost structure) we can understand its location preferences. Farrell (2004) notices that, for instance, labour-intensive industries, such as apparel, prefer to move production to lower-wage countries. She follows observing that industries that rely heavily on natural resources, such as the furniture sector, may decide to locate their production processes in countries in which is easy to find resources with a lower cost. The author concludes providing the example of industries that uses standardized components, like consumer electronics, in which is fundamental to find a place in which build up production economies of scale.

From this we derive that location choice is strictly influenced by the drivers of offshoring.

Roza et al. (2011) summarize the **motives of offshoring** in three groups (cost, resource and enterpreneurial drivers) that purse different objectives: cost savings, efficiency and realizing new business opportunities.

Figure 2: "Main theoretical perspectives and effects of offshoring"

Offshoring driver	Theoretical perspective	Core references	Effect
Cost driver	Transaction cost economics (production efficiency theory)	Coase (1937) and Williamson (1975)	Use low costs (summed production and transaction costs) at offshore locations to decrease <i>cost levels</i> at domestic location
Resource driver	Resource-based view	Penrose (1959) and Barney (1991)	Use resources at offshore location to improve <i>efficiency</i> of current operations at domestic location
Entrepreneurial driver	Entrepreneurship theory	Schumpeter (1934) and Davidsson (1989)	Use entrepreneurship to address new resource combinations to realize new business opportunities

Source: Roza et al. (2011)

Starting analysing the "cost driven offshoring", we need to say that the phenomenon cannot be explained looking only to *lower labour costs* without considering the possible increase in *transaction costs* (search and information costs, bargaining and decision costs, policing and enforcement costs) that could offset the benefits reached. Roza et al. (2011) use as core reference the works of Coase (1937) and Williamson (1975) that affirm that transaction costs increases by *uncertainty* involved in the relocation activities.

Roza et al. (2011) continue analysing the literature remarking that firms, beyond the uncertainty deriving from a relocation decision, can enjoy efficiency gains as well.

Efficiency gains realised at offshore locations can decrease transaction costs. For example companies can achieve economies of scope and technological and organizational expertise and, thanks especially to information technology and new communication systems, they can reduce uncertainties and realize improvements. The authors observed that "offshoring driven by cost" is a strategy especially used by SMEs when these want to start to expand the business. Indeed, this strategy offers scale advantages and low setup costs (thanks to numbers of suppliers at overseas intermediate markets that decrease transaction). This allows SMEs to produce their products at competitive levels.

Hence, in this case firms want to:

- Realise labour cost savings;
- Realise other firm-specific cost savings;
- Improve efficiency.

The second group, *"resource driven offshoring"*, is explained by Roza et al. (2011) applying the resource based view. In this case a firm offshores to focus on knowledge-seeking and efficiency-seeking. The authors take as references the works of Edith Penrose (1959) and Barney (1991) that explain how the resources of a firm are essential to build-up and to improve a sustainable competitive advantage.

In this specific type of offshoring economies of scope, learning or scale are less important with respect to cost driven offshoring. According to the authors, the resource-driven offshoring is a good strategy for small and large firms to search resources, although the kind of resources might be different. *"The resources firms seek enable firms to go beyond performing activities in a cheaper way. Gaining access to personnel and technologies, for example, gives firms the opportunity to become more efficient, i.e. doing existing things more efficient"*. (Roza et al., 2011:317).

Therefore, in this case firms, trough offshoring, would like to:

- Gain access to qualified personnel;
- Redesign the business process;
- Improve service levels.

The last motive, the "*entrepreneurial driven offshore*", represents offshoring as a strategy to realize growth. The authors, to explain this last rationale of offshoring, refer to the *Entrepreneurship theory* (Schumpeter, 1934 and Davidsson,1989). Entrepreneurship refers to the entrepreneur's ability to identify new opportunities, to find out new patterns and to develop the resource base needed to pursue the opportunities. A new declination of the entrepreneurship topic refers to International entrepreneurship. It has a strong correlation with the offshoring phenomenon because "the relocation of business functions makes it possible for firms to get closer to potential customers and other opportunities". (Roza et al., 2011:317).

Therefore, the desired effects could be:

- to implement a larger global strategy;
- to increase speed to market;
- to develop a differentiation strategy;
- to access to new markets.

For sure offshoring constitutes a big chance to realise cost savings and to create value for the firms but, as Markides and Berg (1988) said, the "*The savings can cost a lot*".

In order to implement an effective location decision, managers should assess each potential location in terms of its impact on key operational performance measures like: lead time, inventory, responsiveness to demand variability, flexibility, and quality and not be influenced by cost savings alone. For instance, "a firm setting up a manufacturing plant in a third world country to take advantage of lower labour costs, must assess if the poor infrastructure or the non-availability of skilled personnel may erode its capability to compete on time" (Bhatnagara, and Sohal, 2005:443).

Focusing only on the cost saving is by itself risky because "**hidden costs**" may offset the gains. Hidden costs are all the unexpected costs that have not been estimated or considered during the offshoring decision process.

Pedersen et al. (2012), using comprehensive data from the Offshoring Research Network, argue that hidden costs are due to the *organizational configuration* and *task* complexity¹ of the offshoring process that involves a number of ignored operational challenges and related costs. This, according to the author, causes a significant gap between expected and achieved performance (that is to say between expected and achieved cost savings). Thus, the only way for firms to avoid or to minimize this gap is to have *organizational design orientation* and *experience*, implementing a more strategic approach to offshoring in selecting the location, implementing projects and in coordinating operations.

Along these lines, we can say that globalization changed industries trough offshoring. This represents a new strategy to achieve several benefits as, one for all, realizing cost savings for example moving jobs to lower-wage locations.

However, using the words of Farrell (2004:82), this practice is just the "tip of the iceberg" because "by streamlining their production processes and supply chains globally, rather than just nationally or regionally, companies can dramatically lower their costs and drop their prices to increase demand for their products, attract new customers, and even enter new markets".

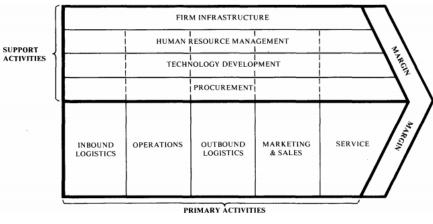
¹Respectively, the first refers to the complexity in terms of the *interdependencies* in the organizational configuration, the latter refers to the complexity of the individual offshoring implementations.

Therefore, in this topic emerges the importance to reengineer the value chain on a global scale and to optimize the global production. "*Countries and companies that understand how this process will unfold will have a better chance of profiting from the new global environment*" (*Farrell, 2005:683*).

1.4. From a local to a global value chain

The global economy is increasingly structured around global value chains. (Gereffi and Fernandez-Stark, 2011:2). Globalization accelerated the disaggregation process of firms' value and supply chains by moving activities and tasks to different locations around the world. In this context, characterized by very complex industry interactions, "the global value chains (GVCs) methodology is a useful tool to trace the shifting patterns of global production, link geographically dispersed activities and actors of a single industry, and determine the roles they play in developed and developing countries alike" (Gereffi and Fernandez-Stark, 2011:2).

According to Porter (1985:33-34), the value chain is a basic tool for "examining all the activities a firm performs. [...] The value chain disaggregates a firm into its strategically relevant activities in order to understand the behaviour of costs and the existing and potential sources of differentiation. A firm gains competitive advantage by performing these strategically important activities more cheaply or better than its competitors".





Source: Porter (1985:37)

Therefore, nowadays the value chain concept is changed from being conceived as the basic tool for examining all the activities a firm performs to be a "key tool for the analysis of economic

transactions between global players and local/regional economic systems" (Lorenzo Gui, 2010:31).

One of the first authors to talk about this transformation was Gereffi and Korzeniewicz (1994), that during the mid-1990s developed a framework called *Global Commodity Chains* (GCCs). The authors remarked that adopting a GCC perspective helps to underline not only the geographical spread of transnational production arrangements, but also their organizational scope (i.e., the linkages between various economic agents, raw material suppliers, factories, traders and retailers).

These GCCs can be of two types representing the alternative modes of organizing international industries: **producer-driven** or **buyer-driven** commodities chains. The first usually refers to most capital and technology intensive industries like automobiles, computers, aircraft and electrical machinery instead the latter refers "to those industries in which large retailers, brand name merchandisers, and trading companies play the pivotal role in setting up decentralized production networks in a variety of exporting countries typically located in the third World" (Gereffi and Korzeniewicz ,1994:97). The main difference between the two is that in the buyer-driven model is frequent that businesses do not own their own facilities. These firms try to exercise the control over the global value chain and to coordinate the activities. A good example of this type of chain is the apparel industry that will be analysed in details in the next paragraph.

During 2000s, in literature started to be used the concept of *Global Value Chain* (GVC) taking as a main reference the work of Porter in 1985. A Global value chain is formed by all the primary and support activities (with the aim of permit firms to exist, to perform and to gain a competitive advantage) that can be contained within a single firm or divided among different firms that could be located abroad.

To understand the importance of Global Value Chains around the world, we can look at the so called "*GVC participation index*" proposed by Koopman et al. (2010) and illustrated in the last updated report of the World Trade Organization WTO of 2014^2 .

This index captures the import content of exports (backward participation) and how much domestic value added is embodied as intermediate inputs in third countries' gross exports (forward participation). The participation index is defined as the sum of the foreign value added (FVA) embodied in a country's exports and the indirect value-added (IVA) exports (i.e. value of

² Report available at the site: www.wto.org/english/res_e/booksp_e/world_trade_report14_e.pdf

inputs produced domestically that are used in other countries' exports) expressed as a percentage of gross exports. This index captures both backward and forward participation. This report calculates this participation index using the TiVA³ database." (WTO report, 2014:83).

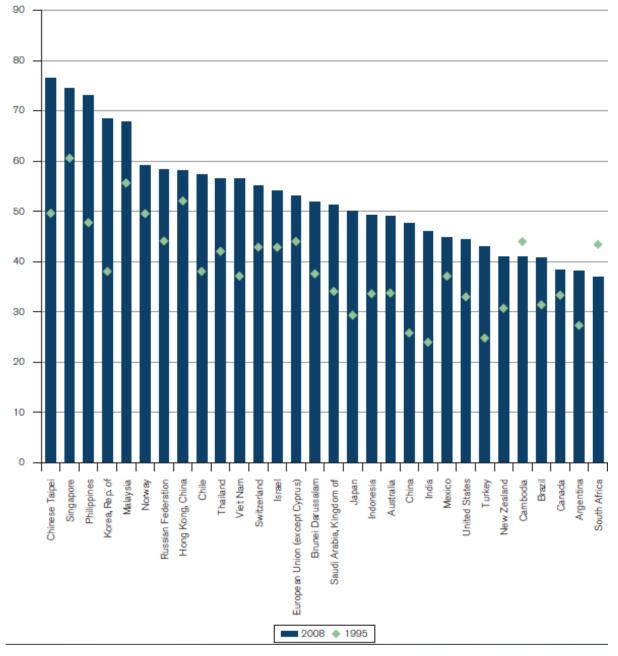


Figure 4: "Participation index in GVCs, 1995 and 2008 (percentage of participation)"

Source: WTO Report (2014:84)

The *figure 4* presents the participation index in GVCs across economies in 1995 and 2008. We can see how in 2008, the top three positions were held by developing economies: Chinese Taipei, Singapore and the Philippines – whereas in 1995 the top three were Singapore, Malaysia and

³ Trade in Value Added

Hong Kong, China. Looking at the changes across time, all economies apart from South Africa and Cambodia increased their participation in GVCs. The Republic of Korea, Chinese Taipei, the Philippines, India and China increased their participation the most.

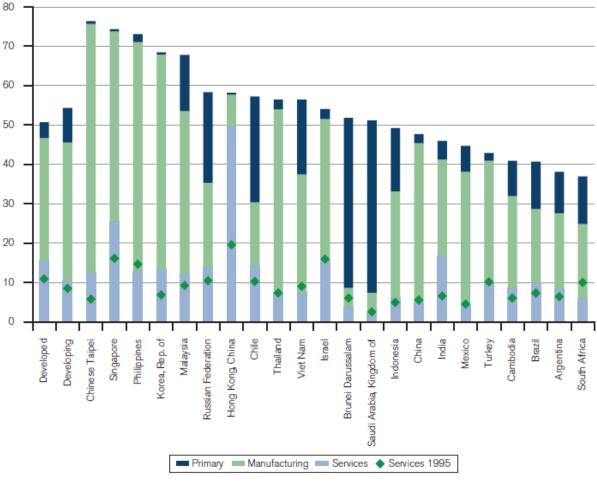


Figure 5: "Contribution of services, manufacturing and primary exports to the GVC participation by economy, 1995 and 2008 (per cent)"

Source: WTO report (2014:89)

In *figure 5* the GVC participation index is split into three broad sectors: services, manufacturing and primary. As we can see from the chart, trade in manufacturing products accounts for the majority of GVC trade however the *services trade*⁴ within GVCs has increased for the majority of developing countries and also slightly for the aggregate between 1995 and 2008.⁵

⁴ The services part of the GVC participation index captures backward (foreign content of services exports) and forward (domestic content of services exports used in total third-country exports) linkages of direct service exports. *WTO report, (2014), page 89.*

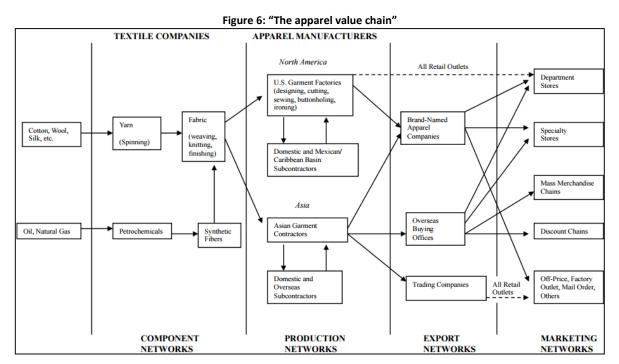
⁵ Trade in services within GVCs accounts for almost 16 per cent of developed country exports and slightly more than 10 per cent of developing country exports, respectively. Hong Kong (China), Singapore and India show the highest shares (50 per cent, 26 per cent and 17 per cent, respectively). WTO report, (2014), page 89.

Hence, in the last years the fragmentation of production and services around the world became a strong reality. Be aware of these new relationships and links between firms and adopting a global vision into firms' decisions making process will determine the success of the company.

1.4.1. A focus on the apparel industry value chain

Gereffi and Memedovic (2003), using the Global Value Chain framework, explain the transformations in production, trade and corporate strategies of the apparel industry. In a work of Gereffi (1994) the apparel industry has been already described as a sector characterized by a *buyer-driven value chain* that contains three types of lead firms: retailers, marketers and branded manufacturers. In nowadays scenario, with increased global competition, these firms have developed extensive global sourcing capabilities.

Gereffi and Memedovic (2003:3) illustrate the apparel Global Value Chain and identify its five main parts: "raw material supply, including: natural and synthetic fibres; provision of components, such as the yarns and fabrics manufactured by textile companies; production networks made up of garment factories, including their domestic and overseas subcontractors; export channels established by trade intermediaries; and marketing networks at the retail level".



Source: Gereffi and Memedovic (2003:5)

In apparel buyer-driven value chains, the growing retailers' concentration and power increased a lot because of global sourcing. For example, in 1999 in United States the percentage of apparel produced in country was only 11%. This, as said by the authors, lead to a stronger competition between retailers, marketers and manufacturers and to a growing number of "*networks of collaborators as well as competitors in the upstream segments of the chain*". (Gereffi and Memedovic, 2003:31).

The apparel industry- in particular the fashion sector- is a highly competitive business where firms that form the chain must be flexible and ready to respond quickly to the needs of the markets. Fernie and Sparks (2004) in their book describe the characteristics of the fashion apparel sector from a supply chain point of view. Given the fact that the *clothing industry* is characterised by short product lifecycles (seasonality), high volatility (not stable demand) and low predictability (due also to the fact that the fashion consumers could purchase by impulse), according to the authors, this is one of the most challenging sector for logistics management.

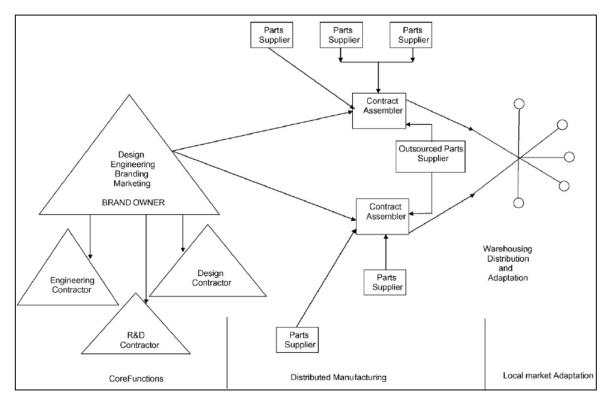
Indeed, the apparel industry has been, and still is, one of the more involved sector in the offshoring phenomenon because of the cost advantage seeking came from retailers. However, the authors noticed that firms of apparel industry that offshore in low labour cost area could realizes longer lead times in global sourcing⁶. This fact, according to Fernie and Sparks (2004), is not caused only by the distance, but this is especially due to the delays and variability caused by internal processes involved and by the import/export procedures across the value chain. Thus, only retailers and manufacturers that are able to be flexible and implement agile strategies, focusing on time compression and quick response to market needs, will out-perform those that do not.

1.5. The global factory

Multinational Enterprises, strengthening value chain activities across the world according to a location convenience, lead to develop a *global factory structure* that allows them to integrate their global strategies. Adopting a global factory structure does not imply necessarily the internalization of the offshored activities by firms. For this reason, MNEs are developing links and relations among them, resembling much more like differentiated networks (Buckley, 2009a).

⁶ There are three critical lead times that must be managed by organizations that seek to compete successfully in fashion markets: time to market, time to serve, time to reach.

According to Buckley (2009a) the global factory structure is divided into three parts. The first part is represented by the **original equipment manufacturers** (**OEMs**) which control the brand the design, engineering and R&D for the product. **Contract manufacturers** (**CMs**) are the second component of the global factory. They need to be flexible to perform (at low costs) manufacturing for OEMs. The third part of the chain is **warehousing, distribution and adaptation** that follow an "hub and spoke" principle to achieve local market adaptation (mixing ownership and location strategies).





Source: Buckley (2009a)

Buckley (2009b) affirms that combining efficiency (to reach economies of scale trough standardization) with adaptation (to be closer to the customers) is one of the biggest difficulties that firms have to face in offshoring. Being *"globally efficient"*, pushes global factories to implement "glocal" strategies in combination with the "fine-slicing" (disaggregation) of activities across the network of the global factory.

The governance of the global factory is also a fundamental question to be highlighted. Buckley and Strange (2015) revise three different point of views given by different authors. Each of the three models captures a part of the contemporary reality about who maintains the control over the global factory's dispersed activities. The first point of view reported by Buckley and Strange (2015) is the one of **Gereffi (1989)** that links the dispersion of value chain activities across the world with a widening of corporate ownership on a global scale. Therefore, according to Gereffi the diffusion of global factories implies a growing number of firms controlled by a more diverse set of owners in many different countries.

The second position reported by the authors is the one of **Grunwald and Flamm's** (1985). According to them, MNEs headquartered in advanced economies still control and integrate (internalize) under common ownership offshored value chain activities.

Buckley & Ghauri (2004) give a completely different conception of the global factory that implies offshoring activities and at the same time externalizing them to independent suppliers. The peculiarity of this point of view is that firms change the ownership of their "fine-sliced" value chain activities retaining the control of the resultant distributed networks through the internalization of the knowledge.

	Gereffi (1989)	Grunwald and Flamm (1985)	Buckley/Buckley and Ghauri (2004)
Location	Dispersion of manufacturing but national specialization in distinct industrial sectors and stages of the value chain	Relocation of assembly activities to developing countries	"Fine-slicing" and relocation of activities
Ownership and control	Widening of corporate ownership	Largely internalized in MNEs	Increased externalization of control of operations; increased internalization of knowledge
Governance	Growth of locally owned firms; more varied governance modes	Offshoring; MNE control	Increased control of focal firm through internalization of knowledge and contractual control of operations

Figure 8: "Key Issues in the Analysis of the Global Factory: Location, Ownership, and Governance"

Source: Buckley and Strange (2015)

From this focus on global factories we can derive that companies, besides the location decision, have to consider different governance/ownership options to implement the offshoring strategy. This choice between "*captive*" offshored plants (owned, internalised) or "*non-captive*" offshored plants (controlled through the market by contract arrangements) is not easy and companies have to consider all the various implications that can derive from it.

1.6. Governance configurations of offshoring

Firms can offshore value chain's activities adopting different governance configurations that usually range from licensing to direct investments, that is to say, the classic *trade-off between market and hierarchy*.

Even if the underlying rationale of this approach considers the relative costs and benefits of both the market for technology and the market for manufacture, the optimal governance structure decision process could be affected by some biases.

Buckley and Strange (2011) notice that *MNEs' attitude to risk* influences the preferred governance structure for international transactions. Company's strategy is determined by the decision taken by managers and stakeholders and it is influenced by their attitude to risk (they could be more or less "*risk-averse*"). Thus, *firms are not risk neutral* (as implicitly stated by international theory) and they do not establish the optimal governance structure simply looking to the comparative costs of the different governance alternatives. Hence is important to take this characteristic into account, in order to put in place some strategies that allow managers to avoid mistakes and biases in the offshoring decision process.

According to Chen (2005), nowadays the classic trade-off between market and hierarchy should be enriched by the analysis of the so called *hybrid governance structures* to exploit complementary assets and capabilities held by local business partners. Indeed, according to the author, the choice of optimal governance structure is determined by the complementarity of strategic assets and by the linkages among the technology-manufacture involved in the international production process.

Thus, according to Chen (2005), besides the traditional governance configurations of an offshoring operation (represented by FDI and licensing), firms have three additional hybrid alternatives.

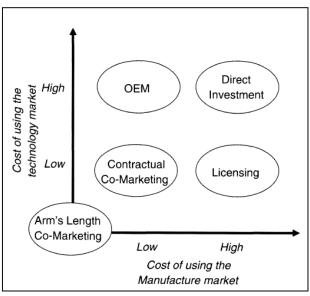


Figure 9: "An extension of internalization theory"

Source: Chen (2005)

1. **Arm's Length Co-Marketing**: in this governance structure "*two firms simply comarket their joint output and rely entirely on arm's length market transactions to regulate the developer-manufacturer interface*" (Chen, 2005:235). No licensing agreement is involved to regulate their cooperation, because the final product market will assess the final value creation of each firm. For this reason, MNEs are incentive to disclose all technical information to indigenous firms and also to provide them continuous technical support. Likewise, indigenous firms do not check the quality of the technological knowledge they received because they know that is in the MNE interest to produce a well-made product abroad.

2. **Contractual marketing**: in arm's length marketing the performances of the two firms are inseparable. Is impossible to distinguish which firm of the two registered a superior performance *(positive performance inseparability)* or a lower performance *(positive performance inseparability)* in the production process. One way to solve the performance inseparability problem, in cases in which the reputation of one firm depends on the performance of another one, is to enter into a contractual marketing. From the contract, indeed, will derive *contractual restraints* (that regulate and control each other's behaviour) and also *payment* and *rewards*.

3. **Licensing**: the author Chen (2005) defines this governance structure as the situation in which MNEs sell to indigenous firms the right to exploit their technological knowledge at a predetermined fee. In this case the licensee bears the full responsibility of his performance. MNEs must put in place some actions to safeguard their ownership rights and, in the same way, indigenous firms must monitor MNEs' behaviour in order to regulate the developer-manufacturer interaction.

4. **Original Equipment Manufacturer (OEM)**: This is a widely used contractual arrangement to organize the cooperation between technology development and product manufacture across borders. The OEM is the offshore supplier (to which MNEs transfer design and production know-how) that produces the components that will be assembled in the final product branded by the MNE. OEM is defined by Chen (2005) as "the mirror image of licensing". Indeed, in the case of licensing, the licensee has access to the technological know-how controlled by the MNE, instead, in the case of OEM, the MNE has access to the indigenous partner's production expertise. Also in this governance option MNEs have to

arrange some sophisticated contractual restraints to regulate the developer-manufacturer interaction and to prevent indigenous firms from misusing the transferred technology.

5. **FDI**: In this form of governance MNEs internalize technology development and product manufacture within an integrated firm through a foreign direct investment. Thus, in this case, the problem of performance inseparability does not exist, given the fact that MNE, owning all technological and manufacturing assets abroad, now is the unique responsible for the entire process. Therefore, in FDI, for managers is important to give hierarchical directives to align the internal new process created. This governance configuration of offshoring is the optimal one if the benefits of integrations are able to offset the costs. If this not occur is better for MNEs to choose among the other options analysed before.

From his analysis the author (Chen, 2005) derives that the choice of the optimal governance structure to govern the developer-manufacturer cooperation depends on the efficiency of the technology market versus the manufacture one. For this reason, he extended the traditional internalization trade-off (market/hierarchy) adding two-dimensional variables: the cost of using the market for manufacture and the cost of using the market for technology. From the *figure 9* is easy to capture the rationale of each possible governance decision. Starting from arm's length co-marketing (seeing performance separability) and following analysing the other forms of governance (considering the costs for manufacturing and technology), we notice that different levels and combinations of the two variables configure different optimal choices for the MNEs. Even if minimize the transactional costs is fundamental in this decision process, the author remarks also the importance of the "*business reputation*". This element should be taken into account when a firm is hesitant about a governance configuration to adopt.

1.7. Conclusion

When firms decide to offshore should consider a lot of elements and try to minimize transactions costs and to preserve the business reputation. Nowadays the choice of the right governance configuration moves from the classical trade-off of the internalization theory and encompasses other hybrid models that can better fit the needs of MNEs. Managers should face continuous challenges originating from the international environment and to the rise of global factories across the world. Thus establishing the right governance configuration and then coordinating the relations in the proper way is fundamental to be successful in this new scenario.

2. CHAPTER MANAGING THE "DARK SIDE": HOW TO IMPLEMENT A SUCCESSFUL OFFSHORING STRATEGY

2.1. Introduction

Offshoring is not an easy strategy to implement because it hides several risks that very often threaten the benefits that could derive from this decision. The aim of this chapter is to define a framework for *preparation and planning* of the offshoring strategy, in order to provide concrete tools to manage the "*dark side*" (represented by all the risks and the hidden costs that firms could incur). It will describe the strategic impact of an offshoring decision, the best operating model to implement it, and the organization readiness factors needed to face this big challenge. Thus, will be presented the importance to conduct a *risk analysis* and a *Total Cost of Offshoring estimation* and to arrange some *coordination methods* able to ensure the knowledge transfer among activities, quality and productivity standards.

2.2. Planning Offshoring

In the previous paragraphs we presented offshoring as an economic decision taken by firms that is driven by different factors whose try to maximize the profit and to minimize the costs. As we can imagine, in practice realising all the expected benefits is difficult and requires a lot of effort before and after having implemented the offshoring strategy. Contractor et al. (2010:1424), say that a fundamental **prerequisite** to match the expectations arising from offshoring is that firms have to "analyse and learn about their own operations and processes in-depth –to assess which of them can be standardized, bundled in new ways, as well as to identify activities where the frequency of occurrence, or scale, of the operation is too small to justify keeping in-house".

From this we understand that, the first thing companies should assess, when they think about offshoring a value chain activity, is to check whether if it is "offshorable".

In fact, Bals et al. (2013) define offshoring as a process that encapsulates three broader organizational processes: the *disaggregation* of firm value chains into offshorable activities, the *relocation* of these activities to foreign locations, and the *re-integration* of the activities into a concerted organizational whole.

Jensen et al. (2013:319) stated that "the less codified, replicable and standardized the activities and tasks in offshoring, the greater the importance, and the challenge, of transferring appropriate knowledge efficiently and effectively in the relocation process". Therefore, is important to pay attention to aspects such as knowledge transfer, coordination, and control that also could be influenced by "the geographic, political and institutional distances between the onsite organization and offshoring activities". (Bals et al. 2013:3)

An interesting report of Boston Consulting Group $(2005)^7$ stated that roughly *half of the companies* that engaged in a **business process outsourcing (BPO)** and/or **offshoring** registered *underwhelming results* and that, surprisingly, only few of them knew where they went wrong or how to solve the problems.

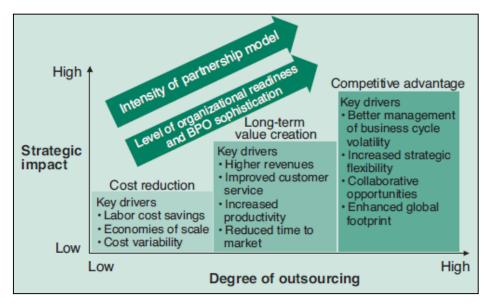
According to the "*BCG report*" much of the outcome of the offshoring or BPO process hinges on its preparation and planning. Therefore, a company, before launching its effort, should consider: the strategic impact of its BPO/offshoring decision; the best operating model to implement it (considering the needs) and if the organization is really ready to face this big challenge.

Consider the Strategic Impact. The majority of literature shows offshoring and BPO as a cost-cutting opportunity. Unfortunately basing a competitive advantage on cost-savings only is a strategy easy to replicate and that barely creates long term value.

Therefore, the aim of firms should be focus on long term value creation enhancing their key capabilities (such strategic flexibility) derived from a range of inputs, including higher revenues and improved productivity and processes.

⁷BCG report (2005) available at the site: https://www.bcg.com/documents/file14496.pdf

Figure 10: "Business Process Outsourcing and Offshoring Are About Strategic Impact, Not Just Cost Reduction".



Source: BCG Report (2005:1)

Choose the Right Operating Model. This is the most difficult step of the offshoring process because each firm is different and can consider different aspects according to its needs. In the *BCG report* are considered four basic models:

1. Offshoring to a Vendor in a Low-Cost Country. Companies that employ this model are looking to seize the advantages of low-cost countries but are willing to *cede at least some operational control*.

2. Offshoring to a Captive Centre, or Wholly Owned Subsidiary, in a Low-Cost Country. This is the more common model of offshoring used by firms. According to the report approximately 70 to 80 percent of offshoring activity is based on this model. It allows companies to benefit from the cost and scale advantages still *retaining full operational control of the offshored activities* in low-labour cost locations.

3. Outsourcing to a Local (Onshore) Vendor. This strategy does not imply moving abroad a value chain activity but it still will be performing onshore. More than 95 percent of outsourcing is still being done onshore (for example activities from IT and logistics to HR, finance, and accounting). The main features of these deals is that the vendor assumes control of some or all of the client's employees but utilizes a more effective structure and optimized processes.

4. **Doing the Work In-House.** This is the option used when, after an accurate evaluation of the offshoring or BOP processes, the disadvantages are greater than the benefits.

Outsourcing and offshoring are not always the best solution and firm could achieve savings by upgrading its internal capabilities and by doing the work internally.

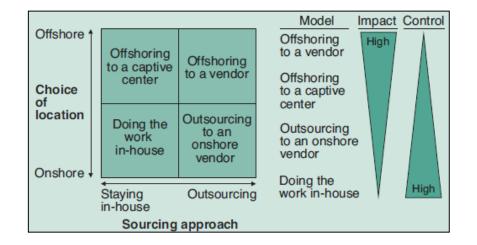


Figure 11: "When Choosing a BPO Model, Companies Must Strike a Balance Between Impact and Control"

According to the BCG Report (2005), choosing the right model requires an *analysis along five dimensions*:

• Strategic impact, "encompassing the effort's strategic relevance, the potential to gain competitive advantage, and considerations relating to intellectual property" (BCG Report, 2005:2). A firm should not outsource a critical process that constitutes a competitive advantage and that differentiate the company from the competitors. Instead would be better offshore to a captive centre or wholly owned subsidiary.

• *Financial impact*, "*encompassing the impact on revenues, costs, and the balance sheet*" (BCG Report, 2005:2). For example, realizing significantly lower labour costs should not cause negative effects on the quality of the product, because this could offset the gains realized.

• **Business impact**, "encompassing service levels, access to skills and technologies, and the potential for greater flexibility and reduced complexity" (BCG Report, 2005:2). A firm should check if trough outsourcing could increase its ability to deliver services or it could allow to have better access to the tools, technologies, and skills.

• *Business risk*, "*encompassing strategic, brand, vendor, country, and operational risks*" (BCG Report, 2005:2). For example, examining the effects of the outsourcing/offshoring on the brand or considering the externalities coming from the geopolitical risk.

Source: BCG Report (2005:3)

• *Feasibility*, "*encompassing the vendor's market, legal constraints, location logistics, and process maturity*" (BCG Report, 2005:2). Here the analysis focuses on the internal capabilities of the firm. For example, examining if the experience owned by the firm is sufficient to deal with the offshoring challenge, or checking if the ongoing capital is sufficient to maintain the required knowledge and skills in-house.

As remarked by the authors of the BCG report (2005:3), *choosing a model requires striking a balance between impact and the degree of control* the organization wants to retain. The latter will largely depend on the confidence the company has in the vendor and on its previous outsourcing experience. For example, if the experience of offshoring/outsourcing is limited, firms at the beginning of the offshoring operations will prefer to maintain some operational control.

A very important point stressed in the report is that companies, irrespective from which operating model and level of control they choose, have to be involved in the effort even after the decision. Outsourcing or offshoring a process "*does not mean that the process goes away*. *A successful outsourcing usually entails some degree of process reengineering*" (BCG report, 2005:3). Therefore, is necessary to fix the process in advance so that the firm knows its optimal cost base and what type of service level it can reasonably expect from a vendor.

Evaluate the Organizational Readiness. According to the BCG Report (2005), one of the most common reason for the high percentage of failure of offshoring processes is the lack of readiness of the firms at the time they embarked on the effort. So in this step is necessary to test if the organization capabilities will support the program looking the *governance structures, the complexity of formal and informal networks, the level of process standardization and documentation, and the company's general tolerance for change* (for example for a cultural reason). Another thing to do is to **engage the work force** and *aligning all levels, functions, businesses, and regional operations with the strategic outsourcing vision and gaining a collective commitment to your objectives* (throughout a communication plan or a change management program).

The last point stressed by the authors of the report BCG (2005) is that, to implement a successful offshoring strategy, firms have to involve the right people and have to fill carefully the position of the *vendor-relationship manager*. This person will perform a variety of key tasks concerning the monitoring of *changes in business requirements, the market, and the*

relationship over the life of the agreement and the evaluation of the results achieved (in terms of value creation) by the strategy.

We have seen how achieving success in the implementation of BPO and offshoring programs require strong long-terms strategies, analysis of the costs and risks, and organizational planning. *"Those companies that take this perspective and can address the challenges in implementation stand to achieve a lasting and significant competitive advantage"* (BCG Report, 2005:4).

For this reason, in the next section will be exposed in details how to conduct a *risk analysis*, how to *estimate the real costs* of these offshoring strategies and *how to lead with organization*.

2.2.1. Risks analysis

According to Aron et al. (2005) businesses do not make decisions about offshoring systematically enough. For this reason, they can incur in three fundamental mistakes.

First, most companies focus too much on choosing locations, partners and prices instead of evaluating properly which processes they should offshore and which they shouldn't. Second, most organizations *do* not take into account all the risks related to the offshoring procedures. Third, most companies make the mistake of considering the offshoring or outsourcing an *"all-or-nothing choice"*, but along the process they have a continuum of options that could enhance the strategy and avoid errors (for example enter into a contractual co-marketing, joint ventures, or set up captive centres overseas). Therefore, the most common error made by companies is to choose wrong organizational forms without considering all the available options.

Making these mistakes represent a big risk for the firm that should be considered ex ante to implement a successful offshoring strategy. The first step to identify the risks according to Aron et al. (2005) is to Rank Processes by Value.

"By ranking all the company's processes, executives can create a value hierarchy. The higher a process's rank in the hierarchy, the more crucial it is to the company's strategy, and the less the organization should think about moving it offshore or outsourcing it. The hierarchy tells companies where the fault lines between processes are and lays out an offshore migration path." (Aron et al., 2005:149)

Process	Value-creation ranking	Value- capture ranking	Total ranking	
Float management	1	1	ר 2	
for suppliers and			l	Processes the
dealers			٦	company
Working capital	2	3	5 J	shouldn't
management				offshore
Cash flow	4	2	6	
forecasting				
Revenue and	3	4	7 ~	
expenses reporting				Processes the
Payment	5	5	10 >	company
authorization				might offshore
Invoice verification	6	6	12	C
	Source: Aron	net al. (2005·149)	

Figure 12: "Creating a Value Hierarchy of Processes"

Source: Aron et al. (2005:149)

Anyway zero risk activities do not exist. Even when firms decide to offshore the ones with low rate ratings in the value creation, they face two kinds of risk: operational and structural.

According to Aron et al. (2005) businesses have two possibilities to limit the *operational risk*. The *first way* is codifying activities, tasks and knowledge (stating rules and procedures) in order to facilitate the understanding of the job across the dispersed international locations. The *second possibility* is using metrics to measure the quality of processes. Aron et al. (2005) stress a lot the importance of drawing up metrics saying that "*what a firm doesn't measure, it can't offshore well*". For this reason, companies, before deciding to offshore, should have already implemented in-house metrics able to assess the quality. According to the research of Aron et al. (2005:141), "only firms that set tolerance limits for errors, draw up completion times and productivity norms, and continuously measure employees' performance are able to move processes offshore [...] in terms of volume and complexity".

The authors classify the activity risk according to the extent to which the activity can be codified. So they listed some types of processes:

• **Transparent Processes** are those processes that companies can easily codify and evaluate. Hence, the associated operational risk of offshoring and outsourcing is very low.

• **Codifiable Processes.** In this case companies are able to assess the quality of execution and can codify most of the work. This task will be performed by qualified people who know how to execute it (such as accountants and lawyers). If the firm can measure the

quality of the end result, the risk of offshoring or outsourcing the processes becomes manageable, otherwise the risk becomes very high.

• **Opaque Processes.** These processes can be codified but their output and quality is difficult to measure. The related risk is moderate if companies check samples and ensure that the production meet the established quality standard. A solution suggested by the authors, to lower risk of offshoring opaque processes, is to dispose a *performance-based rewards and penalties* for checking the outsourcer's agents work.

• Non-Codifiable Processes. These are the most difficult processes to evaluate in terms of quality of execution because of the higher variation of the business events and the unpredictability of the employee's responses. The authors (Aron et al. 2005) proposed as solution for example, promoting activities of monitoring and supervision by the senior managers of the headquarter.

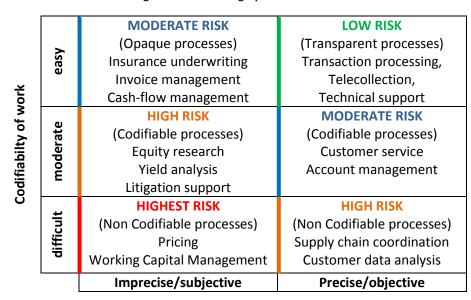


Figure	13.	"Evaluating	Operational	Risk"
Inguic	TJ .	Lvaluating	operational	INISK .

Precision of metrics used to measure process quality

Source. Aron et al. (2005)

Structural Risk is a risk strictly linked to the service provider's behaviour especially when the vendors end act in a way that maximises the both groups' interests. The authors provide some examples of situations that can cause structural risks: the vendors stop investing in training or he or she hires low-skilled people that do not guarantee the same quality. All these problems nowadays can be solved thanks to the information technology that help to track providers' efforts in real time.

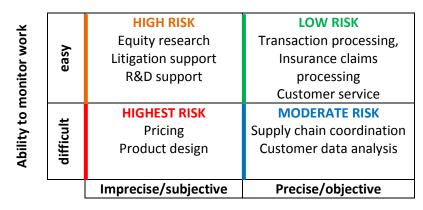


Figure 14: Evaluating Structural Risk

Precision of metrics used to measure process quality

Source: Aron et al. (2005)

2.2.2. Total Cost of Ownership analysis

The total cost of ownership (TCO) is defined by Ellram (1993) as a *philosophy* and at the same time a *purchase tool* which aims at understanding the total cost of a purchase from a particular supplier. The peculiarity of the Ellram's work is remarking that, in doing business, the price is not the only parameter to understand the "real cost" of transactions. To reach a global comprehension of the business is fundamental to determine the key activities and the correspondent key cost elements (before, during and after the transaction). In practice for firms, adopting a widespread approach, is a difficult process, because of lack of data, training and education and corporate culture (Ellram, 1993).

The TCO philosophy can be applied to the offshoring phenomenon and it help to explain the high rate of failure of offshoring. In fact, firms' inability to estimate properly the Total Cost of Offshoring is one of the most important causes of the failures of these strategies.

Indeed, being incapable to assess the cost of the offshored firm activities negatively impacts their performance, and the *resource misallocation* and *managerial distraction* are likely to disrupt them (Larsen, 2016). Therefore, according to the author, only through a correct estimation of costs firms will be able to invest in the required resources and relocate them efficiently to implement a subsequent successful organizational reintegration.

In order to provide a practical example of a Total Cost of Ownership estimation applied specifically to an offshoring operation case (*Total Cost to Offshore*), I decided to use as a

framework a report made by neoIT $(2004)^8$. The report stresses how is important for enterprises to understand their various cost lines in order to: negotiate appropriate charge rates (reducing the operational risk) and budget adequately their investment in infrastructure to support the needs of the enterprise.

In the report are identified twelve key components of Total Cost to Offshore.

1)Wage Rate. In previous paragraphs we noticed that the wage rate differential between countries is one of the most important driver for offshoring decision. However, this is just a little component of the total costs that a firm should consider. For instance, Markides and Berg (1988) say that managers, focusing only in realising labour costs savings, deflect attention from the other 85% of the cost structure. Indeed, they can identify opportunities to save money also in other areas of cost of the company such as administration, inventory control, marketing and R&D. Hence, the comparison of wage differentials across countries should be made applying also an "holistic vision" of the overall cost structure of the firm.

	Program exp	imer (2 eriend		Call Center Agent (2-3 yrs. Experience)			Programmer AVG.	
India	\$ 6,000	to	\$ 9,000	\$ 5,500	to	\$ 7,000	\$ 7,500	
China	\$ 5,500	to	\$ 9,600	N/A		N/A	\$ 7,550	
Philippines	\$ 6,500	to	\$ 10,900	\$ 7,600	to	\$ 9,200	\$ 8,700	
Russia	\$ 7,000	to	\$ 13,000	N/A		N/A	\$ 10,000	
Ireland	\$ 21,000	to	\$ 28,000	\$ 16,000	to	\$ 25,500	\$ 2 4,500	
Mexico	\$ 18,000	to	\$ 23,000	\$ 3,000	to	\$ 15,000	\$ 20,500	
Malaysia	\$ 8,700	to	\$ 12,800	N/A		N/A	\$ 10,750	
Brazil	\$ 9,000	to	\$ 16,000	N/A		N/A	\$ 12,500	
Vietnam	\$ 2,850	to	\$ 4,100	N/A		N/A	\$ 3,475	
Singapore	\$ 27,300	to	\$ 34,600	\$ 22,300	to	\$ 28,400	\$ 30,950	
Canada	\$ 25,000	to	\$ 50,000	\$ 18,600	to	\$ 28,300	\$ 37,500	
United States	\$ 45,000	to	\$ 85,000	\$ 25,000	to	\$ 40,000	\$ 65,000	

Figure 15: "A comparison of wage rates in different countries for similar skills".

Source: neoIT report (2004)

2) **Communication Systems**. Firms undervalue a lot the costs of Offshoring related to the communication systems investments. In the neoIT report (2004) is estimated an expense of \$6000-\$8000 per month for International Private Leased Circuit from a POP (Point-of-Presence) in the US to India. In addition, firms should consider its cost of application, development and maintenance space and also the risk to develop redundant communication

⁸ NeoIT has been one of the first offshore advisory firm for global services born in 1999 in California and today it has become *NEO group*, one of the most important global services sourcing consulting group. The report *"Total Cost of Offshore (TCO): Understanding The True Offshore Financial Rewards and Costs"*, is available at the site: http://itonews.eu/files/f1213794631.pdf

links to assure business continuity and doubling the investment. Even if the communication costs offshore are constantly dropping, these can *be 30 to 60% higher than USA/UK costs*.

3) **Physical Infrastructure and Support**. These costs are defined in the report *redundant* and *location specific*. Indeed, most of the times, the offshore initiative complicates the structure of the firm and, in the case of captive or wholly-owned offshore company, these costs can be substantial.

4) **Transition**. The transition from *locally deployed to globally deployed operations* is a difficult phase in the offshoring process. The neoIT report (2004) says that to elaborate an outsourcing project are required 3-4 months and 5-7 months for a BPO Outsourcing contract (calculated from the first process outsourced to complete transition). During this time-gaps there are several tasks that need to be completed:

- Development and transfer of documentation
- Detailed transition requirements analysis
- Development and implementation of training
- Offshore resource shadowing/reverse-shadowing
- Plan and Readiness for steady state monitoring
- Establishment of Service Level Agreements
- Full Responsibility transfer
- Integration of operations

All these tasks to be completed during the transition phase cost a lot. Indeed, in this stage further resources for documentation, training and extra work are required. Hence, if firms do not manage in an efficient way all these processes, the project could not achieve the steady state within the expected timelines.

5) Governance. This point refers to the management of the offshore sourcing process. The report describes two different situations that could happen during this process. Enterprises could be caught by an "Analysis Paralysis", that is to say "going around in circles looking for information without a clear understanding of how to use it" (neoIT report, 2004:4) and in this case knowledge acquisition cost could be higher than required. Otherwise, they could adopt the opposite "Ready-Fire-Aim" approach, "hoping to achieving a quick-hit and then figuring out what to do next" (neoIT report, 2004:5). Of course this way of manage the process favours companies with more experience in offshoring operations.

6) **HR Change Management**. These costs are typically linked to retraining and redeployment of resources and to the other costs associated with the mutations made in the HR plans (because of new roles and responsibilities of internal resources).

7) **Resource Redeployment**. During an offshoring process is important to redistribute properly the resources and to avoid redundancy in resource utilization. This is a big risk because as the processes become more complex the redundancy can increase *"largely due to additional requirements in governance, and retention of core intellectual capital"* (neoIT report, 2004:5). For this reason, the firm face extra costs to fulfil these requirements, for example, hiring more project managers (which overlap with the other Full Time Employees) or managing the global delivery model itself (culture, communication, performance management, quality assurance, etc.).

8) **Training and Productivity**. To have a global costs vision companies should know how to evaluate their teams and employees' productivity. In the report, are identified some related key drivers of efficiency in order to being able to estimate the Total Costs of Offshoring:

- Level of training of offshore resources on the enterprise's business environment
- Quality of resources available
- Capability of enterprise and business managers to manage offshore outsourcing initiatives, and develop comfort with the global delivery model
- Maturity of the communication infrastructure and processes
- Complexity of the program

Of course each of these drivers has a significant influence on productivity and can increase or dilute the overall cost effectiveness of the delivery model.

9) **Disaster Recovery and Business Continuity Capabilities**. The Report underlines how preparing a *Business Continuity Plan (BCP)* and a *Disaster Recovery Plan (DRP)* adds significant costs to the offshoring procedures because both require some built in redundancy in People, Technology and Process.

10) **Offshore Knowledge Development/Advisory Services**. In this category of costs are included also the expenses needed "*for creating tools, templates, processes and best practices, to help plan, develop and manage their offshore initiatives*" (neoIT report, 2004:6).

Checking if a firm is ready to offshore is expensive and it costs in terms of planning and contracting, international site visits, and due diligence activities.

11) **Travel costs**. This cost item increases especially during the preparation and transition phase and it could be relevant in the long run.

12) **Exchange Rate Fluctuations**. Unbelievably the importance of this type of cost is underestimated not considering the big resonance that the effects of the fluctuation of the exchange rate could have on the strategy and on the financial results (increasing costs, and in general softening the market for offshore sourcing).

Component of Cost	Without Real Time Offshore Expertise	With Real Time Offshore Expertise
Wage Rate	Lack of real time knowledge of wages leads to higher rates, or the sourcing process can be focused only on the expensive top-level service providers.	Experts with real time knowledge of offshore can typically negotiate better charge rates, identify resources or regions with lower wage rates, and help identify highly effective service providers without raising acceptable risk profiles.
Communication Systems	Lower investment in Communication systems and infrastructure, in order to cut cost, leads to frequent blackout. Or, overinvestment as a result of lack of market knowledge.	Offshore expertise is useful in identifying the appropriate level of investment and redundancy required to manage offshore initiatives.
Physical Infrastructure and Support	Can be expensive, likely to be an area of under-investment to cut cost.	Advisors are useful in identifying the appropriate level of investment required, based on region and total costs such as transportation etc
Transition	Projects can take several months to reach steady state and poor resource management can lead to 'reactive' management of the offshore initiative. Missing transition deadlines are common due to inadequate planning, causing higher transition costs.	Advanced Delivery Management (ADM) should typically take 3-4 months to reach steady state, while Business process outsourcing (BPO) should take 5-7 months. Experience in implementing components of transition such as structuring resources, building infrastructure, and developing appropriate training is necessary to mitigate risk and reduce unnecessary costs.
Governance	Poor governance structures can lead to <i>"reactive"</i> management of the offshore initiative. Several iterations and remedial work while going through the sourcing process is typical of enterprises with limited experience with offshore	Strong governance structure, seeded with location expert resources is imperative in developing a <i>"proactive"</i> monitoring and management process.
HR Change	Difficult to manage internally due to	Advisors and consultants are very

Figure 16: "Leveraging Real Time Expertise to lower Total Cost to Offshore"

Management	lack of change management resources and capabilities.	helpful in developing and coordinating appropriate redeployment programs as well as structuring layoffs as to minimize morale issues.
Resource Redundancy	A corollary to poor governance structures, enterprise can get too conservative and have high resource redundancy by retaining most of the internal staff in place, or too aggressive and delegate all responsibility of the project to the service provider.	Deep HR and offshore expertise during the planning phase, and then again during the transition and governance phase, will develop the right structure for effectively managing global projects, and thereby manage resource redundancy.
Training and Productivity	Companies tend to underestimate in training to minimize costs and offshore travel.	Suppliers and advisors can help develop a process for training and development of resources that covers both operational and cultural aspects of the global delivery while adapting to each enterprise's business needs.
Disaster Recovery and Business Continuity capabilities	Inadequate investment in BCP/DRP	An area where sourcing advisors typically will add investment to appropriate level for risk management.
Offshore knowledge development/ advisory services	Cost can be significant in terms of time and effort in gathering information, rationalizing disparate data and developing a method for turning information into an actionable program.	Significant offshore knowledge and a proven methodology for taking an initiative from vision to reality is the hallmark of a sourcing advisor.
Travel costs	Paying full fare and encouraging offshore junkets.	Taking advantage of consolidators and other international fare reduction opportunities.
Exchange Rate Changes	Can impact long-term deals and captive environments	Information on potential directional changes and its impact, and the ability to negotiate longer fixed rates helps enterprises manage this cost.

Source: neoIT report (2004)

Hence, the last conclusions and recommendations (summarized in the previous chart) invite managers to plan and to apply a "*structured approach to offshoring*" that do not try to reduce each single cost component but to optimize the overall cost structure. Indeed, one of the most important thing during this process is to *manage cost holistically* instead focusing only on labour cost saving and, if necessary, use real time expertise to provide offshore knowledge. In this way, costs will be easily recovered by greater savings due to less time spent acquiring offshore knowledge, lower prices and risk mitigation.

2.2.3. Coordination mechanisms

Offshoring should be seen as an organizational reconfiguration that poses the challenge of coordinating and integrating offshoring activities in a global organization to optimize organizational performance. (Jensen et al. 2013).

According to Jensen et al. (2013), the organizations is a systems of interdependent activities and its complexity increases the likelihood of decision errors, organizational inefficiencies, inertia and lack of response. In order to avoid these negative externalities, the firm must specify **interfaces** and **coordination mechanisms** among the activities (Contractor et al. 2010).

Srikanth and Puranam (2011) compare **three generic approaches** to achieve coordination during the offshoring process: *modularization*, *ongoing communication* and *tacit coordination*.

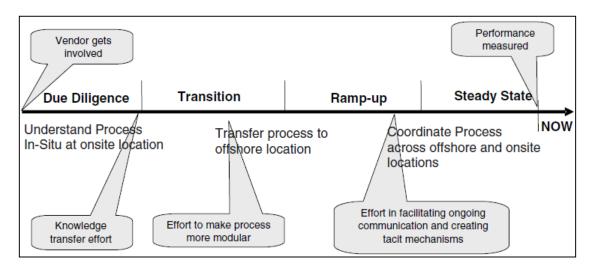


Figure 17: "The offshoring process"

Source: Srikanth and Puranam (2011:852)

The core of the **modularity strategy** is to decompose a system of activities into subsystems (defined modules or components) and to manage the cross-module dependencies through interfaces that limit the need for ongoing communication. This strategy helps firms to lowering costs of coordinating high levels of interdependence across geographies. (Srikanth and Puranam, 2011).

The second generic coordination strategy **-ongoing communication-** should complete the first one. Often, even if interdependences are well managed trough interfaces, evaluation agents could require additional information by calling and e-mailing the origination agent.

Therefore, ongoing communication minimizes the undesirable consequences of interdependence between the offshored process and other linked processes that remain onsite. (Srikanth and Puranam, 2011).

Tacit coordination mechanisms strategy (**TCMs**) denotes the mechanisms that facilitate the formation and leverage of common ground (*that is, knowledge that is shared and known to be shared* -Srikanth and Puranam, 2011:850-) without the need for direct, ongoing communication.

TCM strategy is completely different from the others because it "helps to put knowledge of the inner workings of the modules/locations into common ground, or enhance awareness of context and actions across locations as the project unfolds" (Srikanth and Puranam, 2011:856). Modularity-based strategies, instead, require only the interface to be in common ground. Examples of TCMs strategies are: leveraging shared experiences; working to common standard procedures; using technologies; creating teams with people who worked together before (in order to make use of their joint interpersonal experiences). All of these approaches leverage the formation of a common knowledge and allow to achieve a trust work environment that plays an important role in coordinating offshoring activities.

Therefore, we have seen that coordination of the offshored activities can be reached principally through modularization and communication. Ceci and Prencipe (2013) talked about a specific problem of the decomposability (modularity) of firm's dispersed tasks and activities: the formation of *"knowledge boundaries"*. According to the authors this happen because of the distinctive **properties of knowledge**: *difference* (diverse amount of knowledge acquired by actors), *dependence* (when actors need each other to reach their objectives), and *novelty* (when it arises new common ground is required).

Ceci and Prencipe (2013), thus, follow identifying three **types of knowledge boundaries** (cited in a work Carlile, 2004) that reflect increasing levels of communication complexity. The *syntactic boundary* is represented by the necessity to have a common lexicon in order to transfer knowledge among actors or groups. The *semantic boundary* takes place when a common lexicon is not sufficient because novelty occurred. In this case new knowledge means knew concepts and processes to be translated and transferred to be generally recognized. The most problematic boundary is the *pragmatic boundary* that emerges in contexts in which is required working in team (such as in product development processes).

Indeed, in these situations actors could have different interests and goals since knowledge owned by one actor could have negative effects to another one.

Of course offshoring creates coordination challenges due to the distance and this amplifies the knowledge boundaries' complexity (for examples moving from the least "syntactic" to the most problematic "pragmatic knowledge" boundary). Indeed, when distance increases, coordination and transaction costs augment proportionally. To minimize this problems, managers should manage properly different cultural situations and develop the so called "*cultural intelligence*" to leverage offshoring effectively (Ceci and Prencipe, 2013).

Tondolo et al. (2012) talked about *specific offshoring operations coordination methods* analyzing some cases from the manufacturing sector.

In the study, the most widely used coordination method of offshore operations is **decision centralization at country home headquarter**. This way, according to the authors, allows companies to keep abroad facilities' goals aligned with company proposals, and to standardize management procedures among locations. Indeed, is common that the entire system is integrated and centralized at the headquarters. This centre of control plans all the guidelines (i.e. directives, standard operating procedures, strategic planning, investment risk, expansion of industrial units), manages and supervises the rest of the organization abroad.

Management committees are another common coordination tool. Managers, which have been interviewed in the study (Tondolo et al. 2012), conceived this as "a way to keep management practices aligned, as well to discuss strategies, goals, achievements, and share experience among abroad facilities". Firms could have a committee for different value chain activities (logistics, production, purchase) types of committees' meetings are organized on a regular base, and managers discuss and review all the guidelines and overall management goals that are transmitted to all units.

Back office support structures represent an additional way to support management of abroad locations (Tondolo et al. 2012). For instance, HR back office provides organizational support for all plants and areas (such as engineering logistics and purchasing) in order to facilitate the decision process and the information flows.

Integrated information system is an excellent way to coordinate offshoring operations because it allows to transfer crucial information and control abroad facilities' achievements.

Communication among locations aligns management issues by sharing management experience (Tondolo et al. 2012).

Offices abroad is the method that maximizes the control of offshored operations and that allows most management processes to be done in the offshore country. For example, when a firm offshores a R&D function it needs to be close to the product elaboration process and to work closely with suppliers. In this way for instance, is possible to monitor the level of quality of the products and control the operations (Tondolo et al. 2012).

When an activity of the value chain is offshored, its performance will depend upon the managers' ability to coordinate and align to the objectives the work of the onsite and offshored location personnel. Therefore, to elaborate a well done coordination plan, managers should be aware that the more complex forms of interdependence between activities the greater efforts are required to achieve coordination.

2.3. Conclusion

From the analysis conducted in the previous paragraphs, we have noticed that offshoring is not just looking at cost savings, because these can be easily offset by the hidden costs of offshoring. Conducting a risks analysis, estimating the total cost of offshoring and taking into account the coordination challenges is a good way to implement a successful offshoring strategy.

3. CHAPTER: RESHORING: MORE THAN A "RELOCATION DECISION"

3.1. Introduction

If offshoring has been the big topic of 90s, reshoring is the topic of today. This does not mean that offshoring has been replaced by this new phenomenon but that *after years of large-scale offshoring and outsourcing, companies increasingly seem to look for more diversified sourcing strategies and consider more options in structuring their production processes*" (De Backer et al., 2016:4). According to Backer et al. (2016), firms are thinking about a *regional rebalancing* of (some) GVCs. This occurs because sometimes the large and dispersed structure of GVCs could make companies less flexible and reactive to the market and customers' needs mutations. Thus in recent years, a growing number of companies is bringing back home some value chain's activities implementing different reshoring governance configurations (Gray et al., 2013). In this chapter will be analysed also the reshoring motivations and then these will be compared with those of offshoring to understand in which cases it can be considered a *managerial error* or not. Then will be provided some data to understand the resonance of the phenomenon, with a particular focus on the apparel industry reshoring scenario.

3.2. Why do firms reshore?

Reshoring has catch the attention of scholars which are trying to get to an unanimous definition and to fully understand the phenomenon and its motivations. Researchers use a plurality of definitions to refer to reshoring, but is important to point out when a difference in the terminology corresponds to a difference in the significance too.

Usually when the term **reshoring** is used, it refers to a simply location activity (Gray et al. 2013) in which firms move manufactory back to the country of its parent company (Ellram, 2013). When the phenomenon is defined as **backshoring** it concerns the "*re-concentration of parts of production from own foreign locations as well as from foreign suppliers to the domestic production site of the company*" (Kinkel and Maloca, 2009:155). In literature we find also terms as **foreign divestment** and **de-internationalization** but these implicitly refer to activities of "strategic portfolio management", that involve some divestments, namely "*a*

voluntary liquidation or sale of all or of a major part of an active operation" (Jean J. Boddewyn, 1979:21), instead of referring to specific value chain activities.

Fratocchi et al. (2014) try to give unified and operative definition proposing the concept of **back-reshoring**. This is "a voluntary corporate strategy regarding the home country's partial or total relocation of (in-sourced or out-sourced) production to serve the local, regional or global demands". (Fratocchi et al., 2014:56).

Thus according to Fratocchi et al. (2014), back-reshoring:

- a) is the reversed process of offshoring
- b) does not consist exclusively in bringing back home (or close) the whole offshored company.
- c) is a relocation decision that could presuppose different exit ownership modes (insourced and out-sourced) from the entry modes in the offshore country.

Stentoft J. et al., (2016:57-59) analysing the existing literature, classify the **companies' motivations to backshoring** into seven distinctly different aspect categories:

1) Cost. This is the most cited backshoring (and offshoring) driver in literature. In this category the authors include: increasing labour costs, increasing logistics costs, eroding cost advantage, higher-than-expected coordination efforts and transaction costs, miscalculation of actual cost, energy costs, productivity differences between locations, and need for small production runs.

2) Quality. Poor quality production abroad (that doesn't allow companies to reach the established product's standards) is the second most common reason for backshoring cited by the authors.

3) **Time and flexibility.** Delivery lead-time and reliability, and supply chain resilience are critical factors that some firms are not able to manage, deciding to backshoring.

4) Access to skills and knowledge. The authors identify proximity to R&D resources, availability of skilled labour, and utilization of new technologies and automation as main components of this category.

5) **Risks.** According to the main literature analysed by the authors, the main types of risks for which companies decides to relocate their activities are: the threat of losing know-how and intellectual property, volatility in the currency exchange rates, and supply chain risks.

6) Market. In this category are included by the authors: demand volatility, loyalty and patriotism, value of having the product manufactured domestically (*"made-in"*), staying close to the customers, and a shrinking market size in a target market.

7) **Other factors.** This driver includes government incentives favouring a certain location, increased focus on core activities, and the correction of a misjudged decision (*"error view"*).

After having summarized the most important factors that drive backshoring, is interesting to present the **framework elaborated by Fratocchi et al. (2016)**. The peculiarity of this model is that it frames reshoring motivations according to two couples' variables namely "customer perceived value" versus "cost efficiency" (*the goal*) and "internal environment" versus "external environment" (*the level of analysis*).

The first couple of variables (*the goal*) of the framework, "customer perceived value" versus "cost efficiency", represents the reshoring under two different views. If we consider the customer perceived value motivations, for sure reshoring becomes a strategy to achieve and protect customer's perceived quality. This, according to the authors, is a way to enhance "*firm's ability to create value and maintain competitive advantage through quality and/or innovation, or to provide distinctive services to its customers*" (Fratocchi et al., 2016:110). Analyzing cost-efficiency motivations reshoring is represented as a way to reach lower production and logistics costs, and to set out better co-ordination and control mechanisms. This shows as "production activities in the home country can be ultimately cheaper than retaining them offshore, due to changes in production costs, hidden costs of offshore production, and the costs of managing global logistics and relations with distant locations, including supply chain risks". (Fratocchi et al., 2016:110).

The second couple of variables (*the level of analysis*) of the framework, "internal environment" versus "external environment", provides two different focus on the reshoring phenomenon: a firm-specific (referred to the internal motivations) and country-specific perspective (that concerns the external mutations of the home or hosting countries). "Internal environment motivations for reshoring account for the impact that global operations/configurations exert on intra- and inter-organization efficiency, and distinctive

resources and capabilities. [...] External environment motivations for reshoring reflect the changes in the relative attractiveness of the home and host locations – essentially, changes in costs and/or endowment of production factors, in institutional factors, in country's strategic assets, etc". (Fratocchi et al., 2016:110).

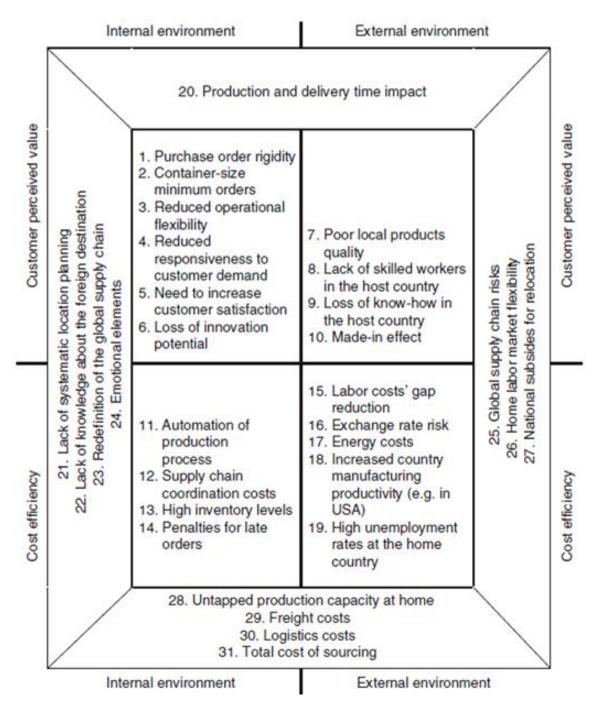


Figure 18: "Motivation for reshoring strategies: an interpretative framework"

Source: Fratocchi et al. (2016:110).

The motivations have been put by the authors (Fratocchi et al., 2016) inside a matrix. The majority of factors is positioned in four quadrants.

Quadrant I (Customer perceived value/internal environment motivations): companies that are in this quadrant try to solve problems linked with a *complex, geographically extended supply chain*. Motivations as purchase order rigidity; container-size minimum orders; reduced operational flexibility; reduced responsiveness to customer demand; need to increase customer satisfaction; loss of innovation potential, could be the result of a type of offshoring not implemented with a market-seeking intent.

Quadrant II (Cost-efficiency/internal environment motivations): motivations of this quadrant are automation of production process; supply chain coordination costs, high inventory levels; penalties for late orders.

Quadrant III (Customer perceived value/external environment motivations). In this quadrant we find reasons to reshoring as poor local products quality; lack of skilled workers in the host country; loss of know-how in the host country; made-in effect. These are typical motivations arising from a "cost driven offshoring", that negatively influenced the quality of the product and the work force.

Quadrant IV (efficiency-driven/external environment motivations). Labour costs' gap reduction; exchange rate risk; energy costs; increased country manufacturing productivity; high unemployment rates at the home country are all motivations that refer to cost or risk differentials between the home and the host countries.

As we can notice from the matrix, there are some motivations that are consistent with more than one quadrant, giving rise to **four hybrid sections.**

For example, *production and delivery time impact* reflects both internal and external environment elements with some possible effects on customer's perceived value. *Untapped production capacity at home; freight costs; logistics costs; total cost of sourcing* are also motivations that are consistent with external and internal environment, but that could might impact cost efficiency. *Lack of systematic location planning; lack of knowledge about the foreign destination; redefinition of the global supply chain; emotional elements* belong to the hybrid section where an internal perspective is adopted, and in which we have at the same time cost efficiency and customers perceived value. Other motivations may instead reflect both value-driven and efficiency-driven factors. *Global supply chain risks; home labour market flexibility; national subsides for relocation* are motivations linked with the external environment level.

After having analysed in details the model of Fratocchi et al. (2016) we understand how is important to adopt a holistic approach to study the phenomenon. Indeed, the presence of motivations that belong to hybrid quadrants (or to all the four quadrants too) demonstrates that reshoring is a heterogeneous phenomenon that *"represents a common response to diverse challenges firms may face"* (Fratocchi et al., 2016:112).

3.3. Different reshoring configurations: the model of Gray et al. (2013)

The heterogeneous definitions of the backshoring phenomenon have an element in common, that is referring only to the physical location and not discussing the ownership configuration adopted in the process, namely the choice between insourcing and outsourcing.

Effectively literature neglects to describe the phenomenon considering the peculiarities of the different possible ownership modes of backshoring. In this regard, Gray et al. (2013) present the topic from a different point of view, remarking the importance of studying the "*path that each firm follows*" from the offshoring decision to the reshoring one, taking into account the ownership perspective. Thus, according to Gray et al. (2013) reshoring is *more than a relocation decision* because is a reverse from previous offshoring decisions and, for this reason, it cannot be examined in isolation but considering from the beginning the company's internalization strategy.

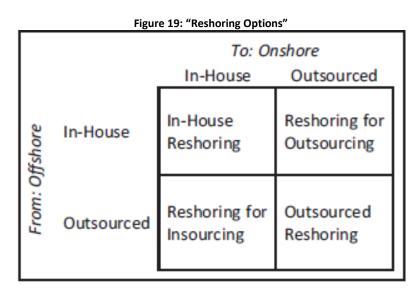
The authors identify four possible manifestations or types of reshoring to fulfil the demand in its local market:

a) **In-House Reshoring**: in this case companies relocate manufacturing activities (performed abroad in wholly owned offshore facilities) back to the home country adopting a wholly-owned facilities asset.

b) **Reshoring for Outsourcing**: here companies change their ownership configuration when they come back to the home country. Indeed, they change from wholly-owned offshore facilities to home-based suppliers.

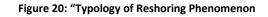
c) **Reshoring for Insourcing**: also in this case there is a change in the ownership configuration starting from the "buy" option in the offshore location and opting for the "make" alternative in the home country, relocating manufacturing activities (performed by offshore suppliers) back to wholly-owned onshore based facilities.

d) **Outsourced Reshoring**: here there is no change in the ownership configuration but only a change in location. Indeed, the company comes back to the home country continuing to outsource the production previously performed by offshore suppliers.



Source: Gray et al. (2013)

All these reshoring options let us understand how is important to study the reshoring considering the previous offshoring ownership configurations. Indeed, no reshoring can occur without offshoring. This new approach to the topic, according to Gray et al. (2013), give the possibility to gain new insights on managerial location decisions and about organizational learning. Indeed, the reshoring processes can start from different starting points, depending on the previous offshored configuration. From this the authors derive eight different reshoring paths a firm could take.



Domestic In-house → Offshore In-house → Domestic In-house
Domestic In-house → Offshore In-house → Domestic Outsource
Domestic In-house \rightarrow Offshore Outsource \rightarrow Domestic In-house
Domestic In-house \rightarrow Offshore Outsource \rightarrow Domestic Outsource
Domestic Outsource → Offshore In-house → Domestic In-house
Domestic Outsource → Offshore In-house → Domestic Outsource
Domestic Outsource → Offshore Outsource → Domestic In-house
$Domestic\ Outsource \rightarrow Offshore\ Outsource \rightarrow Domestic\ Outsource$

Source: Gray et al. (2013)

Kinkel (2014), adopting the same focus of Gray et al. (2013), distinguishes between two types of exit modes: captive-backshoring (from own foreign production plants of the company) and outsource-backshoring (from foreign suppliers of the respective company). The author tries to give insight about the motivations regarding the two modes analysing the dynamics of German backshoring activities over the past 15 years.

The results, even if not statistically significant due to the small total number of backshoring companies, highlighted that for firms involved in processes of *outsource-backshoring* the principal motivations were: quality issues, high transport and logistics costs. Instead, for companies that made *captive-backshoring* principal reasons were principally related with high coordination efforts.

Overall, "there is weak evidence that outsource-backshoring might be more often short-term corrections of prior misjudgements, in particular of the quality and logistics performance potentials of foreign suppliers. However, this needs to be confirmed by more robust model sand empirical results". Kinkel (2014:64).

3.4. Offshoring and reshoring motivation's comparison: the "error view"

Gray et al. (2013) saying that reshoring cannot exist without offshoring implicitly highlight the interdependence and the correlation of the two phenomena. However, in literature the two topics' motivations are investigated separately and is difficult to understand what are the real dynamics that explicate the companies' internalization choices and their reshoring paths.

Thus, according to Orzes et al. (2016:2), "the joint analysis of offshoring and reshoring is a missing link that could throw light on long-term internationalization strategies and could help understand when reshoring actually follows from a "failure" of the offshore strategy".

Analysing the academic literature, we can affirm that reshoring can be considered in two ways: as a *"correction mechanism"*, to a previous wrong managerial decision, or as a *"simply change in strategy"*, given by the mutations in the external environment. Understand the nature of reshoring is not easy, and is impossible to say when it is (or not) a correction mechanism without considering the internationalization path of the company. In fact, when a firm relocate an offshored value chain activity, the motivations could be related to errors in total costs of reshoring estimation or to unexpected changes in the scenario that deteriorate the correct evaluation of benefits.

Companies that lack experience or that do not invest enough time in offshoring planning could use backshoring as a *solution to their problems abroad* (Kinkel, 2012). Indeed, if backreshoring activities take place after a length of time relatively close (4-5 years) to the initial offshoring decision, they probably represent "*short-term corrections of prior location misjudgements*, *rather than a long-term reaction to slowly emerging local development trends*" (Kinkel and Maloca, 2009:159). According to Gray et al. (2013), firms reshore after having experienced personally these *managerial valuation inaccuracies* (*hidden costs and risks*), *so reshoring would be an example of organizational learning-by-doing*.

The other approach to the topic sees backshoring (and the other global sourcing strategies) as "*the joint outcomes of managerial adaptation and environmental selection*" (Lewin and Volberda, 2011:244). Therefore, a *change in firm's business strategy* (for internal changes to respond to the external environment) can represent a reshoring motivation (Grandinetti and Tabacco, 2015) becoming "*an intended (deliberate) and more consistent strategy driving international operations*" (Benito et al., 2011:808). In the same line Kinkel (2014:65) argued that "*backshoring can act as a reasonable strategy to adapt to dynamically changing global markets*".

Bearing in mind these considerations, we understand how is important to study reshoring in correlation with the offshoring path taken by the firm, in order to do not miss the interdependencies among their motivations. A cross case analysis on four firms conducted by Orzes et al. (2016), tried to understand how motivations ("*why*") were connected with the "*how*" (governance modes), and "*where*" (geographical locations) of offshoring and reshoring. In these cases, the evidence suggested that reshoring was a step of a coherent strategy rather than an error correction initiative. Anyway, this finding cannot be considered the rule. Indeed, is extremely important to study the phenomenon of reshoring in relation with the previous offshoring decision of the firm we examine. Only doing in this way, according to Orzes et al. (2016:2), will be possible to "*understand whether offshoring and reshoring can be considered part of the same internationalization strategy* (*e.g., they represent stages of a fully rational internationalization and competitive strategy*)".

3.5. Evidences on reshoring: a "data-driven" analysis

In order to understand the resonance of the phenomenon is important to provide some data on reshoring. These are difficult to find, and researchers gather information through heterogeneous sources of knowledge and trough case-based studies.

The **American scenario** is the most studied because of the attention to the phenomenon promoted by Obama during 2012. The "reshoring initiative", created by Harry Moser, is one of the most important association that gives support to companies who want to reshore, and it provides important insights on the topic encouraging the flow of knowledge.

In the last report of the "reshoring initiative" $(2015)^9$ are reported data on trends in U.S. reshoring and FDI (Foreign Direct Investment). The evidence shows that, in 2015, more than 68,000 jobs came back to the United States bringing the total number of manufacturing jobs brought from offshore locations to 249,000 (number calculated starting from 2010, date in which American manufacturing employment registered its lowest peak).

The major country from which American companies backshore is China with approximately the 60% of backshoring cases. A BCG report made by Sirkin et al. (2011), predicted the American reshoring trend from China, highlighting as one of its causes the increased cost of labour. Indeed, Chinese wages leapt by 150 percent from 1999 through 2006. Wage growth has accelerated much faster than productivity growth. In addition, benefits for the workers rose by 10 percent annually. From 2005 through 2010, Chinese wage increased on average by 19 percent per year (against the 4% increment registered by U.S. workers). Nowadays producing in China has become really expensive, saving on average only the 4 percent compared to the overall cost in producing at the home country.

The American sectors that reshored the most have been the ones with high technological density such as: machinery, transportation equipment and appliances. The most common reasons to reshore are: Made in USA image, automation, re-design of the product, government incentives and skilled workforce.

In the **European scenario** data are elaborated by few institutions. The most important is represented by the *European Manufacturing Survey* (EMS). It investigates technological and non-technological innovation in European industry and it collects information (from more than 3,000 European manufacturing firms) on innovative topics such as production offshoring and backshoring.

Dachs et al. (2014) expose the findings of the most recent EMS survey available conducted in 2012.

⁹ Available at the site: <u>http://www.reshorenow.org/content/pdf/2015_Data_Summary.pdf</u>

The first finding regards the **frequency of backshoring**. According to the survey, offshoring still outpaces reshoring. Only 4% percent of the sample have moved production activities back to the home country between 2010 and mid-2012, against the 17% of offshoring registered in the decade before. Over 3,293 observations, backshoring is most frequent among large firms and the propensity for backshoring rises with **firms' size**.

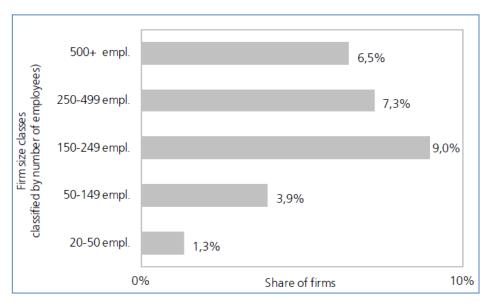


Figure 21: "Backshoring propensity across size classes, 2010 – Mid-2012"

Source: Dachs et al. (2014)

As we can see from *figure 21*, the lowest number of backshoring is registered among small firms with 20-50 employees where the percentage is below 1,5%. There is a peak among medium enterprises (9%) and then decreases for the two largest size classes. This result is not easy to explicate. The authors say that this is simply due to the fact that European larger firms are often stronger diversified and own multiple plants, which increases the likelihood for offshoring again instead of backshoring. Anyway here the interesting point is that, even if the highest percentage of reshoring is registered among the biggest companies, there is evidence that the phenomenon also affects SMEs.

An interesting chart given by the authors (*figure 22*) allows to compare the shares of firms' **offshoring and backshoring propensity** (respectively put in the vertical and horizontal axis) across sectors. Analysing the quadrants formed by the two axes, the authors make some considerations. For example, the south-east quadrant is characterized by a high propensity to offshore, but low propensity to backshore. In this quadrant figure only firms of the textile sector that, being characterized by high labour ad raw materials costs, unlikely will decide to come back to home country. Sectors of the north-east quadrant (i.e. electrical equipment;

pharmaceutics; computers; clothing) may be a potential target group for policy measures to foster backshoring, because they have both high levels of offshoring and backshoring propensity so will prevail the most convenient option.

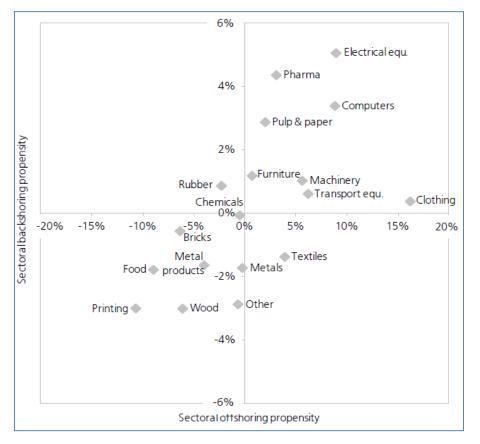


Figure 22: "Offshoring and backshoring across sectors, 2010 – Mid-2012"

Source: Dachs et al. (2014)

The north-west quadrant of the *figure 22*, is the most interesting because it reveals high backshoring and low offshoring propensity that could be exploit for political campaigns for reshoring. Unfortunately, the survey revealed only the rubber sector (and the close chemical industry) belonging to this quadrant. Even if these companies would like to come home, high capital intensity, high capital-to-labour cost ratios and continuous production processes (that characterize these sectors) push them to seek international cost advantage locations. From this chart we can derive that reshoring is not tied to specific industries but is a cross sector phenomenon.

Looking at the **motives for backshoring,** EMS results indicate quality of the goods produced abroad as the most common. Indeed, more than half of the firms in the sample reported quality issues as the reason for backshoring.

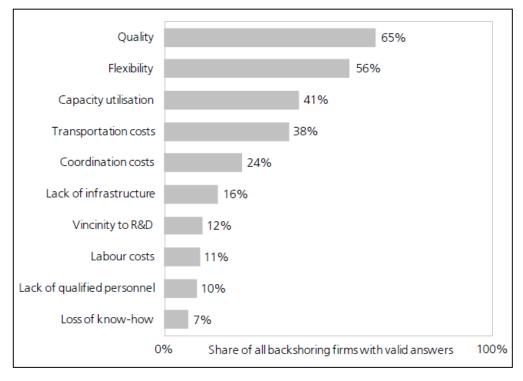


Figure 23: "Reasons for the backshoring of production activities, 2010 – Mid-2012"

Source: Dachs et al. (2014)

According to the EMS survey the second most important motive for backshoring, registered by more than half of the observations, is loss of flexibility. This is due for the complexity of GVCs that make firms unable to react promptly to change in customers' needs. Only 7% of firms analysed perceived loss of know-how in the host country, and only 10% a lack of qualified personnel in the host country. Only 12% of companies of the sample say that the co-location of production and R&D activities at home (vicinity to R&D) was the reason for backshoring.

Unfortunately, these data are not exhaustive to provide a clear insight about the phenomenon. The lack of cross-sectional data is a big challenge that researchers face.

Fratocchi et al. (2015) made an interesting work on backshoring trying to provide **general scenario evidences**. The authors collected data from a differentiated set of sources such as: leading international economics newspapers (Wall Street Journal, Financial Times, Sole 24 Ore); magazines (The Economist, TIME); articles; news contained in the *Reshoring Initiative dataset;* white papers of major consulting companies (Boston Consulting Group, McKinsey, and Accenture); cases cited on academic literature.

The authors formed a database consisting of 427 cases belonging to 342 companies, as 47 companies (13.7% of the total) implemented more than one back/near-reshoring operation (from 2 to 8). Their investigation reveals that the phenomenon is not "US specific" because American and European companies are almost equally represented (respectively 44% and 54%).

Host Country's Region	Home Country Region					
-	Western Europe	North America	Asia (other than China)	Total		
Back-reshoring						
China	86	132	5	223		
Asia (other than China)	22	22	1	45		
Eastern Europe	44	4		48		
Western Europe	26	5		31		
Central and South America	7	11		18		
North Africa and Middle East	6	1		7		
North America	3	1		4		
Oceania		1		1		
Total	194	177	6	377		
Near-reshoring						
China	28	5		33		
Asia (other than China)	3	4	1	8		
Eastern	2	1		3		
Central and South America		3		3		
Western Europe	2			2		
North Africa and Middle East		1		1		
Total	35	14	1	50		
Total (back- and near- reshoring)	229	191	7	427		

Figure 24: Breakdown by Home/Host Country.

Source: Fratocchi et al. (2015)

According authors, the three countries with the highest number of cases are US, Italy, and Germany. More than 73% of total operations regarded China and other Asian countries, whereas Eastern Europe accounts for around one-tenth. The authors registered "region-centric approach" of EU companies in terms of off-shoring strategies, because approximately the 36% of European cases or back-shoring concerned activities located in Europe and not in Asia (including China) like it was common among American companies. Fratocchi et al. (2015) notice also that, looking at the favourite final destinations of near-reshoring strategies, Italy and Portugal are the most attractive EU countries, whereas Hungary and Romania are the most relevant for Eastern Europe. This takes place because, while Portugal and Eastern European countries are generally preferred for their lower labour and logistics costs, Italy is more preferred for the quality of local productions. Finally, another interesting point

highlighted by the study of Fratocchi et al. (2015) is the fact that no reported back-shoring experiences belongs to companies headquartered in emerging economies (with the exception of Taiwan).

Also in the work of Fratocchi et al. (2015) clothing and footwear, electronics, mechanical, and furniture and home furnishing sectors, are the most involved in reshoring processes. this is clearly due to the fact that these sectors offshored a lot in the past.

Industry	Back-Reshoring	Near-Reshoring	Total
Clothing and footwear	67	25	92
Electronic	62		62
Mechanical	53	2	55
Furniture and home furnishing	44	5	49
Automotive	30	4	34
Home appliances	29	5	34
Toys	18	3	21
Electric	16		16
Biomedical	14		14
Food and beverage	12		12
Health and beauty care	8		8
Chemical	6	1	7
Other industries (less than 5 decision each)	18	5	22
Total	377	50	427

Figure 25: "Breakdown by Industry".

Source: Fratocchi et al. (2015)

Figure 26 summarizes the motivations of back-reshoring decisions highlighted by the study of Fratocchi et al. (2015). We can notice that, the results provided are on line with the findings presented before during the analysis of the American and the European scenario (conducted by the EMS). Indeed, the most common back-reshoring driver is related to *costs* (144 cases), in particular because of *labour cost gap reduction* (73 cases). Consistent with the other previous studies, we find *logistics costs motivations* (92 cases) especially due to delivery time. Among the host country related motivations we find the *poor quality off-shored production* (with 73 cases) and the *made in-effect* (82 cases) among home country related rationale. The last most relevant motivations highlighted by the Fratocchi et al. (2015) study are *firm's global reorganization (35 cases)* and the *improvement of customers' services* (44 cases). These are typical motivations related to lack of flexibility that GVCs typical could cause.

Factors	Cases	Motivations	Cases
Costs	144	Logistics costs	92
		Labor costs' gap reduction	73
		Total costs	44
		Customs duties for re-import	3
Other logistics elements	78	Delivery time	70
		Minimum order size	12
Global crisis related	41	Global crisis	26
elements		Unions' pressure at the home country	9
		Untapped production capacity at home	9
		Poor economic and financial performances	6
Host country related	98	Poor quality off-shored production	73
		Local employees' poor skills	16
		Inadequate protection intellectual property	8
		Local market lack of attractiveness	5
		Risk of brand counterfeiting	4
		Absence of local suppliers	3
		Termination of earlier supply relationships	1
Home country related	108	Made in effect	82
		Subsides for relocation	28
Entrepreneur's and firm	86	Firm's global reorganization	35
related		Off-shored activities' control complexity	25
		Implementation of strategies based on product/ process innovation	14
		Need of larger organizational flexibility	13
		Emotional elements (especially in family owned companies)	7
Sales and marketing	67	Customers' service improvement	44
related		Proximity to customers	27

Figure 26: "Motivation for Back-Reshoring Strategies: Uni-CLUB-MoRe Back-Reshoring Evidence."

Source: Fratocchi et al. (2015)

After having examined different studies and scenarios on reshoring, we can affirm that is an "international" phenomenon caused by motivations that are similar across companies of different countries. At this point is important to go deep in the examination of the Italian characteristics of reshoring, in order to provide a frame of reference for the next Italian case analysis.

3.5.1. Italian industry scenario

Italy in second place behind the United States for number of reshoring: 121 against 326 followed by the UK (68) and Germany (63), with approximately 730 cases in the whole

world. This rank, reported by an article of 2016¹⁰ of the economic journal IIsole24ORE that re-elaborates the *Uni-Club MoRe Reshoring* data (2016), is enriched by the analysis of the regional distribution of Italian back-shored companies. According to the article almost 100 are in Northern Italy, about twenty in the centre, while only four cases represent the South.

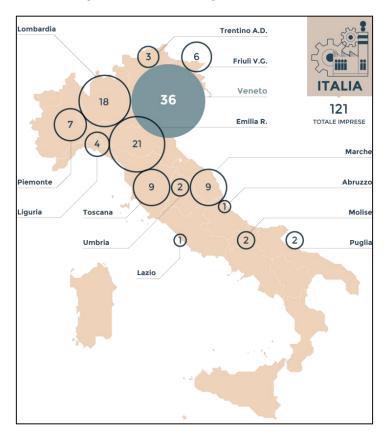


Figure 27: "Italian reshoring cases distribution"

Source: Il sole24ORE in the article: "Italia in prima linea nel «reshoring»"

From this we derive that the phenomenon is spread principally across the north of Italy. Unlike the United States, in which the political class, as we have seen before, fosters the return in country of the productions trough incentives and promotion of the topic, Italian reshoring seems to proceed in a random order thanks the initiative of individual entrepreneurs without political support and incentives (KPMG Report, 2015)¹¹

Looking at host country provenience of the Italian firms that came back to Italy, we can see from the graph that the most common origins (in line with the data presented about the rest of the world) is China and other Asian countries. The peculiarity of Italian data about reshoring

¹⁰ Available on the site: http://www.ilsole24ore.com/art/impresa-e-territori/2016-05-23/italia-prima-linea-reshoring-090139.shtml?uuid=ADaYeTN&refresh_ce=1

¹¹ "The Italian Way. L'industria italiana tra reshoring e nuovi modelli di sviluppo", available on the site: https://home.kpmg.com/content/dam/kpmg/pdf/2016/06/it-KPGMTheItalianWay(ItalyWorks2015).pdf

is that, compared to the global evidences, the weight of Eastern European countries is significantly higher. We can notice this fact simply by comparing the percentage of returns from eastern Europe (26.7%) with the one from Asia (other than China with 15.1%). (Fratocchi, 2014)

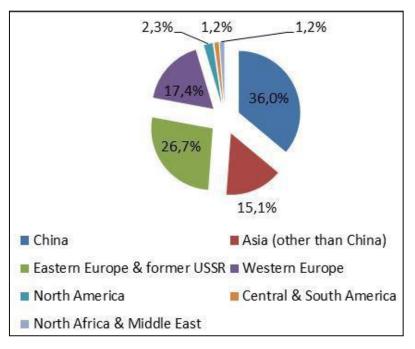


Figure 28: "Italian cases reshoring catalogued according to host country provenience"

Source: Uni CLUB MoRe back-reshoring

The most active Italian sector in reshoring operations is the *clothing and footwear* industry, followed by ANIE sectors (that is to say *electrotechnical* and *electronic* companies) and by *electronics, furniture and automotive*. These results are in line with the global data, only the fashion industry registers a higher percentage, but this can be justified by the strong *Made-in Italy* effect. (Fratocchi, 2014)

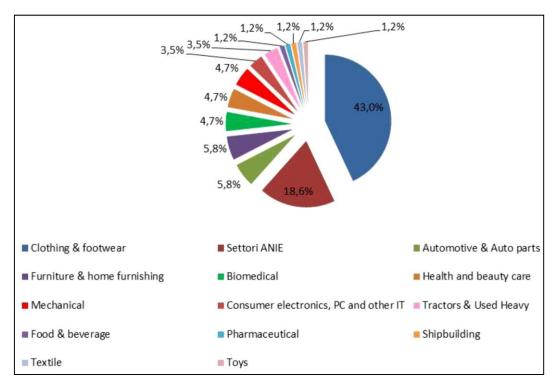


Figure 29: "Distribution by sector (only Italian companies)

Source: Uni CLUB MoRe back-reshoring

The essence of Made in Italy, according to KPMG Report (2015), is constituted by two complementary aspects:

• The *material element*, represented by the quality of materials used and by the technical excellence in the production (handcraft expertises).

• The *intangible element*, represented by the creativity and the uniqueness design and the aesthetic of the product which is the result of a typically Italian historical, cultural and environmental back-ground.

Because of its aesthetic, creative and innovative components, *made-in Italy* is difficult to be replicated outside the Italian territory, and reshoring is one of the principal motivation for Italian firms to backshore. According to the research of Fratocchi (2014), other reasons Italian firms reshore are related to quality problems, internal reorganization, and logistic issues.

3.5.2. A focus on the apparel industry reshoring situation

Studying the data on reshoring we have seen that the majority of cases are registered among the fashion industry (clothes and footwear). The increased complexity of apparel GVCs often could lead to longer lead times and difficulties to have control over the standards of quality established, thus reshoring often is the response to these criticalities. The magnitude of this phenomenon is not surprising because the apparel industry has been, and still is, one of the most involved sector in offshoring operations to seek lower cost of raw materials and labour.

In America for example, this fact is testified in an interesting article of *The New York Times* $(2013)^{12}$. The graph shows us how, since 1990, job losses in apparel and textile manufacturing have been greater than those in any other type of manufacturing.

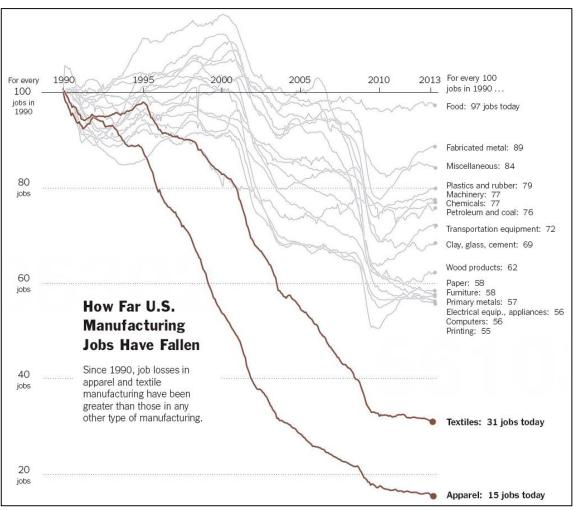


Figure 30: "Jobs evolution since 1990 in US manufacturing".

Source: Bureau of Labour Statistics, as reported in New York Times of Sep 20, 2013

The author of the article highlights how two decades of overseas production has decimated factories in United States. Between 2000 and 2011, on average, 17 manufacturers closed up shop every day across the country. Today companies that want to reshore in USA find more difficult than the past to find qualified workers and, in the same way, for workers is difficult

¹² Clifford Stephanie, U.S. Textile Plants Return, With Floors Largely Empty of People, The New York Times (2013). Available on the site: <u>http://www.nytimes.com/2013/09/20/business/us-textile-factories-return.html?pagewanted=all&_r=0</u>

to obtain a qualified work because a big number of fine operations in the production process have been replaced by machines.

The article reports a *representative wholesale costs*, according to Bayard Winthrop, the founder of American Giant. This example includes: the typical material costs (necessary to produce the hoodie) plus overhead (trim and hardware), plus labour and supply chain costs.

How Much I	t Costs to Make a Hoodie	Fabric	Trim and Hardware	Labor	Duti	ies Shipping
Asia \$31.40		\$18.40	2.30	5.50	3.50	1.70
U.S. \$38.10		17.40	3.20	17.00		о.
according to Bayard Winthrop, the dyeing fabric are all relatively automated ste		Turning cotton into yarn, knitting yarn into fabric and dyeing fabric are all relatively automated steps, so prices in the United States can beat overseas ones.		The labor for a sweatshirt U.S. — including cutting a about three times as expe	and sewing — is	While Asia appears to be cheaper, these to exclude factors like quality control, where N Winthrop says the U.S. has a big advantage

Figure 31: "How Much It Costs to Make a Hoodie"

Thus the labour costs do not represent the main cost, logistic costs do. Indeed, according to the article, the absence of high-paid American workers in the new factories is making the revival possible.

The *Italian fashion industry* is pushing the reshoring phenomenon. The aim is to maintain the characteristics of the excellent Italian apparel value chain and to exploit it favouring the cases of reshoring. According to an article of *Il Sole24ORE* (2016)¹³, this could have positive effects on the economy given the fact that the sector accounts for almost 53 billion revenues (in 2015) with 47 thousand companies and over 400 thousand direct employees.

For this reason, the Italian Fashion System (SMI) is the main supporter of reshoring. In another article of *Il Sole24ORE* (2016)¹⁴ Claudio Marenzi, president of Smi (Sistema moda italiana), said that "the reshoring brings added value to the entire supply chain both in terms of greater control and improved time to market for companies". On these Italian chains, the positive effect of the "made in" plays a predominant role and offset the benefits given by cost savings in producing abroad.

Source: New York Times, Sep 20, 2013

¹³ Crivelli G., 22 June 2016, "Il sistema moda accelera sul reshoring", Il Sole24ORE, available on the site: http://www.ilsole24ore.com/art/impresa-e-territori/2016-06-21/il-sistema-moda-accelera-reshoring-181914.shtml?uuid=ADYndVg&refresh_ce=1

¹⁴ Finotto Carlo Andrea, 8 may 2016, *"Sfida reshoring per il made in Italy"*, Il Sole24ORE available on the site: http://www.ilsole24ore.com/art/impresa-e-territori/2016-05-08/sfida-reshoring-il-made-italy-081413.shtml?uuid=ADYTHYD

In the next years will be pushed the Italian fashion exports considering investments for 64 million, in addition to the 260 million of 2015. A particular attention will be provided to internationalization putting efforts on the consolidation of the agreements and the relations with the rest of the world (EU, USA and Argentina).

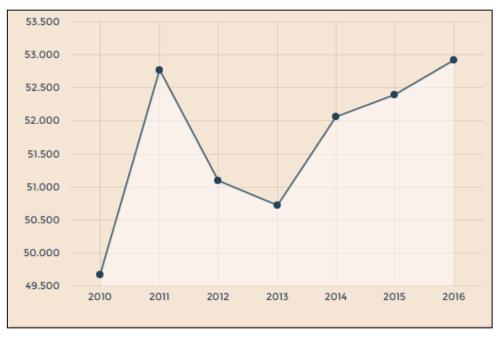


Figure 32: "THE TURNOVER OF THE FASHION INDUSTRY (In millions of Euros)

Source: article of Ilsole24ORE of Crivelli G. (on a SMI re-elaboration of ISTAT data)

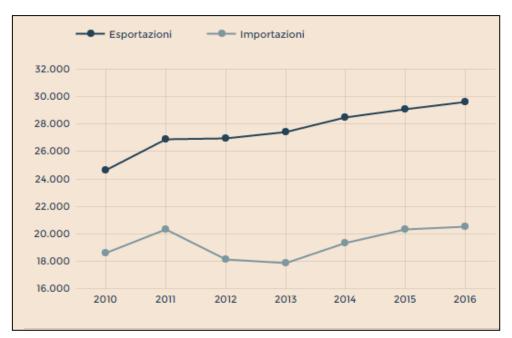


Figure 33: "IMPORTS/EXPORTS OF THE FASHION INDUSTRY" (Values in millions of Euros)

Source: article of Ilsole24ORE of Crivelli G. (on a SMI re-elaboration of ISTAT data)

3.6. Is regional the new global?

Nowadays firms have to face new challenges in the international competitive scenario. Global sourcing strategies are becoming more and more diversified because of the trade-off between benefits to perform activities in optimal abroad locations (such as productivity, efficiency, scale economies, etc.) and the drawback of the loss of flexibility and the risk to not be able to respond to the changing competitive environment.

Backer et al. (2016), in this regard, assert that nowadays firms are considering diversified sourcing strategies to implement the so called *"right-shoring"*. Companies do not focus on offshoring or reshoring only but, taking into account all the variable that could affect the performance, they try to choose locations that are able to maximize the benefits and the flexibility. *"As a result, a regional rebalancing of (some) GVCs seems to be on the horizon which will make the topography of production more varied and distributed. In addition to global hubs in GVCs, production is expected to be become increasingly concentrated in regional/local hubs closer to end markets both in developed and emerging economies".* (Backer et al., 2016:27).

The authors Backer et al., (2016) identify three features that will modify the GVCs configuration in the future: change in production costs, growing importance of demand factors and rise in new technology.

Rising in production and labour costs worldwide modified the traditional relation in which emerging economies were always associated with low-cost advantage. Indeed, nowadays firms could find low-cost location production also closer to the country of origin, enhancing the company responsiveness to unexpected events within their value chains.

As a consequence, the second element highlighted by the authors is related to *demand factors*. Today companies have to fulfil and satisfy increasingly specific customers' needs and, in the near future, customization of the products will require them to be focused on continue innovation. Thus, will be necessary to be closer to innovation and production manufacturing to foster the flow of information with R&D centre and reducing lead times. Consequently, to all of these considerations, "*emerging economies will no longer only serve as centres of supply but also as centres of demand*. The increasing wages and purchasing power give rise to a new class of consumers which differ from the "traditional" consumer in the saturated markets in developed countries" (Backer et al., 2016:28).

The third, and the last, factor of change is the *advent of new technologies*. Indeed, according to the authors, *robotics* will decrease the total cost of labour turning less attractive low labour cost regions, and *Information and Communications Technology* in association with the *Internet of Things* (machine-to-machine (M2M) communication) will improve efficiency, productivity gains and also the responsiveness of companies to changing conditions.

Clearly cost structures, demand factors and technologies will not have homogeneous resonance among manufactured goods. According to Backer et al., (2016), the production of more advanced products will be the one affected the most (and increasingly organised at the more regional level) instead of mass markets products which manufacture will continue to follow the same old structure of production of long global value chain.

Thus in the near future more and more firms will reconsider their locations decision, and reshoring will be the strategy used to be close to demand given the fact that today's emerging economies will become tomorrow's demand centres (Gray et al. 2013).

3.7. Conclusion

We have seen how reshoring is more than a relocation decision. It cannot exist without offshoring and it could be implemented trough different governance configurations (Gray et al., 2013). The major sector involved is the one of the apparel and fashion industry and Italy is the second country in the ranking pushed by the Made in Italy Values. We studied how reshoring could represent a "correction mechanism", to a previous wrong managerial decision, or a "simply change in strategy", given by the mutations in the external environment. To understand the nature of reshoring is essential to consider the whole internationalization path of the company in order to study reshoring motivations in correlation with the ones of offshoring and do not miss their possible interdependencies. Finally, the chapter highlighted that global sourcing strategies are becoming more and more diversified and that in the near future more and more firms will reshore to be closed to the demand (represented by old and new economies scenarios).

4. CHAPTER: "RESHORING PATHS: TWO ITALIAN CASES"

4.1. Introduction

After having examined the theoretical background about the offshoring and reshoring topic, now I will study the reshoring paths of two Italian companies from the apparel industry: Benetton and Seventy.

I will take as reference the model of Gray et al. (2013) presented in previous chapter. As we noticed, the peculiarity of this model is taking into account the "*path that each firm follows*", from the offshoring decision to the reshoring one, and remarking the importance of the governance configuration adopted by the firms in these processes. For this reason, I will try to set each business case in the quadrant of the model that better explains its offshoring and reshoring path.

Thus, the analysis of the history of these firms will be fundamental to determine the strategic motivations at the base of their choices, and to detect if the reshoring process can be considered as a *"correction mechanism"*, to a previous wrong managerial decision, or as a *"simply change in strategy"*, given by the mutations in the external environment. Then, I will make a comparison between the business cases (using as framework model proposed by Fratocchi et al. (2016) and Orzes et al. (2016) studied in chapter 3) in order to get some insights from the apparel industry.

4.2. United Colours of Benetton: a case of in house reshoring

Today Benetton Group¹⁵ is one of the best-known fashion companies in the world, and it is present in the most important markets with a network of about 5,000 stores. Benetton Group is based in Ponzano, about 30 km from Venice, and it is controlled by Edizione S.r.l., the fully owned holding of the Benetton family. It reported consolidated revenues of 11.5 billion euro in 2015 and the subsidiaries of the Group employ about 65,000 people. Benetton Group adopts an "universal" communication style that implements a single, universal message for all consumers dispersed across the world, remarking the social commitment, the care for the environment and the ethics values of the company.

¹⁵ Data taken from: <u>http://www.benettongroup.com</u>

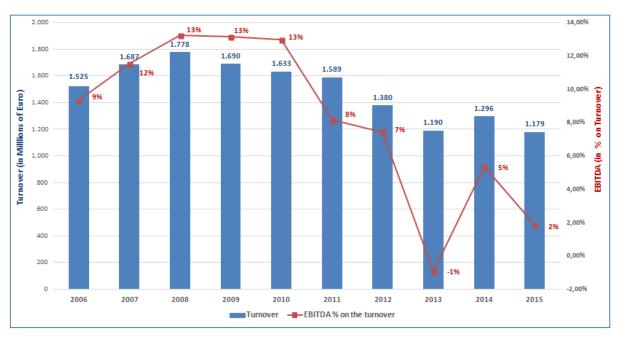


Figure 34: "The Economic and financial performance trend of Benetton from 2006 to 2015"

Source: personal re-elaboration of data taken from Aida database

From *figure 34* we can see how, during the years, Benetton realized decreasing operating and financial performances. In 2013 the company registered a negative EBITDA margin on turnover of -0,1%. By analysing the Benetton annual reports of that years, the problems were due to macroeconomics difficulties in major markets (particularly the Italian and the Mediterranean region) and to the internal changes faced by the company. To solve this negative scenario, Benetton approved a *three years plan* to refocus the company on the core business and then Benetton restarted to realised positive operational margins. Is important to remark that the company is working hard to re-launch the power of the Benetton Brand thus in the next year are expected good feedbacks from the market able to push the Benetton's performance.

In the late 2016 the company announced the willingness to reshore part of its production in Italy. The operation of reshoring made by Benetton can be defined as a case of *"in-house reshoring"* because the firm reshored the production (previously made in a fully owned facility in Croatia) to produce *in-house* in the laboratories in Castrette (Treviso) the *"TV-31100"* the new seamless pullover. It is made with the newest *whole garment technology* and the top quality yarns (90% merino and 10% cashmere). Thanks to this high technological project, Benetton wants celebrate the brand's roots and revive the important connection with its home territory.

4.2.1. History of the company

The story of Benetton started in 1965 when the "Maglierie di Ponzano Veneto dei fratelli Benetton" was founded by the four Benetton brothers: Luciano, Gilberto, Giuliana and Carlo. They were able to understand the new market potential behind coloured jumpers (unusual in the late 1960s). The company started producing sweaters for local independent retailers and in 1966 Benetton opened his first shop in Belluno. In 1969 Benetton inaugurated the first store outside Italy, in Paris, and in the late 70s the company exports reached the 60% of the production.

The *80s* are the years of the *international expansion* during which the group opened stores in New York City, Tokyo and Eastern European and Soviet Union. In these years Benetton is listed on the Milan, Frankfurt (1988) and New York (1989) Stock Exchanges. In order to minimize the risks and maximize the profits, Benetton decided to adopt "*a precautionary step-by-step entry strategy*, *first licensing local producers to use its trade mark, then entering in joint venture with them, and finally establishing a local branch of the company only when the market was considered to be profitable enough. At the end of the 1980s, the Benetton Group started the process of horizontal integration in the value chain*, *by acquiring important textile and knitting factories in several Italian provinces through the affiliated company Olympias*" (Filieri, 2015:242).

The strategy implemented by Benetton during these years is innovative and market driving and allows the company to be competitive ad to revolutionize the fashion industry. Filieri (2015) describes the main pillars of the strategy:

- **Redesign of the shops layout**: Benetton removed the counter from his shops. In this way clients were free to see easily the products. This solution guaranteed lower staff costs and higher margins to independent retailers.

- Creation of the "quasi-franchising system": This system consisted in bypassing wholesalers and selling directly to retailers. Benetton traded and distributed its products through agents which set up a contract relationship (a "licensing agreement similar to a franchise") with the owners of the shops that were allowed to sale Benetton products (Camuffo et al. 2001). Benetton suggested the prices of products, imposed the layout of the stores, provided merchandising support but did not ensure the geographical exclusivity of the distribution and did not repurchase unsold products (Filieri, 2015). Thus, this innovative

system to deal with retailers enabled the company to expand across Italy without having to sustain huge investments (Filieri, 2015).

- **Innovative suppliers' relationships**: Benetton build up a strong relationship of trust with suppliers by leveraging their skills and knowledge and by advising them on new technologies. Indeed, even if Benetton used to pay subcontractors less than other manufacturers suppliers, they could benefit of financial assistance (through its leasing and factoring company), regular orders, technologies and know-how that guaranteed to work at full production capacity. The extraordinary activity of Benetton drove the creation of a whole textile industrial district in the province of Veneto made by thousands of small and medium-sized enterprises (Filieri, 2015).

- The "**postponement strategy**": This Benetton innovation, according to the author (Filieri, 2015), can be considered one of the antecedent of the fast fashion philosophy. By using Electronic Data Interchange (EDI) system, Benetton was able to postpone the color of the products' choice during the season, that is to say, until the newest customer requirements were known according to fashion trends. Thus, the "*tinto-in-capo strategy*" consented to dye the products at the very final stage of production and retailers could order uncolored sweaters in advance, and then specify the colors during the selling season. This innovative operations-management technique (Camuffo et al. 2001) allowed Benetton to be very reactive to the fashion trends and to realize cost savings retaining less inventories and smaller unsold stock (Filieri, 2015).

- **Social advertising**: As we all know the Benetton's campaigns revolutionised the style and language of advertising thanks to the collaboration with the photographer Oliviero Toscani started in 1982. Thanks to his work, the Benetton's unique brand image was associated across the world to multi-ethnical and social values, like peace and racial equality, and the company was transformed into one of the most known and popular brand in the world. However, the relationship ended in 2000 because of the negative effects of a campaign against the death sentence that prompted retailer Sears, Roebuck & Co. to cancel a multimillion-dollar contract to sell Benetton's clothes in 800 of its department stores (Filieri, 2015).

In the *1990s*, international fast fashion incumbents (like Zara), started to erode Benetton's market position. The main problems faced by Benetton were due to its approach to distribution that did not enable the company to rapidly match changing customer's needs (Filieri, 2015). Benetton did not own the stores so did not develop and exploit an homogeneous and unique information system to gather all the sales information in real time.

Thus, during 2000s, the need to monitor and respond quickly to the customer's needs trends induced Benetton to revise its strategy in favour of **big investments in** *real estate* (in order to own the shops and install advanced information systems), *information technology (IT)* and *delocalization* (Filieri, 2015). The *downstream integration*, of these years started in November 1999 with the "*Retail Project*" and accelerated from 2002 with the opening of new megastores in many emerging countries. The launch of the new *information system infrastructure*, named "*Phoenix project*", linked together production, logistics and retailing. This IT system helped to develop a *multi-hub model* (one located in Castrette and another in Hong Kong) which stocks all the items coming from worldwide manufacturers that joint with automation reduced the lead-time to 7 days (Filieri,2015).

The following years the company focused on exploiting the power of the brand, improve the network and push the innovation of the product and reducing the lead time designing fast-fashion mini collections by improving the networks (Benetton annual report, 2010).

Today we are assisting at the desire of the firm to reshore the production and to open new scenarios of production here in Italy where all started.

4.2.2. Benetton's offshoring path

According to Favero (2010) it is interesting to remark that Benetton was one of the first Italian companies to offshore. Its international presence **started in the 80s** but, as stated by the author, the offshored industrial plants (built and purchased by Benetton) were used only to realize *duty and transport cost savings* and these were not considered strategic assets included into a wider and more significant offshoring strategy. In fact, at that time, only the 10% of the production was established offshore.

Only during the **90s** Benetton decided to offshore manufacturing activities to low labour cost countries (Easter Europe and Mediterranean basin).

The motivations were related to the **need of the company to decrease costs** (under the levels that the facilities restructuring and improvements made in the past allowed), and to the new **macroeconomic scenario** (Favero, 2010). Indeed, the stabilization of the Lira exchange reduced the positives effects of the low-price police carried out until then by the company abroad, and the stricter environment legislation induced to revise the old apparel machineries. Furthermore, the competition of the big international retailers (that started to offshore at the beginning of the 90s) increased (Favero, 2010).

As stated by Filieri (2015), the *delocalization* strategy has been prepared by Benetton in a very interesting way. Remarking the special relationship built with suppliers, Benetton proposed them to delocalize their plants in Eastern European countries. Benetton enjoyed cost savings (due to cheaper cost of labour and local raw materials) preserving the trust supplier asset and maintain the quality standards. The offshored Italian subcontractors guaranteed a safe delocalization given the fact that was easy to solve typical problems arising from delocalization such as transport delays, errors in production plants, product faults) (Filieri,2015). As stated by Favero (2010) in 1993 the number of Benetton's Italian suppliers decreased by more than 50% (from 480 in 1987 to 220 in 1993).

Benetton in **1995**, thanks to Tunisia government incentives (consisting in labour and fiscal cost savings and cheaper energy and raw materials costs), implemented the first concrete offshoring operation in **Tunisia and Portugal** (Favero, 2010).

As reported by the Benetton financial report¹⁶ of 1995, Benetton opened a wholly owned subsidiary (Tunisia S.a.r.l.) in the Tunisian city of Kouda active in the production of clothes and, during 1996¹⁷, the company has expanded its production by adding the production of cotton and woollen garments (mainly jeans and skirts), ensuring a stronger Benetton's presence in north Africa (Benetton financial report, 1995).

In middle of 1995, after the success of its first operation in Tunisia, Benetton opened a new company in Portugal near Oporto. This new wholly-owned industrial and commercial subsidiary was the first settlement of the company in the Lusitanian territory (Benetton financial report, 1995).

In **1997** Benetton started to offshore to **Eastern Europe** by setting up in **Hungary** a whollyowned subsidiary named "*Benetton Hungary Kftn*", active in the production of clothing for all divisions and sports shoes. In this year the Benetton's annual report affirms that 10 factories are located outside Italy. Two factories are located in Spain (they produce cotton garments, shirts and trousers), and in the U.S.A.; Tunisia; France; Brazil (garments production), India; Egypt (garments productions); Portugal and Hungary one plant each.

In **1998** the **delocalization program had been officially announced** to the public to promote the Benetton's cutting costs strategy preserving the quality of products (Favero, 2010).

¹⁶ <u>http://static.benettongroup.com/wp-content/uploads/2015/09/1995</u> annual report it.pdf

¹⁷ http://static.benettongroup.com/wp-content/uploads/2015/09/1996_annual_report_it_0.pdf

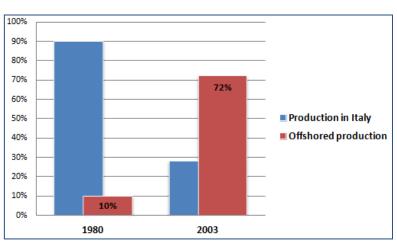
As reported by the Benetton financial report of 1998¹⁸, the "**delocalization program**" consisted in: the creation of a new and advanced production centre in Hungary; offshoring to Portugal and the exploitation of the collaboration of the centre of Castrette with the establishment in Tunisia and Eastern Europe. This new *European manufacturing network* allowed Benetton to further optimize (in economic and qualitative terms) the acquisition phase of the raw materials, which has been concentrated to 90% in Italy, and to obtain a reduction of the lead-time (more efficient management of shipping) thanks also to the utilization in Castrette of an automated packaging new technology.

The new Hungarian manufacturing plant was managed and controlled directly by Benetton but it coordinated a network of small and medium enterprises (the ex-Italian Benetton suppliers for example) that coordinated other local sub-contractors. (Favero, 2010). As we can easily notice this new structure was the duplication of the Castrette organization.

In 1999 Benetton further offshore the production to Croatia (Benetton annual report, 1999).

Offshoring was a slow process in 2000 still the 70% of the manufacturing activities were made in north east of Italy. However, that year the offshoring process accelerated with the construction of a manufacturing building in Croatia in Osijek (Favero, 2010), and later by investing there in new centre of dyeing (Benetton annual report, 2000)¹⁹

In 2002 Benetton offshored in **Slovakia** in Bratislava and in 2003 the 72% of its products are produced offshore (Favero, 2010).





Source: personal re-elaboration on the data of Favero (2010)

¹⁸ <u>http://static.benettongroup.com/wp-content/uploads/2015/09/1998_annual_report_it.pdf</u>
¹⁹ <u>http://www.borsaitaliana.it/bitApp/view.bit?lang=it&target=DocViewerDownload&filename=db%2Fpdf%2F2
<u>75.pdf</u></u>

In 2004 Benetton favoured the independence of the management of the production centres in Croatia, Hungary and Tunisia (where in 2004 is produced the entire product-cycle -from raw material to the finished garment) and it completed the Hong Kong sourcing platform to better and faster serve the markets of China, Far East, Japan and the United States. It was designed and also implemented the new "multi-hub" model for the management of international logistics platforms (Benetton annual report, 2004)²⁰.

In 2009 the group started to face **challenges related to the increasing costs of the raw materials** in Italy and abroad that started to erode the good operational margins registered in the past years (Benetton annual report, 2009)²¹.

Since 2010, the company focused on exploiting the power of the brand, improve the network and push the innovation of the product and reducing the lead time designing fast-fashion mini collections by improving the networks (Benetton annual report, 2010)²².

The 2012 began confirming the difficult conditions of the main markets in which the Benetton Group was present, in particular with regard to the area of Southern Europe (Italy, Greece, Spain and Portugal). In this year **started the first divestments** from offshoring operations in Kazakhstan and in France, however Benetton continued to invest in buildings in Italy, Bosnia-Herzegovina and the Ukraine and to increase production capacity in Croatia and Serbia (Benetton annual report, 2012)²³.

After having delisted from the Milan Stock Exchange in 2012, as reported by the Benetton annual report of 2013²⁴, Benetton launched a *three-year program to refocus on the core business ("piano triennale di rifocalizzazione del business")*. The aim of the reorganization was to return to the original structure and to reposition the company on the "core business" to improve the negative financial results of the last years. Alessandro Benetton started a change process by the spin-off part of the real estate part of the group (which assumed responsibility for the debt of Benetton) and the industrial part Olimpias (the principal fully owned textile supplier of Benetton). Then the company reduced the number of stores and brands (limited only to United Colors and Sisley) and the number of countries where it is present, considering also to backshore part of the production in Italy.

 ²⁰<u>http://www.borsaitaliana.it/bitApp/view.bit?target=DocViewerDownload&filename=db/pdf/new/9974.pdf</u>
 ²¹<u>http://static.benettongroup.com/wpcontent/uploads/2015/09/bilancio_consolidato_relazione_annuale_200</u>
 9 it.pdf

²² <u>http://static.benettongroup.com/wp-content/uploads/2015/09/bilancioconsolidato2010.pdf</u>

²³ <u>http://www.edizione.it/pdf/Edizione_ITA_2012_consolidato.pdf</u>

²⁴ http://www.edizione.it/pdf/edizione_consolidato_2013_ITA.pdf

In this way Benetton admitted to have an image problem caused from the excessive dispersion of the business on non-core activities and the reshoring strategy represented an important way for Benetton to rebuild a reputation and to give the customers a clear signal of repositioning of the business. Confirming these facts, the announced opening in 2016 of the new facility in Treviso.

4.2.3 Benetton's reshoring path²⁵

By studying the Benetton's annual reports, the company first started to prepare the reshoring operations at end of 2014 by implementing the *Benetton group's reorganisation plan of 2013*, and, in 2015, by closing the offshored facility located in Croazia.

Indeed, in mid-2015²⁶, the industrial rationalisation process in the knitwear segment was completed with the **closure of the factory in Labin (Croatia)**, the subsequent sale of the plant to third parties and the transfer of the equipment to the sites located in Nis (Serbia) and Osijek (Croatia).

As confirmed and reported by an article of the newspaper ItaliaOggi²⁷ the company in 2016 reshored in Italy a modest (but significant) portion of its most qualified knitwear production from the previous Croatian headquarter in the Balkans.

This is a case of *in-house reshoring* because the firm reshored the production (previously made in a fully owned facility in Croatia) to produce *in-house* in the laboratories in Castrette (Treviso) a new seamless pullover, the so called "*TV-31100*".

The new reshored facility has been inaugurated officially the 18^{th} October of 2016 and it will produce about 200,000 pullovers per year²⁸. The new "seamless" knitwear "*TV 31100*" is knitted in one piece *using* the newest *whole garment technology* and the top quality yarns (90% merino and 10% cashmere). Thanks to this high technological project, Benetton wants

²⁵ This chapter has been written thanks to the collaboration of Paola Innocente, Head of External Relations of Benetton Group.

²⁶ <u>http://www.edizione.it/pdf/bilancio-consolidato-2015-ENG.pdf</u>

²⁷ James Hansen, 02/12/2016, "Benetton, dai Balcani a Treviso. Si riduce la catena fra ideazione di punta e realizzazione". Available at the site:

http://www.italiaoqqi.it/qiornali/dettaqlio_qiornali.asp?preview=false&accessMode=FA&id=2136356&codiciTe_state=1&sez=hgiornali

²⁸ <u>http://www.benettongroup.com/it/media-press/comunicati-statements/benetton-group-a-castrette-un-nuovo-reparto-di-tessitura-made-in-treviso/</u>

to celebrate the brand's roots and revive the important connection with its home territory (Benetton press)²⁹.

This initiative launched by Benetton Group is part of the "Reshoring Project" promoted by the Italian Fashion System in collaboration with MISE and PriceWaterhouseCoopers. As reported by Benetton website, "the new weaving department realized in Castrette is the first and most important project of reshoring initiated by an Italian company in the textile and clothing industry".

The big resonance of the Benetton reshoring views as a main **reshoring motivation** the new opportunities arising from the application of **new technologies** (thirty-six Shima Seiki machines) in the production process. Benetton invested 2 million Euros in the new facility of Castrette (1500 square meters) and created 50 jobs. The work in the laboratories of Castrette is organized into four specialized teams that alternate every six hours (24 hours 24) for six days a week³⁰. Thanks to this project Benetton wants to create a real *"laboratory for research and development"* highly automated, with a strong *"machine to machine"* connection and thus capable of working on solutions able to respond faster to market demands (Benetton press)³¹.

Indeed, Francesco Gori, Chairman of Benetton Group in an article of "*Il Sole* 24ORE³²" affirms that "the reshoring is not just a productive relocation project, but also a **knowledge and know-how reintegration strategy**. Shorten the geographical distances and put the style and design offices closer to the production means **shorten the chain**, and find solutions **quickly to better respond to the market changes**". The article also remarks that the new sewing technology allows Benetton not only to realize savings in terms of manual processes, but also to minimize the waste of material used in the production process by increasing the value added. Benetton likes to highlight that this operation of reshoring will help also to minimize CO2 emissions in the production process.³³

²⁹ <u>http://www.benettongroup.com/media-press/press-releases-and-statements/tv31100/</u>

³⁰ Marcella Gabbiano, 5/11/2016, "36 macchine per fare un maglione", La repubblica

³¹ <u>http://www.benettongroup.com/it/media-press/comunicati-statements/tv31100/</u>

³² Barbara Ganz, 19/10/2016, "Benetton debutta con il progetto reshoring". Available at the site: <u>http://www.ilsole24ore.com/art/moda/2016-10-18/-benetton-debutta-il-progetto-reshoring--</u> <u>193728.shtml?uuid=ADnAhweB</u>

³³ Andrea Milanesi, 28/10/2016, "Il maglione che porta il nome del cap di Treviso", Il corriere della sera Settegreen.

As affirmed by Marco Airoldi (CEO of Benetton Group) in an interview given to "La Tribuna di Treviso"³⁴, "the hand stitching is an expensive and complicated process to implement, and this is the reason that led Benetton to relocate these operations in low cost countries. Today **new technologies are revolutionizing the structure of costs of a company** *like Benetton:* sewing machines like the ones we have installed in Castrette produce a sweater without seams in one hour. Under these conditions offshoring does not longer make sense".

As defined by the cited article of ItaliaOggi, Benetton made an "*intelligent reshoring*" that uses technology to improve and speed up the production process ensuring, at the same time high quality standards. As reported by an article of Il Sole 24ORE³⁵, the savings in terms of manual work allows the company to choose high quality Italian yarns and, at the same time, to sell the sweater at a low average price of 80 euro. In fact, the Chief Operating Officer of Benetton (in the cited article of ItaliaOggi), Lorenzo Dovesi said that "Benetton wanted recreate a unique product able to give a strong message to the consumer. Hence the need to implement the seamless production, 100% made in Italy and of high quality".

Thus, Benetton implemented the reshoring decision for several interconnected reasons: lowering labour costs by using technology, reintegrate knowledge, increasing quality and flexibility while reducing the lead-time and the "made in Italy" concept renovation.

This last reshoring motivation of Benetton is related to the desire to come back to Italy and to refocus on its Italian's origins and core activity. Francesco Gori, in the cited article of "Il sole24ORE", affirms that he is looking with confidence to the future because the company, through reshoring, is bringing innovation into the extraordinary Italian manufacturing tradition and "Benetton" is reconnecting itself with its purest identity. Starting from this point the Chairman of Benetton group thinks about **future developments**: the new highly automated production area of Castrette (the new "laboratory for research and development") will develop, by employing the newest technology and thanks to the Italian know-how, high quality products composed by high-quality yarns. Thus, Francesco Gori affirms that the concept of *"bello e ben fatto"* will certainly open new possible reshoring scenarios bringing back- home additional offshored production capacity in combination with the exploitation of

³⁴ *Fabio Poloni*, 19/10/2016, "Benetton, il ritorno a casa". Available at the site:

http://tribunatreviso.gelocal.it/treviso/cronaca/2016/10/19/news/industria-united-colors-4-0-1.14275590 ³⁵ Barbara Ganz, 19/10/2016, "Benetton dà il via al reshoring", Il Sole 24 ORE.

more and more advanced technical solutions, such as 3D design of clothes (article of "Il Gazzettino di Treviso")³⁶.

4.3. Seventy: a case of *outsourced reshoring*³⁷

Seventy³⁸ is a trendy and fashion brand for men and women manufactured and distributed, since 1970, by a Venice-based company named Ca'da Mosto owned by Mr. Sergio Tegon.

Ca' da Mosto in 2015 registered a turnover of 47.136.858 Euros³⁹ and an EBITDA margin on turnover of 9,7%. Despite the difficulties related to the economic crisis, since 2013, the operational efficiency of the company is growing and the margin is starting to getting closer to the average EBITDA margin on turnover realized by other similar companies of the sector (for example, Peserico in 2015 registered an EBITDA⁴⁰ margin on turnover of about 18%, and Liu-Jo Group of 16%). The firm closed the 2015 with a net profit of 1.128.169 Euros with a positive increment on the previous year of 0,5127 %.

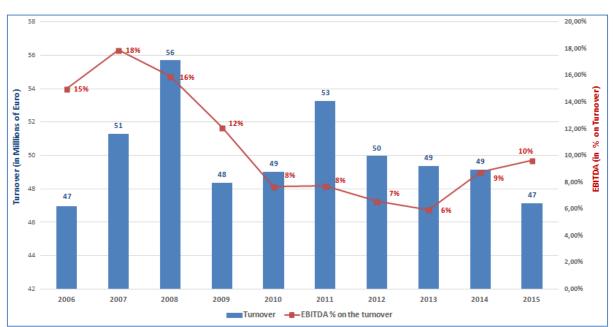


Figure 36: "The Economic and financial performance trend of Seventy from 2006 to 2015"

Source: personal data re-elaboration taken from Aida database

³⁶ Mattia Zanardo, 19/10/2016, "TV 31100: Benetton torna a Treviso", Il Gazzettino Di Treviso.

³⁷ This chapter has been written thanks to the collaboration of Ubaldo Bertuola, production and logistic manager at Ca' da Mosto, interviewed the 3rd of February 2017.

³⁸ Data are taken from: <u>http://www.seventy.it</u>

³⁹ Data taken from AIDA database

⁴⁰ Data taken from AIDA database

The company is a family-run business indeed, since the year 2000, the two daughters and the son of Sergio Tegon started working together on the business development of Ca'da Mosto. Francesca, with a BA in architecture, took the creative direction of the Seventy collections; Giovanna is working on the sales front and Pierpaolo is responsible for the economic and administrative management of the company.

In the company work 121⁴¹ people. Everything is conceived and designed in Scorzé⁴², where the prototypes and the models are made and the tissue are chosen and acquired around the world from certified suppliers.

Indeed, in the headquarter in Scorzè are conducted all the activities related to the: stylistic design (and the raw material-product matching), prototyping, supply chain (procurement of materials and finished garments) commercial and logistics. Even if the majority of the prototyping operations are made internally, sometimes the company is supported by external Italian and international suppliers. For example, when it buys some materials (such as precious silk or laces) from China, the prototyping is made directly from the Chinese suppliers that then send to Ca' da Mosto the clothes to check.

The vast majority of Ca' da Mosto's *distribution* is in department stores but the company has also a network of flagship stores of *Seventy* and *19.70* and it is trying to increase its presence on-line as well. In fact, in 2014, the company started a new e-commerce project (managed internally at the Scorzè headquarter) that increased the on-line sales of about 20% (that is to say around 100 more clothes sold). The aim of the "virtual boutique"⁴³ was also to promote internationalization, in line with the already taken offline trade policy, and to add greater value to the brand positioning exploited also thanks to the power of the social media (as Facebook, Instagram and Twitter-launching the hashtag # 7TY) which allowed to rely on a worldwide pool of users. Indeed, Seventy sells around 30% of its goods abroad and *its most important market* is represented by Japan and Russia.

Seventy can be defined as a middle-range brand (when we compare prices with quality) and we can cite Peserico and Liu-Jo as its main **competitors**.

In terms of *price positioning* of the Ca' da Mosto brands in ascending order we find:19/70 (brand conceived for a younger target), Seventy and VictorVictoria (more expensive brand,

⁴¹ Data taken from AIDA database

⁴² Crema M., 20 Novembre 2014, *"Tegon e la ri-localizzazione. Si torna a produrre in Italia"*, Il Gazzettino.

⁴³ Data taken from: <u>http://www.eurostep.it/portfolios/</u>

especially conceived for the Milanese public). For example, a sell-out price for a pair of trousers is approximately: 110-120 Euros for *19/70*, 140-180 Euros for Seventy and 220-230 Euros for VictorVictoria. Since Ca' da Mosto focuses its marketing campaign especially on traditional channels (like fashion magazines) is very important for the company to maximize the value for money perceived by the customers, producing very well-made clothes and at a very competitive price.

4.3.1 History of the company

The history of Seventy⁴⁴, fashion brand manufactured and distributed by **Ca' da Mosto**, goes hand in hand with the professional development of Mr. Sergio Tegon.

Seventy was established in 1970, after Tegon decided to quit his fixed job at Coin to establish his own brand. Thanks to the high quality of raw materials and techniques used in the men's and women's collections, Seventy had a big success in Italy and worldwide.

In 1975 the **Pepper** denim wear line was launched and constituted a successful project for a young customer base. Between 1977 and 1981, Tegon added new labels to the company: Lemon (young people's apparel) Pepperino (childrens).and knitwear brand Balaj'. The *80s* brought yet another important agreement: the license for the production of the **Cerruti 1881** Jeans collection.

In 1992 the Henri Cotton's and Moncler brands entered in the "Pepper Industries" until 1998 when he radically changed his strategy. During that year Tegon sold Pepper Industries and its subsidiaries through the Ca' da Mosto company in order to focus on the Seventy lines productions. Indeed, Tegon, after having sold his share in Pepper Industries (Moncler, Henri Cotton's, Balaj'), decided to focus exclusively on the development of Seventy working on the creation of contemporary collections, relying on creativity, and seeking to predict current trends thoroughly refined in terms of fabrics and cuts.

The excellent market feedback led Seventy to launch, in 2000, a new brand: **19.70**, especially designed for a female audience interpreting the Seventy spirit in an *easy chic* key.

This year Tegon wants to relaunch VictorVictoria (brand bought at the end of 90s) planning an original and fashion new fall-winter 2017/2018. VictorVictoria could be a driver for growth in foreign sales of Ca'da Mosto. Currently the company (with Seventy and 19.70)

⁴⁴ Data taken from the site of Seventy: <u>http://www.seventy.it</u>

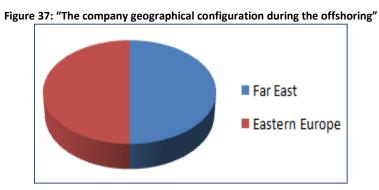
produces only 30% of revenues across the border indeed, one of the strategic objectives for 2017, will be to increase the export growth especially in Russia and Europe⁴⁵.

Seventy recently decided to reshore a little part of the production in Italy and nearshore the other part. In the next paragraphs I will analyse the internalization paths undertaken by the company and its reshoring/near-shoring decision strategy that, according to the model of Gray et al. (2013) can be configured as an *"outsourced reshoring"* because from offshored suppliers came back to Italy and nearshored entrusting to external suppliers as well.

4.3.2 Seventy's offshoring path

The offshoring operations started during the 90s especially in the Far East. Seventy, since the beginning of its history, never produced internally but entrusted the production to *external high qualified suppliers* trough sub-contracts (that is to say, the company orders garments from suppliers and once these are completed the company resells them).

As reported by Ubaldo Bertuola (Production and Logistic manager at Ca' da Mosto), "Seventy started to offshore because of economic problems related to the high cost of Italian labour for the production of some special materials (such as certain kinds of down jackets, silks, laces and embroideries)". Thus Seventy started purchase 50% of the materials in the Far East (cashmere from Mongolia and Nepal, feather from China) and the other 50% from Eastern Europe specifically from Romania and Bulgaria.



Source: Ubaldo Bertuola, Production and Logistic manager at Ca' da Mosto

Thanks to the offshoring experience in China, the company has been able to obtain *new skills and expertises* especially in the production of feather.

⁴⁵ Casadei M., 29 Dicembre 2016, "*Ca' da Mosto sceglie Milano per lanciare VictorVictoria*", Il Sole 24ORE. Available at the site: <u>http://www.ilsole24ore.com/art/moda/2016-12-28/ca-de-mosto-sceglie-milano-lanciare-victorvictoria--182122.shtml?uuid=ADIjGILC</u>

As indicated by Bertuola, "this happened because China enjoyed a training given by the Europeans that offshored there, and Japanese started to merge with the Europeans because of their emerging crisis (that lead to a reduction of their production volume). Thus, the majority of the firms Seventy cooperated with were not Chinese-owned but owned and managed by Italians and Japanese". As said by the CEO Sergio Tegon in an interview for a fashion magazine⁴⁶, referring to its collaboration with a joint venture between Japanese and Chinese: "the Japanese brought into the company the raw materials and machineries' know-how, and the Chinese brought into the company their working ability".

Thus, this offshoring operation made by Seventy has been a delocalization that kept high quality standards and that allowed the company to register very positive economic and financial results not only in the Italian market but also abroad where the product "made in Italy" was really appreciated. However, starting around 2014, Seventy started to reshore and nearshore the external production.

4.3.3 Seventy's reshoring path

Around the year 2014 Seventy decided to revise its localization decision.

This change was due essentially to economic and commercial issues. The *economic reasons* were related to the increased import duties and to the unfavourable euro-dollar exchange (the company normally was used to buy in Dollars and then resell in Euro) that stopped the big benefits arising from these financial operations. After that, the *commercial issues* were related to the fact that customers, because of the increased competition in the apparel industry, began to ask for a "*split of the deliveries*" and also for "*advances on the timing of the deliveries*" normally used by the firm until then.

As explained by Bertuola, "for example, the spring/summer season collection, in the past delivered in mid-April, now has to be distributed at the beginning or mid-February. The advance of all the activities become extremely difficult in this new scenario, because the uncertainty and unclearness of the market turned the commissions forecasting (the so-called "blind orders") difficult to make".

Nowadays the timing of the sales campaign is extended, the deliveries are anticipated and the production space is compressed. Thus, was not sustainable anymore for Seventy to spend the

⁴⁶Iannello A., novembre 2012, *"Delocalizzazione di qualità"*, Fashion Illustrated Industry. People Business And Trends.

65/70% of the time of a normal production cycle of its products (corresponding on average to 40 days) in moving goods from China to Italy. Nowadays that 40 days correspond to the *"advance delivery"* asked by customers.

Thus, the compression of the production timing combined with the geographical distance of the Far East pushed Seventy to bring the production of the activities closer to their demand and customers.

Seventy started considering the opportunities arising from the Mediterranean basin and Europe. The goal was to *reduce the gap of 40 days* of transport and *better manage the deliveries* according to the customers' request. For the Mediterranean basin Seventy referred to almost to the Maghreb area (Tunisia, Algeria, Morocco), Turkey, Portugal, Eastern Europe and Italy.

Despite the high level brand positioning of Seventy and its desire to consistently return back to Italy, the company preferred to largely nearshore in the Mediterranean basin and reshore only a little part of its production in Italy.

The most important reason was related to the costs.

In fact, in Italy the costs of manufacturing activities with high manual labour content are unsustainable because of the elevated Italian suppliers' taxation. According to Bertuola's experience in managing international transactions "on average, an Italian supplier pays about 74/75% in charges and taxes on turnover, in Romania these obligations correspond roughly to the 40/45% on the turnover, and in Portugal are even less. In Italy the cost of a worker for the company is about three times his salary. In Portugal (to cite one example) a worker earns on average 600 euro and it costs 800 euro for the company. An Italian worker belonging to a well-organized and high standards supplier costs 0.35 euro cents per minute instead in Romania 0.11 euro cents. Moreover, the cited unfavourable exchange rate, the increased duties and transport costs made the total cost of producing in the far East very similar to the one of producing in Romania. Thus, although recently Romania registered an increase of 16% on labour costs, companies at the end will have to pay 40 euro more to workers". From this concrete example we can understand that for Seventy Italy did not represent the perfect location to establish its operations, given the fact the cost gap of Italy, compared with the other countries, was unsustainable.

The second reason was related to the **target customers**. In the past Seventy focused its sales in Italy. Today the Italian clothing market is more interested in having a competitive price. Made in Italy is widely appreciated abroad, where customers are also willing to pay an extra price of 20% more.

A third important reason why Seventy preferred to nearshore more than back-reshoring was **linked to the lack of infrastructure and networks in Italy**. Indeed, the strong delocalization of Italian companies occurred in the past years caused a disruption of the Italian efficient networks of firms, and weakened the infrastructural equipment essential to set up the production. The company is trying to recreate them and to support suppliers restarting commissioning goods (even if in the start-up phase the costs can offset the benefits) but it is a long and difficult process.

So in 2014 Seventy brought back from the Far East to the Mediterranean basin and Italy almost the 50% of its total production volume.

In this way Seventy's production takes place for the 70/75% in the Mediterranean basin, approximately 25% do it in the far East, and 10% in Italy in volumes (this percentage today is increasing starting to reach the 15/18%).

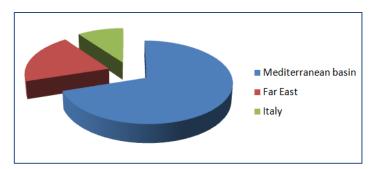


Figure 38: "The company geographical configuration after the relocalization"

Source: Ubaldo Bertuola, Production and Logistic manager at Ca' da Mosto

Framing the topic in terms of garments nearshored in Europe (Italy included) in the past the company produced 150,000 garments in Europe and 200,000 in the Far East. But today in the Mediterranean region including Eastern Europe Seventy produces 200,000 garments over 350,000.

	Before nearshoring and	After nearshoring and	Variation registered
	reshoring	reshoring	
	(number of garments)	(number of garments)	(number of garments)
EUROPE	150.000	200.000	+50.000
FAR	200.000	150.000	-50.000
EAST			

Figure 39: "Number of garments re-localized"

Source: Ubaldo Bertuola, Production and Logistic manager at Ca' da Mosto

For example, the company brought back all the production of the "*cut knitwear*" (such as jersey, T-shirts) from Turkey to Portugal, mainly because of the Turkish political instability. **Portugal** is very convenient under an economic point of view, thanks to its internal social policies, its reduced VAT on raw materials, its competitive prices and its low workers' taxation for companies.

In **Italy** Seventy produces the knitwear (such as tricot) because of the big know-how required by them to be manufactured. Thus, in Italy Seventy collaborates with companies (in Carpi, Prato, Brescia) that offer a great product at competitive prices. In Italy Seventy produces also *"small fast productions"* in collaboration with Italian suppliers located relatively near to the company's headquarter.

The main challenge Seventy faced during the nearshoring operations has been essentially linked with the difficulty **to find new suppliers**. In fact, throughout the transition from distant to closer suppliers, the main problem was to find providers able to guarantee the same: volumes produced in China, delivery reliability and high quality standards.

The parameters that Seventy always adopts to **evaluate a new supplier** are strict and detailed. The very **first parameter** is to assess the stylistic range of the provider (if he has suitable products in line with the idea of style and quality standards of the company). **Second** Seventy considers the products offered by the supplier in terms of costs, and **then** evaluated them on a technical perspective. In this last step Seventy takes into account the *production capacity* (in terms of the maximum volume of number of garments possible to produce), *quality standards* and *delivery reliability* ensured by the suppliers (given the fact that they could work for different brands). All these steps then are analyzed along with political factors and cultural issues (for example is difficult to reach adequate quality standards with the Arabs suppliers because usually they are not very "*details oriented*" like the Italian ones).

In order to guarantee the **knowledge transfer and reintegration in the start-up phase**, people with experience from the headquarters of Ca 'da Mosto in Scorzè work close with the new suppliers verifying, monitoring and training them to do a meticulous work in the production. Another coordination mechanism used by the company in these operations is to have local controllers both in Romania and in Bulgaria and China that represent an important interface between Seventy and the foreign production units.

Thus, the supplier selection and monitoring is a difficult and risky process that requires effort and commitment. However, Seventy affirms that *outsourcing is its best governance solution for several reasons*.

The **first motivation** the company prefers to outsource the production is linked to the uncertainty of the apparel industry. According to Bertuola "this does not make convenient "make-in house", indeed turning the variable costs into fixed costs could have adverse effects on performance. For this reason, Seventy try to enhance the suppliers' fidelity, in order to have a significance influence on their manufacturing and thus, on the final products".

The **second reason** is related to the *specific characteristics* of the product. The garment has a very short life cycle (on average six months), its offer is highly differentiated and its process is difficult to be automated. Bertuola says "for example Seventy for the next fall/winter collection has in program about 1100 models (that is to say the number of outfits matched to one material) to be produced in different places (for skills and technologies) and to be delivered on time. To internalize would be impossible for the company". Because of this complexity, Seventy has a highly developed network of almost 200 suppliers (nearly 100 of them for semi-processed materials only) that lightens its overhead costs and inventory and that allows the company to be flexible and reactive to the customers' needs.

Looking at the future Seventy's goals, the company would like to maintain stable the sell-in prices and to continue reducing the time of production and transport. Even if the company focus is working on improving the lead time, reducing costs and time waste in transportation, in the next years, seventy would like to reshore more productions in Italy, looking for example to some government incentives and opportunities.

4.4. Comparative business case analysis: technologic insights from the apparel industry

In this paragraph I will make a comparison between the two business cases in order to get some insights. I will use the model proposed by Fratocchi et al. (2016) and Orzes et al. (2016)

studied in chapter 3. This framework will allow to sum up each company's motivations to offshore and then reshore, according to two important factors, such as, customer perceived value and cost efficiency, adopting an internal and external perspective.

Benetton offshored to Eastern Europe and Mediterranean basin for economic reasons due to need of the company to decrease costs because of the stricter competition of the big international retailers. We can affirm that offshoring has been a strategy implemented to react to external changes in the competitive environment. Benetton by offshoring improved its cost structure and was able to be closer to the new international customers. Thus, through this operation, the company was able to increase the customers' perceived value and to build a strong and global image of the brand (like the name of its major brand "United color of Benetton" suggests).

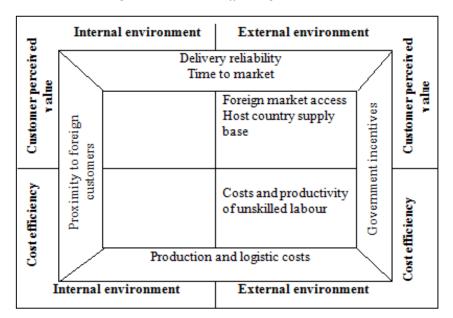


Figure 40: "Benetton's offshoring motivations"

Source: my re-elaboration on the framework proposed by Fratocchi et al. (2016) and Orzes et al. (2016)

We have seen that Benetton started its reshoring path in mid-2015 with the closure of the wholly owned factory in Labin (Croatia), and that it officially took place in 2016 with the opening of the new laboratories in Castrette (Treviso) to produce in-house the new seamless pullover, the so called "TV-31100".

The reshoring motivations reported by Benetton are related to internal and external reasons as well. Reshoring is seen by the company as a way to improve operational flexibility (by

shortening the supply chain and quickly respond to the market changes and new customers' needs) to exploit the "made in effect" and to reorganize the cost structure by using technology. The peculiarity of Benetton's reshoring is, in fact, the application of **new technologies in the production process**, that will allow to improve quality and to reduce labour cost in Italy. Italy so will be central into the Benetton's strategy thanks to the "Made in Italy effect" that the company wants to remark coming back to the origins of the core business and history.

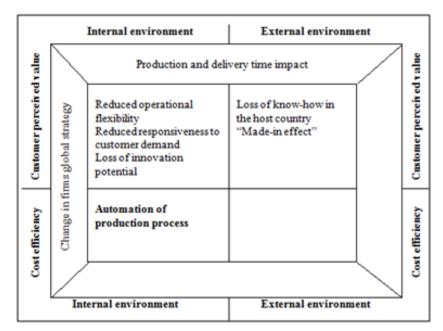
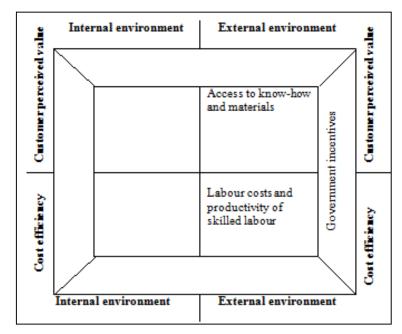


Figure 41: "Benetton's reshoring motivations"

Source: my re-elaboration on the framework proposed by Fratocchi et al. (2016) and Orzes et al. (2016)

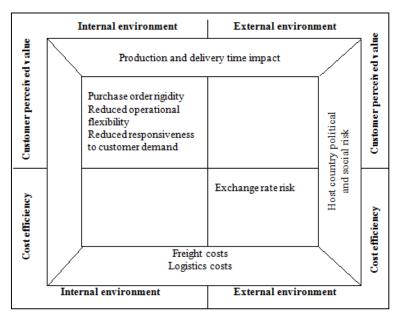
Seventy, as affirmed by Ubaldo Bertuola (Production and Logistic manager at Ca' da Mosto), started to offshore because of economic problems related to the high cost of Italian labour for the production of some special materials (such as certain kinds of down jackets, silks, laces and embroideries) and thanks to the favourable government incentives of the offshored locations (for example Portugal). Thus these motivations are related essentially to external environment factors and through the offshoring operation Seventy tried to improve the cost efficiency and the customers' perceived value of its products.

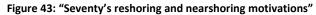
Figure 42: "Seventy's offshoring motivations"



Source: my re-elaboration on the framework proposed by Fratocchi et al. (2016) and Orzes et al. (2016)

Around the year 2014 Seventy decided to revise its localization decision essentially to economic (increased import duties and to the unfavourable euro-dollar exchange) and commercial issues (related to the need of reducing the time to market).





Source: my re-elaboration on the framework proposed

by Fratocchi et al. (2016) and Orzes et al. (2016)

The reshoring and nearshoring operation undertaken by Seventy can be defined as an *"outsourced reshoring"* because from offshored suppliers it came back to Italy and nearshored entrusting to external suppliers as well. Seventy reshored almost because of change in the external environment (like increased duties and taxes, and political and social risk of turkey for example) and to improve the time to market and increase the flexibility. We have seen that the company nearshored more that backshored the production because for Seventy Italy is still not competitive enough in term of costs and networks.

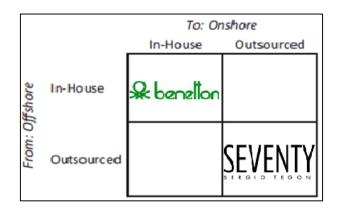


Figure 44: "Offshoring and reshoring governance configuration of Benetton and Seventy"

Source: personal re-elaboration on the work of Gray et al. (2013)

After having analysed the offshoring and reshoring paths undertaken by the companies, is difficult to determine the nature of reshoring made by the two firms because in both cases we find external and internal reasons to reshore or interrelated reasons. Taking into account all the motivations reported and by analysing them in comparison with other correlated factors we can affirm that for *Benetton and Seventy reshoring has not been a managerial error but a change in strategy because of the mutation of the external environment* that deteriorated benefits gained from the past offshoring operation (for example because of increased competition, political instability, increased labour costs) that also caused problems of flexibility and responsiveness to the demand.

After having summed up the main offshoring and reshoring motivations of the two companies, and having defined the governance configuration of these strategic operations, we can make a comparative analysis of the business cases.

The offshoring rationale of the two firms is very similar, because Benetton and Seventy decided to delocalize their production in order to realize labour costs savings and enjoy the

offshored location government incentives. However, looking at their reshoring drivers we cannot affirm the same.

We notice that Benetton reshored the production in Italy to reintegrate the know-how, push the Made-in effect, and especially to innovate the products and the processes by applying new technologies in the production. Thus, in this case, reshoring is enhanced by the technology. Therefore, why does not Seventy consider **technology** as a driver (or a future one) to backshoring?

During the interview with Ubaldo Bertuola (Production and Logistic manager at Ca' da Mosto) interesting considerations about the topic emerged. According to the manager, the apparel sector seems to be hardly automatable (the machines can provide only a little value added in the production) and is impossible to produce the entire garment by using technology because of the extreme variability of the products (in terms of design, materials used, different sizes).

Bertuola says: "for instance, when we talk about the technology applied in the feather manufacturing, we refer to equipment that makes technological only a small part of the entire production process (for example turning more efficient the operation of inserting the feathers into the jacket, or applying the label to the garment). Thus, with these technologies a company can employ a smaller amount of people and, at the same time, get superior quality standards. However, the human labour contribution and skills are fundamental, and above all, is essential to have a strong network of companies able to sustain and develop the new technologies".

According to Seventy's experience in certain product categories (which may be the garments with the feather), the effect of offshoring production to China has led to an impoverishment of the technology in Europe and in Italy. So nowadays a big challenge for Seventy (and for other similar companies) is also to *"reshore technology"* from China (that at this moment is more advanced respect to the technology available in Europe) to its new locations and implement it.

Therefore, important factors arise.

The first is connected with the **timing**, because these new technological machines need a trial stage and adequate preparation to being able to use them efficiently. The **lack of strong networks** turns more difficult the technological implementation and improvement. The other

factor is related to the **cost**. Indeed, big investments are required and their economic return is only expected in the medium and long term.

Nowadays the five-pocket jeans production is the most automated branch of the apparel industry because it has the most standardized production process. Indeed, it applies series of equipments that allow to speed up the activity in an important way.

However, Bertuola said, "these machines have a **considerable cost** (for a new machine is required an investment, difficult to be amortized, of roughly 200.000 euro instead of an investment of 70.000 euro for an old one) and they necessitate workers that control and manage their activities".

Considering all these problems, we understand how still in the apparel sector the cost of labour represents a big challenge for the companies. In this specific case, the Seventy's impossibility to come back to Italy is due mainly to the high cost of Italian labour that cannot be replaced by the automation of the production process.

For Benetton instead technology is perceived as a big opportunity to cut costs and improves products and processes.

As reported by an article⁴⁷ of "*Corriere del Veneto*" the new pole settled in Castrette is only the first step of a long automation and technologic strategy perceived by Benetton. Indeed, the machines now used in the production process in the future could also create clothes with special curvatures and woven shoes. Benetton affirms that the next step will be the *digital design* of the garments.

Thus Benetton and Seventy **consider technology in two opposite ways**. For Benetton technology will represent one of the most important pillars for the next years' strategy, for Seventy it will not. **Why**?

Benetton and Seventy represent **two different type of companies** not only in terms of size but in terms of product supply. Seventy has a higher product positioning that does not allow standardization, instead Benetton offers a more **standardized** type of garments on a large scale that **permits automation** of the production.

⁴⁷ Alessandro Zuin, 19/10/2016, *"Benetton, la nuova tecnologia riporta in Veneto i maglioni prodotti in Asia". Available at the site:* <u>http://corrieredelveneto.corriere.it/veneto/notizie/economia/2016/19-ottobre-</u>2016/benetton-nuova-tecnologia-riporta-veneto-maglioni-prodotti-asia-240993168175.shtml

Indeed, according to Ciappei e Sani (2006) **Benetton** has created the concept of "global product" characterized by strong elements of standardization (the model, the sizes, the way in which it is sold) across the international locations regardless of the distinctive tastes of each geographical area. For this reason, the main competitors of Benetton are global retailers such as H&M, ZARA, and Oviesse that, as stated by Mo (2015), are characterized by three components: *short production and distribution lead times* (that means exploit quick response production capabilities); *highly fashionable product design* and *affordable prices* for the middle market (that is to say exploit "cost control capabilities").

To control costs, the future of *big international fashion retailers* will be technology. As stated by the Mckinsey report⁴⁸ "*The state of fashion 2017*", automation, robotics, and digital supply chain will become important in the fashion industry, especially among big players that will push further into the digital realm. However, for another type of companies "*the natural choice will probably be to continue to look for new, cheaper sourcing countries, because their processes are not as sophisticated or they lack the capital to invest in automation and robotics*" (Mckinsey report:84).

This trend has been captured by an interesting article⁴⁹ of the New York Time that, already in 1990, described the difficulties and the challenges of the coming apparel production process automation. It affirmed that adapting machines to garment making is difficult because fabric is thin and floppy and it is harder to handle than rigid materials like steel or aluminium. In addition, small firms can ill afford expensive equipment.

Then, the New York Time article follows saying that the lower the number of mechanic operation in the production process (thus standardization) the better would be the automation. For example, garments like jeans (as the previous example provided by Bertuola) or men's dress shirts *"has become heavily mechanized due to high volume and fairly standard designs that require fewer than 20 operations"*. If we refer to men's suits, their production process is more complicated to be automated because, according to the article, are present on average from 160 to 210 operations, so that only parts of these processes have been automated.

⁴⁸ http://www.mckinsey.com/industries/retail/our-insights/the-state-of-fashion

⁴⁹ JOHN HOLUSH, 09/09/1990, "All About/Apparel Automation; Factory Tradition, Fashion Imperative and Foreign Competition". Available at the site: <u>http://www.nytimes.com/1990/09/09/business/all-about-apparel-automation-factory-tradition-fashion-imperative-foreign.html?pagewanted=all</u>

Referring again to the Mckinsey report, is true that the apparel industry is at a very early stage (compared with other sectors) in terms of adopting practices such as virtual design, digital printing, robotics, and automation. For this reason, the report affirms that for now, only the more advanced players are exploring these technologies and the rest is still focusing on the optimization of the traditional, non-digitised sourcing to prepare for digital procurement.

Tyler et al. (2012) report that companies, in order to avoid expensive investments in technologic equipment and machinery (and thus avoid the risk), could prefer to outsourced their products' production through specialist third-party manufacturers, who charge a premium for product development and manufacture.

Very important for these companies will be "to support suppliers in order to build skills for the digital future. New skills and knowledge in the product-development and sourcing process will be essential in-house as well" (Mckinsey report:85).

Thus, will be interesting to study in the next chapter the new trends in technology and future governance structures (outsourcing or insourcing technology) that companies will adopt to face the new challenges and changes provided by technology and globalization.

4.5. Conclusion

After having presented and analysed the Benetton and Seventy reshoring business cases, we have seen similarities in their offshoring motivations and differences in their reshoring ones. The most important point of difference was technology. Indeed, Benetton reshored part of the production in Italy thanks to the opportunities arose by the application of automation in the production process, Seventy instead did not perceive technology as a fundamental reshoring driver. Why? One possible explanation has been given by looking to their different product offer and positioning. Seventy has a higher product positioning that does not allow standardization, instead Benetton offers a more **standardized** type of garments on a large scale that **permits automation** of the production. From this observation, we have noticed how, in effect, technology could be a good opportunity for big players in the fast fashion apparel industry and a big future challenge for smaller ones, that will favour reshoring and production process improvements.

5. CHAPTER: SOLVING THE RESHORING DILEMMA: A TECHNOLOGICAL DRIVEN ANSWER

5.1. Introduction

Starting from the technological evidences emerged in the previous chapter, in this last section of the thesis I will define the characteristics of "next-shoring", that is the newest concept of reshoring, by highlighting the recent reshoring governance configuration trends and the related literature on the topic. Thanks to the interview made to "Sip-Italy", a Verona based company that produces Industrial Sewing Machines and that offers related services to the apparel companies, we collected interesting insights on the Italian technological scenario applied to the apparel industry. Then to conclude I will provide some managerial concrete proposals in order to improve and exploit efficiency of these new production processes.

5.2. The technological revolution: the next- shoring.

Technology is a big topic emerged during the business cases comparison. Starting from this evidence, is it correct talking exclusively about location, or would be better to frame reshoring inside the historical change in the technology scenario that firms are living?

According to an article⁵⁰ of McKinsey of 2014, manufacturing strategies, rather than focus on *offshoring* or even *reshoring*, need to concentrate on what's coming next. A *next-shoring perspective* emphasizes *proximity to demand* and *proximity to innovation*. This will be fundamental in the next years where new disrupting technologies will arise and will change supply ecosystems, remarking the importance to *tailor product strategies to local needs with the latest veins of manufacturing know-how and digital expertise*.

The article of McKinsey follows underlying that since 2008 investments in *industrial robots* have increased by nearly 50 percent worldwide, and that by 2025 around the 25 percent of the tasks of industrial workers could be automated. Thus the robots' diffusion, substituting a variety of human tasks, *will allow firms to locate more manufacturing closer to major demand markets, even where wage rates are higher*. This of course will change completely

⁵⁰ George K., Ramaswamy S., Rassey L., January 2014, *"Next-shoring: A CEO's guide"*, McKinsey Quarterly. Article available at the site: <u>http://www.mckinsey.com/business-functions/operations/our-insights/next-shoring-a-ceos-guide</u>

the companies' manufacturing systems that should consider new roles for these mechanical "workers" in order to realize productivity gains, better products and faster speed to market.

In this regard, an important and very recent business case confirms that something is changing, and that successful firms are reorganizing their traditional way of doing business.

Adidas, the largest sportswear manufacturer in Europe⁵¹, in the past offshored a lot to China, Indonesia and Vietnam but today is starting to bring production back home in a new technologic factory (the so called "*Speedfactory*") in Ansbach.

According to an article⁵² of "*The Economist*" of January 2017, this factory probably "will reinvent an industry". The production will begin in mid-2017, and this Adidas project will help it to transform the way trainers are created. Indeed, the *Speedfactory* will use robots and novel production techniques such as computerised knitting, robotic cutting and additive manufacturing, which involves building up shapes layer by layer (known as 3D printing). It has been built in collaboration with a local firm that makes manufacturing equipment, *Oechsler Motion*, and probably it will be the first of other *Speedfactories* across the world.

In this operation Adidas is not looking only on possible savings on labour cost (that, as we know, is rising in Asian countries) but the company's aim is to remain competitive *reducing its time to market* and satisfy the customers' needs. Indeed, the *Speedfactory* could drastically shorten the supply chain and reducing the time to market less than a week. Everything is made digitally, from the design to the quality tests, but of course not every job in the Speedfactory will be automated (creating more than 160 jobs).

Even if, as reported by the article of the Economist, the details of the project are secrets, one important thing emerges: *Adidas*, instead of ordering components from external suppliers, *will produce them by itself* (starting from raw materials, such as plastics, fibres and other basic substances).

The Adidas' strategic choice to internalize the new technological operations underlines another recurring feature of this new scenario. The *automation revolution* is favouring

⁵¹As we can see from the data available on the site: http://www.adidas-group.com/en/group/profile/

back?fsrc=scn%2Ffb%2Fte%2Fbl%2Fed%2Fadvancedmanufacturingadidasshightechfactorybringsproductionbac ktogermany

reshoring and insourcing and making firms more efficient and flexible giving them the opportunity to "*integrate more value creation of the back- or nearshored tasks to their own domestic production facilities*" (Foerstl et al., 2016:496).

The focus of the literature on the role of technology in determining industrial dynamics and hierarchical scope is increasing, remarking *a new nexus* between *technological shocks* and the *vertical organization of industries* (Ciarli et al., 2008).

Taking this new trend into account, it is important to understand "*why*" firms decide to directly invest in technology making it *in-house* instead of buying it from the market.

As a first approximation we could affirm that today *technologies*, constituting a *core competenc*e and a *strategic differentiator* for companies, are less and less outsourced. Indeed, as we studied in the previous chapters, when a competence of a value chain activity is considered "core" should not be outsourced. Maybe this explains why firms are internalizing their high technological processes and are coming back home to be near to their innovation hubs.

Buckley and Casson (2009) affirmed that firms often prefer to internalize technology because of the so called *"buyer uncertainty"* problem. Indeed, when companies decide to buy a license they are not absolutely sure about its novelty, perfection and imitation's risk given the fact that the *licensor's competitors* could imitate (and improve) its technology making it obsolete.

In the case of innovation-based outsourcing companies, according to Narasimahan and Talluri (2009), have to enhance *information*, *knowledge* and *design integration* in order to achieve their business objectives. Since firms cannot control all the knowledge inflows and outflows of the operation, a big *risk of knowledge leak* emerges. The authors follow highlighting that the *risk of disclosing proprietary knowledge* could threat the future competitiveness of the companies and it could push firms into a "*lock-in*" situation with the supplier.

In addition, outsourcing can lead to a significant *operational capability loss*, that is to say, "the extent to which the outsourcing initiative resulted in the loss of the internal operational capabilities associated with the outsourced business activity" (Handley, 2012:154).

According to Mudambi (2002) this argument is strictly linked with the *absorptive capacity* of the firm, that is to say, *"the ability to scan and monitor relevant technological and economic*

information, to identify technical and market opportunities, and to acquire knowledge, information and skills needed to develop technologies" (Mudambi, 2002:5). If the firm is not able to coordinate, control and match the new technological opportunities *accidental organizational forgetting* could take place. It occurs because the company neglects to incorporate new knowledge into the broader organizational memory, *failing then to capture the benefits* of a new technology development that could improve the core competencies and enhance the competitive advantage (De Holan et al., 2014).

Thus, evidences suggest that *new technologies develop in highly integrated organizations* because firms need to control interdependencies among more and more complex activities (Marengo and Dosi, 2005). In the same line Buckley and Casson (2009), which affirm that companies that integrate "high level activities" (such as innovative production, marketing and R&D) need *skilled labour* to managed them and *centralization* to reduce their related information costs and to better coordinate and control them.

Control is not the only reason for companies' internalization. Foss (1993) says that, when a new technology occurs the market is highly "unfamiliar" with what the integrating firm wants, and it is likely that a lack of mutual understanding would take place. Indeed, is possible that the "entrepreneur's idiosyncratic competence is not matched by a corresponding receiver competence among the suppliers possessing necessary complementary activities. Because of such external supply constraints, he has to undertake production himself" (Foss, 1993:140). Thus, according to the author, the competence as strong coordination effort) could clarify why technology pushes vertical integration.

Zhang et al. (2015) argue that companies, in order to outsource successfully a technology, have to take into account the supplier's long-term orientation in *investing in* a new technology (in anticipation of future buyer needs) and *sharing* critical information with the *buyer*. The supplier's willingness to *invest in* and *share*, according to the authors, have to be positively incentivized by companies *arranging long-term, credible and expensive incentives* that guarantee their commitment (for example promising a stable contract or a price reduction pressure in the future) and potential positive returns to the supplier. For these reasons, companies could prefer insourcing the new technology to adopt. Indeed, outsourcing could represent a costlier option to develop a new technology, involving the company's risk to be *incapable to align the supplier's intention* (to dedicate and share resources) *with its requirements*.

Gilley and Rasheed (2000) use the *transaction cost theory* and the *environmental dynamism* to explicate this difficulty company could face. In a rapidly changing environment suppliers with *specialized skills* in *developing and/or implementing a particular technology or process* could exercise a stronger bargaining power over outsourcing firms. For this reason, the authors affirm that *"the transaction costs associated with negotiating, monitoring and enforcing outsourcing arrangements increase in more dynamic environments"* (Gilley and Rasheed, 2000:786). This could well explicate why today firms are deciding to internalize. Nowadays the technological revolution is making the competitive environment very dynamic and the benefits associated with outsourcing are likely to be offset by its increasing costs and "transaction costs".

Indeed today firms, in order *to avoid the imperfections of the external market*, often *re-internalise activities* previously linked by the market mechanism (Buckley and Casson,2009). In order to benefit internalization, costs must be lower or equal to the benefits. However, once this constraint does not hold any more companies have to revise their governance and location decision. Consequently, we can say that reshoring and the insourcing are "*temporary phenomena*" because they depend on the companies' reaction (concerning location and governance strategies) to the evolution of the market dynamics across the time.

To conclude, we are living a technological revolution that is modifying the way firms have to organize themselves to be competitive and reactive to the market changes. For this reason, reshoring will be used as a tool to be close to the demand and to the innovation hubs (declining itself as *"next-shoring"*). As stated by an article⁵³ of 2016 of SAP, *"digitization of supply chains"* and the rise in labour costs will counterbalance the traditional offshoring practices. Indeed, digitization will favour reshoring (and next-shoring) scenarios, given the fact that will be required **highly skilled workers**, and **time to market** will constitute an important element in the global competition.

Another point remarked by the cited article of **McKinsey** is that next-shoring and the digitization of operations (thanks to 3D printers, robotics, cloud computing, mobile communications, and the Internet of Things) will *link assets and stakeholders as never before*. Thus the implication will be that manufacturers will have unprecedented *global visibility* into *who makes what, where, and how well*.

⁵³Goerlich K., (2016), "How Digitalization Will Change Outsourcing Strategies", SAP. Available at the site: <u>http://news.sap.com/how-digitalization-will-change-outsourcing-strategies/</u>

If we take these new dynamics into account we could say that probably reshoring is not a *"correction mechanism"* to the previous offshore operation, but a *"change in strategy*", given by the technological mutations in the external environment.

5.3. The Sip-Italy experience in apparel production automation⁵⁴

Sip-Italy⁵⁵ is a company specialized in the development and production of automatic units for sewing jeans and trousers. Sip-Italy is a division of *TORMEC AMBROSI s.r.l*, and it works in partnership with *Brother industries*, that provides technical and commercial support. The goal of Sip Italy is to manufacture friendly-use automatic work stations with the best ratio in terms of productivity and versatility at the lowest running cost (that is on average 1,2).

The competitive advantage of Sip-Italy lies in producing sewing machines that guarantee high quality standards even if the users do not own high technical skills.

Thomas Ambrosi, CEO of TORMEC AMBROSI S.r.l. and Co-founder of Sip-Italy, said: "our goal is to give the customers a "turnkey solution", suggesting them which machines they need and in what quantities, and recommending them also their factory layout. Generally, the users that will approach the machines do not have many specific skills, for this reason our company supports the customers through the so called "helpers", that is to say, very skilled Sip-Italy technicians who help customers to start the production and, at the same time, to train their own technical on site".

The company is present internationally through two sale channels: the Brother indirect channel (that includes U.S.A, China and Japan) and the Sip-Italy direct channel (that includes Italy and countries as Bangladesh, India, Pakistan). This is the most interesting area for the company, given the fact it registers the highest number of installed machines.

In this regard, Ambrosi affirms: "nowadays Pakistan, Bangladesh and Ethiopia are the areas in which apparel companies produce the most. Companies are leaving from China. We want to be more present in Turkey and in the Mediterranean basin (like in Egypt, Jordan, Tunisia and Morocco)".

Thanks to Ambrosi's experience in the apparel automation field and thanks to the feedbacks deriving from the international presence of the company, interesting insights arose.

⁵⁴ This paragraph has been written thanks to the collaboration of Thomas Ambrosi, CEO of TORMEC AMBROSI S.r.l. and co-founder of Sip Italy, interviewed on the 21st of February 2017.

⁵⁵ http://www.sip-italy.com/

First according to Ambrosi: "many textile companies, that offshored a lot in the past years, have lost fundamental competences related to the production of the garments and, thus, to technology. Then the problem is that, even if those companies backshore their production, they should still import the technology because they do not have the competences. Sip-Italy satisfies the new need of technology applied in the production process offering just in time solutions able to manage volumes and production capacity in a distinctive way from the other competitors (like: Juki, VI.BE.MAC and Jam international)".

Second, new opportunities are coming from the area of the Mediterranean basin. In this market companies produce *lower volumes* with respect to the area of Bangladesh and Pakistan (for example, in that areas a minimum production project is about 5000 pieces per day versus 2000 garments per day produced in the Mediterranean basin). However, this area is very interesting for designers who cannot rely on far countries as Bangladesh because they need their requests to be fulfilled quickly.

Thus, for Sip-Italy the Mediterranean basin will be a laboratory of R&D, because, as Ambrosi said: "all special needs and requests come from there, and if we learn how to fulfil them we can be responsive and reactive to the signals of the market, that will guide us in developing new machines and sewing techniques. This has happened already in the processing of the super-stretch fabric, where we have developed a different cold folding technique (other than the previous hot folding technique) because that type of tissue breaks if heated."

Third, Sip Italy does not sell a lot in Italy because *the automation in the Italian apparel industry is still underdeveloped*. Small apparel companies use very simple and conventional machines because of their versatility.

In this regard Sip-Italy, to fulfil the need of versatility, created a special Programmable Logic Controller (PLC) machine with 10 settings. In this way, the machine is able to perform a sequence of different operations so that the user only needs to manage the change in sequence of operations. Ambrosi said: *"Italy is our dream, because this implies for us implementing more automated engineering system. A slower but more automated production"*. However, in Italy there are not still the volumes to apply technology on a large scale, and this have effects on prices. According to Ambrosi, *"producing a jeans offshore would cost 5-7 dollars for the producer, instead in Italy it would cost 30 euro. Here the difference is not only in terms of cost, but also in terms of lower production volumes. Apply the technology to low volumes with*

higher costs would not make sense. Italy must increase the volumes to support the automation in the production".

Thus, what affirmed by the Sip co-founder confirms the considerations made in the previous chapter 4, where we noticed that automation will be exploited the most by the big players of fast fashion market. Indeed, thanks to their low-medium price positioning on the market and their standardized products, they register big volumes that allow automation. The need to realize big volumes for automation, said Ambrosi, is threatening, for example, small apparel firms located in the Asian countries that risk to disappear because they do not own automatic machines and thus are not able to guarantee a standard quality.

The future will be the industry 4.0 that will exploit automation. For example, in the field of the sewing machine the industry 4.0 should aim to reduce the so-called *"handling time"* (that is to say the time spent by the operator to transfer the garment from one machine to another or from one machine to the final station), which entails more or less 80% of the production time. Sip-Italy has installed counters on the machines that measure the handling to optimize the performance, that in this case is measured in terms of "garments produced in an hour". Also Brother elaborated interesting innovative solutions (like "Nexio"⁵⁶) exploiting the *machine to machine to machine to* Things) projects as well.

Thus, not only the speed of the sewing machine operators will make the difference in the productivity, but also technology will have its role and its responsibilities. Industry 4.0. will undoubtedly have positive effects on costs and quality. Therefore, companies that want to be (or remain) competitive will have to free up resources and invest in technology.

Ambrosi affirms: "the technology is unstoppable. Companies (whether small or large ones) that will stop investing in new production technologies and in evolved machines probably will disappear. Sip-Italy tries to act as a technology-driver by promoting to the customers the latest production techniques applicable. For example, the cited Brother Nexio technology with IoT is an innovation that can be purchased by any small or big organization. The challenge for companies that produce technology is (and will be) to develop affordable technologies and flexible systems also for smaller production companies. And when we talk about technology we refer not only to the "machines" but also to other innovative solutions

⁵⁶ http://www.brother.com/as_oc/ism/en/sp/nexio_s7300a/index.html

as for example automatic warehouses that exploit new security systems and high levels of modularity and customization".

Therefore, thanks to the experience and knowledge of Sip-Italy reported by Thomas Ambrosi we had the possibility to gather indirectly feedbacks from the market and insights concerning technology applied in the apparel industry.

Ambrosi confirmed the trends analysed in the previous chapter by reporting his experience on the field. Indeed, according to him, next-shoring in combination with the exploitation of technology applied in the production processes will be the future, for big players and smaller ones as well. This will represent the main factor on which competitive companies will base their competitive advantage.

Obviously focusing only on the technology we could risk to miss important points able to explicate why firms are choosing to bring back home their productions. However, if we are aware of all the variables and these new changes that can affects the companies' location or relocation decision, we could better interpret the phenomenon and provide more suitable managerial solutions.

5.4. Solving the reshoring dilemma: some managerial proposals

Van den Bossche et al. (2014) try to provide a framework to help managers to determine if reshoring could be considered a right strategic choice or not. The authors list three important questions that companies have to answer before entering in this process:

- 1. Is my reshoring decision *future-proof*?
- 2. Is my company *ready to* reshore?
- 3. Where is the *best reshoring location*?

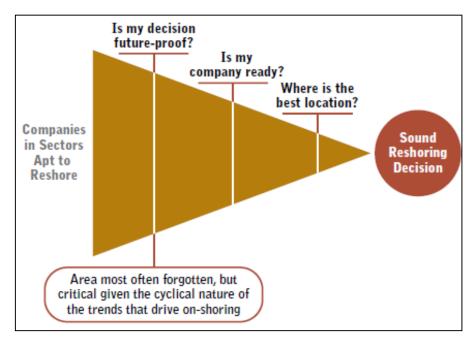


Figure 45: "Reshoring Decision Funnel"

Source: Van den Bossche et al. (2014)

Referring to the *first question* (*is my reshoring decision future-proof*?) managers cannot give a simple "yes or no answer" because, according to the authors, they should conduct a strong analysis of the future possible scenarios to determine whether the costs and capital related to reshoring will be adequately paid back.

Therefore, as stated by Van den Bossche et al. (2014), the *scenario planning* helps companies to identify their potential areas of weaknesses (*"risk mitigation plan"*) and it creates the *right balance of steady state operational efficiency and future-proof robustness* by determining the potential impact of macroeconomic environment and industry trends on different reshoring options in an unbiased way. The authors also suggest an algorithm to conduct a *"stress test"*.

Firms should select the "top two drivers" that could affect their performance (among a list of usually 10 to 15 relevant factors), put them on a 2x2 matrix and calculate the expected probability for each of the four possible scenarios. Thus, by evaluating and studying the results, the "reshoring evaluation team" can understand and indicate whether the decision to reshore is future-proof and share its findings to stakeholders.

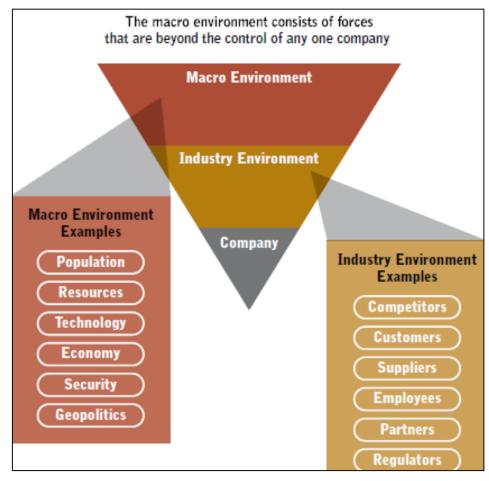


Figure 46: "Scenario Planning-Macro and Industry Trends"

Source: Van den Bossche et al. (2014)

The second question presented by the authors (*"is my company ready to reshore?"*) adopts an internal focus. Indeed, while the macroeconomic math provides *directional confirmation* of the maturity of the external environment, further internal factors, specific to each company, should be investigated before taking this strategic decision.

Figure 47: "Reshoring	Readiness	Factors"
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Capability	Description	Decision
Skills	Degree of functional expertise	If capability not at par, consider relocation of experts
Availability	of current workforce	or local acquisition of capability
Asset Health	Age and health of machinery,	If not in good health or performance, include capability
and Performance	OEE performance	enhancement in business case
Knowledge	Existing processes and infrastructure	If process or infrastructure not in place, include capa-
Transfer	to transfer knowledge and experts	bility enhancement and ramp-up in business case
Project	Internal capability to run high	If capability not up to task, include capability
Management	stakes projects effectively	enhancement or external support in business case

Source: Van den Bossche et al. (2014)

To answer the second question ("*Is my company ready to reshore*?") the authors suggest to start with checking the "*availability of internal capacity*". For example, companies by reshoring to an existing site with extra-free capacity available could achieve economies of scale and scope and at the same time could accelerate the operation's transition and learning curve. However, these benefits from reshoring could be threatened by the wrong estimation of the "available capacity" of the firm, missing possible long-term cost savings or advantages that other locations (other than the home-country) may offer.

Once *availability of internal capacity* (or the right ownership model-insourcing/outsourcingfor new capacity) is established, readiness *factors must be weighed and evaluated rigorously*. The authors cite among these factors: the company's capability in the area of *technical expertise*; experience in building Greenfield sites and in ramping-up the new reshored operation; experience in managing large projects effectively and skills availability.

Even if for the majority of the readiness factors the evaluation can be largely qualitative the aim of these analysis is to *determine objectively the capabilities* of the firm and understand if, before undertaking the reshoring operations, some improvements (and thus extra cost) are required. If the results of the assessments are positive, companies can try to answer to the third and last question about location.

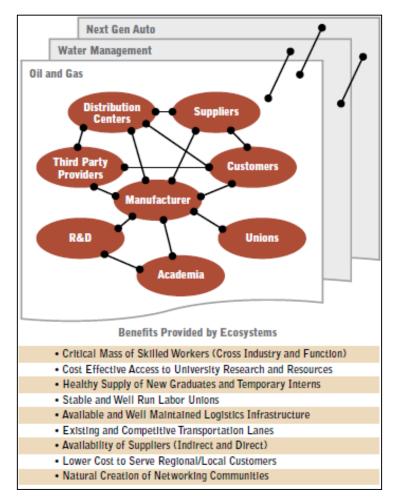


Figure 48: "Business Ecosystems"

Source: Van den Bossche et al. (2014)

We have seen how today the technologic revolution is changing the way firms compete and plan for the future. Technology is breaking the traditional companies' paradigm "offshoring to seek cheap labour cost" and it is pushing them to look at locations that allow to be close to the demand, innovation and high skilled workforce.

The last question of the framework ("*What is the Best Reshoring Location*?") elaborated by Van den Bossche et al. (2014) highlights (confirming what we said in the previous section 5.3) that reshoring is a *temporary phenomenon* given the fact that "*a location right for the firm today may not be right as well tomorrow*".

According to the authors, choosing the reshoring location is the most critical decision and, in order to implement it properly, companies *must identify* the so called *"location selection factors"*, that can turn a location attractive, *and made* a rigorous analysis of its quantitative cost measures and its qualitative capability. This examination is usually conducted by a transparent and objective *multifunctional committee* that determines if reshoring could be the

right decision for the company, both now and in the future favouring, for example, location where a *critical mass of skilled workers*, proximity to customers and supply chain ecosystem synergies are present.

Even if checking the validity and the success of reshoring is an elaborated and difficult process, it is necessary to help companies to avoid expensive and long-lasting strategic mistakes. Thus, conducting rigorous scenarios analysis and checking the internal readiness of the firm is a good managerial practice to realize successful performance in the future.

Shih (2014) studied a lot of American cases of reshoring and in his article try to provide *some practical managerial recommendations*.

First, companies should "stabilize the workforce".

When companies revise their location and decide to come back to the home-country, *high worker turnover* could arise. This problem is due to the fact that nowadays *the new technology* used in the production processes *changed the workers' perception of what a modern factory production job is*.

Indeed according to Shih (2014), lean production systems, extensive use of measurement and information technology on the shop floor, and sophisticated quality systems *have transformed the roles of frontline production and supply chain logistics workers*. This implies that today workers, in the majority of the cases, are not sufficiently well prepared and skilled and, if they are not encouraged enough to learn and stay into the company, they will easily quit injecting variability and unpredictability into the production process.

The author suggests to arrange *pre-employment and post-employment activities and incentive* to select properly the most motivated and committed workforce. For example, a *pre-employment activity* could be selecting only people who made some type of co-investment in making their job (for instance participating in training and certification programs). Instead, a post-employment activity for a company could be preparing a *skills progression system* that shows workers a path of grow to more highly skilled and responsible positions. Another option for managers could be *doing training in-house*, preparing different training programs for different production technologies (for example ranging from the operation of electronic component placement machines to basic quality and lean production methodologies). One more possibility for firm is represented by *working with local community colleges and universities* to train and attract students (for example entering in work-study arrangements).

Second, companies should "address the skills gaps".

According to Shih (2014), countries that have experienced significant offshoring (as USA and Europe as we have seen in *chapter 3*) today register a "*generational skills deficiency*" because they haven't trained enough young people in many important technical fields. This happened because the majority of the companies focused only on low-cost competitive sourcing rather than focusing on design for manufacture and efficient assembly and processing.

To solve this *skill challenge*, the author suggests to invest in training and mentoring in order to establish "*shop floor leadership*" that could launch process and quality improvement projects. Filling the *capabilities gap* requires time, but it is necessary for companies to become again competitive and with a long term sustainable growth.

Third, companies should "rethink the capital/labour ratio".

In the last years companies offshored to enjoy the labour arbitrage thus substituting *labour for capital* (that is to say, the replacement of "hard" automation with manual processes).

The author says that when firms reshore most people assume that they merely go back to the home country to use more automation. This vision is too simplistic because the company's performance depends on the workers' ability in using technology and automation cannot totally or significantly replaces human workforce.

Indeed, companies analysed by the study of Shih (2014) testified that, to translate the gains of automation into sustainable growth, management has to recognize the right *balance between manual and automated processing to avoid over-automating*. The mix may change over time with production experience and learning and, to do this, many firms of the study decided *to increase the amount of vertical integration* bringing work back in-house for enhancing control and improving knowledge and productivity.

Therefore, companies, to build up a sustainable long-term performance in this new technological scenario, have *to rethink the capital/labour* ratio understanding that workers will still have an important and fundamental role in their performance. Thus, the key of the success will be to find the right mix between workers and automated processing.

Fourth, companies should "localize the supply base".

For companies that have experienced a lot of years of offshoring (having offshore-based manufacturers and key suppliers) coming back home means probably facing problems related to a *hollowed-out supply base*.

This, according to Shih (2014), means *rebuild a supplier ecosystem* but in a more strategic way. Indeed, managers have to realize that they should adopt a *relational view* of the suppliers (instead of a transactional one). Co-innovation could help to rebuild core competencies and cooperative partnerships could entail much higher level of information sharing and collaboration to solve design and production problems.

Fifth, companies should "understand the importance of key corporate customers".

The author underlines the importance to favour the *active partnering* with B2B customers to achieve greater transparency to demand. This implies more frequent sharing of demand signals, as well as a commitment to work together to improve overall supply chain efficiency for the longer term. Thus, according to Shih (2014), *open communication* with business partners and *visibility* are the key to efficiency across all the segments of the supply chain.

Sixth, companies should "leverage the new proximity of manufacturing".

According to Shih (2014), coming back home represents for firms a big opportunity to *re-establish a close link between R&D and production* and to improve products thanks to the *new technologies* applied in the manufacturing process.

This occurs usually having the work in-house, that is to say, by internalizing the most of the interconnected functions (such as design team and operations). By creating centres of competences incremental innovations in the product and in the process are more likely to occur.

Thus the author invites managers to take advantage of *shorter lead times* and more *rapid product cycles* deriving from the new close proximity to product design and tight integration with manufacturing. One possibility to exploit this benefits could be moving *more value- added activities in-house* or into the hands of a *strategic supply partner*, or another option could be represented by *creating and rapidly deliver customized and unique products*.

5.5. Conclusion

We have studied how a new nexus between technological shocks and the vertical organization of industries is arising to be close to the demand and to the innovation hubs. A next-shoring perspective will be fundamental in the next years where new disrupting technologies will arise and time to market will be fundamental in the competition. However, implement a successful next-reshoring is not easy. Indeed, managers have to face big challenges due to the change of scenario caused by technology. Location decisions will not be driven anymore by labour-cost arbitrage but by the presence and potentiality of supplier ecosystems. Thus, according to Shih (2014), managers should be able to design supply chains that allow to exploit proximity to market supply ecosystems and innovation.

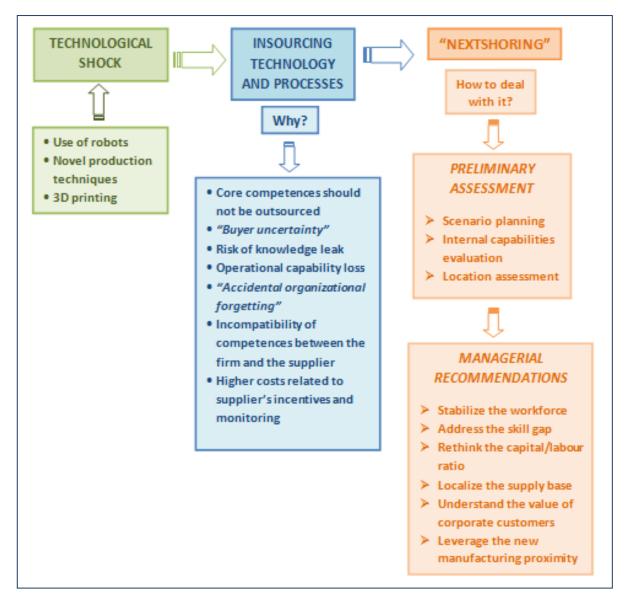


Figure 49: "A possible reshoring reconfiguration"

Source: personal re-elaboration of the literature analysed in chapter 5.4

The *figure 49* represents the main topics analysed in the chapter. When a *"technological shock"* occurs, firms that can adopt technology have to modify their production process and acquire new competences.

In this regard, reminding the discussion on the application of technology in the apparel industry made in *chapter 4* (in paragraph 4.4) is important to remark that, the more a company produces standardized products, the more would be convenient for that company to invest in technology. Otherwise, if a firm produces products with complex design (that involves high numbers of operations and, thus, a high percentage of human labour used in the production process) it is probable that the company will prefer to continue to look for locations in which realise labour cost savings. Of course it is also a question of "investment capacity". As explained in chapter 4, big fashion players can afford new technologies investments, and their mass market products (highly standardized) maximise the benefits of these technological innovations. Different types of firms (like Seventy) with a different and a higher product positioning in the market, may decide to invest less in technology.

Going back to *figure 49*, companies that decided to adopt technology and develop new skills, nowadays, in order to avoid risks and maximise the benefits, are deciding more and more to internalize technology. The companies' main motivations of internalization of technology explained in details across this chapter are summed up in the *figure 49*. These are related to the risk of imitation, the risk of disclosing proprietary knowledge and lose important capabilities fundamental to be competitive in the long run.

"Next-shoring" will be fundamental and managers should be prepared to implement successfully location decision strategies. This means conducting a scenario planning, an internal capabilities evaluation and a location assessment. Finally, in the chapter have been provided practical managerial recommendations. Following them properly, firms should be able to translate the changes into an opportunity to develop people, skills and organizational capabilities and convert them into a source of competitive advantage.

Conclusion

The aim of the thesis was to provide a general understanding about the reshoring phenomenon and to determine its nature.

To do this we remarked the importance to analyse the *entire internationalization path undertaken by the firms*, thus we started studying offshoring.

We learnt that offshoring is not just looking at cost savings, because these can be easily offset by the hidden costs of offshoring. Thus companies should conduct a risks analysis, estimating the total cost of offshoring and taking into account the coordination challenges to implement a successful offshoring strategy.

We noticed that nowadays managers face continuous challenges originating from the international environment and from the rise of global factories across the world. Thus, establishing the right governance configuration (that today moves from the classical trade-off insourcing/outsourcing comprehending also hybrid models) is fundamental to be successful in this new scenario.

Thus, we have seen that reshoring is more than a relocation decision. It cannot exist without offshoring and it could be implemented trough different governance configurations (Gray et al., 2013). After having analysed the literature of the offshoring and reshoring phenomenon, we have studied two cases of reshoring: the Benetton case ("*in-house reshoring*") and the Seventy case ("*outsourced reshoring*").

Understanding whether their reshoring rationale could be considered as a "managerial error" (of their previous offshoring operations) or just a "change in strategy" (given by the mutation of the external environment) has not been easy.

Considering the entire history of the firms and analysing their offshoring and reshoring configurations and drivers, we can affirm that for Benetton and Seventy reshoring has not been a managerial error, but a change in the location strategy driven by the mutation of the external environment. Indeed, the increased competition based on the lead-time, the increased labour costs and the political instability, have deteriorated their benefits gained from the past offshoring operation, leading to problems related to lack of flexibility and responsiveness to the demand.

Comparing the two business cases, we noticed that the two companies offshored for similar motivations but then reshored for different ones. The most important point of difference was technology. Indeed, Benetton based its reshoring operations on the new opportunities arising from the application of new technology on the production process, Seventy did not.

We explained this fact by looking to their different product offer and positioning. Seventy has a higher product positioning that does not allow standardization, instead Benetton offers a more standardized type of garments on a large scale that permits automation of the production.

As stated by the cited Mckinsey report "*The state of fashion 2017*", automation, robotics, and digital supply chain will become important in the fashion industry, especially among big players because for the other companies the natural choice will probably be to continue to look for new and cheaper sourcing countries. In effect, technology could be a good opportunity for big players in the fast fashion apparel industry (and a big future challenge for smaller ones) that will favour reshoring and production process improvements.

In this sense the thesis provides a different view of reshoring, presenting the so called "*next-shoring*" phenomenon: companies will be closer to their demand and their innovation hubs.

Nowadays staying close to the demand and to the innovation hubs is fundamental and in the near future location decisions will not be driven anymore only by labour-cost arbitrage but by the presence and potentiality of supplier ecosystems and new technologies applied in the production process.

This interpretation of *next-reshoring* represents a very big challenge for companies. Indeed, managers will have to put in place strategies able to translate the changes in the competitive environment into opportunities to develop people, skills and organizational capabilities and convert them into a source of competitive advantage. Of course this will require strong efforts and commitment.

In this new dynamic competitive scenario, we are assisting to an *internalization of technology trend*, in this way companies try to increase control over the new technological competences acquired and, at the same time, to reduce the "transaction costs" that instead the externalization option could cause. However, in order to benefit internalization, costs must be lower or equal to the benefits. Consequently, we can say that reshoring and insourcing are

"temporary phenomena" because they depend on the companies' reaction (concerning location and governance strategies) to the evolution of the market dynamics across the time.

In future, as confirmed by the experience of Sip-Italy, the *Industry 4.0* and the investments in technology will favour productivity and efficiency improvements, turning the companies' processes more flexible and efficient producing higher-quality goods at reduced costs, enhancing relocation strategies⁵⁷.

Thus, in following researches will be interesting investigate more on the correlation between reshoring and the application of technology in the production process, in order to be able to support companies in this challenging new scenario.

⁵⁷ <u>http://www.reshorenow.org/blog/industry-4-0-the-future-of-competitiveness-in-u-s-manufacturing/</u>

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