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Networks in the fashion business: From a production and distribution organizational form to a successful innovation driven brand strategy.

Ca' Foscari Dorsoduro 3246 30123 Venezia

Supervisor

Ch. Prof. Giovanni Favero

Assistant Supervisor

Ch. Prof. Anna Moretti

Graduand

Filippo Vego Scocco

Matriculation Number 837984

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1.) Introduction

Nowadays, to generate value and truly innovate, firms have to implement business strategies able to be developed, and create competitive advantages, in an always more interconnected, fast and globalized environment.

Collaborations between firms since more than thirty years are considered a reliable source of innovation all over the different firms' processes, and could be also characterized by the creation of a networked ecosystems among companies and other institutions.

Collaborative approaches are evolving during the recent years from solutions implemented only for productive and supply chain improvement purposes, to strategies that maintain the same organizational configuration but aimed to generate branding synergies and to reach consumers-focus objectives.

This research analyzes the cultural and historical evolution of network organizational forms, and their development across the time and the space, from the first ideation of the network concept to the current scenario, whit its huge diversity of concrete successful cases of networked organizations.

The first part of this research is based on a deep review of the literature, as pivotal process to concretely understand why and how the use of this structure changed during the years, and evaluate the different interpretations of networks organizational structures.

Having a clear definition of what a network and a collaboration are, the research try to understand the dynamics behind the development of a collaborative strategy in the most successful innovative companies, taking in consideration how the temporal, cultural, and technological context affects the implementation of collaborative networks.

To find how this business strategy is evolving through the years, the research restricts its focus on the development of collaborative strategies in one of the most challenging, unpredictable and unstable environments, the fashion system. Starting with an analysis of the fashion industry's characteristics the research try to understand the reasons that made this the perfect ground for networks and collaborative approaches, presenting two relevant evaluative dynamics.

With a brand managerial interpretation, in this composition is evaluated: the role of the brand on the creation of competitive advantages for fashion firms, how strategic networked and collaborative are implemented by fashion brands and how those evolved through the time becoming a pivotal aspects of their success.

To concretely understand this cause-effect process that connects organizational strategic decisions with their effects on fashion brands' equity, the last part of the research analyzes the current adidas' 2015-2020 business plan, "Creating the New", with a special focus on its collaboration-based innovation model, called "Open Source".

Evaluating the business strategy of one of the biggest and influential fashion companies in the world, the research aims to identify patterns among the importance of the creation of a reliable networked structure, and the implementation of collaborative approaches, for fashion firms, with their impact on brand desirability.

2.) Networks: historical development of organizational forms

2.1.) Historical perspective of business organization

Since the 19th century the economic environment changed drastically, and every sector was hit by flows of innovations that brought the world in the modern era. The globalization process, with its improvement of the interaction between people, companies, and institutions worldwide, during the second half of the century saw a relevant growth of its pace driven by the advances in transportation and communication technology.

To better understand how, during the 19th century, globalization and the technological improvements were crucial for the creation of the modern economy it's useful to take in consideration a less structured and developed economical and geopolitical environment, the American one. While in Europe after the industrial revolution, the pace of grow became more stable and characterized by incremental innovations, and more attention was dedicated by countries to an international development through colonies, North America represented still a virgin land, less developed and were the innovations needed years to be adopted properly across its vastly territory.

Following Chandler's analysis of the US economic system, it's easy to understand that up to 1850 it was based on single entrepreneurs managing personal firms that, even with relevant dimension, interacted mostly with local stakeholders and based their decisions on the supply-and-demand market mechanism.

Few where the sectors where firms, pushed by the necessity to manage a relevant amount of people and assets spread around the country, and by the civil war, needed an internal sub-division of the roles in different units or other form of organizational structure. Economic enterprise in the first half of the 19th century was still wholly a personal affair (Chandler, 1973), and the interaction between companies were managed as personal relationship where the market was the pivotal element that generated all the information that entrepreneur needed to take decisions. Around the mid half of the century, America consumers and producers felt the necessity to transfer goods and information always more faster through its extended

territory and the technological innovation of that period were able to satisfy the needs of this not already explored country.

Railroads and telegraph were already implemented technologies in Europe, able to connect different countries, but their application in the wide spaces of North America requested more time to reach all the relevant location spread all over the continent.

Those technologies generated a leverage effect for the economy of the whole country, allowing companies to grow in terms of dimension, speed of production and to distribute their products easily all over.

The obvious consequence was a growth of organizational complexity to manage those new enterprises, followed by the birth of "a new and very different type of decision-making unit, it was a large, multi-unit enterprise operated by managers rather than owners" (Chandler, 1973, 4). This new structure that presented a lot of different small units as parts of the same company, was characterized by a centralized coordination that manage all of them, but also by a sort of independence, because they mostly carried inside several different functions. The continuous improvement of those companies's performances produced such a growth that firms started to acquire others through a vertical integration process, "creating sub-units which often carried out several different functions of production, distribution and transportation within a single, purely private enterprise, something new in the economic history" (Chandler, 1973, 4). Those new enterprises required always more the presence of trained managers inside their formal organization and a more precise information system to help them during the decision-making process. The analysis of their complex internal processes generated data and information from which managers were able to find insight that helped them to take decisions without always rely only on the market.

The American economic scenario at the beginning of the 20th century showed the signs of this relevant growth and appeared completely different compared to the beginning of the previous century.

Some economist defined the period of the late 1800s and early 1900s as the Standardization Era (Miles, Miles, Snow, Blomqvist & Rocha, 2009), a period where managers analyzed and researched to create business models where standard

goods and services were produced on large-scale permitting to offered them at prices that sustained and expanded their companies' markets.

The success of those organized firms derived from the adoption of strategies and structures that generated sales volumes and cost savings, allowing also them to have strong competitive advantages and reach relevant portion of market share. The mass-production technology, central element of the success of the multi-unit form, evolved across sectors and years before it began to be studied, described, and prescribed by theorists in the industrial engineering and scientific management arenas in the early 20th century.

By the 1920s, many firms had specialists in the different areas of this new structured companies and the organizational science of the multi-unit form was well advanced. Generally speaking, as new technologies emerge (e.g., the steam engine in the nineteenth century, the internal combustion engine and electrical motors at the turn of the twentieth century, or the microchip and jet engine in the mid-twentieth century), managers begin to experiment with new business models and new organizational approaches to take advantage of the perceived market opportunities those technologies create (Miles, Miles, Snow, Blomqvist & Rocha, 2009).

After the World Wars, the United States experienced a large growth in population as well as an increase in urbanization. The new American families needed a larger quantity of goods as well as a wider variety of products, offering to firms the perfect opportunity to increase the diversification of their productions and expand into different markets.

The car became a necessity for the post-war Americans and right in this sector the next change, on the way enterprises organized their structure, took place. The necessity to go over the typical standardized products of the, by then, developed mass production, and try to match the more complex needs of the post war customers pushed managers to identify and analyze different market segments. Consequently, they designed organizations with numerous semi-autonomous divisions which could be targeted at specific groups of customers while benefiting from the central pooling working on financial capital and technology R&D (Miles, Miles, Snow, Blomqvist & Rocha, 2009). This new organizational model that saw its proper development around the '50s and the '60s came to be called Multi-divisional form. The M-form spread widely and rapidly among business firms in the United

States, Western Europe, and Japan during the period of economic recovery after World War II (Fligstein, 1985). The post-World War II' market with its increased diversity in demand and the growing request for innovative technologies required companies to be able to creating complex, adaptive systems to manage them. The adaptation of firms to this new ecosystem made grow the importance of the research to find the best organizational form.

M-form became in few years the preferred system of the large international companies. This form allowed them to exploit the advantages to have a distinct strong brand, and to create economies of scale, while maintaining a certain level of flexibility. One of the main characteristics of the multi-divisional structure is the ability to help managers to evaluate easily which production segment was lacking and how valuable each one was, allowing an always better allocation of the resources to the most profitable branches of the organization.

The worldwide economies saw until the '70s a widespread of highly vertical integrated companies, able to manage all the different aspects of different productions, but around that period several different companies started to develop new innovations that changed the environment again, creating new organizational opportunities.

The improvement of transportation, and the development of new and cheap way to communicate helped, again, to connect the world reducing the distances and allowing firms to find new locations to develop their businesses.

During that period another relevant change took place, the shift from the electronic era to the digital one. Computers become always more powerful, cheaper and were used to improve the performances of all the aspects of companies.

This more globalized, well connected and fast ecosystem requested an high level of flexibility to adapt to new innovations and completely new sectors, within an high level of specialization, rise up.

Big multi-divisional firms, with their rigid structures, in the '70s and the '80s were handicapped by a lack of readiness and agility. To adapt to this new ecosystem and to new technologies also increasing their flexibility and creativity, many large companies all over the world started to evaluate the strength to interact with others to exploit their knowledge and their innovations, and so ask to external companies to carry out single processes. Many of these activities presented an high level of

specificity and were entrusted to external companies allowing enterprises to focus on their core business, identify the ancillary activities and saving the related management and labor costs.

In this scenario, the role of organizational studies became always more important, and resulted crucial to help managers to choose between finding an effective and efficient solution on the market or creating a strong integrated form able to satisfy internally the firm' needs.

In 1937 in a classic article, the economist Ronald Coase proposed a theory that identified two alternative governance structure to manage similar transactions, the market one and the hierarchy one (Coase, 1937). For more than thirty years that was the main idea of decision-making theorists on the "make or buy" decision, a straightforward choice between two elements. Especially during the '70s and the 80s different theories about this organizational decision came up proposing an evolutionary view, from market to hierarchy with a gradual passage between them, and the vertical integration on top of this scale.

In the early works of the economist Oliver Williamson in the 1970s, and in particular in his work "Markets and Hierarchies" of 1975, Williamson focused his research on the importance of the Transaction Cost Economics and tried to develop an economic theory of organizations, creating the groundwork for the future organizational network theory.

In that period, in fact, other studies focused on blending the Market vs Hierarchy extreme view, arguing on the boundaries of the firm and the interaction among them, and proposed the possibility of intermediate structures, based on hybrid forms of organizations, with both characteristics of market and hierarchy (Powell, 1987). Walter W. Powell is one of the main theorist of the Network forms as another possible solution to organize and manage the firm' activities. His view evolved from looking at Networks as a mix between "make" and "buy" structures to be a completely different form with proper advantages, disadvantages and optimal performing application.

Following Powell's and other sociologists' idea, they identified unique characteristics for Network forms and defined them as a "collection of actors (N>2) that pursue repeated, enduring exchange relations with one another and, at the same time, lack

a legitimate organizational authority to arbitrate and resolve disputes that may arise during the exchange" (Podolny & Page, 1998, 59).

In the last thirty years the interaction between companies, and the relationships between them and other institutions are one of the main argument of managerial studies, and the continuous improvements of communication are connecting always more companies with the whole stakeholders. The growth of corporate partnering and other various form of collaboration was unprecedented in the last decades. A widest range of purposes to push firms to collaborate arise, mostly innovation-driven, and developed to transfer and share knowledge to achieve mutual benefits (Powell, 1990).

In all the steps of the companies value chain, collaborative approaches are becoming always more relevant, and from the well established production stage networks we can identify a use of collaborative forms for new purposes.

This short historical analysis is useful to understand how drastically the entities, where economic decisions are taken, evolved during only the past hundred and fifty years, and how technological innovations affects the organizational form development. The changes have not influenced only the singles processes of the companies, how they choose and how they innovate. More relevant is that they have also created complete new businesses, helped to re-shape the structure of many sectors and also to reconfigure the organization of whole economies.

2.2.) Three Organizational Form

Selecting the perfect organizational form is not an easy decisions and thousands are the factors that influence it, especially if we consider nowadays environment. Trying to have a deep knowledge of every aspect of their company it's not enough for managers to choose how organize neither a single office inside sometimes enormous international corporations.

History teach us that the the continuous evolution of internal and external factors, and the technological innovation doesn't allow managers to find the perfect solution, but they have to take in consideration strength and weakness of every possibility in an always more unstable environment. Organizational studies often underline the

impossibility to apply rigid forms to different business and the necessity of a continue adaptation as a correlated consequence.

During the years different were the aspects analyzed of hierarchy', market' and network' based organizational form and always new advantages and disadvagyages were attributed to those three forms, evolving with the factors with they are connected.

2.2.1.) HIERARCHY ORGANIZATIONAL FORM – "Make" strategy

When economists talk about hierarchy as a form of organization they refer to the expansion of a firm business integrating on a vertical axis different phases of the value chain (Gereffi, 2001). The integration could be upstream when the company focus on the previous steps of the value chain and downstream when focus on the subsequent one.

This organizational strategy try to satisfy internally the needs of the company that previously were outsourced carrying them inside through forms of acquisition. Trying to identify clear and defined advantages and disadvantages it's not easy for the diversity of dynamics of the sectors and environments where firms operate, but few characteristics of high vertically integrated forms bring out related strengths and weakness of this organizational strategy.

The advantages of hierarchy

A vertically integrated structure, in both the directions of the value chain, offers clear advantages for the firm. The more evident is an high centralized control of all the aspects of the company' value creation. This organizational strategy allow managers to clearly define roles, responsibilities, and the structure of the whole company, permitting an easy cost and quality controlling and a more efficient resources allocation. Vertical integration, so, ensure an high protection of investments reducing the risk connected to the external variables of the market.

After the World Wars, during the development of highly integrated organizational forms, as the multidivisional form, different economists focused their studies on this

strategy. One of the main relevant perspective of the strengths of vertical integration was the Neo-institutional application of the Coase cost-of-transaction-based theory to this new form. The firms relying on the market, with its opportunistic behaviors, suffer from the generation of high transaction costs. M-form for economists as Williamson solves this problem integrating the activities that before it as to find on the market (Williamson, 1981). Using a hierarchical strategy, the cost reduction is reached all over the value chain through a specialization of the assets and the reduction of the cost per unit, generating always bigger economies of scale (Harrigan, 1984).

Another strategical strength of the high vertically integrated form is the knowledge management, in fact only reducing the interaction with the outside world a company can maintain the exclusivity of its know-how. Companies will be able, also, to attain important advantages over their competitors by blocking them from gaining access to relevant innovations and assets around the value chain, owning the company that possess them. From patents and specific production machinery, to distribution and communication channels, a vertically integrated company will gain relevant competitive advantages by the knowledge and the innovations, developed internally.

The disadvantages of hierarchy

Vertically integrated structures present clear advantages that made them the solutions adopted by firms all over the world, but this structures saw in the last decades a reduction of applicability connected to different factors.

The main disadvantage of the hierarchy form is the lack of flexibility and a difficulty of adaption to the external environment and to technological innovations. In the last forty years the technological innovation pace grew continuously representing a clear obstacle for high integrated forms that present an high level of rigidity on all the steps of their value chain.

Highly integrated companies are exposed to major risk of technology obsolescence, and a correlate loss of competitive advantages, derived by a limited and unidirectional development of the internal knowledge. In the last decades, especially for what concern the digital world, technological innovations are easy to find in the

small specialized companies that focus only in specific core businesses, relying on the market for all others activities. Therefore a company that made capital intensive investment to integrate different steps of the value chain and exploit technologies in large scales, could suffer of an easy obsolescence of them, also connected to the reduced access to the market as a source of innovation.

The limited flexibility of hierarchy forms to the environmental and demand changes could also generate problems on the production level of the value chain, in fact within those structures could emerge problems of overproduction or underproduction and consequent difficulty of re-adaptation of the structure (Harrigan, 1984).

Connected to a low flexibility to respond to external and internal changes, there is a clear structural rigidity with an high level of bureaucracy needed to manage the firm and to communicate among its structure. To manage a size and dimension growth, due to integration processes, companies tends to increase standardization and bureaucratization of processes, establishing standardized rules of conduct for common events with the aim to control all stages from production to distribution, but generating a lack of flexibility.

Another issue of vertical integrated forms, with their clear departmental boundaries, clean lines of authority, detailed reporting mechanism, and formal decision making procedures, it's the difficulty to manage those big and articulated structure and the need of an high level of knowledge to face all the different related problems (Powell, 1990). Especially in the early stages of a vertical integrated company, managers have to learn how to run new and different businesses and could become detrimental for the company, generating costs and wastefulness. A company that decides to integrate another process of the chain value, rarely have technical and strategic competencies for implementing efficiently and effectively different processes because managing more phases simultaneously requires organizational skills, human resources management, and ability to face managerial issue that differ widely.

The vertical development of the hierarchy forms present an high level of interconnection between the different steps. This could be an advantage for integrated firms, but they could also suffer of the diffusion of a problem generated in

a stage to a subsequent one, or in the worst case, affect the the whole company's activity.

2.2.2.) MARKET ORGANIZATIONAL FORM - "Buy" strategy

When companies don't have the size and the amount of transactions to invest on specific assets and internalize different processes of the value chain, they need to interact with the market to have access to crucial inputs. Powell described the market, following the classic theorists as Adam Smith, as "a spontaneous coordination mechanism that imparts rationality and consistency to the self-interested actions of individual firms" (Powell, 1990, 302). The idea of the market as an auto-regulated place where offer and demand meet, allowing businesses to find always the perfect solution it's outdated, but in the nowadays ecosystem always more dynamic enterprises choose to buy on the market products and services to simplify their organizational form, and to be able to face the always more unstable environment.

The advantages of market

The advantages connected with the adoption of an organizational structure that doesn't integrate different steps of the value chain, but quite the opposite, rely on the market, are mostly related to the adaptability aspect. Without having a rigid structure, market organizational forms can be able to face the changes of the market and of the environment, and also rapidly adopt technological innovations developed by other institutions.

This fast adaptation helps companies especially on the production point of view. Market organizational forms' adaptability drives to the possibility to improve products' diversification and the ability to offer a wide variety of solutions that can suit and satisfy quickly the clients' needs.

The flexibility of the market forms, connected to the absence of relevant assets, guarantee in certain cases to manage effectively the level of production avoiding the

risks related to over and underproduction. Especially when the input for our production is scarce the market represent a crucial element to satisfy firm' needs and the consequent clients requests.

Another advantage to rely on the market is the possibility to find suppliers that possess specific skills, difficult to be developed internally, so representing an opportunity (Powell, 1990) for the company to improve its products without big efforts. As specific skills, companies in the market can find innovations that can improve every aspect of their structures and their processes generating competitive advantages. Taking in consideration this scenario, supplier become a strategic element of companies success and they are interested to be the perfect choice and to offer key innovation, quality and cost advantages to companies, improving sale profits and gaining market share in the supplying competitive market.

Prices results a crucial element of market driven organizational form because different economists identify prices as the determinant element to define the characteristics of firms' production and exchange (Powell, 1990). In market forms, prices become the determinant to define company activities, the result is the decrease of necessity of a superior person or institution that dictates and define them as in hierarchical forms.

The market result as the place where managers can find all the information needed to manage effectively and efficiently the firm, and even if it's not controlled and steered by them, different scholars identified the market as the result of human actions but not of human design (Hayek, 1945).

The disadvantages of market

Organizations that mostly work depending on finding and buying in the market can face different disadvantages related to the dependency from it. The interactions between firms in the market generate costs (time, money and energy) that can result relevant for the profitability of the company.

Following the study on different organizational form developed by Sundaram & Venkatraman, firms that operate relying on the market generate transaction costs, bargaining costs, information acquisition costs and enforcement costs.

Starting from the transaction costs identified for the first time by Coase in 1937 as "costs of using the price mechanism", after literature saw their application to organizational studies on the works of Williamson. He defined them as the costs added up to the exchange of goods or services in the market.

The behavioral approach of the entities involved on a market transaction should be based on mutual trust, but often the interaction is characterized by a low amount of commitment among the parties (Powell, 1990) to achieve mutual benefits, caused by self-interest maximization and opportunistic behaviors (Sundaram & Venkatraman, 1992). Connected to transactions there are also environmental factors that affect them negatively as the information asymmetry and uncertainty, and all those elements could generate relevant costs.

Transaction costs are characterized by three essential attributes that influence the presence and the amount of element that generate those costs: the asset specificity, the frequency of interaction, and the amount of uncertainty (Sundaram & Venkatraman, 1992).

The nature of the assets and more in particular the specificity of their use is relate to the lost of value of an asset/good if it's used for a different purpose then the one it's created for. Having an high specific asset in our transaction could drive to increase the opportunistic behaviors and the connected costs. Strictly related to the specificity it's the availability, the technology advancement and the replaceability of the asset. In fact having a unique innovation guarantee clear bargaining advantages to one part that will try to take as much advantage as possible increasing the connected costs of transaction.

The second element is the frequency of transactions. An high frequency of transaction will leave more space for self-interest maximization behaviors for the less attention that the parties will give to each transaction. This element has a leverage effect for the other two increasing the possibility to generate transaction costs.

The third element its the uncertainty connected to bounded rationality and limited knowledge during the bargaining. Obviously an high level of uncertainty push a part to try to exploit and obtain advantages from the other parts, and also generated by external factors, uncertainty could increase the amount of cost to manage the transaction (Sundaram & Venkatraman, 1992).

Another type of costs that the market could generate is related to bargain failures and are called bargaining costs. Reaching always efficient agreements it's really difficult for market forms, and even when assets present low specificity and there is a low level of uncertainty there are many instances in which market forms of exchange fail, generating not efficient outcomes (Sundaram & Venkatraman, 1992). A relevant example to explain and confirm this evaluation of the two economist is the prisoner' dilemma game, where both the parties are in a full information condition but they find difficult or expensive to cooperate, generating inefficient outcomes (Shubik, 1983).

Considering an illusive scenario of perfect agreement where the parties are able to avoid negative affects from their bargaining process, still the environment may generate easily two different problems for the market organizational forms.

First, during the process to find the best counterpart and the appropriate attributes of the transaction, information plays a crucial role, and companies could face a relevant amount of costs to research and acquire it. Second, after the obtainment of the agreement companies need to make all the subsidiaries activities to enforce it, creating costs that can always be reconnected to the reliance on the market for relevant activities of the firm' value chain.

Market organizational forms could exploit different advantages, especially from their flexibility and adaptability to the environment, and to the demand. But when the costs generated by the transactions with other parties, and by the bargaining process within all its steps, both exceeds the cost of implementing a integration strategy, the company should think to internalize that transaction and manage it with a centralized coordination based on an authoritative hierarchical management (Sundaram & Venkatraman, 1992).

2.2.3.) NETWORK FORM OF ORGANIZATIONS

As history shows in the evolution of the economic system and of the environment, economist try to understand the way companies develop new and more efficient and effective organizational form. Different firms developed after the World Wars large integrated systems to achieve economies of scale and cost reduction strategies, but

the environmental evolution pushed managers to try to find new solutions to organize them efficiently and effectively, to overcome their hierarchical limits. The new dynamics of the global markets showed the disadvantages of hierarchies and especially their lack of agility to respond to changes.

Managers that faced this scenario were interested to find new solutions to reorganize firms' value chain trying to reach a new set of objectives, and disposing of new knowledge developed on the vertical integrated organizations experiences. The idea of a more lean structure able to be flexible and strong on the company' core-business at the same time, became the new achievement for a relevant amount of enterprises all over the world.

This new objectives that moved managers in the opposite direction from highly vertical integrated forms, could have pushed them to a more market based form or to find complete new directions that would take them and their firms in the next millennium.

2.2.3.1.) Different definitions in the literature

Since the beginning of the 20th century, and even before, companies developed relationships among them, with different characteristics than the single transaction. Especially in the capital intensive sectors that requested an high number of relevant assets and specific knowledge, as the oil extraction, petroleum refining, chemistry or the aircraft industry, companies collaborated to exploit costs advantages and spreading risks.

During the years the interactions between firms evolved and changed their characteristics, and firms experimented always new kinds of partnerships, agreements and collaborations to overcome weaknesses and to innovate. Those collaborations grew on broadness and deepness, and interested always more crucial elements of businesses (Powell, 1990).

After the World Wars, the development of hierarchical enterprises drove to a growth of the economists interest on organizational forms and supply chain concepts. When companies started to face difficulties and, the awareness on the drawbacks of high integrated forms growth, the economists focused more on "make or buy" decisions,

outsourcing strategies, and few were the literature pieces on new and different organizational forms.

This intensification of the studies on the relationships among firms, on the patterns of the exchange of different elements of firms' operation, and on how companies innovate gave birth in the '80s to the first relevant academic concept of relationship among companies created to "form a stable organizational unit", and was called "quasi-firm" (Eccles, 1981).

Since the concept underlined by Eccles in relation to the construction industry, different disciplines' scholars used a wide variety of words to describe, even metaphorically, the inter-firm coordinated structures that companies started to develop around that period.

Relevant was the analysis on the development through the years of the concept used to describe network-like forms made by Candace Jones, William S. Hesterly, Stephen P. Borgatti. They presented on their work "A General Theory of Network Governance: Exchange Conditions and Social Mechanisms" a table (Table 1) that gathers a group of definitions by scholars from different backgrounds that tried to describe with different terms their interpretation of the network concept (Jones, Hesterly & Borgatti, 1997). In this research they took in consideration nine definitions developed from 1986 to 1996, trying to find the most appropriate words to define networks forms, and to find the patterns in the literature on networks that would help them to identify the key elements of networks.

From the analysis of the three scholars it's easy to understand how in the '90s the literature on the network forms of governance started to grow in popularity and always more managers moved their attention to organizational forms based on collaboration.

Patterns can be find on the literature and the definitions analyzed by the authors (Jones, Hesterly & Borgatti, 1997). Among them, the most relevant works able to underline the development of vertical and horizontal continue or recurrent exchanges among companies were Powell, that presented in "Neither Market nor Hierarchy: Network Form of Organization" the concept of "Network forms of organization" (Powell, 1990), and Larson in "Network dyads in entrepreneurial settings: A study of the governance of exchange relationships" that defined the

Differing Terms and Definitions for Network Governance

Reference	Term	Definition of Network Governance
Alter & Hage, 1993	Interorganizational networks	Unbounded or bounded clusters of organizations that, by definition, are nonhierarchical collectives of legally separate units
Dubini & Aldrich, 1991	Networks	Patterned relationships among individuals, groups, and organizations
Gerlach & Lincoln, 1992	Alliance capitalism	Strategic, long-term relationships across a broad spectrum of markets
Granovetter, 1994, 1995	Business groups ^a	Collections of firms bound together in some formal and/or informal ways by an intermediate level of binding
Kreiner & Schultz, 1993	Networks	Informal interorganizational collaborations
Larson, 1992	Network organizational forms	Long-term recurrent exchanges that create interdependencies resting on the entangling of obligations, expectations, reputations, and mutual interests
Liebeskind, Oliver, Zucker, & Brewer, 1996	Social networks	Collectivity of individuals among whom exchanges take place that are supported only by shared norms of trustworthy behavior
Miles & Snow, 1986, 1992	Network organizations	Clusters of firms or specialized units coordinated by market mechanisms
Powell, 1990	Network forms of organization	Lateral or horizontal patterns of exchange, independent flows of resources, reciprocal lines of communication

 $^{^{}m a}$ Not all business groups are characterized by networks of cooperation (1995: 102).

Table 1 - Jones, Hesterly & Borgatti, 1997

"Network organizational forms" (Larson, 1992). Both the authors focused their attention on the presence of pattern, as discernible regularity, on the companies activities of exchange and on the relationships among them, differentiating the network forms from the others organizational forms.

Another pattern identifiable is related to the presence of "flows of resources between independent units" (Jones, Hesterly & Borgatti, 1997). Especially in the work "Organizations working together" by Alter & Hage the concept of "Interorganizational networks" express the aspect of the "flow of resources" (Powell, 1990) between nonhierarchical clusters of organizations made up of legally separate units (Alter & Hage, 1993). The two authors emphasized the independency of the

business units involved on the exchanges of resources from a legal perspective and in relation of the role they have in the business ecosystem.

Understanding and evaluating the different definitions presented by the variety of authors analyzed, and trying to find the common points among the literature analyzed, Candace Jones, William S. Hesterly, Stephen P. Borgatti, proposed their concept of "Network Governance".

"Network governance involves a select, persistent, and structured set [of] autonomous firms (as well as nonprofit agencies) engaged in creating products or services based on implicit and open-ended contracts to adapt to environmental contingencies and to coordinate and safeguard exchanges. These contracts are socially-not legally-binding." (Jones, Hesterly & Borgatti, 1997, 914)

The three authors, with the aim to present a clear definition of network as an organizational form, used different relevant words, and each one represented a connected characteristic of networks. Trying to unify all the main concepts of the literature on the network forms (till 1997) they generated this definition that could be take as a basic and clear concept for further implications and analysis.

They started using three main adjectives in relation with the word "set". The first term that they attached was "select", and they use it to transfer that networks interactions are developed between precise members and not with every subject that operates in the same industry. They wants to enhance the idea that an entity could collaborate with different others entities, but each cluster as to have different purposes and employ different patterns of coordination to achieve distinct goals. The second relevant word is "persistent" and it's used to indicate the persistence over time. The authors with this word wants to present the network governance as a dynamic process of organizing a firm that facilitate the creation of sequence of exchange over time, creating and re-creating the network structure.

They continued with the word "structured" to underline the business aims to obtain competitive advantages behind patterned collaboration, not developed randomly. They used also the phrase "autonomous firm" to transfer the complete independence of the subjects involved in those collaborations, and so, emphasize

the necessity of real and concrete business objectives to create and maintain networks.

Another relevant part of this definition is the presence, in relation to networks, of "implicit and open-ended contracts". The authors here wants to put the attention on the absence, most of the time, of formal or legal contracts among the parts that develop a collaboration, moving the focus on the ability of network forms to rely "more heavily on social coordination and control, such as occupational socialization, collective sanctions, and reputations, than on authority or legal recourse" (Jones, Hesterly & Borgatti, 1997).

The growth of the attention of scholars on the network organizational forms or network governance during the '90s created a wider empiric basis that helped the development by means of an increasing number of companies of networked organizational structure all over the world. During those years researchers with the most different backgrounds described and interpreted in many different ways the collaborative networks phenomenon, to the point that different scholars talked about the birth of a new discipline.

Following the work presented in 2005 by Luis M. Camarinha-Matos and Hamideh Afsarmanesh and referring to the growth of networks literature in the '90s, when a considerable research efforts have been focused on identification of the differences from what it's previously considered "normal", and the base of established body of knowledge, probably a new scientific paradigm have been created. This crisis on the existing knowledge about organizational forms and the connected arise of the networks discipline is driven by (1) the variety of the contributing disciplines, that move around computer science, computer engineering, communications and networking, management, economy, social sciences, law and ethics, etc., (2) by the growth of an organized basic knowledge, and (3) by the recognition of the different multidisciplinary scholars as member of a unified community (Camarinha-Matos & Afsarmanesh, 2005). Those three elements constitute for the authors the foundation in the '90s of the collaborative networks discipline.

The analysis of the discipline of Network forms developed by the two authors moves also on the time and evaluate if still in 2005 is present an active research agenda on networks and confirm the birth of a real new discipline.

To evaluate the existence of an active research agenda the discipline has to stands the test of time, has to be present a substance that allow to individuate different research directions and has to be present multiple approaches to guide the research on it (Liles et al. 1995).

Research on networks is active, as we said before, since the beginning of the '90s demonstrating to be a relevant argument, and always new researches were developed in a variety of fields that can be easily subdivided in different branches. The third element needs a particular attention because different scholars during the years stressed the fact of a lack of concrete and well developed approaches or models on networks' literature. In the 90's especially the literature on networks form wasn't really organized and the studies were focus more on the comparisons with other forms and on the reasons of arise of those collaborative strategies, but since the end of the '90s more than hundreds R&D projects and practical implementations have been supported by the European Commission, in addition to various national initiatives, developing concrete research roadmaps related to collaborative networks (Camarinha-Matos & Afsarmanesh, 2008). Another relevant element that support the existence of the networks discipline is the development of different activities through education entities, scientific associations, dedicated conferences and professional entities to improve the widespread recognition of the discipline.

In conclusion, the literature presents networks as a structure that always evolved and changed through the years, and that was able to be adapted to the field of application. During the last four decades the evolution path has reached levels never seen before, and globalization and digitalization represent a challenge for firms all over the world. Following the literature, network structures seems to provide effective and efficient solutions to the organizational problems of companies that operates in 21st century.

Networks' literature grew as the increasing application of this form to businesses, analyzing always more in depth network organizational structures and the aspects of its development. The large diversity of existing and emerging collaborative forms and the related experiences created a large amount of empirical knowledge that has to be consolidated to understand completely the network paradigm and its manifestations. The creation of a solid literature is crucial to facilitate new

developments in all the different sectors where network forms are already part of the business ecosystem, and understand how to push the boundaries of their applicability.

2.2.3.2.) Conditions and explanations of the arise of networks

The aim of the business literature its mostly based on understanding the reasons why a certain phenomenon happened and which conditions have generated it in order to provide effective models of understanding able to define the phenomena. Taking in considerations collaborative networks, things do not change.

The multidisciplinary studies on the evolutions and the development of network forms had identified during the years a wide range of reasons why the networks took place and why companies operating in completely different environments changed their organizational structure into a form based on collaborations.

The difficulty on finding the reasons of networks development is attributable to the variety of fields where networks are used, and consequently studied, that don't allow a simple unified definition of the causes. Despite such complexity, analyzing the literature it's possible to identify patterns developed during the years, on the reasons that push networks to arise, creating a relevant knowledge base.

To simplify and organize the description of why network forms are developed, and understand clearly the multitude of factors that influence this scenario, it's helpful to subdivide those explanations in three macro areas related to economical/managerial conditions, historical conditions and social mechanisms. Those three areas present necessary elements for network governance to emerge and thrive, as other ones that are subsidiary but able in the same way to push firms and managers to reconfigure their companies' structures and interact with other firms in a different way from what was before.

Economical/Managerial Conditions

Using those two words the intent is to gather all the conditions, that push network forms' adaptation, and are related to managerial choices or to the economic

conditions that affect them. We can also say that those conditions are strictly related to the characteristics of the market where a company operates and to the mechanisms that affect it. The characteristics presented, following the literature and the analysis of Candace Jones, William S. Hesterly, Stephen P. Borgatti, worked as a perfect ground for the birth and the growth of networks in a variety of sectors.

The first condition is the presence of a relevant level of product demand uncertainty with a relatively stable supply. Predict the future it's impossible also for the most successful managers, and uncertainty is something that companies has to deal with. The source of what creates uncertainty can come from suppliers, customers, competitors, regulatory agencies, unions, or financial markets (Miles & Snow, 1978), and the understanding of which is the source in the environment where a company operates influences what governance form is used to coordinate and safeguard exchanges. The literature presents clear examples that in conditions of relatively modest supply uncertainty and predictable demand, firms tend to integrate vertically, but the higher the level of demand uncertainty raises, the more integrated forms can suffer of obsolescence or seasonality (Mariotti & Cainarca, 1986). When demand presents a relevant level of uncertainty, firms tend to disaggregate their structures into autonomous units, primarily through outsourcing or subcontracting (Mariotti & Cainarca, 1986) to increase flexibility. When the resources that feed a firm core processes are exchanged or rented, rather than owned, they can be reallocated and redefined cheaply and quickly to meet the demands' changes. Different are the reasons of an high level of demand uncertainty. Scholars propose two main reasons behind this economic condition: the presence of a market full of unknown and rapid shifts in consumer preferences (Jones, Hesterly & Borgatti, 1997), and to the rapid changes in knowledge or technology, which results in short product life cycles and makes the rapid dissemination of information critical (Garud & Kumaraswamy, 1993). Essentially the dynamics of an ecosystem with the presence of demand uncertainty and stable supply are such that it provides conditions amenable to network and market organizational forms but inimical to hierarchies.

The second condition that helps the development of networks is an high level of customized (or asset-specific) exchanges, and a related human asset specificity.

The word customization of product or services, in this framework, means the creation of a specific product or service for a client. This type of productions are characterized by a limited usability by others firms, and a connected growth of dependency between parties. To manage effectively customized productions an high level of coordination is needed between the parties, but at the same time those productions make both seller and buyer more vulnerable to shifts in markets for the specificity of the products. Safeguarding the exchanges becomes a relevant point of the firms' organizational strategy in order to avoid losses and production wastes. A relevant demand uncertainty in conjunction with a custom production increases risks for a company driving to difficulty in the decision making process.

During the last decades customized productions became common among networks (Miles & Snow, 1992) for their ability to enhance the coordination and the cooperation between firms. When a network is based on a customized production normally involves an high level of human asset specificity. With this concept the literature refer to the knowledge and the skills individuals possess, and are intangible crucial assets on customized productions.

Exchanges characterized by an high level of customization and an high level of human asset specificity require an organizational form that enhances cooperation, proximity, and repeated exchanges to transfer effectively tacit knowledge among parties (Jones, Hesterly & Borgatti, 1997).

The necessity of cooperation appears as a crucial element that pushed companies to the network form of organization, given the limited usability of the concrete physical production assets. Working together makes firms involved in networks gain tacit knowledge, a relevant asset that improves the effectiveness and efficiency of the exchanges. Tacit knowledge can't be assimilated in short-term interactions, it needs to be assimilated over time through repeated exchanges, and aspects as proximity facilitates its sharing among the parties.

Exchanges characterized by customization and high levels of human asset specificity are not effectively coordinated by market mechanisms, but hierarchical or network structures are needed (Jones, Hesterly & Borgatti, 1997).

In this scenario, networks represent the perfect balance between the disaggregation pushed by demand uncertainty, and the need for coordination and integration to manage customized production with human asset specificity.

The third condition refers to the presence of an high task complexity in the processes with a short time to market. Task complexity represents a big obstacle for companies operating in nowadays fast pace environment, and it's connected to the number of different specialized resources needed to complete a product or service (Liu & Li, 2012). An high number of different specific input creates interdependence among companies, and consequently need an high level of coordination to manage all the different activities.

Time pressure is a market characteristic that if coupled with an high complexity of the processes needs a strong team coordination to be managed. Firms have to organize the simultaneous work of diversely skilled members to produce quickly a good or service characterized by high task complexity. In rapidly changing markets, lead time became a crucial aspect that companies have to try to reduce always more, to gain competitive advantages and market share.

In this scenario, network governance, in a condition of intense time pressures, facilitates the cooperation among multiple, diversely skilled parties to create complex products or services. Implicit is the observation that to speed up those products' and services' time to market, networks become the most reliable option, especially if compared to the series of sequential exchanges of hierarchical forms of organization (Powell, 1990).

Another condition is related to a typical element of transaction costs theories, the frequency. This word concerns how often specific subjects make transactions with one another, and following the works of Williamson (1985), an high frequency of exchanges is an important determinant of governance.

The literature proposes different visions on the impact of frequency on organizational strategies through the years, and different correlation with network forms are presented. Following Williamson, the high costs of a specialized governance structures are worth only in presence of recurring exchanges (Williamson, 1985), identifying networks as possible solution for the organizational strategies. More recent works, however, suggest that high frequency is a condition that pushes firms to adopt collaborative forms. As we said before, frequency is a crucial element to

develop human asset specificity, to improve effectiveness and efficiency of exchanges, and to enhance the transfer of tacit knowledge.

The consequences of an high number of transactions affect also another relevant element of network forms, the "identity" and the perception of the parts involved (Jones, Hesterly & Borgatti, 1997). Control is crucial within exchanges because it permits to a firm to understand if the other is trying to get advantages from an opportunistic behavior, driven by an information asymmetry, and to avoid those unequal transactions. The development of networks in high frequency of exchange environment transforms the orientation that involved parties have toward a single exchange and increase the amount of informal control over exchanges (Jones, Hesterly & Borgatti, 1997).

A relevant concept connected with the frequency of exchanges is reciprocity, the ability of an high number of transactions to create the perception of necessity of the other part, and develop among the parts a mutual interest to operate the exchanges to benefit all of them equally. Reciprocity is more connected with sociological theories, and Mark Granovetter was one of the main theorists of its social impact on exchanges. He developed the concept of "embeddedness" to describe how the firms make exchanges in a social context that influences in the same way the overall structure of relations, the economic actions and the outcomes (Granovetter, 1992). The importance of frequency and reciprocity in networks, and how they generate informal control on firms' exchanges provides an important common point among transaction cost theorists and social network theorists. Integrating those two visions of networks, it's clear to identify an high frequency as a relevant condition to the rise of network governance (Jones, Hesterly & Borgatti, 1997).

Those four economic conditions represent characteristics of the environment where a firm operate that affect how companies develop their organizational form. However no one of those could push the emergence of network governance by itself, only a combination of specific conditions can make the network organizational form emerge and thrive, with its comparative advantages over markets and hierarchies. In a scenario where adaptation to a fast changing demand, where coordination to manage complex tasks, and where the ability to overseeing and integrating parties' interests in customized exchanges are needed, network forms can show their

potentiality. Exchanges' coordination and control could inhibit firms from relying on market mechanisms for customized and complex products, and the necessity to be flexible could inhibits firms from hierarchical and integrated forms. With this perspectives, network organizational forms can be the solution that balances in the best way those factors, helping to face successfully a challenging environment that present those conditions.

Historical conditions

Since the end of the World War II, the global economic environment was transformed radically by a subsequent series of innovations and facts. In the last fifty years different were the historical and cultural conditions that deeply influenced how companies developed their organizational structure to face the ecosystem they operated in.

Focusing on the rise and the diffusion of network forms of organization, with their development of inter-firm relationships, the literature presents different historical conditions that worked as catalyst for network wide adoption. Three main historical facts and conditions can be directly connected to the network diffusion: the Japanese economic success in '60s-'80s period and the "keiretsu" model, the information and communication technologies' (ICT) improvement of the digital revolution, and the globalization process.

After the second World War, since 1952, Japan experienced the Allied occupation, that destroyed its flourishing economy of the beginning of the century, and one of the main impositions was the the disaggregation of the Zaibatsu. This Japanese term defines the industrial and financial business conglomerates based on families that were at the base of pre war Japanese economy. They were characterized by a large dimension, a total integration of the processes under the same ownership, and the ability to offer a wide variety of product and services, from steel, to banking, to international trading and various other key sectors in the economy.

The '50s and the '60s represented for Japan a new beginning, where a new economy had to be built in a country destroyed by the war. Even if during the occupation of Japan more than fifteen Zaibatsu were targeted for complete

elimination and more to be reorganized after elimination, the base structures of this characteristic organizations remained the pillars of Japanese economy, especially in forms of banks and training company.

From the '60s to the '80s the Japanese economy lived a continue growth becoming early the third largest in the world with an average GDP expanded at an annual rate of nearly 10% that slowed down only around the 1973 Oil crisis to a still-rapid average annual rate of just over 4%. During this period thanks to a government accurate economic policy that improved exportations, crucial element of Japan economy, and also focused on generating a growth of the internal consumption, Japan saw the rebirth of the Japanese society.

From the remains of the Zaibatsu, new organizations arose, characterized by a new governance model based on a set of companies with interlocking relationships and shareholdings, described by scholars as an informal business group, called Keiretsu. The organizational form of Keiretsu is based on strong relationships among the companies that are part of it, based also on the ownership of small portions of the shares in each other companies. The Keiretsu, with its high interaction among companies, enhances organizational flexibility. By sharing knowledge and allowing them to lear from others parties experiences, it reduces the lead time, and improve the overall quality (Nishiguchi, 1994).

The Keiretsu was the dominant structure in the Japanese economy for the second half of the 20th century, and clearly presents the characteristics of a network organizational form. The Japanese economic success in the '70s and the '80s drove the attention of the managers and the scholars from all over the word to this organizational structure, that was able to show the advantages of networks and team coordination to enhance organizational and communication capabilities. The literature focused especially on the automotive sector where the Keiretsu were able to give to the Japanese firms a competitive advantage over Europeans and Americans, reducing lead times and costs. Different authors proposed that the Japanese success, with its Keiretsu networks, pushed firms across the globe to moving toward network governance in an effort to achieve product variety under intense time pressures (Coriat, 1995).

In the period when big integrated forms suffered at most showing their difficulty to adapt to an always fast environment, the Japanese economic success helped the

diffusion of new forms of governance, able to mix elements of vertical integration structures with the reliance on a group of external trusted partners, and build with them an informal relationship in order to enhance coordination, communication and drive to innovation. The Japanese example representing also a concrete historical condition for network rise.

The last fifty years were characterized by a continuous improvement of every kind of technology, but this period will be remembered for what historians call the digital revolution, the event that marked the beginning of the Information Age. This period is also known as the Third Industrial Revolution, with the shift from mechanical and analogue electronic technology to digital electronics which began all over the world from the late 1950s to the late 1970s with the adoption and proliferation of digital computers (mainframes).

Since the 1980s, then, this revolution took on the table the possibility for people everywhere in the world to store, retrieve, transmit, and manipulate data or information, and this opportunity represented a crucial change for all the functions of businesses. From that period companies had the possibility to send informations and store them instantly, reaching effectiveness and efficiency in communications that were never seen before.

Since then, things have evolved drastically with the improvement of the technology and the reduction of cost barriers to access to it, allowing a reduction of the time and the distances that people need to communicate. Since the '80s information and communication technologies (ICT) became an always more important aspect of the business development in every sector and changed drastically how companies interact internally and externally. Those new technologies created a clear space for the creations of new companies that specialized in use, management and appliance of ICT innovations to improve business processes. The innovations developed in those years were so radical that were hard to be adopted quickly all over the value chain of the big vertically integrated structures that characterized the business ecosystem at that time. Those new technologies pushed the big firms to outsource single processes to not suffer of obsolescence and exploit the flexibility advantages that ICT can offer.

This necessity to outsource the processes to exploit new technologies, connected with ICT improvement, has dramatically changed the way organizations consider partners, and the development of strategic alliances and networks was a natural consequence.

In that period a new concept was developed by the literature observing the relationship between companies and the ICT development. To describe organizations made of detached and disseminated entities that support their work and communication with an intense use of information technology, scholars use the terms "virtual organizations" (Gupta, 1997). The main characteristic of those structures is the use of tools and technology (computers) to work together across boundaries of space, time, and organization, creating a virtual interactive shared space.

In this scenario, physical proximity and localization have become less important (Chiarvesio, Di Maria & Micelli, 2004). The use of ICT allowed companies to interact with others reducing transaction costs, and develop innovative solutions to create organizational forms based on collaborative approaches. The ICT innovations developed in the last decades of the 20th century pushes significantly firms to adopt networks as organizational form to exploit conditions never seen before in history, and obtain the correlate advantages.

Different scholars call the opportunities given by the digital revolution, and especially the one related to internet, the New Economy. Taking in consideration this concept, network organization forms could help to develop a completely different way of doing business, where the advantages of the local embeddedness such as informal exchanges could be overcome by the benefits of developing relationships on the electronic marketplaces (Rayport & Sviokla, 1994).

The technological advancement is strictly related to another phenomenon that was, and still is right now, crucial for the diffusion of the network form of organization, i.e. the globalization process.

Since the beginning of the 20th century connectivity of the world's economies and cultures grew very quickly due the communication and transportation innovations. Moving around the world and interact with people all over it is always more easy and cheaper, cutting the physically and communicative barriers among people.

Globalization can be defined as a process of interaction and integration between different societies and cultures, and following the definition presented by the International Monetary Fund (IMF, 2000), it's composed by four basic aspects: trade and transactions, capital and investment movements, migration and movement of people, and the dissemination of knowledge.

Taking in consideration a business perspective, globalization through the years created an always more unique worldwide market allowing companies to sell their products or services all over the world. Thus, in this view, the interaction between companies and all the different worldwide countries is not simply linked to the export activity, but it is a process that includes the geographic outsourcing of entire steps of the value chain. The possibility to exploit the advantages offered by partners operating in different counties, pushed firms to find always better partners all over the world for their processes. In this new worldwide competitive landscape, organizational forms became always more important to try to find the most effective and efficient value-chain management solution.

At the beginning of the '90s, only a minority of the companies had developed international operations, but thanks to ICT innovations, the reduction of transportation costs and the borders' opening of crucial countries, these became more and more common activities among larger companies.

Operating in a globalized environment presents an incredible set of advantages for firms, but at the same time requests incredible organizational abilities. Most relevant is certainly the need for internal and external coordination to manage properly and efficiently international operations. Coordination requests a rich communication among parts and thanks to the communication technologies advancement it was possible through the years to develop concrete international structures that operates all over the world.

When we talk about globalization it is impossible to undervalue how a new culture or a new business impacts on every local cultural and societal environment, and what are the reactions. Taking into consideration this phenomena, in addition to coordination, relevant for a company is the access to the knowledge and relationships that a partner owns by virtue of its position in a local context (MacCormack, Forbath, Brooks & Kalaher, 2007). Following the literature on organizational forms, in order to achieve high level of coordination and create strong

collaborations with crucial partners, the best organizational form is the creation of network structure.

Globalization process offered, and will offer, clear circumstances that together with technological innovation fit and push the adoption and the diffusion of network structure among firms all over the world.

Social mechanisms

The environment where firms operate is changing continuously because of an incredible number of factors, and each industry presents different dynamics that companies have to take in consideration to be successful. Organize the structure of a company is a choice strictly influenced by both the industry, and the wider environment where it operates.

The literature is rather concordant on the abilities of network organizational form on adapting, coordinating, safeguarding exchanges, and generate synergies that improve the performance of the firms involved in particular conditions. Networks face perfectly environments that present high levels of demand uncertainty with high interdependence, owing to customized, complex tasks, and where hierarchical governance structures suffer for their rigidity, as presented before (Jones, Hesterly & Borgatti, 1997).

One of the main differences between vertical integrated structures and collaborative approaches concerns how those different organizational forms overcome the problems generated by unstable environments, explaining why networks better fit environments with need of flexibility.

Different scholars argue that hierarchies to adapt to market conditions, to coordinate efficiently all the steps of the chain-value in order to achieve efficient exchanges, and to safeguard the firms' interaction with the market use authority, bureaucratic rules, standardization, or legal recourse. On the other side, especially the social literature explains the ability of network to face and overcome those hostile conditions, for most of the other organizational structures, through social mechanisms.

With this term the literature generally present a mechanism-based explanations of social phenomenon. Social mechanisms are described as a general sequence or set

of social events or processes by which, in certain circumstances, some specific cause tends to generate some precise effect in the realm of human social relations. This generated cause-effect relation or set may or may not be analytically reducible to single actions and attribute them to individuals who enact it, and may be represented by underwrite formal or substantive causal processes (Gross, 2009). The social mechanisms generated among companies that develop a network relation are dependent to the characteristics of network itself and the market where it operates, but a pattern can be find in the literature and four main mechanisms of network forms can be identified: restricting access to exchanges in the network, creating a macroculture, imposing collective sanctions, and making use of social memory and cultural processes to define reputation (Jones, Hesterly & Borgatti, 1997).

In a unstable and fast pace environment characterized by difficult specific processes among the value chain, those four social mechanisms provide networks with comparative advantages over other organizational forms, based on hierarchical structures or that rely on market.

As analyzed before different economical and historical conditions pushed networks to emerge and diffuse, and in conjunction with them, social mechanisms when are present thrive even more the development of network forms of organization.

Restricted access to exchanges in the network: A strategical reduction of partners involved in a network, restricting so the access to firm to participate, is identified as a mechanism that enhance the successful development of networks. In networks the reduction of the access occurs through two main events: the status maximization and relational contracting.

The research for strategic partners is a crucial element for the success of firm' strategy, and to evaluate the available suppliers one of the easiest informations to access are the past demonstrations of quality and the previous works of suppliers (Podolny, 1994). Following Podolny, the demonstration of quality is what define the status of a firm in the ecosystem where it operates. In networks, companies seek to avoid partners with lower status, trying always to maximize the status of partners. This factor generates a chain reaction that makes firms to interact with similar status

parties, reducing partners only to the most efficient and effective ones, that can guarantee a same level of quality.

Relational contracting as the same push companies to reduce the number of parties whom it interact with, in fact only developing special relationship with partners it is possible to put in act contracts with implicit terms and understandings that will determine the effective behavior of the parties that enhance coordination (Bolton, Malmrose & Ouchi, 1994).

The benefits of a restricted access is an overall coordination improvement drive by the development of efficient collaborations, reducing coordination costs, and by the increasing of interaction' frequency. Focusing on the interrelation between frequency and coordination among fewer parties, it is clear that who interact more often reduces unexpected behavior, unreliable skills, and goals' changes, and bring coordination to an higher level that may include a deeply knowledge of each other' system and the coo-development of communication and production systems to improve performances (Eccles, 198)(Bryman et al., 1987).

Another relevant effect of the interaction with a limited number of parties is that facilitates the control activities over exchanges. A limited number of partners reduce the amount of resources that a firm has to spend monitoring against opportunistic behaviors, and the relationships created tend to improve the sharing of aligned interests and needs (Granovetter, 1992).

The selection of a precise amount of partners is pivotal and the literature puts the attention on the adaptability of networks that could trick firms involved that try to strongly reduce the number of participants and of different relationships. Too closed system can generate a reduction of performances and benefits of network forms, because, a too small number of members or interactions don't incentive quality and innovation (Jones, Hesterly & Borgatti, 1997). The literature expresses here the importance of the accuracy on the partners selection process, to build a successful network, and underline how a development of strong relationships with selected parties helped firms to understand the potentiality of networks as effective and efficient organizational forms, and electing the restricted access mechanism as a leverage for the diffusion and development of networks.

Macroculture: The sociological literature, when analyzing a phenomena or an entity, tries, to describe it following different levels of closeness to the research target, from micro-level to macro-level. Taking in consideration the macro analysis, it is mostly presented as the process that scholars do to trace the outcomes of interactions over a large population of a subject.

Developing a macro analysis on a company underlines all the stakeholders who interact with and show its position in the bigger picture, the system it operates. A macro-level analysis defines also the frequency and the strength of the interaction with the different subjects. Especially in peculiar sectors, the interactions among firms and other institutions that operate inside are really intense and there are concrete share of valuable informations. All the information and experiences that institutions share through the time create a knowledge that belong to all the subjects that operates within a sector, and can be identified as a concrete culture.

With the word macroculture the literature gather all the shared assumptions, values and information rallied in industry-specific professional knowledge, that guide actions and push the development of typical behavior patterns among independent entities (Jones, Hesterly & Borgatti, 1997). Macroculture is based on a insidedeveloped knowledge on how a sector work. Presents evaluations on customers, competitors, suppliers, and society, their roles and relationships, and how they manage problems and solutions (Gordon, 1991).

Different factors helps the development of a relevant macroculture. More relevant and frequent interactions among the industry participants are developed, showing an high structural embeddedness, more the shared knowledge is crucial to operate successfully in that sector.

The literature identify the presence of a strong macroculture in a sector as a factor that increase the development of collaborative approaches and network forms of organization. The impact of the macro-knowledge on companies that develop a network is mostly on making exchanges and communication more easier, and enhancing coordination among entities to get competitive advantages. Macroculture creates ground rules and a common language for interactions helping companies to have a more clear and cheaper exchanges.

Two main factors are individuated as helpful for the creation of a macroculture, and one is related to the presence of third institutions, such as guilds, professional

schools, or associations that work strictly within a sector and develop institutionalized common approaches and understandings (Jones, Hesterly & Borgatti, 1997). The second, more relevant on the creation of macroculture, is a close geographic proximity of the entities involved, because of the ease of continuous and successful interaction in geographically concentrated areas (Philips, 1994).

Although macrocultures improve network governance to emerge and diffuse, they could require years and concrete efforts to establish and be useful for the whole sector. Even within a sector with an high presence of cooperative approaches, the development of shared understandings, routines, and conventions for different tasks could never diffuse, and the intangible aspect of macrocultures makes them not easy to be recognized by the different stakeholders of a sector.

Macroculture remain a critical factor that enhance the diffusion of network organizational forms and its shared social processes and structures help companies to understand the potentiality of collaboration with strategic partners.

Collective sanctions: The development of successful networks that generates concrete competitive advantages is based on a condition of trust among parties. This is one of the main characteristics that differentiate networks from other organizational forms.

If a member of network violate group norms, values, or goals could reduce strongly the effectiveness and the efficiency of the collaboration driving companies involved to wastes, losses and damaging them overall.

The literature names the act of punishing other members violations as collective sanctions. With this term scholars include all the activities that a company put in act to in order to elicit a change in the violating firm' behavior, and can range from diffusing guilt part' private information to obtain negative effects, or to the temporary or permanent exclusion from the network, or even on sabotage activities.

Collective sanctions are crucial to the development of strong permanent relations, and punish those who do not adequately screen or punish poor performers (Jones, Hesterly & Borgatti, 1997). The effects of the presence in networks of effective sanctions are the reduction of behavioral uncertainty by increasing the, not only

monetary, costs of the opportunistic or other collective negative behaviors, and the decreasing of the costs to control over each other.

When companies operates and interact inside a collaboration the point of contact could be copious and not always all of them can be controlled perfectly. Firms involved may be unable to discern intentional opportunistic behaviors from a genuine misunderstanding or a simple single error, and especially when the complexity of tasks is high or companies work under conditions of high uncertainty, it is difficult for them to evaluate if obligations to one another are affected by opportunism (Bhide & Stevenson, 1992). In this scenario collective sanctions could loose of accuracy, reducing their effective use, but the development of correct punishments for participants that don't operate correctly within a network remain an element that is presented by literature as relevant to build and strengthen network organizational forms.

Reputation: Analyzing the previous mechanisms that help networks to diffuse, thrive, and improve their performances, a sort of line of conjunction among a restricted access, the creation of a macroculture, and the punishment of opportunistic behavior can be find on the reputation, consequent to an evaluation, that different companies operating in a sector have of each other.

Reputation involves an estimation of one's characteristics, skills, reliability, and other relevant attributes useful to know and to take in consideration during an interaction. Different factors push a company to evaluate others, and take in consideration their reputations to gain advantages and implement successful relationships.

High levels of uncertainty on the processes driven by customized and difficult tasks, together with environmental instability make information about their own and others' reputations a relevant asset (Kollock, 1994). Especially in networks or other collaborative approaches, where firms relies on others in different steps of the value chain, a deeply knowledge of partners is crucial. During the partners' research process, and during the operative different processes, reputation provides information about the reliability and goodwill of others parts enhancing the creation of successful collaborations.

The presence of repeated unstandardized exchanges among parties of a sector increase the level of unique problems and misunderstandings, and the development

of networks to overcome those issues is a solution that assume a deeply evaluation of the partners characteristics. Only with this assessments companies involved can achieve successful levels of coordination and make embeddedness sustainable, driving them to implement network organizational forms.

Another relevant effect of a successful evaluation of the reputation is the improvement on firms' ability on detecting and deterring deceptive behaviors, enhancing cooperation only with valuable partners (Parkhe, 1993). Safeguarding activities can find in reputation of different companies and institutions, patterns that help identified previous negative or positive conducts or facts, and also find how is the best way to relate with partners.

The research that a company has to put in act to have a reliable reputation' evaluation of other firms could be costly, especially if a company operates globally. The development of a macroculture could help the diffusion of sector participants' reputations, and reduce the costs connected with the estimation of firms characteristics and skills.

Even with the presence of a strong macroculture, the literature evidence that reputation can present other limits in usage connected to the inaccuracy, especially when diffused across long chains of links, or misinterpretation of the informations that can distort positively or negatively the reputations. Another vulnerability of reputation could be find in and excessive use and over reliance of it, limiting the access to new innovations that can come from underestimated companies. This phenomena is presented by the literature as homophily, and it is described as the act of shutting out other entities that don't present similar characteristics (Blau, 1977).

Taking in consideration all the aspects of reputation, a correct evaluation of every kind of stakeholders a company interact with is a relevant asset for companies, and become even pivotal in networks, where companies relies on the operates of others to gain completive advantages. Selecting the right partners is becoming always more a crucial choice to face the nowadays environment where firms can develop collaborative organizational forms with a wide variety of institutions all over the world. The improvements on reputation' evaluation pushed networks to more easily show and ensure their advantages, enhancing the diffusion of this organizational forms.

2.3) Networks' diversity

2.3.1.) COLLABORATION CONCEPT

Since the beginning of the industrialized era people cooperate through their businesses to obtain better results than working by theirselves, and from there things have evolved to the development of a society based on networks where the interaction and the cooperation among businesses, people and other institutions, is continuous.

Through the years the technological improvement and a mix of economic, environmental, historical and social conditions pushed companies to develop always more different and peculiar kind of collaborative approaches, that adapted to different sectors and environment to produce positive synergies. All those business interactions evolved through the years developing a wide diversity of networked structures and collaborative approaches.

The literature always tried to clearly classify the diversity of network forms, finding huge difficulties such was fast and multi-directional the innovation pace. A clear and reliable classification of network organizational forms could be identified in the work "Collaborative Networks: Reference Modeling" by Luis M. Camarinha-Matos and Hamideh Afsarmanesh (2008). The two scholars focused their conjuncted academic' efforts to present an always more precise classification of the organizational forms that are based on the development of a network.

Before going through the authors' classification of the different forms of networks, it is relevant to completely understand the concepts at the base of collaborative organizational forms literature.

Different patterns among the literature identified four main base concept of networks: networking, coordination, cooperation, and collaboration.

The literature often, in the past, did not properly analyze those concepts distinguish them with four different meanings. Taking in consideration the wide diffused word collaboration as example, often it is confused with the concept of cooperation, or they are unified giving them an undistinguishable unique meaning. The

misunderstandings around the collaboration concept could be enforced in the literature when are present also different other concept as networking, communication, and coordination (Himmelman, 2001).

Other factors that influence the creation of ambiguities in the literature, are the different fields where this concepts are used, and the historical period took in consideration in the analysis.

Recently a new model (table 2) to present the meaning of networking, coordination, cooperation, and collaboration was developed by different scholars to present those concepts in a hierarchical scale as one is the upgraded version of the previous, creating a scale from the less complex, networking, to the most completed, the collaboration concept. This scale is based on four elements that are put together to increase the complexity of the definitions.

"Communication & Information Exchange", "Complementarity of Goals", "Compatibility of Goals" (Individual entities working apart), "Joint Goals, Joint Identities, Working Together, Joint Responsibility" are summed up together to present a clear definition of collaboration, and how it differ from the others in a complementary structure (Camarinha-Matos & Afsarmanesh, 2007).

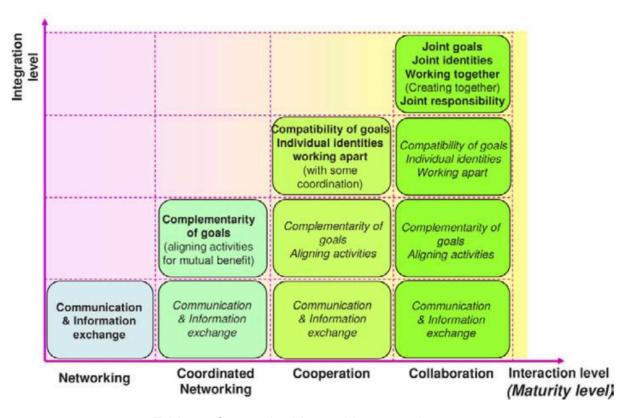


Table 2 - Camarinha-Matos, Afsarmanesh, 2007

The graph exposes in a simple and direct way the complementarity and the progressive summation of the elements that built the different definitions, using on the X axis the maturity level, presented as the summation of different elements that built a complex entity, and on the Y axis the integration level that describes the increasing integration between the entities involved in the different definitions. Relevant is the concept of "collaboration maturity level" that is presented by the literature as the amounts of common goal-oriented risks, commitment, and resources that participants must invest into the joint activity. As we move from networking to collaboration, the level of maturity of a structure increases towards involvement in a collaboration process.

Starting from the bottom of this hierarchical scale there is the simplest concept, with the lower level of integration between the parties and maturity, that the literature identify with the word "Networking" and define:

"Networking – involves communication and information exchange for mutual benefit". (Camarinha-Matos & Afsarmanesh, 2007, 2008: 52)

Interesting is the fact that this term is used in a huge variety of different contexts to communicate different activities that involved the exchange of informations. For instance, often people refer to business related concepts talking about networked organizational structures, but in the literature the concept has a different meaning more close to the pure exchange of information. Networking is used here to identify the situation which a group of entities share informations and experiences for mutual benefits, but without any common purpose and without building any structure among the parts.

The next step of this growing scale is the concept of "Coordinated Network", where the authors include the coordination concept, a crucial element of network organizational forms and define it:

"Coordinated Network– in addition to communication and exchanging information, it involves aligning / altering activities so that more efficient results are achieved.

Coordination, that is, the act of working together harmoniously, is one of the main components of collaboration". (Camarinha-Matos & Afsarmanesh, 2007, 2008: 52)

Clear here is the increase of efforts of the parties to move in the same strategic direction to achieve a competitive advantage. The coordination between the parts allow them to develop conjuncted activities that request more than a simple exchange of information. Although the development of coordinated activities, a Coordinated Network may be developed by companies to reach different goals and through the use of different resources and methods.

The exchange of information and the implementation of coordinated activities could bring parties to different advantages, and don't present any kind of structural integration between them. But at the same time a sort of embryonal complementarity is present on the objectives of firms part of a coordinated network. The third step of the hierarchical explanation of the collaboration concept is the cooperation. With this world the literature include often the presence of common and mutual goals among the parties, that may be reached through increased shared efforts, involving investments to improve the point of contact and the communication among firms.

The concept of cooperation is diffuse among the supply-chain literature and is used from different authors to define the client-supplier relationships that implement simple and basic activities of integration between them, or activities to reach compatible goals based on the sum of their value-chain' processes. In the schema a clear definition of cooperation is presented:

"Cooperation – involves not only information exchange and adjustments of activities, but also sharing resources for achieving compatible goals. Cooperation is achieved by division of some labor (not extensive) among participants". (Camarinha-Matos & Afsarmanesh, 2007, 2008: 53)

This definition underlines the sharing, among firms involved, of resources to achieve compatible objectives but still maintaining a separation on the activities done by the different companies. Only in the point where the operations of the different firms come together could be present some low-level of co-working.

Most of the times a cooperative approach is characterized by the presence of a common plan, that could not be designed jointly, to help to coordinate the common touch point of the value-chain and improve both firms' performances.

At the top of this schema with the higher level of collaboration maturity and integration there is the collaboration concept. As a sum of the all four main characteristics of the four collaborative approaches, collaboration assume an high level of shared activities between firms' organizations, that could affect from the design to the production, to distribution processes, and even how the output is marketed. The aim of this high level of efforts to work together is to enhance the capabilities of each other and generate competitive advantages over competitors. This word collaboration derives from the Latin *collaborare* that means "work together" and the definition presented on this hierarchical schema is:

"Collaboration – a process in which entities share information, resources and responsibilities to jointly plan, implement, and evaluate a program of activities to achieve a common goal. ... It implies sharing risks, resources, responsibilities, and rewards, which if desired by the group can also give to an outside observer the image of a joint identity. Collaboration involves mutual engagement of participants to solve a problem together, which implies mutual trust and thus takes time, effort, and dedication". (Camarinha-Matos & Afsarmanesh, 2007, 2008: 53)

Analyzing this definition is clear that a collaboration assume a complete involvement of the parties in the activity, non only sharing information and resources but work together to implement a common plan with shared objectives, that can be achieved effectively and efficiently joining their forces.

Collaboration diverge from cooperation for its focus on sharing all those resources to work conjunctly on common objectives, rather than a process of "individualistic" participation constrained by contextual factors (client-supplier relationship), used to achieve a precise outcome (Camarinha-Matos & Afsarmanesh, 2008).

For the authors the collaboration process involves also a sharing of risks and responsibilities among the parties. Used by the literature to transfer the high level of conjuncted work that collaboration implies, negative aspects as risks and responsibilities, are not taken in consideration in the previous definitions.

Collaboration is presented here as a sum of different elements that unified drive to an always more complex structure among different parties that develop it to achieve shared goals. So, crucial, following the authors is the creation of a single unified plan that helps collaborating companies to generate synergies that will drive them to successful outcomes.

This theoretical analysis schema of cooperation presents clearly four different definitions to describe different processes. Applying them to real cases however it is not easy, and the distinction between them could lose effectiveness and different mixed form can be funded.

In practice collaborative approaches offer unlimited possibilities to companies to find the well suited structure and organization to take advantages over others. A relevant factor that highlights the difference between the static theoretical definition of Luis M. Camarinha-Matos and Hamideh Afsarmanesh and the reality can be found in the continuous change of the processes that a collaborative approach has to face overtime.

Collaboration in its strict sense does not happen all the time, in networks there could be phases where firms collaborate intensively with an high number of tasks, and at the same time phases based on individual work where companies face different tasks independently, to after come together physically or virtually and work again on the outputs generated (Camarinha-Matos & Afsarmanesh, 2008).

This dichotomy between the rigidity of the literature and its definitions, and the reality is a frequent issue in the organization firms theories but even this, clear definition enhance managers' ability to understand the reality and face the boundless different situations that the environment presents.

2.3.2.) ELEMENTS OF COLLABORATION

Requirements for collaboration

Collaboration is a complex process composed by different factors that, when connected, drive participants to gain competitive advantages. As a complex activity, collaboration needs different requirements to create the backbone of its processes, and make them successfully.

Following the literature on which main elements have to be considered by managers to implement a collaboration strategy, a series of requirements resulted crucial to achieve effectively and efficiently the set objectives.

The first element is the necessity to have a shared purpose that differ from the single individual ones of the parties. The purpose has to be a common problem to be solved or a joint objective that push firms to work together to realize something that working alone, they would never be able to achieve. A purpose that is common among different parts assumes the role of the intention, the commitment by them to carrying out actions, to build something conjunctly (Giesen, 2002).

Strictly connected to the presence of a unique purpose, that can be identify by the definition of common goals, is the development of a shared vision of the whole process. The world vision is used in management literature to describe the projection of a scenario that reflects the values, the believes and the aspiration that a company wants to achieve with its activities (Johnson & Scholes, 1999).

Shared goals and visions don't have to be a summation of the individuals objectives, they have to be developed together taking in consideration the actors involved as one new entity (Giesen, 2002).

Another relevant requirement for the development of a successful collaboration is a deep knowledge of others' skills, structure and capabilities. To interact with other entities operating in the same or different markets is fundamental for a company knows partners' skills, structure and capabilities accurately to don't create processes of over-expectation or under-expectation that will not drive to the best exploitation of the parties' characteristics.

Knowing properly the other parts creates a suitable scenario for a clear communication, and manage successfully the different shared processes of a collaboration. During them new positive or negative characteristics of the other parties can emerge, especially during its development, and only handling a deep knowledge of the other parts and of the environment where it operates, a company can overcome this fact promptly.

Understand the strength and the weakness of partners is a necessity for firms that want to develop a collaborative approach, also because collaboration imply an high level of sharing among parts. When parties agree to collaborate, are simultaneously

agreeing on process of sharing, that could affect a variety of different owned assets, tangible or not.

Firms involved in collaboration share, first of all, knowledge and informations, always more relevant assets in the nowadays economy able to drive to improvements and innovations. Informations represent a foundation of the collaboration process, and during the whole development as to be present a continue exchange of them to keep aware parties of the state of the processes.

Another intangible shared asset by collaborators is the trust among them, a crucial aspect to build successful networks. Trust assumes a strong level of confidence among partners reached through a well made partners selection and the creation of real and solid relationships.

Firms developing a collaborative approach share also the responsibility for the different tasks during both participation and decision making process. This factor exposes parties to be accused by others in case of unreliable, opportunistic or any other behavior that could damage the collaboration itself or the firms involved. In fact companies that collaborate share the accountability for the outcomes of the collaboration, both in terms of rewards and liabilities (Giesen, 2002).

In addition to them, companies to collaborate could share also tangible resources and assets, in order to improve communication, to put in act the collaboration, and help firms to work conjunctly. Collaboration requires investments by the different partners in term of monetary, human and time resources, that will be allocated during the whole collaborative process (Giesen, 2002).

A relevant aspect of collaborative network forms, that is connected with the assets that different parties share with others to develop collaborative approaches, is that sharing does not imply involvement's equality.

During the history any kind of collaboration took place and a relevant characteristic of this variety of cases is the presence of different roles with a different amount of commitment in the networks (Brna, 1998). This aspect is relevant to understand the dynamics inside a sector, and evaluate how different companies interact developing collaborations with different involvement levels. Managing the different involvement on collaborations could be a factor that pushed companies through the years to develop the variety of network forms, trying to find the most appropriate and successful one for different partners, sectors, location, or environments.

In fact, collaboration requires an adequate environment to enable and facilitate the collaboration process. The literature often presents the necessity of a collaboration space for companies to develop different type of collaborative approaches, and the characteristics of the right environment depend on the form of collaboration. Time and location constitute the two main element took in consideration in the analysis presented by Winkler (2002). The author identified synchronous collaboration, when the collaborative processes take place at the same time, or asynchronous collaboration when they take place at different times. Regarding the location he identified the collocated collaborations, for the situation when companies work together in the same place exploiting the advantages of a

when companies work together in the same place exploiting the advantages of a concrete proximity, and the remote or virtual collaboration, when companies collaborate but from different locations. Virtual collaborations could be seen as a strategy that not completely fit the aim and the characteristics of a collaborative approach but in the last decade the technological improvement has developed innovations that permit to firms to communicate effectively and efficiently even worldwide distances, and develop both synchronous and asynchronous collaborations with partners all over the globe (Winkler, 2002).

Define a precise group of requirements for collaboration is a difficult process for the literature, facing the diversity of collaborative approaches. Anyway the difficulties to create a unified theory, different authors presented crucial aspects that are at the base of the creation of successful collaborations, and has to take in considerations by managers as starting point to analyze the situation where their companies and the future possible partners are before develop a collaboration.

The steps of the collaboration process

The literature, to better understand the dynamics of collaborations, during the years tried to analyze the process that companies go through to develop a collaborative approach. Taking always in consideration the diversity of collaborations that companies implemented during the years, different scholars identified a variety of generic steps that companies have to do to collaborate.

A relevant and clear sequence of steps that describe what a company has to go through to develop a collaboration was presented by Giensen (2002). He identified six generic steps that could be adapted easily to the different conditions where companies operate.

The first step presented is based on the identification of the different parties and contact them to organize a meeting and bring all of them together, physically or virtually. Analyzing this step is relevant the fact that the a collaboration born mostly from the needs of a company and the proposal to collaborate to others (Giensen, 2002).

The second step is a crucial one and refers to the definition of the objectives of the collaboration, and the desired output that companies want to produce. With this step companies starts to bargain all the different aspects of collaboration, from the foundation of it, the common objectives (Giensen, 2002).

The third step is based on the definition of the structure of the collaboration. With the word structure the author identify all the different aspects which determine the roles, the leadership, and the ownership of parties, and how those communicate and exchange information. Within this step companies, also, decide how the decision making process is developed and how the resources are allocated. The definition of the main aspect of the collaboration' structure include also the design of a schedule of when all the different activities will take place, so after this step a complete idea of the whole collaboration process is developed (Giensen, 2002).

The fourth step is based on the definition of the legal aspects of collaboration, and the policies regarding how to handle conflicts, how to manage accountability, how will be managed the output of the process (rewards, recognitions, ownership of generated assets). This step has the clear objective to safeguard the whole process and avoid parties to behave opportunistically (Giensen, 2002).

With the fifth step, companies start to define more precisely the activities, the mechanisms and the processes that the collaboration will generate, improving the collaboration' structure. This step is also relevant because are defined all the measurement and the assessment of the whole different aspects of collaboration, together with the risks that parties can face and the consequent contingency measures (Giensen, 2002).

The last step identified by the author focus on the establishment of the effort that different parties have to allocate to collaborate. The commitment is a pivotal aspect to create a successful collaboration, and the definition of the will to collaborate shows how much the different parties will be involved in the collaborative processes, and confirm the intention of the different parties to work together for a common objective (Giensen, 2002).

This sequence present the steps that companies pass through simplifying every process and giving a schematic overview of them. In the reality is difficult to reorganize everything in simple consequent steps because the variable involved in collaboration processes are uncountable and unpredictable.

The unrealistic simplicity of the steps presented can be misleading for parties intentioned to collaborate in different time and space. This aspect is relevant to define how firms are going to bargain the different characteristics of the collaboration, that are strictly related with the characteristics of the parties involved in. Developing a collaboration in a scenario of different time and space could make the steps longer and difficult to accomplish, leading also firms to abandon the idea to develop a collaborative strategy.

Difficulties in the collaboration development

Analyzing the collaborations between firms, with their steps to create the joint structures and the actual development of the activities in order to achieve a common goal, the literature identified and stressed different elements of this process that act as barriers creating difficulties on the coordination between the parts' behaviors.

Collaboration involves a process of sharing that not always represent a common action for companies. Manage the resources, own and share them, is typically difficult during the collaboration process, even when they are acquired by the parties strictly to perform specific collaborative tasks (Wolff, 2005). Tangible and intangible appropriate resources represent a crucial element of collaboration, and the possibility to exploit the resources of other parties is one of the main reasons why firms collaborate. To overcome this issues an high level of interaction could develop

a major trust among parts, allowing also easier control activities on them, but anyway share different assets with others remain a delicate part of the collaboration process (Wolff, 2005).

Another element of a collaborative approaches that could generate negative effects on the process is the rewards' management. Evaluates and determines the individual contribution of the singles collaborators, especially when collaboration is based on the creation of intellectual propriety with an intense investment of not proportioned intangible assets, results challenging for the parties involved. Developing a common perception of the exchanged values results crucial to manage effectively the rewards and the benefits. This assume the creation of a shared model on how to manage rewards, and avoid misunderstanding and opportunism (Camarinha-Matos & Afsarmanesh, 2008).

Wolff in his analysis (2005) identified as another problematic element in the collaboration development, the commitment of the different parts. Even with clear common objectives and purposes, firms remain detached entities that facing an obstacle or an attack could respond as a whole, sharing the consequences, or could not trying to save their own interests. This represents an high risk for a collaboration because could ruin the relationship between the parts or drive to a quickly end of the whole process. Here, also, as in the problems related to rewards' management, a solution could be find in the creation of a shared model that define accurately the roles and the different task of each part, but could easily fall in a condition of bounded rationality defining all the possible cases.

Strictly related to all the three previous elements there is another one that could generate problems during a collaboration process, the responsibilities. Manage the responsibilities and make companies share them is a difficult process for the firms involved in a collaboration, especially when referred to negative outcomes of the process. Companies should define previously different principles that will help them on understand how to share the responsibility properly, and not waste time, money and work trying to solve this problem, as the others, slowing down the collaboration process (Wolff, 2005).

Companies often implement collaborative approaches to compete effectively against other entities or groups, but competition could be also an element that characterized firms inside the same alliance.

Authors have different views on the effects of internal competition in collaborative approaches, identifying it as a source of positive and negative behaviors. Taking in consideration first the more obvious negative effects on a structure based on working together, competition can drive to behaviors with the aims to gain more power, status, or material resources from others. Acting in this way a company can damage the collaboration and loose trust and reliability (Camarinha-Matos & Afsarmanesh, 2008).

At the same time, following other scholars, internal competition could become a crucial factor for firms to innovate. In fact, innovations most of the time came out from divergence and challenges to the current different directions, norms, or assumptions (Denise, 1999).

Competition so could be an element that generates positive and negative effects and generates consequent problems and opportunities. The members of a collaborative form of governance has to find the best balance between collaboration and competition to exploit the advantages of both, without generating obstacles. This dichotomy is seen by the literature as one of the most challenging factors for the definition of the foundation policies and principles of a governance structure, as the sharing and the infrastructural ones for collaborative network forms (Denise, 1999).

2.3.3.) COLLABORATIVE ORGANIZATIONAL FORMS

The environment where companies operates is always being challenged by innovations and changes that consequently pushed firms to adapt and develop their organizational forms through the years. Networks were also affected by this changes and so developed a wide diversity of forms and structures, showing a huge variety of behavioral patterns. For experts and scholars this variety represented a difficulty in the development of a unified paradigm and a correlated unified literature (Camarinha-Matos & Afsarmanesh, 2008).

One of the most unified establishments of the literature refer to the structure that networks can develop and how the different entities interact inside them. Three main

topologies are identified frequently as the base structures that a network organizational form can implement (Table 3) (Katzy & Zang & Löh, 2005):

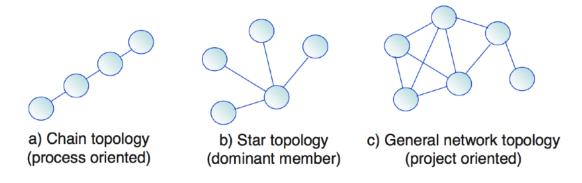


Table 3 - Katzy & Zang & Löh, 2005

- a. Chain topology: this topology presents consequent interactions between the parties that follow a the pattern of the products or services value-chain. This structures is the one at the base of supply chains manufacturing industries.
- b. Star topology: this topology presents a series of entities interacting only with one central hub or strategic center, that present a dominant position over the others. This structure is typical in the capital intensive sectors, where a big company develop networks with single suppliers for specific tasks of its complex production processes (automotive).
- c. General network topology: this topology presents a series of entities developing multiple relationships among all of them without any dominant position. Interactions present an high level of freedom in its characteristics, developing an always changing net among partners. This structure is typical in the creative and innovative industries, where the exchanges are based mostly on knowledge.

Those three structures are at the base of a simple classification of how networks can be developed, and how even if based on collaboration could present dominant positions inside them. Focusing on the structure of interactions doesn't take in consideration fundamental elements to classify networks as the duration or a more wide range of aims why a network is developed.

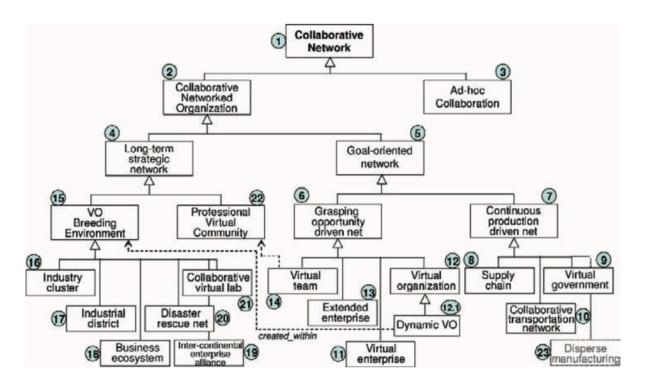


Table 4 - Camarinha-Matos & Afsarmanesh, 2008

Analyzing the literature one of the most precise schema able to take in consideration a huge variety of network-based forms, and define a taxonomy, is the one presented by Luis M. Camarinha-Matos and Hamideh Afsarmanesh (2008). The authors identified and described more than twenty-three different collaborative network forms and ideated a diagram to explain the common characteristics among them (Table 4).

Starting with the definition of collaborative network at the top of the whole schema, they developed a sort of net that present and describe the single forms, but, identified also the relations between them.

With collaborative networks the authors wanted to describe a phenomena that is antecedent to an organized structure among different partners, and relate more with the simplest concept of collaboration.

1 - "A collaborative network (CN) is a network consisting of a variety of entities (e.g. organizations and people) that are largely autonomous, geographically distributed, and heterogeneous in terms of their operating environment, culture, social capital and goals, but that collaborate to better achieve common or compatible goals, and

whose interactions are supported by computer network". (Camarinha-Matos & Afsarmanesh, 2008, 57)

Relevant is this definition are two aspects, the fist is that the use of the word "entities" to underline that collaborative networks don't present only a business orientation but are a structure that everyone can build for the more different purposes. The other relevant aspect of this definition is that, for the authors, collaborative networks' interactions are supported by computer network. They underline the relevance of computers in the development of structures based on the interaction between different parts, and how communication improvements are at the base of network developments.

From this pivotal concept the authors split in two other typology of collaborative networks, the collaborative networked organization and the ad-hoc collaboration. The first includes the majority of the network forms and present a crucial aspect as the necessity of an organization over the different activities of the members able to identify some rules and participants' roles.

2 - "Collaborative networked organizations (CNO) are a collaborative network possessing some form of organization in terms of structure of membership, activities, definition of roles of the participants, and following a set of governance principles and rules". (Camarinha-Matos & Afsarmanesh, 2008, 57)

The second definition include all the collaboration that entities develop to improve a general aim, no pre-plan and/or structure is present, and participants act following no specific roles with specific tasks. This concept is well explained by the word "spontaneous" that they use on the definition.

3 - "Ad-hoc collaborations are a "spontaneous" form of collaboration without a precise structure or pre-defined organization". (Camarinha-Matos & Afsarmanesh, 2008, 57)

Going more deeply on the schema its easy to see how collaborative networked organizations are divided following a time perspective in long-term strategic networks and goal-oriented networks.

The first are also called by the authors "breeding environments" for their aim to offer in the long period the perfect conditions and environment to develop collaborative approaches. In this category networks are not based on continuous forms of collaboration through the years but more on forms of cooperation that prepare the ground for collaborative activities.

4 - "Long-term strategic network or breeding environments – a strategic alliance established with the purpose of being prepared for participation in collaboration opportunities, and where in fact not collaboration but cooperation is practiced among their members. In other words, they are alliances aimed at offering the conditions and environment to support rapid and fluid configuration of collaboration networks, when opportunities arise". (Camarinha-Matos & Afsarmanesh, 2008, 58)

The second group part of the CNO is characterized, as the opposite, by an intense collaboration process developed to achieve specific goals. Interesting in this category is the development by partners of a strictly goal-oriented structure created to achieve a single unified objective.

5 - "Goal-oriented network – a CN in which intense collaboration (towards a common goal or a set of compatible goals) is practiced among their partners". (Camarinha-Matos & Afsarmanesh, 2008, 58)

The Goal-oriented networks are sub-divided by the authors in two different categories:

6 - "Grasping opportunity driven networks are a CN driven by the aim of grasping a single (collaboration) opportunity and that dissolves after the goal is accomplished". (Camarinha-Matos & Afsarmanesh, 2008, 58)

7 - "Continuous production driven network – a CN driven by or oriented to continuous production/service provision activities". (Camarinha-Matos & Afsarmanesh, 2008, 58)

Continuous-production driven networks present different structures that can see firms working conjunctly for a long time to reach long term objectives, and are characterized by a clear defined structure along the value-chain. The authors inside this category present different examples:

- 8 "Supply chains are a stable long-term network of enterprises each having clear roles in the manufacturing value chain, covering all steps from initial product design and the procurement of raw materials, through production, distribution, shipping, and warehousing until a finished product is delivered to a customer". (Camarinha-Matos & Afsarmanesh, 2008, 58)
- 9 "Virtual governments are alliances of governmental organizations (e.g. city hall, tax office, cadastre office, and civil infrastructures office) that combine their services through the use of computer networks to provide integrated services to the citizen through a common frontend". (Camarinha-Matos & Afsarmanesh, 2008, 58-59)
- 10 "Collaborative transportation networks are a long-term CN involving a diversity of actors such as road management entities, logistic operators, parking management entities, gas stations, banks, etc. in order to provide integrated transportation services". (Camarinha-Matos & Afsarmanesh, 2008, 59)

Even is clearly identifiable the diversities in the three continuous-production driven networks proposed, the authors unified them to underline the specificity of their objectives and the duration over time to reach them.

The other category part of the Goal-oriented networks is the Grasping-opportunity driven and its characterized by networks that their existence is related to the achievement of a single specific objective. When the goal is reached the collaborative networked organization is going to dissolve and the different firms

involved loose any responsibilities to others. In the works of Luis M. Camarinha-Matos and Hamideh Afsarmanesh few examples are presented:

- 11 "Virtual enterprise (VE) represents a temporary alliance of enterprises that come together to share skills or core competencies and resources in order to better respond to business opportunities, and whose cooperation is supported by computer networks". (Camarinha-Matos & Afsarmanesh, 2008, 59)
- 12 "Virtual Organization (VO) represents a concept similar to a virtual enterprise, comprising a set of (legally) independent organizations that share resources and skills to achieve its mission / goal, but that is not limited to an alliance of profit enterprises. A virtual enterprise is therefore, a particular case of virtual organization". (Camarinha-Matos & Afsarmanesh, 2008, 59)
- 12.1 "Dynamic Virtual Organization typically refers to a VO that is established in a short time to respond to a competitive market opportunity, and has a short life cycle, dissolving when the short-term purpose of the VO is accomplished". (Camarinha-Matos & Afsarmanesh, 2008, 59)
- 13 "Extended Enterprise (EE) represents a concept typically applied to an organization in which a dominant enterprise "extends" its boundaries to all or some of its suppliers. An extended enterprise can be seen as a particular case of a virtual enterprise (in case of a temporary and goal-oriented extended enterprise) or of a supply chain (in the case of a long-term structure)". (Camarinha-Matos & Afsarmanesh, 2008, 60)
- 14 "Virtual team (VT) is similar to a VE but formed by humans, not organizations, a virtual team is a temporary group of professionals that work together towards a common goal such as realizing a consultancy job, a joint project, etc, and that use computer networks as their main interaction environment". (Camarinha-Matos & Afsarmanesh, 2008, 60)

The authors in four of the five examples proposed (11/12/12.1/14) emphasize the virtual aspect of those networked organizations to describe their ability to operate conjunctly thanks to high developed computer-based communication and coordination mechanisms. Those structures often are formed by geographically distributed entities that don't present concrete headquarters, and saw their diffusion increasing with the development of informational technologies within the digital era. The network organizational forms' literature often use the term virtual enterprise and virtual organization with a concept that differ slightly from the acceptation that Camarinha-Matos and Afsarmanesh use in their researches. Often those definitions are used to described forms with long-term duration, even their strict connection with computer technologies.

Focusing now on long-term strategic networks, and the definition presented by the authors, of this peculiar networks characterized by solid and well-established base structures that allow partners to exploit them to implement opportunity-based collaboration activities.

15 - "VO Breeding environment (VBE) represents an association of organizations and a number of related supporting institutions, adhering to a base long term cooperation agreement, and adoption of common operating principles and infrastructures, with the main goal of increasing their preparedness towards rapid configuration of temporary alliances for collaboration in potential Virtual Organizations. Namely, when a business opportunity is identified by one member (acting as a broker), a subset of VBE organizations can be selected to form a VE/VO". (Camarinha-Matos & Afsarmanesh, 2008, 60)

Following the literature of the two authors, they initially developed their theories only around the virtual organization breeding environments (Camarinha-Matos & Afsarmanesh, 2005) but through the years they applied this concept also to areas connected to the digital revolution of the last decades of 21st century, developing new examples of long-term strategic networks.

16 - "Industry clusters are one of the earliest forms of VO breeding environments, consisting of a group of companies, typically located in the same geographic region and operating in a common business sector, that keep some "binds" with each other in order to increase their general competitiveness in the larger area. These binds may include sharing some buyer-supplier relationships, common technologies and tools, common buyers, distribution channels or common labor pools, all contributing to some form of cooperation or collaboration when business opportunities arise. Earlier forms of clusters did not require a strong ICT infrastructure but more and more collaboration resorts to such support". (Camarinha-Matos & Afsarmanesh, 2008, 61)

17 - "Industrial district – is a term mostly used in Italy that represents a concept quite similar to an industry cluster. It can be focused on one single sector or cover a number of sectors in a given region. (Camarinha-Matos & Afsarmanesh, 2008, 61) Incubators (of new companies) represents a pool of small companies in their early phase, co-located in the same geographical space, possibly covering different sectors, and that share some basic infrastructures (communications and other generic services) as well as consultancy support in order to evolve towards mature organizations. However, traditional incubators are not yet real VBEs as they usually do not collaborate much in joint business opportunities. Nevertheless it would be reasonable to imagine a next generation of incubators "absorbing" the goals, principles and mechanisms of a VBE". (Camarinha-Matos & Afsarmanesh, 2008, 61)

18 - "Business ecosystems – also sometimes called digital ecosystem, is similar to a cluster or industry district, although it is not limited to one sector but rather tends to cover the key sectors within the geographical region. A business ecosystem is inspired by the mechanisms of the biological ecosystems, try to preserve local specificities, tradition, and culture, and frequently benefit from (local) government incentives. In most aspects business ecosystems simply represents a renaming of the industrial district concept. Namely, differences are subtle and can perhaps be found only in a clearer emphasis on the involvement of a diversity of their actors – the living forces of a region – in addition to companies, and a more intense use of advanced ICT tools to support collaboration". (Camarinha-Matos & Afsarmanesh, 2008, 62)

- 19 "Inter-continental enterprise alliance a special case of VBE involving subnetworks of enterprises in different continents". (Camarinha-Matos & Afsarmanesh, 2008, 62)
- 20 "Disaster rescue networks a strategic alliance of governmental / non-governmental organizations specialized in rescue operations in case of disasters is another recent form of VBE aimed at facilitating a rapid and well-coordinated response in case of a disaster. This VBE could have a local / regional coverage or a global geographic span". (Camarinha-Matos & Afsarmanesh, 2008, 61)
- 21 "Virtual Laboratory (VL) / e-science networks represent the alliance of autonomous research organizations, each having their own resources (equipments, tools, data and information related to their past experiments, etc.), enabling their researchers, located in different geographically-spread centers to be recognized and considered for taking part in potential opportunity based problem-solving collaborations (forming a kind of VO for each problem solving). During a problem-solving collaboration process, it is typical that some expensive lab equipments owned by one or more organizations is made available for (remote) use by the other collaboration partners". (Camarinha-Matos & Afsarmanesh, 2008, 61)
- 22 "Professional virtual community an alliance of professional individuals, and provide an environment to facilitate the agile and fluid formation of Virtual Teams (VTs), similar to what VBE aims to provide for the VOs". (Camarinha-Matos & Afsarmanesh, 2008, 64)

Taking in consideration those definitions a clearer and structured scenario of networks organizational forms was presented. The continue development of new collaborative managerial approaches challenged the literature on trying to define the diversity of network organizational forms. Anyway scholars were not able to describe the whole variety and the dynamics that influence the development of new networks. Trying to find patterns among the different organizational structures presented, an evidence can be noticed around the continuously impact of the technological

advancement on how firms implement networks. New generations of managers, raised in the digital era, were able to understand more concretely the potentiality of collaborative organizational forms supported by literature frameworks, a more clear analysis of the environment where networks operate, and a familiarity with new technologies.

Always new forms of collaborative approaches are emerging in different sectors showing the necessity of a continue research on the development of networks, and on which factors push firms to implement this organizational forms. Different variables are connected to the environment where an entity operates and the level of technological innovation present in its sector. Those factors through the time created always new dynamics that pushed firms to choose collaborative networks for continue new purposes and to innovate, evidencing the suitability of the network organizational model.

3.) Networks and collaborative strategies: relations and effects on the fashion system

3.1.) Fashion system: the perfect environment for networks

Since the beginning of history, an undeniable characteristic of humans is the ability and the necessity to express themselves, in term of feelings, thoughts and aesthetics. The use of any kind of different items to adorn our bodies was one of the most used way to transfer values through history (Steele, 2005).

The contemporary concept of "fashion", following different historians as James Laver, is connected with the beginning of "Western fashion" in clothing around the middle of the 14th century, and could be described as any product or market, where is present an element of style, which is likely to be short-lived with the rise of always new trends (Christopher, Lowson & Peck, 2004).

Recently the word "fashion" has been used with a more open meaning by people, to identify a style or styles of clothing worn at any given time by groups of people, or the whole sector connected "with the design, manufacturing, distribution, marketing, retailing, advertising, and promotion of all types of apparel" (Čiarniene & Vienazindiene, 2014, 64).

Different scholars have attributed to "fashion" the characteristics of something that is always moving and changing, and reflects the aesthetic, economic, political, cultural, and social' changes of a society. The industry that tries to interpret those changes and propose different answers, together with the industry environmental dynamics that affect it, it's often called by the literature "fashion system".

This concept embraces all the businesses connected with fashion' phenomena, from the more artistic with their handmade production, to the multinationals with fully integrated value-chains, taking also in consideration consumers and their consumptions (Steele & Major, 2015).

The fashion system is seen as the environment where fashion trends and changes born, live and die, overcame by new ones. The factors that affect the fashion system and consequently allow the presence of trends, following different authors, could be intrinsic to fashion or external.

The intrinsic factors are related with nature of fashion itself, as the necessity of novelty or the attractiveness of the beauty. The external factors include all the events happened through the history all over the world, even the ones no strictly fashion-related, because they could affects cultural or societal aspects of consumption (Steele & Major, 2015).

In the last decades the fashion system has changed drastically due to different variables, that characterized it also before, but that have now increased their influence transforming the environment where fashion firms operate and the way consumers interact with them.

From the '60s in the different areas of the world, population started again after the World Wars to live in a wealthy society due the post war reconstruction. A direct effect was an increased consumption of goods, and the fashion industry was fully affected by the necessity of huge quantities of items to "dress" the people.

A more developed fashion taste arose all over, after the flatness of the wars period, and the fashion industry adapted to this new society with standardized mass produced styles, trying to achieve production low-cost maximization (Bhardwaj & Fairhurst, 2010).

During the following twenty years the styles and the products available in the market didn't change significantly, firms faced design restrictions on production and the whole fashion industry showed a clear product-driven approach focus on reducing the cost per unit. Consumers, even if the improvement of their conditions was less sensitive toward style and fashion, preferring basic apparel (Bailey & Eicher 1992). In the '80s things started to change, different scholars started to notice a growing request of fashion oriented apparel for women, as compared with the standardized one of the previous decades (Bailey & Eicher 1992). Consumers started becoming more fashion-conscious (Bailey 2001), and look for new items, new colors, new shapes, new materials and new textures that would satisfy their new tastes. The cultural and societal development of the '80s was pushed, also, by the technological innovations that drastically changed the perception of what was advanced and new at that time.

The globalization process and several years characterized by international economic stability, had their impact on improving the society conditions and allowing people to purchase more, and request for more novelty and diversity.

Firms to answer to those relevant changes of the fashion system and be prepared for an even more uncertain future, started to modify their structure e develop new strategies to face this mutated environment.

Since the '80s, a typical product life cycle in the fashion market had clear distinctive stages, and seasonality followed the clear pattern Spring/Summer and Autumn/ Winter, allowing firms to plan and organize efficiently their production. The continuous changes in consumer tastes through the diffusion of always new fashion trends marked the end of the planned season (OTA 1987), the reduction of fashion' products life cycle and an increase of people' clothes turnover.

In the '90s retailers started increasing their products range, trying to offer always updated products and a closer responsiveness to new fashion trends.

To increase the variety of items that companies offered in the market, a new strategical merchandise development diffused. Brands started adding more phases to the existing seasons, reaching even five more mid seasons (Tyler, Heeley & Bhamra 2006). The literature reconnects the rise of this new strategy to changes in consumers' lifestyles and also "to the need to satisfy consumers' demand for fashion clothing for specific occasions" (Bhardwaj & Fairhurst, 2010, 167).

This new environment pushed firms to reorganize their supply-chains, leaving mass production structures for more flexible ones characterized by higher responsiveness (Malone, 1999).

This shift of fashion companies' organizational form followed the global firms' necessity to adapt to a faster and connected world, and the disaggregation trend that started in that period, with its reliance on outsourced steps of the value-chain in contrast to previous high vertical integrated structures. Tyler, Heeley, and Bhamra (2006) proposed a clear analysis of the fashion industry' infrastructure development around the '80s, showing the emphasis on achieving quick response through reduced lead times, along with maintaining low costs.

Strictly related with the reduction of costs was the offshoring phenomena. Different manufacturers in the '80s and the '90s moved or outsourced different steps of the value chain to places with low labour costs in order to reduce costs of production, but despite that it leads to increased lead times, the creation of complicated supply chains due to geographic distances, inconsistency and instability of the processes around the chain, and to complex import/export procedures (Bruce and Daly, 2006).

In that period moving to undeveloped countries to reduce production costs became a trend on supply chain literature and among managers, and different firms opted for this solutions without the proper preparation to a difficult strategy as offshoring, facing sometimes relevant negative results.

In the '80s, the fashion industry was dominated by several large firms, which often controlled the whole value-chain, that made really difficult for others to compete (Barnes & Lea-Greenwood 2006). During the decade different fashion firms started to implement more consumers-driven approaches based on great efforts to understand them. In order to do it, they increased the development of unique combinations of high-value research, design, sales and marketing activities to increase their profits and work strategically with outsourced efficient factories (Gereffi, 1999).

The fashion industry moved into the '90s looking for new solutions, and reconsidering the sequential structures typical of the fashion system (fashion and textile designer, manufacturers, retail/buyer) for new forms of organization able to respond promptly to the increasing velocity of the fashion system.

The '90s represented the beginning of a new evolution of the fashion system where the technological innovations, and the strong changes in lifestyle due sociocultural factors, made information and trends moving around the globe at a total new speed (Hoffman, 2007).

Consumers started to interact with brands through completely new channels diffusing an always more globalized fashion-consciousness, that drove in 1999 to the public diffusion of fashion shows and catwalks through magazines and the web, demystification always more the fashion system and exposing people to exclusive designs and styles inspired from runways (Sydney 2008).

This new scenario pushed fashion firms to go over their boundaries to find new solutions that will allow them to reach the new more demanding and fashion savvy consumers, and provide them with the right product at the right time in the right market, as fast as possible (The Economist, 2005).

This necessity of firms for a quick analysis of the fast-moving trends, and the ability to respond quickly, pushed them to use all the means available to reach new competitive advantages. Computer technologies, diffused and established in the '90s, started to become in the fashion industry a relevant asset.

The shift from forecasting future trends to use real-time data and data analysis to understand consumers' needs and desires represented a real change in the industry (Jackson, 2001).

Those technologies helped firms to understand consumers and future trends, to reduce time-to-market, and to propose always new and attractive items inspired by fashion shows and trendsetters (Bhardwaj & Fairhurst, 2010).

To manage increasing amounts of information and create a strong interaction and interexchange among the value-chain, to improve reactivity, firms had to rely on trusted partners that posses the skills to ensure efficiency and effectiveness of this new innovative processes. Fashion companies in the '90s, started to develop organizational structures based on collaborations with different partners. From design, to production, to distribution, to marketing, etc., finding the perfect organizational form to manage all the different steps of the fashion firms' value-chains, became a crucial aspect to operate successfully in the always changing environment of the fashion system.

Moving to the 21st century new dynamics appeared influencing consumer choices. The literature identified different patterns among aspects as: "exclusivity, price-consciousness, hoarding merchandise for future use, consumers' perceived risk due to trade-off between quality and price, consumer expectation and satisfaction after the consumption process, consumers' efficiency in terms of cost–benefit analysis,... and environmental concerns" (Bhardwaj & Fairhurst, 2010, 171).

People in the new century started to use always more fashion items to communicate their tastes and lifestyles, and designers have to interpret and translate them into fashion goods, taking in consideration the continuous changes of scenario and the new fashionable styles that came up (Cholachatpinyo, Fletcher, Padgett & Crocker, 2002).

The technological improvement based on internet, made consumers always more aware and gave firms the possibility to reach always new people.

New innovative firms, based on online commerce platforms, arose giving the possibility to people all over the world to buy the same clothes and express an always more globalized styles, changing the fashion system drastically again. Fast Fashion companies, developed from the '90s to the 2000s, focused on the quick response to trend and on wide products variety. Those firms found a risk and

an opportunity, at the same time, in those new virtual structures based on networked approaches with different entities, and they faced for the first time a new challenge that hindered their endless development.

Different big companies perceived initially the e-commerce platforms as rivals to their concreted well-established distribution channels and tried to develop their own online stores facing problems and difficulties to manage the related knowledge. At the same time different firms understood the opportunity to develop strong partnerships with them to exploit their consolidated technologies, and generate competitive advantages.

The fashion system was affected by relevant changes in the last decades, moving from a regular, standardized and organized system to a fast-paced chaotic net of interactions between different entities.

Relationships among producers, designers, distributors, marketers, and trendsetters became always more crucial to reach consumers quickly, to create a multitude of touch points between brands and consumers, and to find new ways to generate values. In this new scenario collaborative approaches proliferated and thrived making the fashion system a sustainable environment for networked organizational forms.

The recent related literature always tried to find patterns in the fashion system to identify the intrinsic dynamics and the characteristics that pushed the diffusion of fashion firms' collaborative approaches. To clearly understand which factors made the fashion industry work as the perfect terrain for network developments, it's important to analyze the scholars' explanations to the characteristics of the fashion system that enhanced collaborations.

3.1.1.) CHARACTERISTICS AND DYNAMICS

Analyzing the fashion system, different scholars tried to find patterns among the characteristics of it that pushed firms to implement network organizational forms. Few appear clearly from the supply-chain studies on the fashion industry, others are more focused on the market and consumers' behaviors.

The first characteristic of the fashion system is that it is identified by the literature as related to the products' short life cycles. Normally products go through a life cycle defined by the literature by five different stages: introduction, growth, maturity, saturation and decline. Where the first and the last phases are characterized by more uncertainty, the necessity of flexibility, and the other three present an higher volume of production, less volatility and more predictability (Waters, 2002). Fashion products' life cycle differs from the classic representation for a clear compression of the stages and a shorter time between introduction and decline. Those products are often designed to capture a specific mood of a specific time, and match the trends that are arising. Fashion market is also characterized by short seasonality with products that often do not really reach maturity and decline phases, and continuously new desired items came up, generating always new opportunities for companies (Christopher, Lowson & Peck, 2004).

Fashion firms have to be able to deeply understand their customers and try to forecast trends to propose the right products at the right time, generating an high revenues in the short time available, and reducing at most unsold products and delays that will produce unexpected costs.

To manage products characterized by a short life cycle, firms have to develop a very flexible structure able to respond quickly to the insights produced by the analysis of the market, transforming them into always new products, and offer them to customers promptly.

The literature since the end of the '90s proposed two main solutions to respond to the speed of the fashion products' life cycles and improve the "supply response sensitivity to market demand" (Bergvall-Forsberg & Towers, 2007, 379).

Scholars identified lean and agile manufacturing techniques, and a mix of both, as effective strategies to achieve those objectives. in the work of Naylor, Naim and Berry (1999), agility in the fashion industry is connected with the use of market knowledge, and the development of "virtual corporation" to exploit profitable opportunities trying to obtain the best possible results in a volatile and fast-paced market, on the other side leanness focus on the elimination of all wastes among the value chain. Already in 1999 the fashion system was characterized by reduced product life cycle, and scholars' solution to operate successfully was the

development of collaborative approaches that allow firms to respond promptly to the necessity of new products.

From that time the technology has improved with a very fast pace proposing always new tools to collaborate. The always more reduction of the fashion products' life cycle pushed firms to develop network structures of efficient and effective long-term strategic solutions to improve the different processes that firm pass through, to understand the fashion trends, and offer always new products at the right frequency to consumers (Bergvall-Forsberg & Towers, 2007, 379).

Another characteristic of the fashion system is the high volatility of demand. With this concept the literature recognizes the instability and the non-linearity of fashion products' demand (Christopher, Lowson & Peck, 2004).

During the '80s and '90s the fashion system moved from a production-driven approach to a more demand-driven one, and the ability to handle volatile demand becomes a relevant aspect to operate successfully. This is true not only for retailers, who have to interact with final consumers and face volatile demand: in the last three decades, volatility is being passed through the value chains of fashion firms reaching manufacturers and distributors (Gangadharan, 2007).

Demand volatility is normally influenced by a wide variety of customer choices, product customization, rapid technological improvements and increased global competition (Gangadharan, 2007).

Taking in consideration the fashion system other factors influence the stability of demand. Fashion goods demand is strictly connected to the environment where consumers live, and it may be influenced by the vagaries of weather, films, or even by pop stars and footballers (Nenni, Giustiniano & Pirolo, 2013). Especially in the nowadays environment where consumers are exposed to an always growing number of commercial stimuli, the elements that create fashion trends, and consequently affect demand are a huge variety.

Different authors highlight that, in order to respond quickly to those unpredictable changes in demand, companies need to develop a fast information flow not only within their walls, but also with company's partners. Collaborative approaches developed around the entire value chain, from suppliers to retailers, and even with customers, helped companies to receive demand information sooner and more

frequently thus enabling them to respond faster and distribute relevant data analysis through their supply chains. Technological collaborative innovations allow firms to share those trends informations without any limitation of time and space, helping them to all work together to achieve the objectives of efficiently meeting customer demand. (Gangadharan, 2007) (Nenni, Giustiniano & Pirolo, 2013).

The high volatility of demand is strictly related with another fashion system characteristic, the low predictability of trends and consequently of demand. The fashion system till the '80s was an high predictable sector with standardized productions (Bailey & Eicher 1992) and limited numbers of items unsold, but the drastic changes of the fashion system, and on how people approach fashion products, that took place around the '90s made difficult for fashion firms to evaluate demand and satisfy it without incurring in higher costs or wastes.

In the last decades the literature proposed several methods of context analysis, and approaches to forecast demand, but recent analysis showed that they didn't really represented a solution for the fashion industry.

Different authors identified three main barriers in the processes of forecasting fashion demand, they found that short selling seasons, high levels of uncertainty and the lack of historical data represent elements of fashion demand that do not allow an easy evaluation of it (Bartezzaghi, Verganti & Zotteri, 1999) (Nenni, Giustiniano & Pirolo, 2013).

The first barrier was discussed in the first paragraph of this section (3.1.1.) and it is referred by the authors, in this case, to seasons because especially in the '80s and the '90s the fashion system, and its forecasts, were two season-based.

The second element is presented here as barrier to fashion trends forecasts, but can be identified as a separate characteristic of the fashion system. An high level of uncertainty is also described by different authors as lumpiness, so the feature of alternating periods of very low or zero demand and then spikes of demand (Syntetos & Boylan, 2005). A lumpy demand is characterized by high variability, and it is sporadic and nervous, becoming very difficult to forecast. The literature propose different causes of high levels of uncertainty, or demand lumpiness and can be easily assigned to the fashion system: high numerousness and high heterogeneity of customers, low frequency but high variety of customer requests, and high

correlation between customer requests (Nenni, Giustiniano & Pirolo, 2013). All those causes limit the abilities of firms to evaluate demand and forecast clearly the future trends and dynamics of the fashion system.

The third barrier, the lack of historical data, is connected with the impossibility to organize the high variable fashion demand data in time, and also with the level of product innovation that can be found at each fashion season (Nenni, Giustiniano & Pirolo, 2013).

Those barriers don't mean that fashion firms do not try forecast demand, they instead implemented more marketing approaches, and instant evaluations of the market selecting mostly customers as a forecasting unit. An example of one of this methods is the Order Over-planning, which analyze the early information that a customer generates during his purchasing process before he places his actual order taking in consideration each single customer order instead of the overall demand (Bartezzaghi & Verganti, 1995).

Other authors had analyzed how fashion giants, as Inditex, forecast demand and try to create more populated historical series as a base for forecasting methods. McAfee, Dessain and Sjoman, on their work focus on Zara and the IT technologies that it implemented, showing that Zara' team selected as forecasting units repetitive features of the products, as color or size, in order to overcome lumpiness and improve statistical forecasting methods results. The brand underlined especially the relevance of the colors in fashion system forecasting, and how this attribute can guarantee reliable results (McAfee, Dessain & Sjoman, 2007).

Despite the different methods developed, the fashion system remain a low predictable environment and companies need to accept the fact that change and instability are fixed features, focusing more of what is under their control to work fast and iteratively (BoF & McKinsey, 2018).

Patterns in the literature can be identified among the fact that firms in the fashion system need to identify reliable partners to work closely and connected, and share information among the value chain in order to develop a strong demand-driven approach able to understand promptly consumers needs.

Collaborative approaches through the years resulted into established solutions to face low predictability, and overcome the difficulties of operating without high levels of forecasting activities.

The literature identified another aspect of the fashion system as critical for how fashion firms develop their structures, and for the diffusion through the years of collaborative approaches. Fashion consumers are characterized by an high level of impulsiveness during the purchasing process, and most of the buying decisions are made at the point of purchase (Lee, 2002).

Since the '80s consumers have been always more put in front of purchasing decisions, from the presence of only the physical store and the development of teleshopping, moving through the diffusion of the e-commerce, arriving to the nowadays environment where mobile are playing an always relevant role to generate purchases. This evolving scenario challenged strongly fashion firms to innovate, or to be always updated, on the development of new points of purchase.

This fashion system characteristic affects deeply the entire value chain of fashion firms and has two main implications for how they interact with partners.

The fist is related to suppliers and their ability to respond promptly to brands' orders, allowing products to be available for consumers as soon as possible. To reach high levels of quickness and reactivity to trends' changes, firms have to create agile and flexible supply chains, relevant so it's the research of reliable partners to create strong relationships (Wahida Shahan, 2010).

The second implication of the high impulsiveness in fashion' consumption is connected to who really interact with consumers and represent an asset for brands, the retailers. In the fashion system, firms can organize their structure to have a direct contact with consumers, or develop relationships with other companies focused on the last step of the value chain in order to exploit their well developed and distributed points of sale. Since the last decades of the 20th century this decision represented a huge trade-of for fashion firms and mostly adopted a mixed approach, owning and reaching, through retailers, locations spread allover. In this scenario where distributors and retailers represent an highly relevant element of successful fashion firms' value chains, build a strong partnership became crucial for companies. Through the years collaborative approaches became essential to reach consumers and generate conversions in the fashion system, and a huge variety of form were developed.

The technological improvement in the 21st century have changed the distribution step of the value chain drastically. The possibility to reach consumers and generate conversions from their houses, or now everywhere from their smartphones, created completely new opportunities for companies and retailers, and a new typology of actors arise in the fashion system. With the development of internet technologies new companies based only on online processes started to grow and increase their relevance and power becoming, nowadays, a crucial part of fashion firms' value chain, especially for their closeness with today' consumers. Web-based platforms use technologies that not all the firms now posses or that don't result profitable to be adopted, so the only way to exploit their advantages is to collaborate with them with different levels of embeddedness, as a "complement to fashion brands own omnichannel offer, or as a stepping-stone to expand geographically into new markets" (BoF & McKinsey, 2018, 46).

Network forms represented since the '90s a reliable organizational form to develop fashion firms' supply chains based on flexibility and responsiveness, giving the possibility to offer always new products, exploiting crucial technologies, and reach consumers in the most relevant, innovative and profitable point of sales.

The fashion system evolved through the years offering an always huge variety of products to consumers. With the concept of product variety the literature defines the number of versions of different products offered by a firm in a defined time, and the drivers of difference could be size, shape, structure, features, color, appearance (Park, Velicheti & Kim, 2005). Product variety directly affects different steps of the value chain of fashion firms, generates incremental costs, and at the same time affects consumer purchase behavior.

For fashion companies, to ensure always a huge variety on the shelves represents a relevant challenge, and a competitive advantage as well. Costs evaluations results crucial on variety choices, and the literature underlined through the time the relation between those strategical decisions and the organizational structure that a firm adopt. Operational efficiency became an hard achievement increasing the product variety, and fashion firms had to build their structures taking in consideration this factor.

The literature presents often this decision between costs and revenues, when the level of variety increases, as a trade off that firms has to face to grow. The possibility for fashion firms to manage successfully this decision is connected with their structure and the flexibility to adapt to changes in the market driving managers to increase variety.

Network organizational forms allow firms to interact with different suppliers and distributors, and be able to develop collaborations to increase variety managing more easily the related costs.

Different scholars proposed an interesting approach to improve flexibility, optimize market requirements, and consequently manage increased variety, the Mixed Supply Base. Rather than interact with either overseas cost effective manufacturers or responsive domestic suppliers, the mixed supply base approach proposes a mix between suppliers with different characteristics to exploiting the advantages of all of them and increase the flexibility (Bruce, Daly & Towers, 2004).

The mixed supply base approach, as others implemented to improve supply chain agility, clearly entails the development of a network organizational structures, where different suppliers play a crucial role to achieve an efficient product variety level.

A huge variety of offered products with its mix of style-based and non-style-based products, sizes and colors creates difficulties also for what concern the processes to manage the volumes of those products.

The fashion system is characterized by a large variance in demand and consequently become relevant the number of stock keeping units. For a specific fashion product (SKU) the volume of sales is very low compared to other sectors, and demand for that specific product has an high level of volatility due to trends. It is so, extremely difficult predict how the total aggregate demand will distribute over the variety of products that are offered, and manage efficiently the different volumes of the single products (Abernathy, Dunlop, Hammond & Weil, 2000).

As to manage effectively variety, within the fashion system firms need to understand which organizational structure allow them to be flexible managing volumes, to reduce stock costs and to develop quick and responsiveness manufacturing processes. For firms that operate in this environment, collaborative approaches to create an agile value chain became a crucial choice in the last decades and always

an increasing number of fashion firms implemented networked structures (Čiarniene & Vienazindiene, 2014).

All those characteristic of the fashion system affect deeply how actors interact in this environment. A common element that can be connected with all the feature previously analyzed, that have the ability to create standards in the market, and playing a crucial role for fashion firms' success, is time. Proposing this concept the organizational and supply chain literature underline the velocity of fashion system and of the interaction among the entities (Bergvall-Forsberg & Towers, 2007). During the last four decades a strong and consistent reduction of the times all over the processes inside and outside the fashion firms, with a consequent increase of speed requested to operate successfully, took place, and fashion firms had to adapt to always new standards of quickness.

Globalization and technological improvement, consumers who wanted always more new products, and competitors proposing innovative approaches, could be identified as main factors of speed improvement within the fashion system. According to the literature, a fundamental measurement of the time in the fashion system is the Lead Time. Defined as the time between an order and the satisfaction of the request, it is a general crucial parameter to analyze economic processes. The total lead time is the sum of all the different lead times necessary to transform an input to a final output, and can be compared to the total time to accomplish all the steps of a product value chain. Scholars in the past identified stocks as a crucial element to reduce the total lead time, but due the increasing costs related and the necessity of flexibility, firms to decrease lead time moved to solutions based on the reduction of stocks and a fluidity of processes working more on the points of connection between different steps (Treccani, 2012).

In the fashion system, following-supply chain scholars, there are three critical lead times that firms must manage effectively and efficiently to compete successfully. The first is the Time-to-Market and refers to "how long does it take the business to recognize a market opportunity and to translate this into a product or service and to bring it to the market". The second is Time-to-Serve and it is more retail focused, but still crucial for the whole value chain, and its aim is to understand "how long does it take to capture a customer's order and to deliver the product to the retail

customer's satisfaction". The third is the Time-to-React and take in consideration "how long does it take to adjust the output of the business in response to volatile demand" (Christopher, Lowson & Peck, 2004, 4).

All those three times result crucial for fashion firms to evaluate their responsiveness, and even if the total time it takes to bring the products into the market is invariably longer than the nowadays time customers are prepared to wait, companies have to build an agile an reactive structure to reduce times around their value chains and operate efficiently and effectively.

Speed result a constant characteristic of the fashion system that firms have to always take in consideration in their strategic choices. The ability to respond promptly to consumers is now a priority for fashion companies and strongly affect how they develop their organizational structure.

Following the literature, for a company that wants to be able to be flexible to changes and at the same time answer quickly to consumers, a networked structure (wide supply base) with high levels of connection and integration with partners that operates, and that operates with consumer a based approach, is the best solution to succeed in the hyper fast nowadays fashion system (Christopher, Lowson & Peck, 2004) (Bergvall-Forsberg & Towers, 2007).

All those characteristics demonstrate that the fashion system became through the years a less simple, clear and ordinary environment: in it companies can not adopt standardized product driven organizational forms. History shows that networks and collaborative approaches are the most adopted solution for fashion firms to success, but that their development has to continuously update to new technologies and new dynamics of the fashion system, and every single case of collaborative approach implementation present different peculiarities.

The fashion system in the last decades changed drastically and all the actors, from raw materials' producers to final consumers, changed their behaviors and how interact among them. Phenomena as the globalization, the technological improvement, the necessity for reducing costs and the increase of customer requirements affected deeply the environment where firms interact modifying it at a pace never experienced before. This peculiar nature of the fashion system with its volatility, velocity, variety, complexity and dynamism pushed firms through the years

to implement structures always more based on reactivity and flexibility, reducing the risks of stagnation, the inability to improve their processes following environment' velocity (Nenni, Giustiniano & Pirolo, 2013).

3.1.2.) NETWORKS' DEVELOPMENT IN THE FASHION SYSTEM

Analyzing the fashion related and the organizational literature on the historical evolution and implementation of networks and collaborative strategies, a pattern could be identified on the presence of two distinct but interconnected phases. As discussed before, the fashion system in the last decades has changed drastically, but could be relevant, for the literature and the knowledge related to networks in the fashion system, understand when and what changed this environment. A clear evolutionary scenario of the past is crucial to understand the present and useful to produce insight for future strategies, and fashion is a standout amongst the most difficult fields, highly affected by global economic uncertainty, as well as particular trends and technological changes.

In the last forty years fashion firms developed a huge variety of organizational structures driven by cost reduction and the necessity of quickness, but even if those objectives are the foundation of the business strategies of fashion firms, in the last two decades the entrance in the digital era has changed and expanded this paradigm forever.

From the beginning of the modern fashion system around the '80s, to the begging of the 21st century, fashion firms implemented always more networked organizational structure based mostly on the collaboration with suppliers and distributors (Jackson, 2001). Over the new century a huge revolution took place, global economy entered in the digital era. The fashion system was extremely invested by new technologies and by the digitalization of the processes, and completely new actors in the sector arose.

The literature does not present this change from before to after the digitalization as a disruptive change, but taking in consideration the innovation pace and how deeply the whole system was affected in a short period of time, this change could be comparable to a real revolution.

To clearly understand the nowadays scenario is fundamental understand how was before and after the digitalization, and understand how the organizational structure of companies and their collaborative approaches changed. Going through a briefly evolutive analysis of both the period where fashion firms operated is useful to present the new developments of collaborative approaches of nowadays most successful fashion companies.

3.1.2.1.) Networked supply chain' solutions ('80s-'90s)

For a long time, fashion industry was characterized by stable environmental conditions, and a specific model of organization remained dominant. Entering in the '80s, increasing environmental turbulence had redefined the rules of the game. Fashion firms experienced for the first time a more prominent need of adaptability, and explored different avenues regarding organizational structures. Literature in the '90s presented a clear scenario where fashion firms operated. Different scholars stated that in the previous period of relative environmental stability, existing and dominant organization forms defined the implemented organizational variety and shaped in part the environment where they operate. But, the environmental transformations of that decade tended to affect how firms organized their structures and changed the incremental evolution pace, characteristic of periods of relative stability, to a more seesawing one that pushed firms to rethink to their structure. The new increasingly turbulent, ambiguous, and hypercompetitive environmental conditions of the '90s made necessary the development of flexible and organic organization forms to survive and success, so managers focused their efforts to create new flexible supply chain structures (Lewin and Stephens, 1993; Djelic & Ainamo, 1999).

In the last decades of the 20th century fashion firms were extremely focused on finding the best supply chain solution to face the unstable environments and reduce costs. Networked forms were developed mostly in those years to create a flexible and agile supply chain, and even if they were something not well defined and recognized among managers, the literature started to clarify this new structure, its advantages and its applicability.

Collaborative approaches were also a direct consequence of the outsourcing movement that in the '90s saw a huge variety of fashion firms moving or outsourcing their productions abroad in order to reduce costs, and networks were the solution to manage effectively those structures limiting risks and focusing on the company' core business.

Beside the huge variety of organizational forms developed, networks in the '80s and the '90s were considered for a limited range of objectives, compared to now. This does not undervalue the necessity for firms to develop network forms, because they were necessary to move and continue to operate successfully in the modern fashion system, as evidenced by concrete examples as Zara or Benetton (McAfee, Dessain & Sjoman, 2007), and helped firms to have the right approach to manage future digital innovations.

Anyway, it is interesting to notice how in this early modern period networks and collaborative approaches were only took in consideration as a supply chain solution, without considering the huge variety of aspects that the creation of a network involved.

In 2007 MacCormack, Forbath, Brooks and Kalaher analyzed the traditional collaborative approaches developed in the '80s and the '90s evidencing that many firms mistakenly applied a production outsourcing mindset to collaborations, seeing the utilization of partners just as a way to accomplish costs reduction through the substitution of internal assets with a less expensive one of equivalent expertise (MacCormack, Forbath, Brooks & Kalaher, 2007).

This type of networks' implementations, following the authors, didn't drive to real concrete changes in the way they were organized to innovate, but mostly for costs purposes, without generating real competitive advantages. Instead successful developments of networks saw firms going beyond simple costs arbitrage, "asking global partners to contribute knowledge and skills to projects, with a focus on improving their top-line" (MacCormack, Forbath, Brooks & Kalaher, 2007, 2) in order to re-designing their organizational structure to innovate effectively and efficiently. The scholars proposed a clear differentiation between the development of collaborative approaches for production and innovation purposes, and identified three critical errors of firms, that based their collaborative approaches on a

production outsourcing mindset, compared to more successful innovative network developers.

The first is a lack of a strategic implementation of collaboration. Looking only for a solution to reduce costs, consequently firms generate a misalignment with their own overall business strategy, reducing the possibility to succeed.

The second is the creation of partnership not properly organized, treating partners as suppliers and interacting with them only for procurement functions. This lack of a true exchange of knowledge and information increase the fragility of the partnership limiting the positive effects that can generate.

The third is the lack of far-sightedness. Those firms didn't concretely invest to develop collaborative capabilities and faced the challenges with existing staffs and processes, creating collaborative structures with predefined limited durability. Those three errors can be attached to a variety of unsuccessful fashion firms' strategies that weren't able to produce really competitive advantages from collaborations, for their restricted supply chain focus (MacCormack, Forbath, Brooks & Kalaher, 2007). At the opposite successful fashion firms, that were able in the '90s to create network organizational forms putting attention to these critical areas, generated innovations that competitors could not replicate, and consequently created values that prepared the perfect ground floor to walk in the digital era.

3.1.2.2.) Fashion in the digital era and the new collaborative solutions ('00s-now)

The fashion system moving into the new millennium saw the evolution of firms in a new direction. Fashion companies in the years around the beginning of the 21st century started to enter in the process of digital transformation, crucial element for successful collaborative approaches (Christopher, Lowson & Peck, 2004). Before going trough the effects of the digitalization of the processes on fashion system and on how firms collaborate, it is relevant to clearly understand what is the digitalization and what imply. Around the digital transformation and the correlated definitions it is not very easy to simply find a unique statement to use as starting point for the research. Through the years three main concept arose and were used

among the literature, sometimes with different meanings, creating a blurred ideas of this processes that affected in the last decades the whole global economy. One of the concepts is the "digitization" that essentially refers to the changing from analogical processes to digital ones without modifying the activities that the processes theirselves implied (Gartner IT Glossary, 2018). Beside this definition related to the processes, a huge variety of the scholars, use digitization referred to the evolution from analog to digital of informations, enabling a faster and cheaper exchange of bigger amounts of them (Bloomberg, 2018).

The second concept that is used by the literature is the "digitalization", and even in this case it is difficult to find a clear definition. Even if "digitization and digitalization are two conceptual terms that are closely associated and often used interchangeably" (Bloomberg, 2018). In the literature, different authors used the second one to refer to a process that restructure, using digital communication and infrastructures, how people interact (Bloomberg, 2018). Another relevant definition of digitalization is given by Muro, Liu, Whiton, and Kulkarni (2017) that in their report connected this concept mostly with the process of the use of digital technologies and data-driven information to transform business operations, and consequently the business model.

Further analysis of the different definitions of this phenomena tend to unify those two views of digitalization. Finding interconnections between the people interactions and the business processes, and showing how digitalization affect both, in a unified vision where processes are affected and people that develop them are affected to (Bloomberg, 2018).

The last concept refers to the process of digital technologies adoption in a macro perception, and it is defined "digital transformation". With those words the literature defined the phenomena that took place over the 21st century in a broader term, and refers to the "customer-driven strategic business transformation that requires crosscutting organizational changes as well as the implementation of digital technologies" (Bloomberg, 2018). Digital transformation initiatives include different digitalization projects and its main focus is on the use of digital technological innovations to manage the continuous changes that a customer-oriented strategy has to face, and require flexibility and agility (Matt, Hess & Benlian, 2015) (Bloomberg, 2018).

Taking in consideration this definition of digital transformation, the link between this phenomena and the development of collaborative approaches and networks among the fashion system is clear, and could be seen as a single flow of innovation that invested the whole sector.

The implementation of collaborations and networks, and the digital transformation process share common objectives, and are often seen by the literature as crucial elements to reach high levels of agility and flexibility (Christopher, Lowson & Peck, 2004).

The fashion system, since the beginning of the 21st century, is rapidly becoming a predominantly digital industry and taking in consideration the four main pillars of digitization, - big data, Internet of Things (IoT), platform economy and artificial intelligence - networks, look the best solution to exploit those technologies to improve fashion firms' performances, and to operate successfully in the new millennium (Textile World, 2018).

Many fashion brands implemented the digital transformation process with a fragmented approach, focusing on digitizing single processes or isolated functions, obtaining limited or very slow returns. Experts and scholars, at the opposite, identified an "urgency and a building up momentum behind digital transformation as organizations re-imagine, reshape and retool for an era in which traditional boundaries are broken" (Lay, 2018). Collaborative approaches resulted so, crucial to reorganize fashion firms for the digital environment where they operate nowadays, and where they are going to operate in the future.

The process of digital transformation that the fashion system is going through since the last two decades, it is not something that regard only firms' processes and activities, but involved the whole system, and especially shifted the role of consumers from passive observer to central element. They are no more satisfied simply buying products, the exponential development in the utilization of advanced technologies have enabled them to interact, belong, influence and be the brands that they wear, caring about how they look, and about the perception of the goods they buy and own, in public and on social media (Lay, 2018). Since the beginning of the century, the growth of consumers' use of digital channel before, during and after their purchase, was incredible, and fashion firms had to adapt to this totally new

scenario where the consumer-brand relationship moved to completely new standards (Textile World, 2018).

This new environment, characterized by huge amounts of data, quickness, online social interactions, digital marketing techniques, and e-commerce platforms, created totally new opportunities of business and way to generate values. Firms focused on the use of specific technologies that enable to interact effectively with the digital world, or focused on specific new "digital steps" of the value chain, arose and thrived, becoming crucial partners with the main fashion brands and retailers. Those new actors of the fashion system have reached levels never expected before, as the example of the online platform Amazon that recently has reached \$1 trillion of total market value (CNN Money, 2018) or the only fashion related seventeen years old english platform ASOS that reached £5.06 billion in market value (London Stock Exchange, 2018).

The ability to innovate and to face the new dynamics of the fashion system, pushed fashion firms to research the best partners to manage successfully new technologies and gain competitive advantages.

Brands in the digital era understood also the necessity to find completely new partners to interact conjunctly with the new fashion system and especially with consumers, generating collaborations never seen before, with completely different aims and driven by completely different parameters.

In this scenario where in three decades the main focus of fashion system moved from production to consumers, supply chain' processes continued to be incrementally improved to satisfy the always changing demand, working on speed, reactiveness and reducing costs. The consumers' technologies adoption velocity is reflected also on the digitalization of production processes, creating always more closer networks that go over the physical and time barriers. Products nowadays could be digitally conceived and designed, produced by robots piloted from other parts of the planet, and then electronically sent, tracked, distributed, and marketed to digitally connected consumers that probably purchased them from their mobile phones (BoF & McKinsey, 2018).

In the last twenty years, the fashion system changed drastically tanks to digital technologies, and even if this evolution to a completely new environment seems as a big step, the scalability of digital transformation and the always increasing

innovation' pace will remodel this consumer-based sector to always new scenarios (Lay, 2018).

Fashion firms to implement strategies to operate successfully and create value into the nowadays digital world, and lay the foundations for more comprehensive change tomorrow, should identify the templates set by digital leaders and forge to collaborate, sharing with those crucial partners unique digital drivers that will lead them to manage effectively and efficiently digital innovations and increase digital embeddedness (Textile World, 2018).

3.2.) Networks and collaborative approaches for branding purposes

Innovations developed in the last decades offered to companies interacting within the fashion system a huge variety of possible strategies to generate value and face the always more difficult environment where they operate.

Through those years consumers became always more sensitive and reactive to fashion system' trends thanks to the improvement on social and communication technologies, that allow them to connect to a velocity never experienced before. This crazy frequency of interaction between consumers, firms and all the actors of the fashion system represented a threat for a lot of different actors that weren't ready to operate sustaining this speed, but represented also a huge opportunity for who were able to exploit those interactions to create a strong connection with consumers, generating more conversions through different channels.

The consumer-centered approach of nowadays fashion firms put an extraordinary attention to the interactions between people and firm, and an effective and efficient management of the brand of a company became crucial.

The increasing work of fashion firms developing technologies to manage interactions with consumers, that try to reach always more of them and more effectively, through the years gained constantly importance, and different experts presented them as fundamental techniques to succeed. Customer Relationship Management, Efficient Consumer Response, customer equity, relationship marketing, customer database management, e-relationships and proximity marketing are just examples of tools used by fashion firms to try to obtain the

maximum result from consumers interactions, trying to generate competitive advantages (Kapferer, 2008).

Even with this continuous development of technological innovations that allow a more profitable interaction with consumers, different experts noticed that all these useful techniques soon lost their potential to create a permanent competitive advantage. In a fast and unstoppable environment as the fashion system, the diffusion and the sharing of those procedures, became rapidly a standard, used by all competitors, reducing the effectiveness of the advantages previously generated (Kapferer, 2008).

In this scenario it is not easy for firms understand how to create lasting competitive advantages that enable them to create a special and unique connection with consumers, that will consequently increase sales and maintain a loyal relationship with them.

Taking in consideration the society where consumers live, extremely based on a materialistic perception of things, people want always more from their consumption. The mere functional use of products is no more enough, and consumers go beyond to meanings attached to their consumption, and the fashion system could be taken as one of the most relevant examples of this concept (Dittmar, 2008) (Ashikali & Dittmar, 2012). In this scenario fashion firms have to understand the importance of the values connected with their brands and manage all the interactions through the points of contact with consumers trying to enhance them.

Since the '80s, as previously analyzed, consumption in the fashion system changed. People started paying very high prices for companies' products with recognized brands, actually purchasing the ideals and the values attached with those products, also reducing the attention to other aspects, or at the opposite choosing cheaper no branded solutions. Digitalization through the years worked as a leverage for the different values association process to single products, and the increasing touch points between brands and consumers pushed firms to put always more attention on every kind of interaction with people, online and offline.

Around the beginning of the 21st century fashion firms started to evaluate the opportunity to gain advantages by collaborative approaches based on the creation of products conjunctly with specific partners, already part of their networked organizational form (for example retailers) or not, sharing knowledge, technologies

and different assets, but with the main aim of associating the two brands and the values connected to reach new consumers and enhance the perception of both brands.

Since the first experiments of brand collaborations in the fashion system the scenario has deeply evolved to a situation where cross-brand collaborations have become one of the defining features of fashion (Gordon, 2018). The combinations of different brand values consequent to actual collaborations, in the last decade, ranged among a huge variety of aims, reaching really successful results and even ruin themselves. Fashion brands developed those strategies among each others, or with other actors within the fashion system, or even with entities completely extraneous of fashion system, generating completely new products or simple special edition of already existing ones.

To clearly understand how collaborative approaches evolved in this new direction becoming a crucial element of the nowadays fashion brands' strategies, from the most luxurious to sportswear or streetwear ones, is relevant understand the dynamics of brand management and the correlated objectives that fashion firms tried to achieve. Result also extremely important the analysis of real cases of fashion firms that through the years thanks to concrete collaborative approaches gained an incredible visibility that consequently generates high conversion rates through their different channels.

History clearly shows that in the fashion system, collaborations became always more a foundation for supply chain structures, and to face the digital transformation of firms. However nowadays collaborative approaches are applied to the managerial activities that interact at the most with consumers through firms' different channels, and represent one of the main ways to generate a stable and concrete competitive advantage in the fashion system, the brand management.

3.2.1.) THE GROWING IMPORTANCE OF THE BRAND MANAGEMENT IN FASHION FIRMS

Brands are fundamental aspects of modern society and what really differentiates a company or a product from others, entering all spheres of our life: economic, social,

cultural, sporting, even religion. Because of their role, brands were analyzed by scholars with a variety of different perspectives that move from macroeconomics, to microeconomics, sociology, psychology, anthropology, history, semiotics, philosophy and so on (Kapferer, 2008).

Through the years different the definition of what is a brand generated a sort of disagreements and and different were offered by the literature. More difficulties were faced on the definition of the value of a brand and how to evaluate it, also because different companies since the '80s started to insert brands as assets in their balance sheet.

The American Marketing Association uses now the definition presented by Keller (2003, 3) to define what is a brand, and identify it as a "name, term, sign, symbol, design, or a combination of them intended to identify the goods or services of one seller or group of sellers and to differentiate them from those of competition." This definition put the attention on what concretely is a brand and following the work of Keller himself, he identified the name as the crucial element of differentiation because of its ability to influence the market and buyers. Relevant elements of this definition are the identification and the differentiation aspects, identified as crucial to create a successful brand.

Analyzing this definition has to be taken in consideration two characteristics of brands. The first is their intangibility and the second is the fact that brands are conditional assets, so they need to be considered in conjunction with other material assets such as production facilities (Kapferer, 2008).

The nowadays literature identify also how a brand should be, and presents five characteristics that it need to have in order to generate a competitive advantage. Scholars identified consistency, adequateness, distinctiveness, protectability and the ability to suit the consumers' desires as crucial elements of a successful brand (Laforet, 2010). All those are really difficult aspects to achieve in the nowadays environment for the presence of an infinite number of brands but as to be always taken in consideration by managers in the creation and the development of an existing and a completely new brand.

The majority of experts, beside the importance of what concretely is a brand, focus on the concept of brand equity, so the goodwill that an established brand has built up over its existence (Shimp & Andrews, 2012). This value can be considered

following two different perspectives, the firm that owns a brand ones and the consumers ones.

Starting with the firm-based viewpoint of brand equity, it refers to the outcomes extending from the efforts to enhance a brand's value, to the perception of the brand of firms' various stakeholders. Obviously increasing the value of the brand, it will generate a group of positive outcomes that include increasing the market share, increasing the brand loyalty, the possibility to charge premium prices and even the possibility to earn a revenue premium (the differential between branded products and normal ones of the same company) (Chaudhuri & Holbrook, 2001).

Moving to the perspective of customers, a brand can be defined to possess equity to the extent that people are familiar with the brand and have stored in memory a set of mental associations, which add to the perceived value of a product or service, unique (exclusivity), strong (saliency) and positive (desirable) associations (Keller, 2008). Relevant so is the role of cognitions, the mental associations, that consumers attach to brands, that are not simple homogeneous feelings, but an intense

Different authors subdivide the brand equity in two forms of brand-related knowledge, brand awareness and brand image.

affected by an unlimited variety of factors.

combination of emotional component that is different for every person and is

Brand awareness is the knowledge of a consumer connected to the ability to identify a brand name, thinking about a particular product category and the ease with which the name is evoked (Shimp & Andrews, 2012). Scholars identified two levels of brand awareness, brand recognition that reflects a relatively superficial level of awareness of a brand, for example the ability to identify a brand if it is present on a list or if hints are provided, and brand recall that indicate a deeper form of awareness and the ability of consumers to retrieve a brand name from memory without any reminders (Keller, 1993).

The second element of consumer knowledge that part of the brand equity is the brand' image and it represents the associations that are activated in memory when people think about a particular brand. Those associations can be of different type, so refer to product-related attribute or not, to the different benefits connected to the brand (functional, symbolic, experimental) and to an overall evaluation of the brand. The associations present in the mind of consumers to have a successful brand have

to represent favorable links to the brand and might be held strongly in the consumers' memory, and also if some of them are unique in comparison to other brands this generate a special relationship between brand and consumers (Shimp & Andrews, 2012).

Different scholars presented brands as real entities that can be described through the analysis of their personality using different adjectives. Aaker, Fournier and Brasel (2004) identified in their work five personality dimensions that can be used to describe the majority of the brands and easily compare them.

Sincerity, excitement, competence, sophistication, and ruggedness are the five elements of brand personality and each brand can posses some degree of each of these dimensions, and together can be used to describe clearly the associations connected to a brand.

Sincerity dimension is associated with down-to-earth, honest, wholesome, and cheerful brands; excitement is related with daring, spirited, imaginative, and up to date brands, while brands with an high level of competence are associated to reliability, intelligence, and success. Sophistication refer to luxurious, upper class and charming aspects of a brand, and ruggedness at the opposite express the toughness and the outdoorsy dimension of a brand (Aaker, Fournier & Brasel, 2004). Brand result a complex and deeply articulated concept that firms has always to keep in mind developing their activities in the nowadays environment, and especially in the fashion system where consumers purchase with a clearly attention to the brand even before evaluating the single specific product, the connected meanings that brand managers create and communicate to their target market are a crucial aspect to succeed. This unique set of associations that a brand aspires to create and maintain, is often called brand identity and could differ in different aspects from what really consumers perceive and think of the brand, because of the expectations and comparisons activities in consumers' minds (Laforet, 2010).

Firms since the '80s started to analyze, plan, implement, and control brand identity through the development of the more diversified activities trying to appealing to consumers' functional, symbolic, and/or experiential needs (Park, Jaworski & MacInnis, 1986).

Starting with an appeal to functional needs, companies through brand management activities have to attempt to satisfy consumer's consumption-related problems. The

symbolic needs often refer to the consumers' desire for self enhancement, role position, group membership, and belongingness, and firms especially in the fashion system have to clearly understand what are the main symbolic associations to their brands in order to develop specific activities to enhance or modify them to generate competitive advantages.

The last needs that firms have to appeal are the experiential ones, and are connected to the ability of the brand to transmit messages that provide sensor pleasure, variety, and/or cognitive stimulation (Park, Jaworski & MacInnis, 1986) (Shimp & Andrews, 2012).

Since the '80s, consumers' needs changed drastically. Taking in consideration only the fashion system, as presented before, the fast pace of change and of creation of always new trends has reached an extraordinary level. The velocity of fashion system and the increased frequency of interactions brand-consumers driven by digital technologies challenged firms even to maintain their brand identity through the single years, and push them to allocate always more resources on brand management activities.

Trying to appeal to those consumer needs is crucial to develop a strong and concrete brand identity that will hopefully lead to enhance brand equity, and reach the ultimate long-term objective of brand management, create brand loyalty (Dick & Basu, 1994).

Brand loyalty can be defined as the most beneficial brand element to firms, and it is based on the commitment of consumers to continue to buy a product, or advocating a brand, and also on any other positive behavior that promote a brand (Pappu & Quester, 2015).

Consumers loyalty to a brand result so a crucial element for fashion brands because helps to increase predictability and security in demand, one of the main problem of nowadays fashion system, but also reduces the effects of other brands activities to increase their market share, raising barriers. Clearly for a brand having an even small but intense loyal customer basis have relevant positive effects also on brand equity, increasing the value of the brand and easily attracting other consumers to try the brand (Kotler & Keller, 2011).

Analyzing deeply brand loyalty following the work of Thomson, Macinnis and Park (2005), it is interesting that they centered the concept of brand loyalty on the

emotional attachment that consumers have to the brand, based on the relationship and the identification with unique characteristics of the brand. This attachment is generated through such increasingly positive interactions with the brand in the time, that consumers can arrive to don't even enter in a purchase process and choose a product only for loyalty and previous experiences.

Through the years fashion firms implemented every kind of brand management activities trying to increase brand equity and build a loyal relationship with consumers, obtaining different results. In the last decades the fashion system lived a continuous increase of speed and reduction of prices, increasing demand for fashionable products and consumers expectations on them (Black, 2008). This drove fashion brands to two main dynamics of how they operate, and consequently manage their brands, in the nowadays fashion system.

The first is connected to the rise of cheap fast fashion firms that have the ability to alter styles efficiently offering the right products at the right time at a cheaper price, reducing consumers' expectations and increasing their satisfaction due the limited monetary effort. Those brands through the years faced real difficulties in cultivating brand loyalty and an high level of interchangeability among brands, that absolutely do not increase brand equity (Parguel, Delécolle & Valette-Florence, 2016).

On the other side, high price fashion brands that based their success on innovation, design, exceptional standard of quality, appealing to consumers much more for their exclusivity, premium prices, status and image, faced difficulties to operate in this fast pace environment and tried always more to develop brand strategies focus on emotional attachment to the brand (Cailleux, Mignot & Kapferer, 2009).

Those two dynamics are used by different experts as the extremities of the full diversity of brands that operate in the fashion system and show the two main directions where this chaotic environment is going. If we also consider also that many brands in the fashion system nowadays are still wondering how to interact with consumers in the digital world, and how to present their brand heritage and identity through digital devices, brand management acquires an always increasing importance.

Any digital manifestation of the brand connected or not with offline activities has to consider brand values communicated and must be created to match the consumers' needs. Reporting Roger Lay (2018), Digital Marketing Lead of Deloitte Digital

Switzerland: "A misaligned or generic digital offering may actually widen the digital divide and even pose a threat to brand and reputation".

Clearly the importance of brand management nowadays is growing, and is seen by managers as one of the main crucial aspects to succeed. The development of a "favorable brand image, brand equity, and strong loyalty does not happen automatically" (Shimp & Andrews, 2012, 38) and fashion firms have to sustain a huge amount of marketing and communication activities in order to improve their branding results in the nowadays fashion system, and clearly the analysis of experts in the last decades showed this necessity.

Taking in consideration the environment where fashion firms operate and the exponential opportunities offered by digitalization, a huge diversity of brand strategies have been developed by fashion brands trying to reach diversified results. One of the brand strategies that is being increasingly implemented to increase brand equity and shape consumers associations is called by the experts, leveraging, and exploit the associations that already exist and are diffused among people' society and culture (Shimp & Andrews, 2012). Leveraging could be defined as a macro strategy that can take different directions and be developed using different actors of the nowadays fashion system.

Already in 2003 in Keller' article "Brand Synthesis: The Multidimensionality of Brand Knowledge", a schema (Table 5) that display clearly the actors of brand leveraging activities was presented. The four main direction of leveraging strategies involved people, places, things, and other brands.

A pattern can be identified analyzing this schema, all of double sense links assume the presence of a sort of collaborative approach with the aim of leveraging associations by creating connections with other elements that already possess well-known meanings and characteristics (Shimp & Andrews, 2012).

Even if created in 2003 this schema remain still a simple but relevant vision of how brands implement brand strategies based on the interaction with other entities.

Analyzing more recent concrete cases and the literature of the last decade, immediately, this schema appears as a mirrored representation also of the nowadays environment, more than twenty years later, showing a brilliant modernity.

The use of it, as starting point to find patterns in the nowadays fashion system, helped researchers to understand how the complexity and the continuous changes

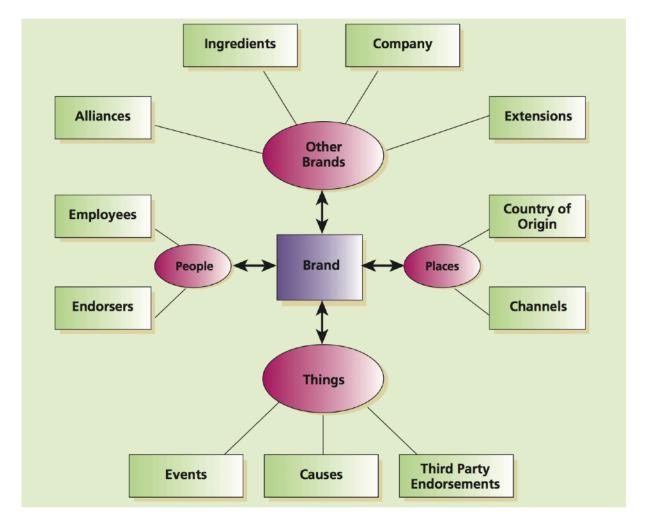


Table 5 - Keller, 2003

of the environment where fashion brands operate, pushed firms to rely always more on leveraging strategies. Where branding strategical activities based on collaborative approaches, are developed to achieve equity-building objectives. Collaborations result so a crucial element of successful brand strategies, and taking in consideration the large diffusion of networked organizational structure among fashion firms, a common line can be identified showing how the fashion system is an environment that embrace collaborative approaches and how collaborations assumed through the years a pivotal role in the different functions of fashion firms. Driven by a vision always more close and focus on consumers, collaborations reached what is really in contact with them and it is present in their mind, the brand.

3.2.2.) COLLABORATIVE BRANDING APPROACHES

The nowadays fashion system presents brand collaboration as an ideal way to speak to the visual and cultural complexity of consumers (Gordon, 2018), but analyzing the literature is clear that is tremendously difficult to identify what concretely is a brand and what can be defined as a proper brand collaboration. In the frame proposed by Keller in 1993, leveraging strategies differentiate visibly the development of a collaboration with people, places, things, from what he consider other brands. As the fashion system evolved through the years, the concept of brand connected to it did the same, blurring the boundaries of what concretely is a brand, moving forward from the simple name, or icon definition.

Different actors (people, institutions, cities, event, places exc.) started to act and manage their activities as true brands with associated set of values (Kapferer, 2012) and interact among them to enhance both brands' equity and profitability. Different experts supported this vision, viewing brands as "much more than a name or a logo and identifying brands as everything and everywhere (Pallotta, 2011) (Gallucci, 2018).

With the growing diffusion of digital points of interaction with consumers, the concept of "everything is brand" reached a total new level and firms started to care about touch point with consumers "at every level and in every detail, from the big things like mission and vision, to your people, your customers, and every interaction anyone is ever going to have with you, no matter how small" (Pallotta, 2011). In the last decade different scholars analyzed consumers social behaviors (Cova & Kozinets & Shankar, 2007) showing how people empowered by digital technologies as social media can concretely co-create value, "by giving their contribution to new product development process (Füller, Matzler & Hoppe, 2008), brand meaning (re)definition and other marketing activities" (Rossi, 2015, 1886).

This ability of consumers to widely create and share their own contents affected deeply how firms manage their brands, increasing complexity. The consumers digital activities characterized by a total new level freedom of interaction can not be controlled by firms, must be guided to a co-creation, in order to drive mental associations to build the desired brand equity (Ind, Fuller & Trevail, 2013).

In this modern fashion scenario, where an always increasing variety of subjects operate as brands and where technology created always new influential points of contact, the collaborative approaches, foundation of the leveraging brand strategies. can be redefined from Keller' vision of four separate directions to a cloud, or a network, of entities that interact creating net of brands' collaborations. All the different co-developed activities with the variety of actors part of the brand' network can be seen as brand collaborations, so it is clear the importance of managing all of them effectively to create or modify brand identity, to increase brand equity and brand loyalty, and consequently generate conversions. Fashion brand collaborative strategies can represent a successful option "to enter new markets more confidently and increase brand awareness in a more efficient way. They are also a way to amplify their appeal by becoming part of a whole that is greater than the sum of its parts" (Bellissimo-Magrin, 2017). Find the best partners and align all the omnichannel strategies represent always a challenge to develop successful collaborations, but can lead fashion brands to grow, reduce costs, increase the reach, and so generate a concrete added value to a brand.

Few experts through the years tried to organize all the different collaborative approaches that brands can develop proposing a macro division between collaborative marketing activities and collaborative branding activities (Stec, 2013) (Steffens, 2018). Both of them are based on collaborations and partnerships to increase both individual marketing efforts and clearly shape associations and values that consumers attach to the two brands. The main difference is on how activities are executed to reach collaborative brand objectives.

Collaborative marketing (co-marketing) is defined by Carly Stec (2013) as the effort of "two like-minded brands to align their marketing efforts to promote each other's product or service". The primary aim for firms' co-marketing campaigns is to obtain visibility, reach, expenses and sales results that working alone could have not been accomplished. This technique benefits also partners, allowing them to share information, knowledge and resources easily, saving money and time, and create new connections among a common operative environment (Stec, 2013).

Relevant is the impact of co-marketing activities in brands' credibility. All the actors of an ecosystem will perceive the high level of trust that others are willing to invest in your brand (Stec, 2013).

Co-marketing, following different authors, result more effective when brands have similar personas and a common way to market their products, even they are completely different. "Not surprisingly, the Internet has made the option of collaborative marketing easier than ever" (Williams, 2013) reducing time and costs, and allowing firms to implement collaborative marketing solutions to reach the new shared audience (Steffens, 2018).

Focusing on the fashion system, co-marketing strategies are well established solutions used by brands to reduce marketing costs, share risks, and model consumers' brand perception (Eunha & Niehm, 2010). The digital wave that hit the fashion system in the 21st century pushed the diffusion of those techniques among fashion brands, driving also to the arose of new entities or platforms dedicated mostly to the development of collaborative marketing strategies. Those subjects facilitate all the steps, from the research of the right partners to the analysis of the results, to develop successful co-marketing strategies.

The second direction of collaborative approach that experts identified is called collaborative branding (co-branding), and even if different authors often interexchange the two, following the clear division presented by Stec (2013) and Steffens (2018), co-branding techniques are based on "a marketing arrangement where two different brands join forces to create a product or service indicative of both their identities". With this definition appear the main difference of co-branding strategies from co-marketing ones, the conjuncted creation of a product that contain both element from the brands involved. The primary aim of co-branding strategies is to combine brands' markets, reach and awareness, introducing to their audiences the partners and vice versa (Steffens, 2018). Those strategies generate also cost advantages from the subdivision of the new product' marketing costs, and the ones related to the entire development of the product, thanks to shared technologies, knowledge and information (Stec, 2013). Co-branding strategies are developed to create synergies, that advantage both brands but implemented to obtain specific brand results (Steffens, 2018).

Co-branding can be seen as part of a co-marketing strategy, even if it needs a more accurate research of the right partner and, especially, of the right product to propose to consumers. Endeavor similarity and buyer personas receptivity are seen by experts as two crucial elements to find the right partner to develop a co-branding strategy (Stec, 2013).

The fashion system in the last decade saw an incredible diffusion of co-branding strategies, and experts understand that "collaboration within the fashion industry has become an important, value creating concept" (Eunha & Niehm, 2010). Fashion brands though collaborations pursued a different variety of competitive advantages, attributable to tangible aspects as design and technology applications, and intangible aspects such as the leverage of emotional and psychological positive associations in customers' mind (Eunha & Niehm, 2010). Successful fashion brand collaborations generate a relevant image enhancement effect (Samsung Design Net, 2012) and easily produce buzz through the offline, and especially online channels (Stec, 2013).

Fashion co-branding activities design and plan visual products to change of reinforce positioning and differentiate brands from competitors at a moderately limited cost than develop new items, and at the same time maintain and combine the identities of partners (Yang et al., 2012) (Kim et al., 2014).

Even if previous literature on fashion collaborations has been mostly exploratory research and result still limited, experts and scholars could not avoid to consider collaborations as a crucial brand strategical aspect of current fashion system. The variety of brands continuously involved in the creation of co-branded products nowadays, represent a relevant concrete element to underline the importance of collaborations for fashion firms success, so much that became for different of them the central element of their business strategy.

I take as an example the development of Vetements, fashion brand based in Zurich, private owned by Gvasalia's brothers since its foundation in 2014. This brand was able to generate in 2017 revenues approaching \$100m (Socha/WWD, 2017) becoming one of the most successful fashion brands of the current era. It debuted its Spring/Summer 2017 collection at Paris Couture Week proposing only products developed in conjunction with eighteen different brands, adding Vetements' style approach on what each brand does best, exploiting the expertise of others.

Analyzing Vetements' success it is clear how collaborations are growing a more and more relevant aspect for fashion brands and also a basic concept for their branding strategies (Gordon, 2018).

Co-marketing and co-branding strategies are presented by the literature, and supported by concrete cases, as successful activities for fashion brands. However relationship with partners can present few limits, mostly connected with the necessity of high coordination and the complexity to build up the collaboration from a legal and contractual perspective (Kotler & Armstrong, 2009).

Regarding coordination, fashion firms that decide to develop a collaborative marketing strategy or a co-branded products have to ensure to align both advertising, promotion and marketing efforts to create a unified communication, and do not incur in differences that could generate confusion and damage the campaign, or even worst the brands involved (Fava Neves, 2007).

Co-marketing and co-branding activities involve firms' value chains completely, from the bottom to the top, and the coordination of them depends largely on their structural flexibility. Rigid internal polices, conflict of interests, budget rigidity, different marketing priorities, different programmed time schedule, and even geographical distance can obstruct fashion brands from develop successful collaborations (Fava Neves, 2007) (Kotler & Armstrong, 2009).

Legal and contractual issues could be other factors that generate difficulties during the development of collaborative strategies, especially if developed internationally and between large corporations. Brands are mostly protected by licensing and other legal limitation, that could restrict creativity and innovation during the design process, reducing collaboration effectiveness (Kotler & Armstrong, 2009).

Aligning the marketing and branding strategies, and consequently the value chain, of collaborations' partners clearly presents risks. Success is no guarantee, and the outcome of a co-marketing and co-branding strategy could not represent what expected by the brands and the whole stakeholders. Audience could not understand the collaboration and not perceive properly what brands tried to communicate.

Among partners also could emerge some problems related to an unequal effort made by the brands that will generate instability and drive to unsatisfying results (Bellissimo-Magrin, 2017).

The experts focusing on the solutions to overcome those risks of co-marketing and co-branding strategies present different aspects of collaboration management that help to improve coordination, and avoid unexpected and unsuccessful outcome. Communication among partners is presented as a crucial aspect to develop successful brand collaborations. "Meet frequently to ensure cohesion" (Fava Neves, 2007, 184), "Keep a regular schedule of communication to keep everyone on track and on message" (Bellissimo-Magrin, 2017), and the definition of clear shared objectives and expectations in a specific time frame, are only few of the managerial activities that can help partners to overcome coordination problems. Another frequent aspect presented by experts as helpful to develop a successful brand collaboration is the measurement activities during all the process to track results and understand clearly the reached objectives of both brands (Fava Neves, 2007). The ability to avoid problems and difficulties during a brand collaborative process is strictly related also to one of its first step, the partner selection. Choosing the right partner is an activity that can affect the whole process and critically determine the success of a collaboration. Understanding what "each brand brings to the table and respect the expertise each has" (Bellissimo-Magrin, 2017) to really exploit everyone most relevant skills, and analyzing deeply the possible partners, their brands, their organizations and how they operate is crucial before implementing co-marketing or co-branding strategies (Fava Neves, 2007) (Stec, 2013) (Bellissimo-Magrin, 2017). Since the beginning of the 21st century, fashion firms have implemented an unexpected amount of collaborations. More then the significant quantities, what is more relevant and surprising is the diversity of genres and characteristics of the partners and of the outcome (Kim & Ko & Lee & Mattila & Kim, 2014). Firms trying to achieve different branding objectives, that will positively affect the whole firms' value creation, relied on collaborative approaches trying to differentiate their brands from competitors.

In this scenario, novelty, uniqueness, and the ability to create trends more than follow them, became crucial characteristics of fashion brands. The research of always innovative partners pushed firms through the years to implement brand collaborative approaches with an always more diversified variety of subjects, that experts subdivided in within-business and inter-business collaborations. Following the schema presented by Kim, Ko, Lee, Mattila and Kim (2014, 352-353) the

collaborations within-business are categorized into "fashion brand and fashion brand, or fashion brand and fashion designer", and the inter-business collaborations are sorted by "fashion brand and artist, fashion brand and celebrity, fashion designer and artist, and fashion designer and celebrity".

Taking in consideration the current fashion system, the experts' definition of brand, this definition could probably delimit excessively the range of partners that fashion brands chose through the years to collaborate with. New dynamics and trends are always arising among the fashion system, and the necessity to generate new associations and the connected values correlated to them, made firms going out the boundaries of the simple triangle - art, other brands and celebrities collaborations - presented by Kim, Ko, Lee, Mattila and Kim. One of the most relevant new dynamics that absolutely started to influence fashion consumption is sustainability (Henninger, Alevizou, Goworek & Ryding, 2017), and firms from the sportswear', to fast fashion' to luxury' brands are always more taking in consideration this aspect on their brand strategies and on their global business strategies.

Fashion firms, in the last decade, increasing their strategical consumer orientation used collaborations to fulfill new needs of sensitive consumers without limiting the diversity of partners (Rollet, Hoffmann, Coste-Manie're & Panchout, 2013). This showed the fashion system openness and how it is driven by always changing dynamics.

The flexibility of nowadays fashion firms, requested to face the environment where they operate, match perfectly with the one of the brand and collaboration concepts, and allow firms to implement branding collaborative approaches without no limits. However the high level of coordination requested, the success of fashion brands' collaborations is undeniable and the majority of fashion brands are adopting this approach as foundation for their brand strategies reaching relevant results that were not able to generate before. Collaborations became so the media to achieve objectives that use branding purposes to concretely increase sales and generate competitive advantages that help fashion firms to guide the fast, chaotic and unpredictable fashion system and that will last through the years.

4.) Case study: adidas' "Creating the New" business strategy and the collaboration-based innovation model

4.1.) adidas networked organizational structure - historical overview

The fashion system through the years, as presented by the literature, changed drastically, and firms had to try to respond promptly to those new dynamics, even redesigning completely their structures and their business strategies.

To clearly show how collaborative approaches moved from being applied only to supply chain processes improvement, to an intense use also within brand strategies, the analysis of a concrete case result pivotal to find patterns among this fashion firms evolution.

In nowadays panorama of fashion companies, it is easy to find different examples of brands that are using collaborations as an element of their business strategies, or for more branding related purposes. But to really understand how collaborative approaches are now becoming core element of global fashion enterprises' business strategy, is relevant to find a company that really saw in collaboration the way to innovate.

As previously analyzed, during the years, fashion firms changed radically the main focus of their strategies, from a productions and cost reduction vision, mostly diffused in the '70s and the '80s, to the modern consumers based business vision. Few firms since the beginning of their histories, even before the '70s, have been consumers focused, and were able to build, around this strong central element, a multi billionaire company.

Probably for the different attitude and also the different characteristic of its consumers, a specific company was able to develop innovative approaches to the fashion system, moving from a specific niche to becoming one of the most influent fashion firms worldwide.

adidas, since its foundation in 1949, had only one focus, "to work for the best of the athlete" (adidas group, history, 2018). This attention to final consumers of their products allowed them to move through the time and different phases without never

loosing a consumer-based approach able to create the perfect environment to innovate.

The history of adidas is deep of important events, but few of them present a relevant significance to understand how this multi-sport specialist became an innovator of the fashion system, and how adidas was able to collaborate with its stakeholders to reach crucial competitive advantages.

The first products realized by Adi Dassler in his factory in the small town of Herzogenaurach were shoes, mostly for athletics competitions and football players, and since the begging their materials and their unique design with the three strips, distinguished them from the others. In 1967 adidas presented, working closely with Franz Beckenbauer, its first tracksuit model, becoming the first piece of apparel for the german company. This strategy open a new market for the brand, that was one of the first to propose a total look for athletes.

The ability to work closely with athletes, developing their products together, constantly improving their performance was one of the main characteristic that in the '60s and the '70s made adidas grow and became an international staple for performance and style.

The three stripes, with their recognizable look and their exposure on the most relevant athletes, and at the most relevant sports events globally, started to diffuse more and more outside of the track or the court, becoming an icon for the new generations fashion taste entering the '80s.

The '80s represented for adidas a new era after the death of its founder in 1978, and the took over of Adi's son Horst, with the support of his mother Käthe. The son was one of the main inventor and promoter of the sports marketing, and was able to drive the company through relevant innovations as Micropacer (1984). adidas in the '80s really strengthened the brand' fashion attitude, representing a staple for different emerging culture and subcultures, as the hip-hop and streetwear arising one, with disruptive strategies as the collaboration with the US-based hip hop group Run DMC in 1986, that set "the everlasting street fashion trend off but also marked the birth of non-athletic promotions in the sporting goods industry" (adidas group, history, 2018).

The beginning of the '90s represented a tough period for the German brand. After the sudden death in 1987 of Horst Dassler, the international company became a

corporation in 1989 and suffered for unsuccessful managerial decisions that generated repeated loss and stopped its continuous growth.

The ability to invert this fall can be connected to the 1993 starting governance of Robert Louis-Dreyfus, and his ability to turn "the sleeping giant from a sales- to a marketing-driven company" (adidas group, history, 2018) and started to grow again, becoming public in 1995. This new approach to the market of the German company, based on a strong analysis of consumers using data and digital technologies, could be seen as a totally new innovation, but enlarging the picture of this new direction of adidas, an interesting parallelism could be found with the throwback extreme focus of Adi Dassler for the users of their products, the athletes.

Walking in the new century, adidas added a new member to its team, acquiring the Salomon Group and becoming one of the Germany's 30 largest quoted companies, with the name adidas-Salomon AG (adidas group, history, 2018). At the beginning of the 21st century another strategical decision influenced adidas business structure, "in addition to its sport performance offering, adidas was the first in the industry to introduce a new lifestyle segment, focusing on sports-inspired streetwear" (adidas group, history, 2018), understanding how sport brands really operates in a bigger scenario, the fashion system.

This strategic decision represents a crucial step to understand the current branding approach of the firm and was also marked since the beginning with three of the most enduring collaborative approaches of the fashion system. adidas to enhance the associations with its brand developed the collaborations with the fashion designers Yohji Yamamoto (2002) and Stella McCartney (2004), and a never seen before partnership with the automotive staple Porsche (2007).

Analyzing the 2000s brand strategy of adidas, those collaborations can be defined as the first developments of co-branding strategies, and taking in consideration that are still part of the differentiated offer of adidas after more than ten years, represent by theirselves successful examples.

Yohji Yamamoto', Stella McCartney' and Porsche' collaborations with adidas presented during the years an high involvement between the designers and the brand, and were not the only collaborative approach that adidas implemented. The partnerships with the most successful athletes from the whole variety of sports, the

connected institutions, and others artistic, musical, cultural and social background influential personalities, were crucial elements of the 2000s brand strategy of adidas. Using the lens of the previously presented extended definition of brand, those collaborations could be clearly seen, with different levels of involvement, as brands collaborations, and thanks to them adidas brand equity grew, enhancing the perception of fashion lifestyle brand without loosing the performance attitude. In 2005 adidas and Salomon went to different directions, and one year later the German brand acquired Reebok, one of the well-known sporting goods' brands, creating a single unified group, but still maintaining separated the two brand identities. While Reebok went through a rebranding in 2011 to bring back its fitness DNA that made its success in the '80s and appeal to new sport categories as Yoga, Dance and Aerobics, adidas continued on its way to be a brand able to "offer apparel and footwear for every sport, every fashion, every style, whether you are an athlete or fashionista" (adidas group, history, 2018).

adidas through the years continued its development achieving better and better results thanks to its strategy focused on appealing sport, street and style consumers with a single well defined brand.

Technological innovation was always absolutely a priority for the German brand, that since the beginning of its history introduced a series of relevant breakthrough innovations. Since the '80s, gradually, most of the production was outsourced to factories located in the Far East, especially china and Vietnam, reaching through the years incredible performances of efficiency, effectiveness and overall quality of the products (Di Mauro & Fratocchi & Orzes & Sartor, 2017) (adidas group, Annual Report, 2017).

adidas through the years was able to build a networked organizational structure with established partners. Suppliers and distributors spread all over the world became crucial drivers of innovation. This networked layout presents the brand in the middle among those different actors, and everyone has precise functions in the adidas' value chain.

This innovation driven structure in 2013 demonstrate its ability to innovate when together with the German chemical company BASF, adidas introduced a completely new cushioning material, Boost. This technology set a new standard in comfort and

cool in the sneaker market, helping greatly to increase revenues, market share and heavily impacting the brand equity.

Analizing the "Boost Revolution", it is interesting to notice that in 2013 when the first Boost shoe was launched, following the analysis of Jack Woolf (2018), "adidas only held two percent of the U.S. market share in the running shoe category, a number that remained stagnant until 2015, while today that number is more than nine percent".

During the two years between the launch of Boost shoes and the beginning of the climb in the market share, "the brand had success among the world's most elite runners, but everyday runners simply didn't care" (Wolf, 2018). This incredible innovation necessitated something to launch it and make people talk about it, having only a great technology was not enough to appeal the always more fashion aware consumers and enhance the mass diffusion of Boost.

adidas, to leverage Boost technology and the entire brand, chose in 2013 to develop a marketing strategy based on a collaboration with the most influential person in the sneakers' market, the artist and designer Kanye West. Even before adidas released the joint developed "Yeezy" line in 2015, that integrate Boost technology, he was able through his presence on the new digital channels and his communicative power to "put Boost on people's minds" (Wolf, 2018) and made Boost, with its performance and its comfort, a mass adopted technology.

Boost technology since 2013 was applied on an always large portion of the adidas offer, and together with the leverage effect of Kanye West became a central element of adidas business. At the same time with other different artists, designers and athletes as James Harden, Lionel Messi or Paul Pogba, were developed collaborative approaches becoming strategical elements of adidas brand strategy success.

For the German brand the extreme focus on technology and branding activities became a crucial asset to enhance growth, and the implementation of collaborative approaches with a large differentiated group of actors generate a concrete competitive advantage.

In 2015 adidas developed the new five years business plan called "Created the New", and following the most recent Annual Report (2017) adidas describe it as:

"Creating the New is our strategic business plan until the year 2020. Our ambition to further drive top- and bottom-line growth by significantly increasing brand desirability builds the core of Creating the New. The strategic business plan therefore focuses on our brands as they connect and engage with our consumers. This consumercentric approach is driving significant improvements in the desirability of our brands and has increased our relevance with consumers around the globe. As a result, we are gaining market share in those categories, markets and cities that we have identified as future growth drivers for our company". (adidas group, Annual Report, 2017, 62)

Analyzing this definition is clear how adidas, with the five years plan "Creating the new", rely on brand management, and on the relationship between the brand and consumers, to grow and generate competitive advantages. Relevant it is also how adidas move back is focus on the core elements of the corporate, adidas and reebok, to work on them and improve their value in specific segments. "Creating the new", two years after its implementation is generating incredible results for the German brand with an over than expected increase of sales of 16% and of gross margin of 1.2pp (adidas group, Annual Report, 2017, 3), but it was also able to increase adidas brand equity and improve brand perception with more fashionable and on trend associations, without loosing its connection with sport performance.

adidas current business plan represent for the brand the way to compete globally and reach a total new level in the fashion system. Trying to understand deeply the dynamics, the reasons and the drivers that made this plan, at the half of its development, generates those relevant results, is crucial for adidas to build a solid base for future improvement.

In a scenario as the fashion system where networked organizational structures are largely diffused among global fashion enterprises and those nets of actors enhance the development of collaborative approaches, understand why networks affect deeply the consumer-centered fashion companies' results, and if collaborative approaches drives fashion companies to improve the performances of their brand based strategies, could represent a useful and relevant analysis for the brand management research.

4.2.) "Creating the New" strategic business plan

Analyzing the adidas' five years business plan "Creating the new" it is clear how the brand is the central element of the entire strategy and how it is used to reach strategic business objectives. Going deep in this approach emerge that its brand is used by adidas to increase the connection with customers and engage them, sharing values and associations that drive to conversions.

The strategy of adidas clearly reveals its consumers-based vision that use its brand to interact with people all over the world, and gain market share reaching always new consumers through all the different online and offline channels.

It is now relevant for this research, taking in consideration this core perspective of adidas business strategy, identify the drivers that adidas is using to increase brand desirability and if them could be presented as generalized essential elements for nowadays fashion firms.

adidas presents clearly its "future growth drivers" (adidas group, Annual Report, 2017, 62), foundations of brand desirability enhancement, using a schema (Table 6) available in its (2017) Annual Report.

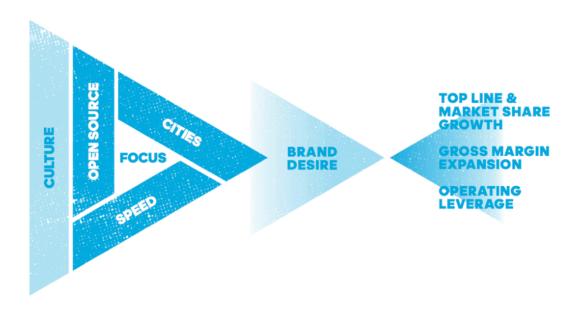


Table 6 - adidas group, Annual Report, 2017, 62

Using this frame made by three triangles adidas shows graphically the development of its business strategy, the drivers which the brand is activating to increase the brand desire, and the objectives that this enhancement is reaching and will reach in the five years period 2015-2020.

To shortly analyze it, starting from the left side at the base of the first triangle there is the word "Culture", with this concept adidas underlines the importance of a clearly defined and shared company culture to "make the difference in achieving our [adidas] long-term goals" (adidas group, Annual Report, 2017, 62).

Culture is presented by adidas to identify the people part of the organization from the top to the bottom levels, and the approach that they have to have, developing a real internal "Culture of performance, creativity, collaboration and confidence" (adidas group, Annual Report, 2017, 62-63), seen as essential to implement successfully its business plan.

Noticeable is that the foundation of adidas business strategy, the culture, it is perceived not only as the single act of working together to achieve synergic benefits, but a concrete part of the attitude that adidas employees have to develop true the years is to collaborate among them and with external entities to make their company improve and implement effectively its plan (adidas group, Annual Report, 2017). Moving to the first triangle, it is composed by the three main "future growth drivers" of adidas (adidas group, Annual Report, 2017, 62): Speed, Cities and Open Source. Before going through them deeply in the next paragraphs, is relevant briefly define them to understand adidas business strategy and find patterns on how collaborations are crucial for its brand objectives.

The word "Speed" is used by the brand to demonstrate the aim to respond always quicker to fashion trends and offer promptly to consumers what they want. Revolutionizing the entire business model end-to-end to increase the whole value chain' speed, adidas aims is to be the fastest brand to offer desired products (adidas group, Annual Report, 2017).

The second driver is called "Cities", and is used by adidas to describe its intent to "over-proportionally invest to grow share of mind, share of market, share of trend" in six global megacities, identified by adidas as crucial target markets to increase brand desirability.

The third word used by adidas to complete the "future growth drivers" triangle is "Open Source". With this concept adidas identifies its new "collaboration-based innovation model" (adidas group, Annual Report, 2017, 63) aimed to open the company to external interactions with a huge diversity of actors, including consumers, to improve the brand desirability. This third element presents crucial characteristics that with a deep analysis will help to understand how adidas is developing its collaborative approaches, and why collaborations are presented as a growth driver to improve brand desirability, sales, market share and profitability (adidas group, Annual Report, 2017).

The "future growth drivers" triangle, with its "Culture" base, head towards a central triangle that present the pivotal element of the adidas' business strategy, the "Brand Desire". adidas with this schema shows clearly the centrality of branding activities in its business strategy and how increasing brand desire is crucial to reach global business objectives.

Brand desire in the literature is defined as the brand ability to engage customers emotionally, even outstripping their needs and wants, and create value from this relationship (Ind & Iglesias, 2016). adidas adopted this concept to underline its consumers-focused strategy, and identified the enhancement of Brand Desire as core element of Creating the New.

The last triangle presents the three main macro objectives of the adidas' business strategy, and shows graphically how the Brand Desire works as pivotal keystone between the drivers and the objectives. "Top line & Market Share Growth", "Gross Margin Expansion", and "Operating Leverage" describe shortly the final results that adidas wants to achieve gradually yearly and with a more macro vision at the end of the five years. Following the most recent adidas annual report (2017) with the activation of the drivers to increase brand desirability and brand loyalty, the german brand presents in a more explanatory way the objectives that it wants to achieve in the five years period:

- "Achieve top-line growth significantly above industry average: We aim to increase currency-neutral revenues annually between 2015 and 2020 at a rate between 10% and 12% on average (initially, in March 2015: high-single- digit currency-neutral increase)". (adidas group, Annual Report, 2017, 66)

- "Win significant market share across key categories and markets: We have defined key categories within the adidas and Reebok brands that will spur our growth going forward. From a market perspective, we have defined clear roles for each of our markets, depending on macroeconomic trends, the competitive environment and our brand strength in the respective markets". (adidas group, Annual Report, 2017, 66)
- "To improve our profitability sustainably: We plan to substantially improve the company's profitability, growing our net income from continuing operations by an average of between 22% and 24% per year between 2015 and 2020 (initially, in March 2015: increase at around 15%; updated in March 2017: increase between 20% and 22%)". (adidas group, Annual Report, 2017, 66)
- "To deliver on our commitment to increase shareholder returns: Creating the New includes a strong commitment to generating increasing returns for our shareholders. Given our firm confidence in the strength of the company's financial position and future growth ambitions, we target a consistent dividend payout ratio in a range between 30% and 50% of net income from continuing operations". (adidas group, Annual Report, 2017, 66)

Those four points explain clearly the business objectives of "Creating the New", and show that, after two years from the launch of the plan, over expected positive results can be connected to its implementation. Analyzing those four points, appear unquestionable the impact of the drivers on brand desirability and the consequent effects of on the presented business' key performance indicators.

Already from this simple initial overlook of adidas business plan, branding activities are presented as crucial to reach always new levels of success, even for a global fashion company as adidas.

Taking in consideration its networked organizational structure, moving through all the specific components of adidas' business strategy is the natural next step, and other new relevant insights can be identified to sustain the central importance of brand in the fashion system and how collaborative approaches have a crucial role to develop successful innovation driven brand-based strategies.

4.2.1.) SPEED AND CITIES: STRATEGIC LEVERAGES FOR BRAND EQUITY

Speed, Cities and Open Source could sounds as common use words if analyzed singularly and without knowing the concept that adidas integrated and connected within them. But, contextualizing these words in the fashion system, and associating them to the business strategy of one of the most relevant global fashion brand, Speed, Cities and Open Source, are used to define the three "future growth drivers" of its five years business strategy.

adidas presents clear definitions of the three drivers that since 2015 have been activated in order to increase brand desirability and reach the objective of its strategic business plan, showing that different concrete strategical branding activities are hidden behind these three words.

To understand how the three drivers affect positively adidas' brand desirability generating positive business results, and if collaborations within "Creating the New" work as a common line among the growth drivers, this paragraph analyze specifically Speed and Cities. While Open Source, defined by the brand as "collaboration-based innovation model" (adidas group, Annual Report, 2017, 63), with its special collaborative aim and its characteristics is going to be overviewed specifically in the next paragraph (4.3).

The Speed concept, as briefly described before, is the adidas response to the velocity of fashion system and to the necessity to offer always on trend products to consumers.

"Driving brand desirability begins with putting our consumers at the heart of everything we do and serving them in the best possible way. This involves ensuring that consumers always find fresh and desirable products where and when they want them and with an unrivaled brand experience" (adidas group, Annual Report, 2017, 63), with this sentence adidas explains the importance of the consumers' brand

experience on all the points of interaction with the brand, and how the analysis of point of sale and responsiveness become crucial to ensure that.

To continuously increase speed, adidas necessitated to evolve its networked organizational structure in all its aspect, allowing the brand to interact and respond to consumers quicker than ever.

Since 2015 adidas implemented three main organizational programs to improve its supply chain performance. The first is the "Never out of stock" activity, and is focused on the conjunct development with its suppliers of a production line able to set a "global, permanent offer with longer life cycles and continuous reproduction and replenishment" (adidas group, Annual Report, 2017, 63) for their iconic products, always requested by consumers.

This first program could present a sort of dissonance with the nowadays fashion system' dynamics, but the peculiarity and the iconicity of a group of adidas models create the necessity of an unstopped production of them.

Taking in consideration this activity, the relationship between adidas and its network of suppliers become crucial to ensure the effectiveness and the efficiency of the production of this icons, and offer a permanent availability of them to its customers, improving the brand experience.

The second program is called "Planned Responsiveness" and it is based on the activity of "systematically monitoring trends at the point of sale" (adidas group, Annual Report, 2017, 63). Thanks to the informations collected adidas can reduce lead times and satisfy easily consumer demand, offering with more precision the most wanted products. This continue exchange of information between adidas and its external partners necessitate the development of a networked structure where successful collaborative approaches are essential to improve the performance of the whole value chain.

The third program included in the Speed driver is called "In-season creation", and refer to the ability to create products or variations of them during the seasons thanks to the increased velocity of the processes, "to ensure we capture the latest trends in our industry" (adidas group, Annual Report, 2017, 63). Answer promptly to trends offering new products that follow them enhance relevantly the brand desirability and allow adidas to interact with a new pace to consumers, achieving competitive advantages.

Thanks to the Speed programs adidas has reached in two years relevant results. The 28% of the net sales of the german brand derived to speed-enabled products, so items produced following the three Speed programs, and this number results completely in line with the 50% objective for the end of Creating the New (adidas group, Annual Report, 2017).

Another relevant results, connected to the effect of Speed activities on brand desirability, is the "20% higher share of full-price sales with this part of our business [speed-enabled products] compared to the regular range" (adidas group, Annual Report, 2017, 63). This datum shows clearly how velocity among all the steps of the value chain allow adidas to offer more desired products and satisfy promptly consumers of the nowadays fashion system.

Analyzing the Speed concept proposed by adidas in its business plan, a pattern can be identified on the relevance of its networked organizational structure of suppliers, distributors and retailers based on collaborations as solution to increase the speed among the processes, and offer to consumers the products that they want as fast as the company can.

Inside the Speed activities is included also the development of the "Speedfactories". Two new factories located in Germany and US that "using smart manufacturing instead of centralized production, bringing production closer to where the consumer is. Open doors to the creation of products completely unique to the fit and functional needs of our consumers, through a combination of the craft of shoemaking and cutting-edge technology" (adidas group, Annual Report, 2017, 63). Even this project is way far to support the entire growing demand of the brand and it is limited to the production of special products, as the AM4 line dedicated to the main global key cities, to Speedfactories are used by adidas as innovations' generators and to experiment and develop always new technologies. Following different experts, attached to the relevance of Speedfactories as innovation center and experimental factories for future products developments, an increase of adidas brand value is identified due the innovative perception that they generate (Ismael, 2018).

Moving to the second "future growth driver", Cities, adidas during the development of its 2015-2020 business plan perceived the opportunity to grow in specific markets, aligning its efforts with the urbanization trend and the ability of specific

cities to shape global trends and the perception of fashion brands (adidas group, Annual Report, 2017).

The German brand, to improve its brand desirability in specific influential target markets, identified six metropolis, London, Los Angeles, New York, Paris, Shanghai and Tokyo, and decided to develop there peculiar "relevant products, bottom-up activations and holistic retail experiences" (adidas group, Annual Report, 2017, 64) to increase the engagement between consumers and the brand on a variety of touchpoints.

In this cities adidas, since 2015, is trying to reach consumers not only trough the classic distribution channels but more developing close relationships "with them in communities where they live, places where they work, fields, courts and streets where they play and doors where they shop" (adidas group, Annual Report, 2017, 64) to generate synergies that amplify the branding activities effects. adidas in its 2017 Annual Report declare that after two years since the implementation of "Creating the New", and more specifically after focusing on the six cities, different analytics (Net Promoter Score and market share) present a perfectly on track improvement "to achieve our long-term target to double revenues in our global key cities by the end of 2020" (adidas group, Annual Report, 2017, 64). adidas also attributes to the six cities an "above-average contribution to the overall growth of our company and...to achieve market share gains" (adidas group, Annual Report, 2017, 64). These results are reconnected by the german company to the over proportional branding efforts implemented since 2015 to the transformation of the six cities in ecosystems, that facilitate the transfer and the modification of brand associations and the enhancement of brand loyalty.

Specific products, activations and experiences are identified by adidas as the elements to create an "end-to-end ecosystem" (adidas group, Annual Report, 2017, 64) where consumers interact deeply with the brand. Taking in consideration this vision of the german company, different actors operating in the six cities had to be involved to develop successful brand strategies that increased, and will increase, adidas' brand desirability.

Key retail partners, communication agencies, and other different influential entities and personalities, able to deliver the brand identity of adidas in their respective cities, have been therefore activated to interact with consumers online and offline, and all those actors are generating ecosystems, comparable to networks, based on continue collaborations and interactions aimed to reach the branding objectives at the base of adidas' five years business plan.

Speed and Cities represent two essential "future growth driver" for adidas and are used by the brand through different activities that already after two years since the beginning of their implementation have generated over expected results. adidas presents clearly the connections between those drivers and their effects on the brand desirability, central element of the five years business plan, and how through Creating the New the german company is generating improvements in sales, market share and profitability.

To understand how brand-based strategies are generating highly relevant results for adidas and how this concept could be generalized to other global successful fashion firms, is noticeable how those two drivers activated by adidas, without being clearly based on network building processes, or on model collaborative approaches, shows the necessity of adidas to create interconnections with a huge variety of external entities. adidas, so, identified through the years crucial partners among the entire value chain, from the designing, to production to distribution, to communication steps to collaborate with, and build a networked ecosystem aimed to reach consumers, in the right place and at the right time, and increase adidas brand desirability.

4.3.) Open Source: a collaboration-based innovation model

Following the representation (Table 6) of the strategic business plan "Creating the New", within the drivers identified to enhance brand desirability, one of them is presented by the German brand as a "collaboration-based innovation model" (adidas group, Annual Report, 2017, 64). Analyzing this definition presented by adidas is clear how the brand felt the necessity to implement collaborative approaches, and even more relevant for the proposed thesis, how they are perceived as drivers of innovation.

Open Source, as third part of the future growth drivers' triangle, aims to increase brand desirability, but differently from other drivers presented before its implementation seek to "opening the brands' doors...It is about learning and sharing, about starting conversations between the brand, external experts and consumers and about giving them the chance to have an impact on what we do" (adidas group, Annual Report, 2017, 64).

The adidas collaborative approach Open Source is developed to build close brand interactions with consumers and key personalities, and innovate thanks to the creative capital generated by this interexchange of knowledge, tools, resources, opinions and visions. Open Source pushes the co-creation and the co-development between the brand, consumers and other key actors to "explore new territories so as to create unprecedented brand value for the consumer beyond mere transactional businesses" (adidas group, Annual Report, 2017, 64).

The competitive advantages obtainable from this collaborations are clearly generated by the relatively inexpensive production of the creative capital, offering the possibility to consumers to collaborate with a global fashion and sports brand, and use all its advanced tools and resources. At the same time Open Source' collaborations push loyal consumers and always new ones to interact with the brand, offering to adidas the possibility to transfer brand values and change its perception in order to affect positively the crucial brand desirability (adidas group, Annual Report, 2017).

Collaborations are interpreted by adidas, through Open Source, as a concrete way to innovate and increase brand desirability, showing also the company consumer-focus orientation and the need to integrate consumers in relevant processes to offer them the best products, satisfying their needs and being their first choice.

4.3.1.) COLLABORATIONS DIVERSITY

Operating worldwide and offering a very diversified range of products, adidas has to develop a huge variety of collaborative activities in order to reach and interact with a really diversified range of consumers.

Following the Annual Reports (2017) that presents the corporate business strategy of adidas, three main categories were identified in 2015 to group all the strategic collaborative directions that adidas is developing.

The first are the "Creative Collaborations" and are aimed to "increase our creative capital through new tools, new environments and new perspectives from outside creative thinkers. They are meant to give creativity a platform and provide the right tools for ideas to blossom" (adidas group, Annual Report, 2017, 64).

Inside this category are included a wide variety of activities developed by adidas since 2015, but all follow the common line of creativity as an asset to gain competitive advantages, and as a new way to create brand interactions with consumers.

A relevant investment that follow this strategic direction is the creation of the Brooklyn Creator Farm, a "design space and creation hub" (adidas group, Annual Report, 2017, 64) based in New York, where creative consumers can present their ideas and have the possibility to work concretely with professionals using the latest technologies and tools. Since its implementation in 2016 this place has impacted directly the creative direction of adidas, allowing the brand to propose innovative projects that contributed to the positive market results, and also generated a strong interaction with influential creative communities in the city and worldwide.

Part of this adidas collaborative direction is also the crucial collaboration with Kanye West, identified by experts as one of the most relevant influential factor of adidas brand desirability, especially for the Boost franchise (Wolf, 2018). The conjunct development of the Yeezy shoes line had brought a completely new impulse to the entire adidas design processes and impacted strongly on the perception of the three strips brand all over the world. adidas collaborating with the artist from Chicago was able to be a starter of the Streetwear and Sportswear pivotal trend of the nowadays fashion system, generating relevant results in strategic target markets as the USA and Asia (Wolf, 2018).

Other relevant creative collaborations of adidas that contributed clearly to the over expected positive results of "Creating the New", especially in enhancing the brand desirability, are the ones with Alexander Wang and Stella McCartney, among others, for their influential target directions to, respectively, the high fashionable consumers and the luxury sporty women (adidas group, Annual Report, 2017).

Focusing on creative collaborations, they have not only be perceived as the development of always new high desirable products thanks to the conjoint design of shoes and apparel lines with influential experts and consumers, they work also on the creation of a net of people that: highly contribute to amplify the diffusion of the brand and their correlated experiences through their channels, and at the same time bring to the company expertise that in the nowadays fashion system are crucial to develop competitive advantages.

The second category is "Athlete collaborations", and obviously includes all the adidas activities aimed to develop products together with the most successful athletes, exploiting their expertise and influence as for artists and designers, but also "to build communities of athletes that help shape the future of their sport...on a local level", "To directly engage and interact with a broader consumer community" (adidas group, Annual Report, 2017, 64).

adidas, since the '70s represents a staple in the fashion system, finding its style inspiration from sports and athletes and use them to share its brand values. With the "Athlete collaborations", the german brand includes all the collaborative approaches implemented with professional athletes, but also more innovative ones developed directly with consumers that choose adidas for sport purposes, a relevant part of their total sales. The brand interacts with this crucial groups of people using digital and physical space projects, aimed to develop collaborations, for example, with communities of runners or with yoga lifestyle events, trying to create an high engagement between the brand and sportswear consumers (adidas group, Annual Report, 2017). Those collaborations with local communities, together with the ones with most performant athletes of the planet impact effectively brand desirability and push consumers to choose adidas to be part of a community or to empathize their favorite athletes.

The third strategic collaborative direction it is called by adidas, "Partner collaborations" and is intended "to open up our [adidas] knowledge of sport by working with the best in other fields. By exchanging core competencies, we will create unique value for our brands and ultimately also for our consumers" (adidas group, Annual Report, 2017, 64).

This definition leave a lot of free space to adidas because does not present a clear identification of what kind of partners it refers, but shows clearly how the share of knowledge will drive to create unique value for the brand and for consumers. In the adidas' most recent Annual Reports (2017), the brand presents two relevant examples that can be really useful to understand how adidas implemented concrete Partner collaborations that impacted positively on brand desirability, exploiting two completely different sets of values.

The first is with Parley for the Oceans, a "network and space where creators, thinkers and leaders raise awareness for the beauty and fragility of the oceans and collaborate on projects that can end their destruction" (Parley, 2018). adidas as founding member since 2015, contributes to the financial support of this platform, but in 2017 decided to try to obtain more from this collaboration, creating the first "franchise silhouettes made out of Parley Ocean Plastic" (adidas group, Annual Report, 2017, 64), a material develop "from upcycled plastic waste that is intercepted before it reaches beaches and coastal communities" (Parley, 2018). Thanks to this collaboration adidas associates sustainability values to its products and to its brand, gaining competitive advantages responding quickly then competitors to a new trend that is deeply hitting the nowadays fashion system. The second collaboration developed by adidas, and presented in its latest Annual Reports (2017) as part of the Partner collaborations, aims to transfer values connected with pioneering innovation processes that make its products the most advanced on the market. Together with Carbon, a company specialized in 3D printing techniques, adidas developed a new platform for future products called Futurecraft 4D. This technology allows the German company to "to print previously impossible designs without labor-intensive and complex assembly" (adidas group, Annual Report, 2017, 64), so in the next years produce products never seen before. Partner collaborations can be identified as crucial elements to face the uncertainty of the current fashion system and find always relevant new partners to approach actively the incoming dynamics that influence consumers choices. This group of collaborations, as the previous presented, can affect deeply brand desirability, and taking in consideration the results after the first two years from their implementation, they generated conjuncted positive effects on how adidas brand are perceived by consumers (adidas group, Annual Report, 2017).

Together, the three collaborative directions part of Open Source, the future growth driver described by adidas as a "collaboration-based innovation model" (adidas group, Annual Report, 2017, 64), generated synergies able to impact deeply the ability to innovate and to interact with consumers of the brand. Even adidas is implementing since 2015 collaborations with apparently three diversified group of actors, the relationships among them and the german brand are really close. Those interconnections generates a networked structured based on offline and online interactions that really help the brand to reach the huge variety of worldwide consumers, and transfer them values that increase the brand desirability and generates long term brand loyalty.

Considering the three future growth drivers, Speed, Cities and Open Source, a pattern on the relevance of building a huge network of interactions between adidas and a wide variety of entities is identified as successful to increase brand desirability. Among those interactions, the brand has to be able to identify the most successful strategic partners to collaborate with, as clearly presented by the activities included in Open Source.

The development of a collaboration-based strategy by a global fashion company as adidas, with proved positive connected results, represents a relevant example of the necessity of fashion firms to implement always more effective networks, in order to achieve brand-driven competitive advantages, and consequently driving improvements in sales, market share and profitability.

4.4.) Difficulties and solutions of Creating the New

Analyzing the adidas five years business plan Creating the New, with its drivers and its main focus on brand desirability, could be relevant to understand the impact of collaborative brand-based strategies on fashion firms, evaluate the difficulties that adidas faced after two years from its implementation.

The evaluation of the possible weakness and the threats of this concrete example of brand strategy, characterized by an high volume of collaborative interactions and aimed to build a networked structure around the company, become relevant for this research. So, trying to find the available insightful informations to understand the difficulties that adidas faced, and the possible future threats of the implementation of Creating the New, a first problem occur, the lack of previous research.

The newness of this strategical vision of adidas and the limited amount of literature related, do not help to identify the negative aspects of the the plan' implementation. To proceed on the analysis, a useful way that could drive to produce insights related to the difficulties that adidas is facing, is to try to obtain relevant informations from actors that interacted actively with "Creating the New" development.

Contacting and interviewing Domenico Fumagalli, Junior Manager Sales Coordinator of adidas Italy, and Marco Viganò, Senior Business Development Manager of adidas Italy, one main limit emerged on the development of the consumer-based networked activations of Creating the New.

Following the two experts the main weakness is connected with the difficulty on the selection of which entities represent efficient and effective partners to interact and collaborate with. This main limit is connected to an intrinsic aspect of collaborations, and even that in this case represents still a risk for adidas: The necessity for the brand to identify successful partners.

Derived from the relevance of the network structure that adidas is building through its plan, and representing also a common line among the three future growth drivers, successful partners are a priority for adidas.

The difficulties on the partners' selection could be reconnected to two main reasons, the difficulty to find strategically aligned partners, and the difficulty to evaluate them and their impact previously, during and after the collaborations' activities.

The strategic alignment problems come from the global dimension and the high standards of adidas in every aspect of the development of its activities, especially taking in consideration the importance of consumers for the brand strategy, and the uncontrollable dynamics of the fashion system. The companies and the other entities, whom collaborate with the german brand need to represent excellences in their field, or posses unique characteristics that generates relevant competitive advantages. Taking in consideration this premise, the number of strategically aligned entities decrease particularly especially in a local perspective, creating the necessity of high efforts by adidas to manage the research processes.

Connected to those high efforts of the brand, there is the necessity to evaluate partners' impact to choose successfully the more performant ones. Before the actual implementation, during its development and after the collaborations' activities, adidas needs to evaluate them to recognize the positive and negative effects on brand desirability.

The needed evaluations of collaborative approaches represents a difficulty, following the experts of adidas, not for their costs that could be presented as a sort of transactional costs (Coase, 1937), but more for the complexity of the identification of useful evaluative variables.

adidas in its latest Annual Report (2017) described the necessity "to ensure that we [adidas] are at the pulse of the consumer journey at key moments and touchpoints in their lives" (adidas group, Annual Report, 2017, 65) and increase brand desirability, as the reasons of the efforts implemented since 2015 to face actively evaluation process difficulty.

The German brand presented in 2017 two consumer-focused activities that can help the company to evaluate partners end collaborations' effects on brand desirability. The first activity is the quantitative and qualitative evaluation of user-generated content related to partners interactions on social media.

Based on the will of consumers to contribute on digital platforms to a "creative culture" (adidas group, Annual Report, 2017, 65), so the sharing among users of their interactions with the brand, this parameter is gaining always more importance for adidas (adidas group, Annual Report, 2017).

The second proposed is the evaluation of the growth of users involved in the adidas' "digital ecosystem" (adidas group, Annual Report, 2017, 65), so the sum of all the users that interacted with the brand digitally (adidas group, Annual Report, 2017). The inputs for those evaluation activities represent inexpensive available informations for the brand, and the outputs generated considerable progresses in 2017 on the ability of adidas to identify successful partners that affect strategically brand desirability (adidas group, Annual Report, 2017).

The parameters presented show clearly also another crucial aspect for adidas, the digital interactions with consumers. Those interactions are identified by the german brand as a crucial aspect, but their relevance can be easily generalize to all the consumer-oriented companies that interact with the fashion system.

The positive financial and economical results of the 2017, together with those new techniques developed during the year, and the digital development of the fashion system, could be interpreted as the right direction for adidas to overcome its problems. Continuing the improvement on the evaluative processes, the german brand is ensuring to it the ability to identify always more accurately partners and their impact on brand desirability, implementing always more successfully collaborative activities and growing the pivotal networked structure at the base of Creating the New.

4.5.) Future developments

The adidas five years business plan, Creating the New, is reaching at the end of 2018 its third year since its implementation in 2015, and the results are absolutely encouraging the brand for what is coming in the next two years and after 2020. adidas is clearly shaping its future, using Creating the New to improve always more the most relevant and performant aspects of its business.

Starting from the people part of its organization, described by the "culture" concept and identified by adidas as the base of the successful implementation of all the activities needed to grow. Moving to the drivers, identified as the way to generate future growth thanks their different characteristics. Both are really helping, as originally designed, to reach the objectives of adidas business plan and build the base for the future development. As presented before, they are used by adidas to improve the central element of the plan, the brand desirability.

The activities implemented to activate those growth drivers are building through the years a more and more relevant network of entities that is highly contributing to adidas' branding objectives. Thanks to this developed net of interactions, adidas is reaching improved levels of speed among all the value chain, reducing the time to analyze consumers' trends and offer them the most desired and profitable products. Building this network, entities helped also to improve efficacy on developing activities on key target markets, identified by adidas as the worldwide most influential cities, and improved considerably the brand-related consumers' experiences in those places.

The ability of the german brand to develop this networked ecosystem of crucial partners is clearly reconnected to the relevant history of successes of adidas and its continue performance improvement. Looking at the activities that really impacted on brand desirability in the last years, especially on digital channels, Open Source, the adidas' "collaboration-based innovation model" (adidas group, Annual Report, 2017, 64) had a primary role.

The networked structure of interactions built by adidas represents also an undoubtedly crucial element to other three business growth directions, that are gaining relevance for the future of the brand. One is more related to the sport core heritage of adidas, and it is the ability to develop technological innovations, also seen as brand desirability enhancer. The other is sustainability, as relevant brand affective factor, and the third is connected to the digitalization of consumer experiences. All of them are perceived as central elements within all the different departments of the organization structure, and all are considered crucial elements for the future of adidas.

The collaborative approaches that adidas is developing are contributing to all those three directions, especially if we consider their impact on the central element of the business plan, brand desirability.

adidas regarding technological innovation stated that: "True to the vision of creative collaboration, our innovation approach is widely based on our Open Source mindset which is clearly visible in our numerous collaborations with athletes and consumers, universities, industry-leading companies as well as national and international governments and research organizations" (adidas group, Annual Report, 2017, 78). As far as to sustainable development is concerned, adidas presents clearly the importance of the interactions with company's stakeholders, to strike "the balance between shareholder expectations and the needs and concerns of our employees and consumers, the workers in our supply chain and the environment...will contribute to lasting economic success" (adidas group, Annual Report, 2017, 88). The digital development represent another crucial future direction for adidas. Always more consumers interact with brands through digital processes, and adidas has clearly showed its intention to improve digital interactions: "Technology has enabled us to accelerate building direct relationships with our consumer. Improving digital capabilities along the entire value chain enables us not only to interact with the

consumer, but also to become faster, better and more efficient in every part of the organization" (adidas group, Annual Report, 2017, 65).

adidas, taking in consideration the economic results of the last two years and how its strategy is performing in relation to brand desirability, is clearly creating the basis to improve in the long term. The consolidated networked structure and the strategical collaborations developed, allow the brand to face the future being confident of its ability to improve all the aspects of its business, and to operate successfully in the nowadays fashion system.

Taking in consideration the aim of the research, the already developed networked structure and the brand-oriented collaborative approaches can be considered successful solutions for adidas, and an even more wider networked structure should represent a strategic future objective.

Moreover, the exploitation of collaborative approaches has to continue developing always more the proper open mindset to interact with the external world successfully, and the synergies generated by the collaborations with the best partners will produce relevant speed, differentiation, innovation and sustainability competitive advantages, affecting deeply brand desirability in the long term period.

5.) Conclusions

This work provided a relevant analysis of the development in the last thirty years of the concept of network. Starting from the first implementation of networked organizational forms around the '80s and the '90s, the research moves through the years, arriving to nowadays strategical developments of collaborative approaches. Analyzing the historical evolution of networks and collaborative strategies, a clear definition of this phenomena is presented, ensuring a strong literature base to concretely understand the nowadays implementations. A peculiar attention is reserved to the aims that pushed companies to develop new networked structures with strategical partners, and how this variety of directions helped through the years to create relevant nets of collaborations among firms.

To make the research efforts sustainable it was useful to restrict the focus on a single industry that, following the literature (Paragraph 3.1.1.), presents peculiar characteristics that in the last decades helped relevantly the implementation of networks and collaborative approaches: the fashion system, presented as the environment that include all the businesses dedicated to "the design, manufacturing, distribution, marketing, retailing, advertising, and promotion of all types of apparel" (Čiarniene & Vienazindiene, 2014, 64).

A deep analysis of the fashion system and its characteristics, revealed the importance of the digital transformation process, and the consequent impressive increase of interactions firms-products-consumers, on the evolution of networks and collaborative approaches, from being developed only as supply chain improvement solutions, to being developed to new strategic brand-related directions.

Relevant in this new scenario is the concept of brand, its strategic role in connecting consumers to products, and how it is able to create associations and transfer messages that really affects fashion companies' performances.

In nowadays fashion system the importance of the brand is understandable by the relevance of it in the strategies implemented by fashion firms, and how they use it to activate and shape the interactions with consumers.

From the literature and the analysis of the business strategy of adidas, one of the main global fashion companies, appears clearly that consumers interact always more with brands thanks to digital devices, and collaborative strategies based on networks of successful partners developed by companies are used by fashion firms to improve the brand desirability and the brand loyalty.

adidas presents clearly the necessity to build a successful network and collaborate with different institutions as driver for the future growth. The results presented in its latest Annual Report (2017) sustain this evidence and show how this strategical direction impacts directly the ability of the company to innovate and satisfy consumers, improving brand desirability, sales, market share and profitability. The research, with its historical, cultural and technological evolutive analysis, explains the large diffusion of networked organizational structures and collaborative approaches is an answer to the challenging conditions of the fashion system, and the development of strategies based on collaborations impacts deeply on the branding objectives of consumer-centered fashion companies, improving their performances and projecting them to future innovative business directions.

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