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INTRODUCTION

Creativity is a key element of Creative Industries, determining both their success and their variable nature. Creative Industries in Italy today count for 443,208 companies, 7.5% of the total, and they represent 15.6% of national value added, with 227 billion euro (Symbola and Unioncamere, 2015). In recent years we are witnessing a growth of creative businesses, supported by the demand for satisfying products both in terms of functionality and in terms of symbolic and emotional content (Sedita and Paiola, 2009). Despite these important data, Creative Industries are still difficult to fully frame, not only with respect to no Creative Industries, but also because an exact internal classification with cultural ones lacks.

However, one common element to all definitions which characterizes them is the use of the *applied creativity*, defined as "an element of artistic or craft inventiveness employed for a specific practical, and probably commercial, purpose other than its own sake" (Hill and Johnson, 2003). Creativity is therefore aimed for economic purposes, but it always keeps its own nature that defines it as a human and individual characteristic (Santangata, 2008). Creative Industries are so governed by special mechanisms, recognized by Caves (2000) as the seven properties and that will be described in Chapter 1, which result from the particular creative nature. The dominant presence of a creativity influences the economic and managerial mechanisms and procedures, in which creative process has to develop intertwined with other processes, such as value co-creation.

Often in Creative Industries, especially in the B2B context, the products are created and commissioned for a specific client, whose resources are essential to achieve an *optimal value-in-use* (Muller and Zenker, 2001). Therefore the result is an highly customized output, created following client's requests. Co-creation appears as a good practice in order to combine the best resources of both parties, since it is defined as "a process that brings different parties together in order to jointly produce a mutually increased value, focusing on knowledge and expertise" (Lessard, 2014, p 40). The benefit of co-creation process is derived from the value created by knowledge flows, resulting from the interaction between the parties, and through the exploiting of *relational capital* (Burt, 2004), based on *shared knowledge and shared transaction-specific investments* (Blonska *et al.*, 2013).

Co-creation appears as a fundamental element for the consolidation of *value adding relationships* (Kotabe *et al.*, 2003), and it has always been a tool used to exploit the interaction with the client. Just think of the co-creation in the sector of automotive production,

in which the Japanese model shows a creation of value through continuous relationships between provider and client, leveraging the benefits that arise from the *social memory* (Dyer, 1997). Nowadays these elements can be found in highly technological and innovative industries, as in the case of KIBS (Knowledge Intensive Business Services). Not only these realities are based on the S-D logic, and then on a high customization of the output result of the collaboration with the client (Vargo *et al.*, 2008), but they also contain in their nature an essential element of co-creation, i.e. knowledge. The latter represents the object of the flows between the parties and also the source of the increased value created; the creative company therefore requires adequate Knowledge Management practices in order to be able to absorb and channel it in organizational processes, through continuous processes of *knowledge conversion* (Den Hertog, 2000). *Codification* and *personalization* are therefore two of the strategies used for the management of explicit and tacit knowledge, which arise from the co-creation process (Bettiol *et al.*, 2012).

The traditional concept of co-creation is therefore based on client engagement throughout the production process, during which the parties cover different roles with the aim of promoting the joint creation of the output (Aarikka and Jaakkola, 2012).

As anticipated, creativity is able to influence the mechanisms that regulate the contexts which see it as a predominant element. In addition, the traditional concept of co-creation does not appear entirely compatible with that of creativity, based mainly on the exploitation of organizational *human capital* and so on tacit knowledge, difficult to share and outsource (Polanyi, 1966). But even if creativity is subject to a different use than one purely cultural and creative, according to the *individual approach* (Sagiv *et al.*, 2010), creativity retains its *subjective dimension* and it is deeply tied to the individual who possesses it (Santangata, 2008). Then it is possible to identify creative people as those which have interesting, stimulating and innovative ideas, through which changing the existing domain (Csikszentmihalyi, 1996; Simon, 1986). So the question that arises is: How does creativity influence the process of co-creation? And does the latter favor an effective use of creativity or not?

Actually Creative Industries are an important reality but still partially unexplored. However, as already mentioned, they own a huge potential in terms of quantity and quality also in the Italian context. In these creative contexts, co-creation is debated almost exclusively for B2C cases, thanks to the growing success of the practice of *crowdsourcing* and *social communities* (Rullani, 2009). In these cases however, the intervention of the client is limited mostly to the

final stages of the production process, such as marketing or advertising, and therefore it deviates from the process of strong interaction which characterizes the traditional co-creation. Instead in the case of B2B, S-D logic imposes an intense collaboration with the client in order to better meet its demands for a highly personalized output (Vargo *et al*., 2008). However, this issue is largely unexplored in creative B2B, despite the co-creation being a fundamental process of knowledge and value creation.

To answer this question was chosen as subject of analysis an innovative, technological and deeply based on the importance of the creative component industry, namely Computer Animation. This sector is in full nature of the Creative Industries, based on a mix of creativity and management; in the Italian context it is young and dynamic, marked by a high rate of growth and, at the same time, a high rate of mortality. The industry characteristics are rapidly changing in both quantitative and qualitative terms, as companies become structured and consolidated rapidly over time. Companies operating in the sector, the so-called *creative studios*, provide a portfolio of different services, from classical animation to 3D one, from illustrations to videogames. Each company has its own characteristics which, although identified with those of the industry, define a particular style that characterizes them from competitors. Currently in Italy this sector is not fully recognized, as opposed to some international cases, and today looks like a cross industry between the animation, audio-visual and information technology. What ensues is the absence of both theoretical contributions and empirical data which can help to understand the mechanisms that characterize it; and this reason sustains the need to adopt an exploratory approach.

However, Computer Animation is a significant and in perspective industry, because it has all the characteristics to become well-established and successful reality based on two key elements: creativity and technology. *Creative studios* work in most cases on commission and then they have to deal with the relationship of co-creation with the client in order to provide a highly personalized output. To do this the company must be able to create the perfect blend of creativity, technology and resources provided by the client, and this is not simple. Defining the impact of creativity on the co-creation of co-creation is a key issue for the development of this changing reality, which could benefit from the resources created by an effective interaction. To analyse the relationship between creativity and co-creation in creative industry of Computer Animation a study based on creative KIBS (Lehrer *et al.*, 2012) was used as reference, being an excellent example of the use of traditional co-creation in innovative and technological contexts. KIBS are also similar to the one in question, being characterized by

several common elements, such as technology, the output customization and immateriality, and the fundamental role of knowledge.

From the empirical research of Lehrer *et al.* (2012), it has shown that when creativity is a dominant aspect of the business, a co-creation of value is possible only in the cases where client involvement is limited to the initial and final stages of the process. In the middle phase the so-called *creative process* (Hill and Johnson, 2003) develops, and resources of the client are not able to bring added value. This identity represents the competitive advantage of creative businesses, which is supported by the technological level, but that is fundamentally based on their ability to create original solutions to clients' requests, and so on creativity. What is recorded is then a U-shaped relationship between co-creation stages and client engagement. Only this structured co-creation can promote the effective use of creativity, otherwise a co-creation unable to create value occurs. This is an interesting result, being not in line with the concept of traditional co-creation based on a constant client involvement along all of the process. But will it be so for Italian *creative studios*?

While there are several elements that can help to take the contributions of KIBS for this sector, such as the S-D logic or the *knowledge-based* nature, it was not possible to extend directly the results of the study of Lehrer *et al.* (2012) to the Italian context of Computer Animation. In fact, the latter is actually completely different from the KIBS considered, in terms of size and corporate structure, and from this gap arises the need of an empirical research on some Italian cases. Through the contribution of a company leader in this industry, it has been possible to select four Italian companies, identified through the concept of *perceived rivalry* (Castaldo, 2012), and subject them to fill in a questionnaire as research tool, derived from the one used for the study of KIBS creative. However, given the differences between the objects in question, this has been adapted to Italian reality, while maintaining the three major themes: business structure, co-creation and knowledge development.

What emerged from the companies is consistent with the view taken by Lehrer *et al.* (2012), but there are still elements that distinguish creative KIBS and Italian *creative studios*. They confirmed the hypothesis that creativity influences the co-creation process, creating a U-shaped relationship with client engagement, but this trend is not so radical. The different answers will be analysed according to the characteristics of the sector, taking into account the limitations imposed by the object in question, including a lack of an internal organization. Moreover, the sector is not yet well-established and fully recognized, and this prevents the

translation of unique mechanisms as a whole. However, the findings can be used as a starting point for the study of this evolving industry or related and more structured fields.

In Chapter 1 are reported the definition and the classification of Creative Industries, as relevant as still difficult to define. Then the relevant data of these successful reality in Italy are exposed, followed by the description of the characterizing element, i.e. creativity, and of the economic and managerial mechanisms that differentiate them from other industries.

Chapter 2 is instead focused on the key issue of this study, namely co-creation of value. This process is based on knowledge flows between client and supplier, and then a section is devoted to the description of the knowledge and its management at organizational level. Finally, the focus moves to the issue of co-creation in the context of KIBS and the Creative Industries.

Chapter 3 takes up the final theme of the previous chapter, expanding it towards the introduction of Computer Animation industry. The latter is then analysed through the description of the services provided, the mechanisms of interaction with the client and an analysis at industry level, comparing it with other international contexts.

Chapter 4 describes the testing methodology and the tool used. For each macro-theme analyzed there is a brief description with the theoretical references and goals.

Chapter 5 concludes the research by presenting what emerged from the questionnaires, and analyzing it through the use of the literature referred in the previous chapters. Each section describes an important issue, and it all ends with a general analysis in order to answer the key question of the work and with the presentation of limitations and possible extensions of this research.

CHAPTER 1 – CREATIVE INDUSTRIES

Creativity is part of the human being, and we can find it in everything around us. When we try to link the economic world to creativity, considering it as a means and not an end, the first approach is to define "all industries as cultural" (Hesmondhalgh and Pratt, 2005). Actually, it is possible to recognize a creative dimension in each business idea, and for this reason, it is hard to determine in a conclusive way which are the boundaries of the so called Creative Industries. The terms culture and creativity are very broad and there are several ways in which the organization of this creative world can be conducted, depending on the outputs, inputs, processes or just on the meaning of creativity.

1.1 DEFINITION AND CLASSIFICATION

The English government was one of the first to recognize the existence and importance of Creative Industries in the document "A new Cultural Framework", defining them as the industries which have origin from the individual creativity, ability and talent, and whose potential in term of richness arises from the development of the intellectual property (Santagata, 2009).

WIPO (World Intellectual Property Organization) defines a stricter area, being Creative Industries "those industries that are engaged in the creation, production, manufacturing, performance, broadcast, communication, exhibition or distribution and sales of works and other protected subject matter" (WIPO, 2003 quoted by Santagata, 2008).

The global organization UNESCO describes specifically the difference between Cultural and Creative Industries, and defines the former as the ones "which combine the creation, production and commercialization of creative contents which are intangible and cultural in nature" (Unesco, 2008), and the latter as "those in which the product or service contains a substantial element of artistic or creative endeavour" (Unesco,2008).

Not only the definition of what Creative Industries are, but also the boundaries within the Cultural Industries are hard to define in a proper and unique way. In wider terms, in connection with Cultural Industries, we can refer to those which create an output whose objective is being appreciated as such, without other finality, providing specifically cultural goods and services (Throsby, 2013). On the other hand, for Creative Industries, creativity is

functional to the creation of an output which has a different objective than the creative or cultural one (Sacco, 2011) and it is an identifiable and significant input (Throsby, 2013). Creativity, compared to culture, is more powerful in order to create economic value, but the latter sustains its power. In a certain way, creativity uses and transforms the cultural outputs to create something with a higher economic value (Sacco, 2011).

This paper deals with the study of Creative Industries and it will be used the definition probably most known and used in Italy, defined by Symbola and Unioncamere (2015), which is based on UNESCO definition and ATECO 2007 codes, and it appears as a re-examination of the **Concentric Circles model** of David Throsby (2008). Moreover, compared to the traditional European definitions, Symbola and Unioncamere (2015) include in the boundaries of Creative Industries also the *creative driven activities*, which are part of the food, furniture or fashion industry, but that show a creative influence.

Symbola and Unioncamere (2015 – see Appendix 1) recognized four principal productive categories linked to culture and creativity, from the closest to other economic fields of goods and services production, to the more cultural:

1. **CREATIVE INDUSTRIES**: They represent the broader set of activities and the object of this work, including the industries which are characterized by the presence of a significant creative dimension, as advertising, communication and design.
2. **CULTURAL INDUSTRIES**: Closer to the creative core, there are the activities which operate through industrial logics, but which are linked to the production of reproducible outputs with a high creative content, as music, videogames, cinematographic, radio, television and publishing industries.
3. **PERFORMING AND VISUAL ARTS:** These activities are strongly linked to the creative dimension, and naturally, they can't be organized industrially, as they are founded in the reproduction of unique and limited output, as visual arts and performing arts (Sacco, 2011).
4. **ARTISTIC AND CULTURAL PATRIMONY:** The latest category includes activities which are related to the conservation and fruition of the historical and artistic patrimony.

Related to the cultural dimension, there are also other activities, as digital platforms, science and technology, experience economy or complementary sectors, in which there is a creative

dimension, but it is too small to be measured in term of added value to the economy (Sacco, 2011) and for this reasons they are not considered in the statistics.

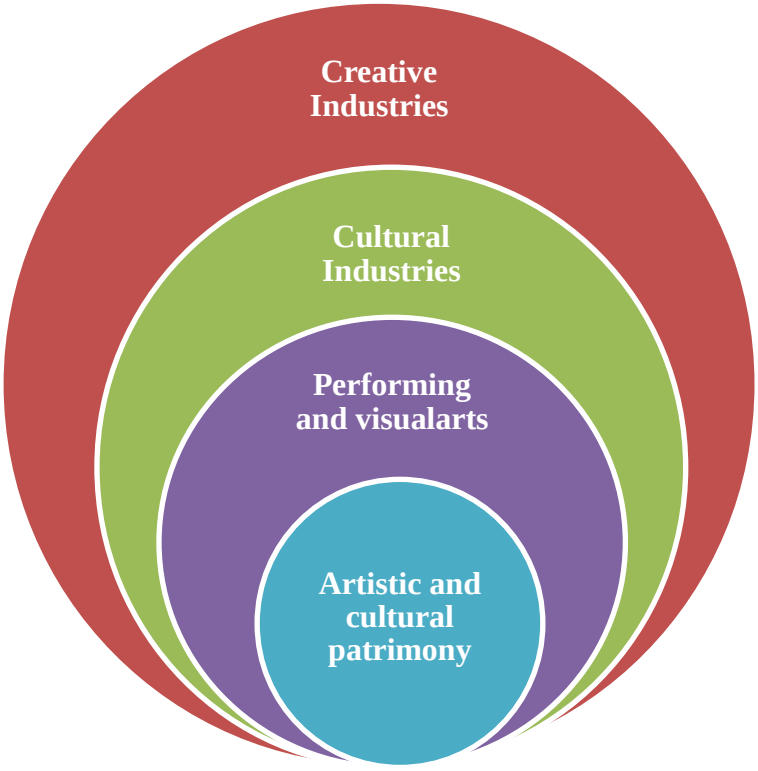


Figure 1 – Creative industries classification (Symbola and Unioncamere, 2015)

All classifications, which are mentioned in Figure 1, are quite recent, even if Creative Industries have existed since the first example of *applied creativity*, defined as "an element of artistic or craft inventiveness employed for a specific practical (and probably commercial) purpose other than its own sake" (Hill and Johnson, 2003).

The term *Cultural Industries* was used for the first time by Adorno and Horkheimer of the School of Frankfurt in the '40s, referring to the mass Cultural Industries in a negative way, and the actual use comes from the '80s, while the term *Creative Industries* from the '90s (Orlandi and Santangati, 2014).

However it is in the new century that the importance of the contribution of Creative and Cultural Industries was been recognized in the worldwide economy.

One of the most important contributions was the definition of the **Seven Properties** required in order to be recognized as a creative industry, which were established by Richard Caves in 2000:

- *Nobody knows*: Uncertainty surrounding demand – the value of the output perceived by clients can be identified only after its consumption;
- *Art for art's sake*: The utility artists derive from their work;
- *Motley crew*: The diversity of skills required for producing the good or service;
- *A list/ B list property*: Vertically differentiated skills of creative workers;
- *Infinite variety*: The wealth of differentiated products;
- *Time flies*: The problem of coordinating the motley crew to deliver the good on time;
- *Ars longa*: The durability of creative products.

Another important contribution was the concentric circle model developed by David Throsby in 2001, the first which represented the graph with the creative core and circles that represent commercial increasingly industries (Throsby, 2013 - Appendix 2).

1.2 IMPORTANCE IN THE ITALIAN ECONOMY

Nowadays the economic power of Creative Industries is acknowledged worldwide, specifically for their positive trends in an economy, which is now rising from the economic crisis.

As can be seen in Figure 2, In Italy, according to the data collected by the organizations Symbola and Unioncamere (2015), the creative and cultural firms are 443.208, and they represent 7,3% of the total. Moreover the creative business represents 15,6% of the national added value of 227 billion euros. Another fundamental aspect is the multiplier effect that they have on the rest of industries, equal to 1,7: the 84 billion euros of produced wealth stimulate other 143 billion euros in other fields. And 1.4 million people are employed in creative firms, who represent the 6,3% of Italian employees.

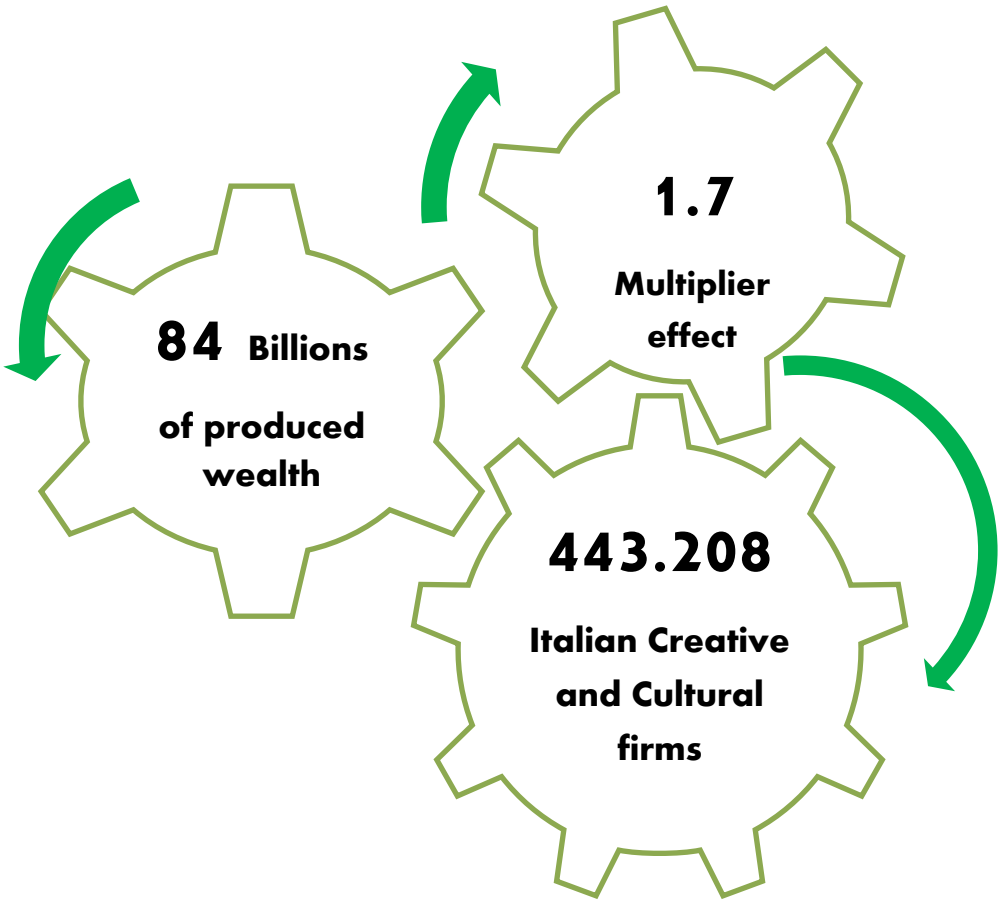


Figure 2 – Italian Creative Industries data

Going more in detail, the 46,5% and the 46,8% of the richness come, respectively, from Creative and Cultural Industries. In particular, the 21,5% of the total added value comes from the *creative-driven* firms, which can be seen as the heart of the Made in Italy. Even if there is a recessive clime due to the economic crisis, the positive commercial balance of the Creative Industries, in particular of the creative fields, represents a positive expression of how the culture is important.

How could this extraordinary situation be explained?

Especially since the last decades, the quality/price ratio or value for money are mostly displaced by the focus on the contents and the quality of products, which can be defined as "no more than an artefact around which clients have experiences" (Roser *et al.*, 2009). The evolution of experience searching consumers has increased the demand for all the form of the creative expression (The work foundation, 2007): they need something more than the mere output, and the creativity is the resource of it. So creativity can be considered the first step of

the value chain (Sacco, 2011) and ,especially since the ‘80s, it has started to be considered a fundamental element for a successful output. Through its new digital accesses, the development of the New Economy of technologies gave the possibility to use creativity and culture in a more massive way, and, in this sense, the demand increases day by day (Santagata, 2008).

1.3 THE KEY ELEMENT: CREATIVITY

From a managerial and economic point of view, a question arises: what makes Creative Industries different?

The key point is again the presence of the specific and winning element – creativity. It is correct to argue that creativity is everywhere; in every economic activity it is possible to find a creative dimension. But in these specific sectors creativity is preponderant and it appears as a necessary input for the value creation. What is distinct about these industries is that their revenues are largely generated by commercialising *expressive value*, understood as every dimension which shows cultural meaning or understanding (The work foundation, 2007). David Throsby (2013) has identified some dimensions of the expressive values in which the Creative Industries deal:

- *Aesthetic value*
- *Spiritual value*
- *Social value*
- *Historical value*
- *Symbolic value*
- *Authenticity value*

Expressive value adds to our knowledge, stimulates our emotions and enriches our lives, creating new insights, delights and experiences (The work foundation, 2007).
Even if creativity is not deployed for its own sake but towards the achievement of other commercial purposes (Hill and Johnson, 2003), its predominant presence influences the economic structure and properties of the economic activities which are part of the creative fields, which require a different management of instruments in comparison to the majority of the other industries.

The literature presents different approaches, defining creativity as "resulting from a well-described but still not so well-understood sequence of steps, an output from a process" (Amabile,1988 as reported by Hill and Johnson, 2003), or as "an individual and psychological difference between individuals, perhaps innate, but possibly also amenable to training and linked to other traits, the output of an individual difference" (Hill and Johnson, 2003). So, following this point of view, creative people are the ones with interesting, stimulating and innovating ideas through which they change the existing domain (Csikszentmihalyi,1996). Considering it from a problem solving point of view, probably the most suitable to the *applied creativity* perspective is the capacity to generate or recognize alternatives, possibilities or ideas, which can be used to solve problems (Franken,1993).

In synthesis, creativity can have an *objective dimension*, incorporated in services and goods, or in organizational and productive processes; and a *subjective one*, as a human characteristic (Santagata, 2008). So the definition of creativity can be seen from different perspectives, which obviously can influence the boundaries of Creative Industries.
Creativity itself is a process (Santagata, 2008), and the definition of the steps which compose this process can help to better understand the internal mechanisms of these industries. There are several versions which describe the structure of the *creative process*, but probably the most well-known is the **Five stages model** defined by Amabile in 1988. This theory sustains the *creative process* model as follows (Hill and Johnson, 2003):

1. *Problem finding* – the first step of the process results from an external or internal stimulus, that can be a problem or an interest.

2. *Immersion or preparation* – in order to solve the problem, the motivated individual becomes immersed in the problem, and he starts to recall and to collect information.

3. *Idea generation* – the result of the previous step, is the generation of alternative solutions to the problem, which are affected by the experience, knowledge and imagination of the individual.

4. *Idea validation* – the alternative ideas are tested, and it is chosen the one which fits better to the problem.

5. *Application and outcome assessment* – the selected solution is applied, and the result is monitored.

The influence of the cultural atmosphere (Santagata, 2008), can increase the production of both the *objective* and *subjectiv*e creative *dimensions*. Even if, in our case, we are interested in the *applied* one, defined as "the ability to generate original creative ideas in the service of client needs" (Hill and Johnson, 2003), this process can be used to analyse the differences between Creative Industries and the others. The presence of the *creative process* ensures the absence of a scientifically technical base with formal logical structure, in favour of a process of learning and creating intuitive, iterative and trial and error (The work foundation, 2007), organized in teams and networks. Therefore, coordination and management are necessary in order to maintain stable the creative knowledge flow.

1.4 ECONOMIC AND MANAGERIAL CHARACTERISTICS

Going more into detail, the new and old sectors which are part of the Creative Industries are characterized by some common elements, as risk, uncertainty, innovation, performativity and differentiation (McKinlay and Smith, 2009). The transition towards an economy based on creativity requires a deep revision of the basic mechanisms of value production (Sedita and Paiola, 2009). The presence of the creative component, as a fundamental element, makes the environment more uncertain and complex with some dynamics which can be summarized by the **Seven Properties** defined by Caves (2000).

For instance, it makes the demand more uncertain (Caves, 2001); creativity can be appreciated depending on the individual preferences, which have a strong role. Hollywood (California), the most famous movie industry, represents a clear example of the first principle coined by Richard Caves (2000) *nobody knows* which expresses the demand uncertainty. In fact the consumers' reaction to a product is neither known beforehand, nor easily understood afterward. Consumers discover their preferences about creative products through repeated experiences, in a "sequential process of unsystematic learning by consuming" (The work foundation, 2007). In this unpredictable process, the judgement of others has a fundamental role: word-of-mouth and reviews can have a trigger effect convincing people about the quality of a creative product (Caves, 2001). More than in other sectors, the social dimension, which characterizes the Creative Industries, gives even more importance to what people think in representing something that can be distinguished.

Furthermore, considering creativity as a human characteristic, Creative Industries are peopled by creative talents which are "called to their art", and even if created for a specific market, their products are pure expression of personalised value (The work foundation, 2007). The creators fell a higher membership for a creative product more than in the case of industrial or massive output, but a downside is that they don't care about how the creative work is organized, creating some problem of coordination with the other parties. This makes the management more difficult: not only the needs of the clients, which represent the commercial part, but also the creator's expectations, which are the creative part, have to be satisfied by the same products. Sometimes, these two dimensions differ and in these cases, the value creation is interrupted.

The creation of a successful product needs the contribution of different and heterogeneous subjects, with a *motley crew* (Caves, 2000) made up by different professional competencies, necessary to configure in the correct way the final product (Caves, 2001). Each subject adds his inputs to the product the value chain and increases the economic value of the final product. For example, a cinematographic product is the result of different contributors, which have different roles, competences and objectives, from the director to the technician, from the actors to the scriptwriter. Due to the complexity of the demand, talking about *applied creativity*, it is necessary a complex work behind the final product, which considers all the different dimensions that can increase the value perceived by the consumers. Obviously, the interaction between several subjects, more economically or more creative oriented, favours the rise of conflicts because of the presence of different values and priorities.

In this framework is also present another variable, which can affect the quality of the product, and this is the temporal dimension (Caves, 2001). The heterogeneous activities need to be organized and coordinated considering the time constraints, the *time flies* property (Caves, 2000). Moreover the coordination of the creative parties is particularly challenging because such parties cannot be totally controlled, but are probably the ones that affect the final value the most. In term of temporal coordination, another fundamental element is the availability of some inputs. The creative product is created with the contribution of specific human resources, and in order to obtain the desired output, they must all be available at the same time. A typical example is a cinematographic product, which requires the simultaneous availability of several actors, according to the timing of the production: one absence can hold the entire work up. The main challenges is select appropriate team members, and coordinate them and their activities forward in time (The work foundation, 2007).

When the collaboration between internal contributors is not enough, the creative process must be extended outside the organizational boundaries: in this case, there is a co-creation process between the client, a firm or the final consumer, and the creative firm. Co-creation is a fundamental and necessary step in order to give value to the final product, which requires high interaction and *knowledge flows* and the integration between external and internal resources (Durugbo and Pawar, 2014). But it is clear that to have an effective process, the two parties have to work together in order to reach the shared objectives, in a process based on communication, tolerance and collaboration (Bettencourt *et al.*, 2002). But, as previously stated, when creativity is involved in the process, the creator considers the output as part of himself; for this reason, the management of the co-creation can be very difficult, as will be described better in the next chapter.

This is the main objective of this work: to analyse the co-creation process, i.e. the interaction between the client and the creative firm in order to create an higher value, within Creative Industries, determining if the presence of creativity affects the co-creation process and in which way.

CHAPTER 2 – VALUE CO-CREATION

Co-creation can be defined as a process that brings different parties together in order to jointly produce a mutually increased value, focusing on knowledge and expertise (Lessard, 2014). The so-called *value-in-use*, which differs from *value-in-exchange*[1] according to Adam Smith, is deemed as a crucial component of a company's competitive advantage (Aarika and Jaakola, 2012) and lays at the very basis of the choice of drawing upon co-creation.

2.1 CO-CREATION PROCESS

The idea that value is the outcome of mutual interaction justifies the importance of co-creation in the economic environment: "Value is always collaboratively created by interdependent actors in the market and it is always determined by the beneficiary of the service" (Lessard, 2014). By defining the *value proposition* as "reciprocal promises of value, operating to and from suppliers and clients seeking an equitable exchange" (Eggert, 2009 as reported by Aarika and Jaakola, 2012), co-creation is subsequently the process whereby parties can jointly exploit their resources, benefiting the creation of increased value. The more both parties recognize the importance of resources belonging to their counterpart, the more the process itself acquires potential.

There is nothing new here, considering that co-creation is by now intrinsic in every economic field, in a variety of ways and on different levels of the *value chain*. Let us just think about the end consumer of present times: consumers are able to search for information on the web, give unsolicited feedback to companies, shape communities of interacting consumers, creating value for the company, which will eventually arrange it to satisfy its clients (Roser *et al*., 2009). All of these procedures, fostered by technology, are the evolution of a decades-old sort of co-creation, in which consumers, albeit in a minor way, contributed to business processes

[1]"The word Value, it is to be observed, has two different meanings, and sometimes expresses the utility of some particular object, and sometimes the power of purchasing other goods which the possession of that object conveys. The one may be called *value in use*, the other, *value in exchange*." (Adam Smith, 1723-1790 as reported by Lessard, 2014)

beyond the act of mere purchase. Co-creation emerges as a recast form of co-production in services, which firstly introduced the concept of inseparability of production and consumption (Lehrer *et al.*, 2012), recognizing the client as part of the production and distribution processes of the service. It is therefore of no surprise that the *service-dominant logic* (S-D) has its roots in the concept that "value is always co-created, jointly and reciprocally, in interactions among providers and beneficiaries through the integration of resources and application of competences" (Vargo *et al.*, 2008, p 148). However, the importance of co-creation does not apply only to the company-consumer relationship but broadens as applicable to any connection going on in the *value chain* process. The benefit deriving from the connection between consumer and supplier company is supported by the importance of the *relational capital*, seen as the whole set of intangible resources which derive from network of relations between organizations, such as shared knowledge and *shared transaction-specific investments* (Blonska *et al.*, 2013). According to Dyer (1997), effective partnership between companies can minimize the *cost of transactions*[2] while maximizing transitional value, and this can be seen as a traditional form of co-creation. Through an empirical research, Dyer (1997) showed that in automotive production industry the presence of *relation-specific investments* between clients and providers can lead to lower transaction costs thanks to the exploitation of intagible resources which arise from the interaction. Once again the *relational capital* stands out: thanks to this concept, all economic agents can benefit from relational investing overcoming *free-riding* behaviours and easing knowledge sharing in order to create *mutual understanding* (Blonska *et al.*, 2013). The longer *interfirm links* endure, the more an effective coordination between parties is achievable, thanks to the creation of an *idiosyncratic interaction* which is part of the concept of *relational-specific assets* (Kotabe *et al.*, 2003). In co-creation, beside economic transaction, there is a sort of overlapping of social relations, demonstrating the fact that business is *embedded* in social networks (Sedita and Paiola, 2009). Therefore, the stream of resources that is produced in the process gives rise to added value and knowledge, not only in the economic field. Dyer (1997) recognized the sharing of information as one the elements that are crucial to determine the trend that diverges from the classic theory of transitional cost. The exchange of information nurtures the probability that both companies will be able to improve their performances in brand new ways. Sharing information is correlated to one of the main bedrocks of co-creation: interaction. Access to information, open dialogue, understanding risks and benefits connected to an action and

[2]Transaction cost can be defined as cost incurred in making an economic exchange. They can be decomposed into four separate costs: search costs, contracting costs, monitoring costs, enforcement costs (Dyer, 1997).

transparency of communication (Figure 3) determine good quality of interaction and foster successful creation of value thanks to a diminishing in *asymmetry* of information which characterizes economic trade (Prahalad and Ramaswamy, 2004).

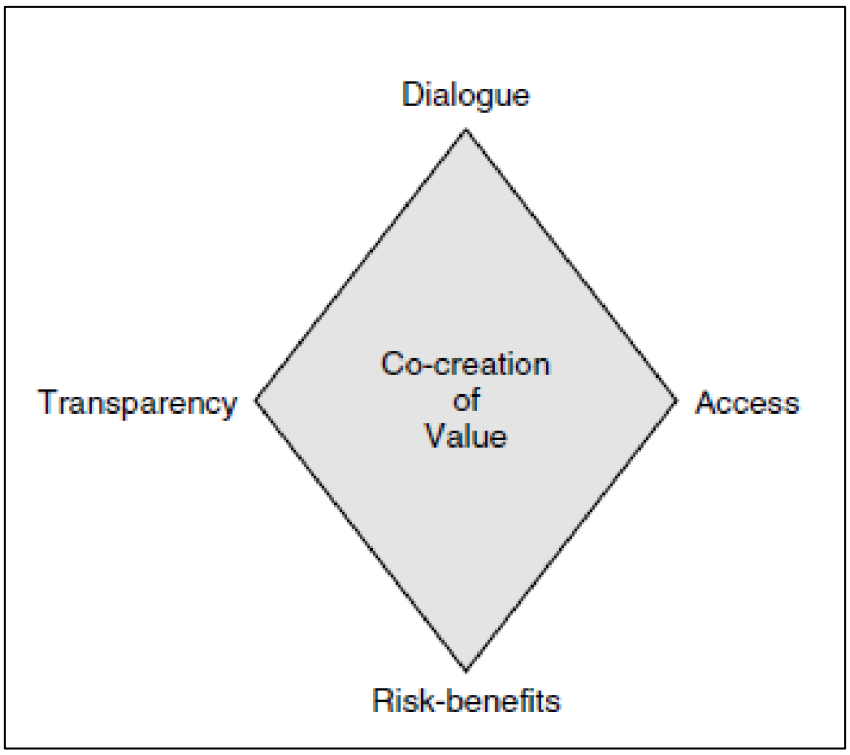


Figure 3 -DART framework (Prahalad and Ramaswamy, 2004)

We could think of co-creation as something that exceeds the limits of the continuum between standardization and personalization: not only will the company create a product to satisfy clients' demand, but it will rather co-create together with its counterpart in order to create an increased value, in terms of quality and satisfaction of the client (Bettencourt *et al*., 2002). In this case, benefits overtake the cost, thanks to the creation of a joint value which relies on the exploitation of the relational potential (Figure 4).

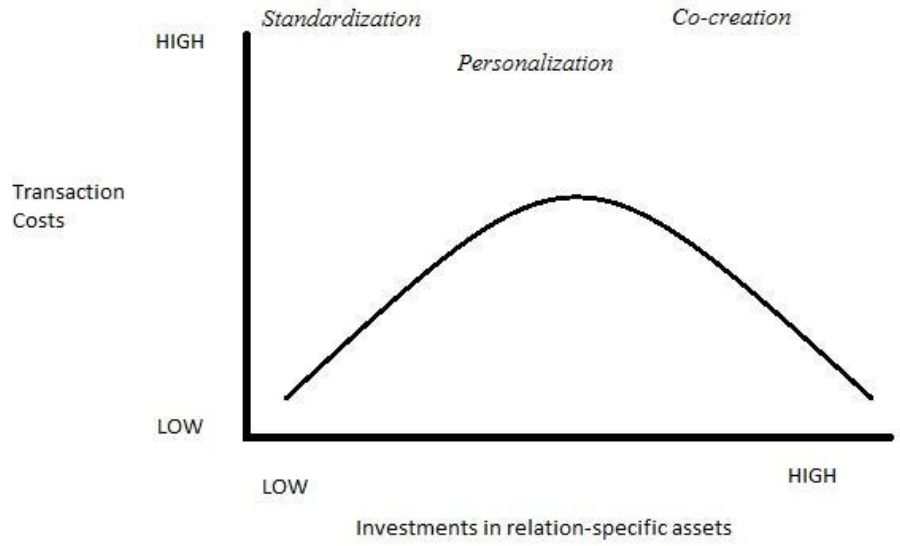


Figure 4 – Relation between transaction costs and investments in relation-specific assets (Elaboration on the basis of Dyer, 1997)

Co-creation can therefore be considered as a sort of intermediary governance in the *hierarchy-market continuum* (Williamson, 1985): the two companies involved are independent but at the same time they can take advantage of the partnership thanks to this collaborative process (Kotabe *et al.*, 2003). However, while on the one hand there are benefits in terms of increased value, on the other there are risks related to the peculiarity of the investment, and risks linked to the need for appropriate integration on both sides (Williamson, 1985). Now the idea of searching for competitive advantage in the form of *distributive game* between a company and its clients or suppliers is overcome, the power of *value adding relationships* is finally acknowledged (Kotabe *et al*., 2003). The value adding relationships are based on one of the crucial elements of *relational capital*, that is to say the *knowledge flows*. Relational investment effectively generates knowledge, with favorable exponential effects (Sedita and Paiola, 2009). According to Kotabe (*et al*., 2003), the profit in terms of performance derives from intentional and organized knowledge transfer, generated and conveyed throughout the co-creation process. Generally speaking, these different kinds of *interfirm relationships* benefit the supplier, by "direct rewards of doing business with the buyer" (Blonska *et al.*,

2013, p 1297). The client is favoured by "the preferential treatment a supplier gives to a specific buyer in exchange for its past actions or future loyalty" (Blonska *et al*., 2013, p 1297). These kinds of relationships are necessary but not sufficient for the co-creation process, which establishes its potential on *knowledge flows* between the parties (Muller and Doloreux, 2007).

2.2 KNOWLEDGE MANAGEMENT AS FUNDAMENTAL PART OF THE CO-CREATION PROCESS

Co-creation can be considered as an iterative process of knowledge, which can bring to future paths of value, benefiting both client and supplier (Roser *et a*l., 2009). Back to the S-D logic, concept that arose with the former co-creation conception (co-production in terms of service providing), we could notice how the so-called *operant resources*, such as knowledge and expertise, are recognized as crucial resources in the creation of a competitive advantage (Vargo *et al*., 2008). Successful co-creations generate knowledge thanks to the interaction between the two parties, but the company must be capable of understanding the value of this process and exploiting it through a Knowledge Management (KM) strategy. This kind of strategy, which implies gathering, developing, sharing and actually employing organized knowledge, refers to a multidisciplinary approach and aims at reaching the organization goals and making the best out of resources (King, 2009). The Organizational Learning (OL) is one of the main tools through which an organization can considerably improve their use of knowledge (King, 2009). As far as knowledge is concerned in the co-creation process, the first organizational decision examines trade-off between creating new abilities or expertise and further developing already existing ones (Vidal and Popadiuk, 2009): in the first case, we could talk about *exploration*, while the second one is *exploitation.* Exploration takes care of those activities ascribable to "search, variation, risk taking, experimentation, play, flexibility, discovery, innovation" (March, 1991, pp 71), while exploitation to "refinement, choice, production, efficiency, selection, implementation, execution" (March, 1991, pp 71). What matters in an organization is the ability to exploit knowledge, specifically to promote short-term profit, but also exploring new knowledge in order to support long-term competitiveness (Eriksson, 2013). The choice does not rely on the *expected value* of these two options alone, but also on other variables, such as time, their variability and distribution, which influence

both implicit and explicit choices (March, 1991). A company must choose where to invest; the ideal goal is to maintain some sort of balance between the two extremities of the continuum, reaching the so-called *ambidexterity* (Eriksson, 2013). The presence of heterogeneous *assets* and knowledge among the parties can motivate this ambidexterity, but it must be supported by an appropriate integration strategy: both parties believe in the value of their own resources, but their heterogeneousness is source of value and possible source of conflict at the same time (Blonska *et al*., 2013). The *social capital*, as well as the *relational capital*, arises from the advantage some individuals can benefit from by being in a *social structure*: the more the parties can integrate themselves, thus creating a homogeneous group, the higher value will be created by the *knowledge flows* (Burt, 2004). Integration can be supported by informal socialization, allowing the creation of mutual tacit knowledge (Eriksson, 2013). Moreover, the presence of prior learning experience can ease the process of integration and mutual understanding in that "learning is cumulative and learning performance is greatest when the object of learning is related to what is already known" (Cohen and Levinthal, 1990, pp 131). The ambidextrous identity is a precious characteristic to be looked for in the client, so that the goals of both parties are in agreement.

At this stage, it is necessary to introduce a new topic related to KM, that is to say management of tacit and explicit knowledge. They are the main components of knowledge, together with data and information (Jackson, 2012). Tacit knowledge is defined by Polanyi (1966) as a sort of *embodied* knowledge, something an individual knows he owns but cannot describe, if not by means of performing. It is something not describable through words, something that inhabits the minds of people and is either impossible, or difficult, to articulate (King, 2009), and is made up of know-how and expertise of the *human capital* of a company. On the other hand, explicit knowledge is what the organization owns in terms of words, documents, database, and any other explicit form; a company must know where its knowledge is stored and who developed it (Simon, 1991). The most part of knowledge is initially tacit and under-employed because the organization does not know precisely what it owns (King, 2009). Locating and spreading this kind of knowledge is crucial because the competitive advantage of a company is usually based on them. According to the **Resource Base View**, the competitive advantage of a company relies on resources with value, rare ones, hard to reproduce. Those resources that the company is capable of exploiting (VRIO) (Kraaijenbrink *et al.*, 2009). Tacit knowledge is implicit and hard to imitate in the beginning. When it is actively developed, acquired and transferred within the organization, it offers a precious opportunity (Jackson, 2012), but it must be turned into explicit knowledge in order to make it

accessible to the entire organization. Nonaka (1994) defined knowledge creation as a process of conversion of tacit knowledge into explicit. He also created the SECI model (1994), which lists the four main ways of converting knowledge and his work represents a crucial part of the *knowledge-sharing process*. The procedures are (Figure 5):

- **Socialization (Tacit-to-Tacit)** – in order to share and generate tacit knowledge through direct observation and experience-sharing.
- **Externalization (Tacit-to-Explicit)** – in order to articulate tacit knowledge by means of a dialogue or a consideration, using symbolic language and translating all tacit knowledge into a concept or an archetype.
- **Internalization (Explicit-to-Tacit)** – in order to learn and acquire new practical tacit knowledge, by learning explicit knowledge thanks to actions and considerations or simulations and experiments.
- **Combination (Explicit-to-Explicit)** – in order to systemize, apply, gather and integrate explicit knowledge.

The knowledge creation process is developed by sharing tacit knowledge, creating concepts, justifying concepts, building an archetype, and finally cross-levelling knowledge (Nonaka, 1994).

From \ To	Tacit Knowledge	Explicit Knowledge
Tacit Knowledge	**Socialization** "Sympathized knowledge"	**Externalization** "Conceptual knowledge"
Explicit Knowledge	**Internalization** "Operational knowledge"	**Combination** "Systemic knowledge"

Figure 5 - SECI model (Jackson, 2012)

Moreover, when co-creation takes place, it often generates some fully tacit knowledge (Vidal and Popadiuk, 2009): this can therefore be considered a process of socialization from which the company must be able to grasp value resources. According to the Resource-based theory on the importance of a relation for knowledge diffusion, cooperation can influence the level of knowledge individuals apply to business, especially for what concerns tacit knowledge, which is an example of know-how difficult to transfer ex-ante (Conner and Prahalad, 1996).

Two strategies of knowledge management linked to managing tacit and explicit knowledge are:

- **Codification**, which increases "the efficiency in KM at organizational level and it supports knowledge transfer across individual and firms"(Bettiol *et al.*, 2012, p 550) and is based on the process of "extracting explicit knowledge from the person who developed it, storing it in databases, and promoting its subsequent reuse by anyone who needs it" (Kumar and Ganesh, 2010, p 119).
- **Personalization**, which is useful "where sticky knowledge is involved and interaction becomes the easiest process for knowledge exchange" (Bettiol *et al.,* 2012, p 550). It refers to transferring tacit knowledge between people by promoting direct interactions in order to share personal knowledge (Kumar and Ganesh, 2010).

Companies should employ both codification and personalization strategies, which normally refer to explicit and tacit knowledge, so that they can make the best out of their resources in a balanced way (Kumar and Ganesh, 2010).

The fact that knowledge is at the basis of the co-creation process implies the need of an appropriate KM strategy that can take advantage of its potential in order to create value. All forms of co-creation are characterized by the exchange of knowledge[3], whether it be voluntary or not (*spillovers as unremunerated benefits*), as it is proven by the studies on client-producer relations in the automotive sector. The knowledge generated by the exchange ensured appropriate coordination between the two companies (Kotabe *et al.,* 2003). It is therefore necessary for a company to learn from its external relations in order to expand its *knowledge-base,* using the so-called *realized absorpitive capacity* (Hernandez *et al.,* 2011) to

[3] "Spillovers are the conditions in which firms or consumers benefit from knowledge, market opportunities, innovations or skilled employees that they have not paid directly " (The work foundation, 2007)

transform and take advantage of the generated knowledge. The ability of exploiting knowledge external to the organization is a key concept of the *innovative capabilities*, which implies recognizing, absorbing and using this knowledge for business purposes (Cohen and Levinthal, 1990). Thanks to co-creation a process of *mutual learning* takes place between companies and the individuals involved. This process goes beyond the company itself and not only does it transfer knowledge, but also creates new value based on it (March, 1991).

2.3 NEW FORMS OF VALUE CO-CREATION PROCESS: KIBS MODEL

Since its first appearance, the concept of co-creation indicated a process that creates value through the joint use of resources and that is proven by the concept of RBV, stating that a company has a limited number of resources and must therefore seek elsewhere what it cannot develop within itself (Kraaijenbrink *et al*., 2009). However, while the first examples of co-creation, or better co-production, were based primarily on interaction linked to the joint production of an output, in today's cases next to the exchange of tangible knowledge, it is fundamental to this process the role played by intangible and *process-oriented* knowledge flows (Den Hertog, 2000). In the last few years, some sectors made co-creation their strength, especially the B2B sector, such as Knowledge Intensive Business Services (KIBS) (see Appendix 3). However, it would not be correct to define them as classical sectors based on S-D logic, since they represent sectors focused on the importance of co-creation as the key process to generate value. KIBS are seen as means to facilitate and transfer or as innovation sources (Den Hertog, 2000) and are "mainly concerned with providing knowledge-intensive inputs to the business processes of other organizations, including private and public sector clients." (Muller and Doloreux, 2007, p 5). Miles (1995, as reported by Muller and Doloreux, 2007) identifies three main characteristics of the companies in this sector:

1. They are primarily based on professional knowledge;
2. They are information and knowledge sources in the first place, or they use the latter to provide intermediate services for the production processes;
3. They have a competitive importance and are essentially business suppliers.

Speaking about the cognitive dimension, Bettencourt (*et al.,* 2002) defines them as "enterprises whose primary value-added activities consist of the accumulation, creation, or dissemination of knowledge for the purpose of developing customized service or product solution to satisfy the client's needs" (pp 100-101). Although some KIBS provide standardized outputs, such as IT, this sector is characterized by the personalization of the provided service (Bettiol *et al.,* 2009). KIBS take advantage of co-creation since they see the client as a co-producer of value and they maximize his engagement to adapt themselves to his needs. Though, this type of co-creation is not limited to a specific need or to mere production: the service product does meet the needs of the client, but is not the result of the sole internal process within the service provider. In fact, "the resulting service product largely depends on the nature of the interaction between the service provider and client, and the quality of the communication process that is involved" (Den Hertog, 2000, p 505). A collaborative partnership can generate well-suited *knowledge-based* solutions and increase the chances of meeting the objectives (Bettencourt *et al.,* 2002). Knowledge flows are of crucial importance in KIBSs and clients relations and can be divided into four categories (Den Hertog, 2000):

- Tangible vs Intangible knowledge;
- Human embodied versus non-human embodied forms of knowledge resources;
- Explicit/codified vs tacit/non codified knowledge;
- Contractual vs non-contractual forms of knowledge.

The interaction between service provider and client creates a dynamic and continuous process of *knowledge conversion*: from socialization to externalization, from combination to internalization (Den Hertog, 2000). In this process the client has a multidimensional and highly collaborative role, as he himself possesses skills and knowledge, both tacit and explicit, that are necessary for a successful output (Bettencourt *et al.,* 2002). Unlike the B2C sector, where the client is mainly involved only in some phases (typically those before and after the creation and distribution of the product), in the value co-creation process typical of KIBS the client is often part of the entire process and plays different roles based on the characteristics of each phase (Aarika and Jaakola, 2012 - Figure 6).

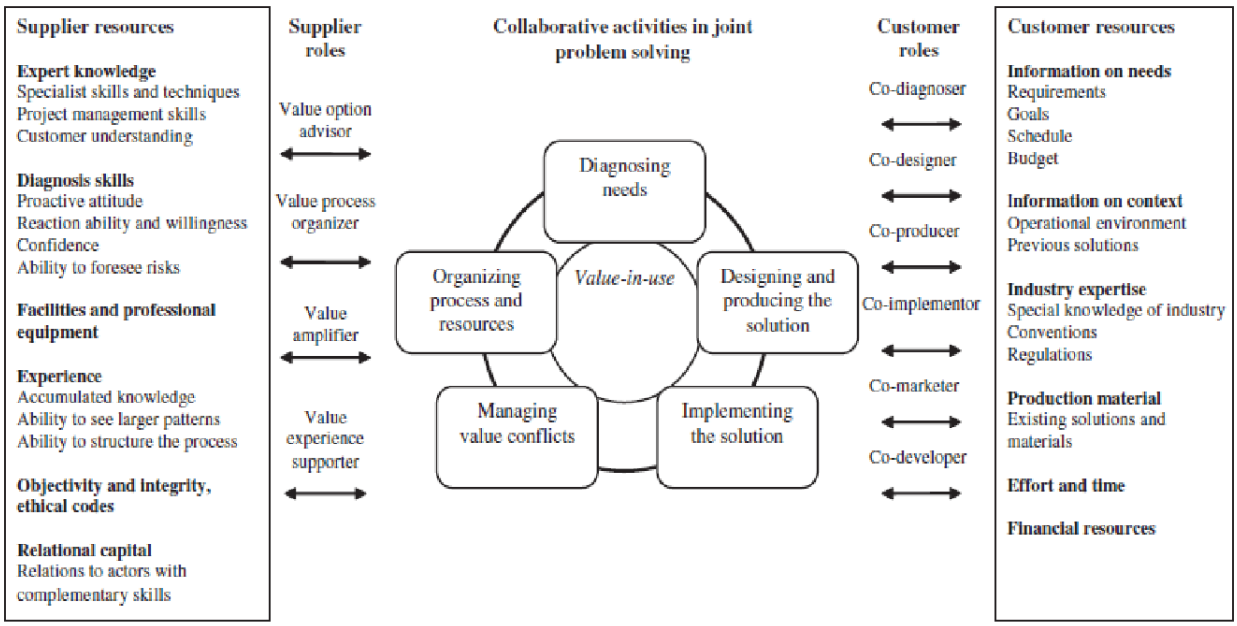


Figure 6 – Value co-creation in KIBS – Phases, roles and resources
(Aarika and Jaakola, 2012)

Value co-creation processes of this kind are complex and dynamic (Lessard, 2014), as a consequence of the asymmetry of information that could complicate the exchange of information and the creation of joint value (Santos-Vijande, 2013). Two are the key processes of collaborative co-creation to facilitate interaction: "1) the alignment of actors' interests, value propositions and resources, and 2) the actors' ability to integrate the engagement's deliverables and outcomes as a basis for their perception of the engagement's value" (Lessard, 2014, p 36).

2.4 ROLE OF CREATIVITY IN CO-CREATION PROCESS: AN ANALYSIS OF CREATIVE KIBS

KIBS base the production of their services on the co-creation and "clients' contribution to the process is integral to service success" (Bettencourt *et al.*, 2002, p 100). The interaction is constant across all the service production process and in each phase, the client covers a specific role, which leads to an optimal co-creation (Aarika and Jaakkola, 2012). Effectively

some research has revealed that the IT service firms often work for months as a single organizational unit with their clients (Lehrer *et al.,* 2012). However, when creativity is a dominant element of the business, the basic logic to the co-creation process changes.

Some types of KIBS can be defined creative, as design or advertising (Bettiol *et al.,*2012), and they can be considered as a link with Creative Industries. These types of KIBS are the object of a study conducted in terms of co-creation and creativity. Through an empirical research based on three real cases, Leher *et al.* (2012) confirmed the hypothesis that more creative the required services are, more autonomy is required by the KIBS provider, and consequently interaction with the client is more limited. This hypothesis is based on concepts already discussed, which are based on the fact that the creative individuals are *idiosyncratic,* particularly in their level of *intrinsic motivation* and this characteristic determines their need of autonomy. This necessity argues with the organizational commercial objective, so "design-oriented firms are challenged to reconcile the creative culture of designers with the analytical orientation of managers" (Lehrer *et al*., 2012, p 500). Effectively if from one side the commercial part follows the client in a systematic way, on the other side the creative one grows apart from this rational context. In order to confirm this, the studious have analysed the big KIBS provider design oriented, which create a continuum between the *technical orientation* and the *marketing orientation.*

The study reveals that the degree of co-creation varies considerably among different projects, clients or phases of the same project. In particular, it shows the presence of a U-shaped relationship between the co-creation degree and the succession of the different phases. Therefore, co-creation techniques seem necessary in the initial and final phases, while in the central part of the process a decrease occurs of the interaction degree between the parties, as shown by Figure 7. This tendency is justified by the fact that the *creative process* occurs within the central phases of the process, and the presence of the client is seen as risky for the creation of an optimal creative solution. Moreover, the slope of the U- shaped relationship is affected by some contingent factors, such as the level of task required, the level of client capabilities, the level of task interdependence and the complexity of client requests.

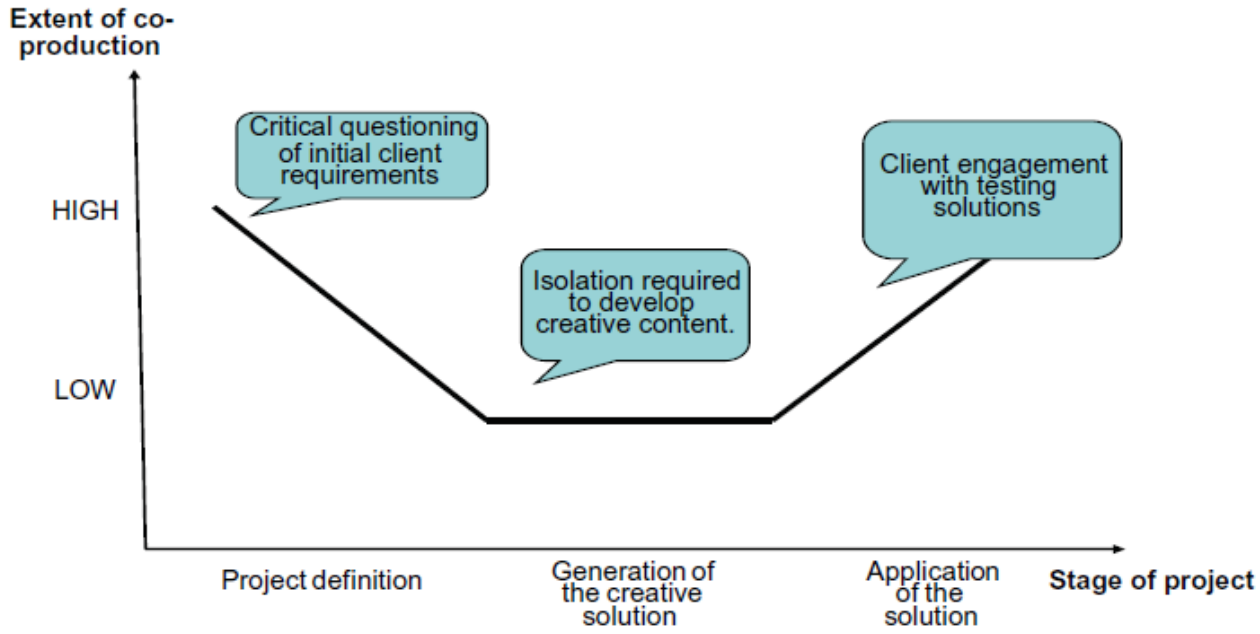


Figure 7 – Extent of KIBS and client co-creation along key stages of project (Lehrer *et al.*, 2012)

The results seem to be coherent with the arguments, which were discussed before in terms of the co-creation and creativity, which own characteristics that seem incompatible. The next natural step is to analyse the situation in the contexts where creativity is a fundamental element, i.e. Creative Industries.

2.5 CO-CREATION AND CREATIVE INDUSTRIES

Unlike co-production and vertical collaboration between companies, the co-creation of value is developed by increasing the level of costumer engagement in development and production processes and by basing the process itself especially on knowledge flows between the parties. As we already said in the previous chapter, creativity can be found in every economic sector, at different levels and in different forms. Though, in the last few decades, those sectors based on *applied creativity* have gained in importance, economically speaking (Hill and Johnson, 2003). Creativity is a core component of the so-called Creative Industries, where it is not

used *for its own sake,* but rather to achieve other purposes, often in the trade sector (Hilland Johnson, 2003). In fact, it is typical of this type of industries to be characterized on the one hand by a commercial dimension, which aims at meeting both the commercial objectives and the consumer's needs, while on the other by a creative dimension. Creativity can be considered as a mental process, or better a process of the human brain, that helps the individual to think and solve problems in some creative way (Simon, 1986). It is therefore difficult to imagine the two above-mentioned objectives being on the same page. On the objective level, creativity can be embodied by goods, services or processes in logic, organization and production, while on the subjective level, it is perceived as an individual characteristic that can be reproduced by the individual and the society (Santangata, 2008). Thus, although creativity is part of economic and production processes, it is still strictly linked to its individual nature. In Creative Industries there are several creative talents "called to their art" (The work foundation, 2007) that can at the same time be perceived as an advantage and a challenge for the company as their objectives are not always those of the commercial dimension. In fact, conflicts are socially inevitable in any kind of organization and are often caused by disagreements between individuals on different objectives or interpersonal matters (Chen and Underwood, 2008). These potential internal conflicts must be managed so that they do not interfere with the value creation chain and the whole value co-creation process. Management is therefore necessary not only to manage relations within the company but also external relations, such as vertical partnerships (De Meyer, 1999).

Sure enough, co-creation is frequently used also in Creative Industries in different forms and at different levels of the *value chain,* despite the best-renowned examples being the cases when marketing or distribution involve the costumer. Speaking of B2C, cooperation begins when information is shared through digital platforms and social networks, where the company can exploit the resources given by the costumers. By taking advantage of this bottom-up creativity strategy (Potts *et al*., 2008), members of *online communities* can share information and create new virtual products, which is an incredible low-cost resource for the service supplier. This trend is also favoured by other collaboration possibilities, for example when a word of mouth is used to share information, which eventually creates a *creative common* (Rullani, 2009). Another widely used practice is *crowdsourcing*, which is based on contributions of a large group of people, especially external from the organization, which through the use of social networks can provide contents and ideas to firms (Potts *et al.*, 2008). Social networks give consumers the possibility to create economies of scale of knowledge (Rullani, 2009) that B2C companies can exploit in order to create value for their consumers.

The B2C can therefore be perceived as a creative sector where co-creation is limited to some specific activities of the company and where the costumer is involved only in relation to that.

On the other hand, B2B activities of the Creative Industries are similar to traditional co-creation and to KIBS, since clients can interact with the service supplier throughout the whole production chain, as part of a process of mutual learning (Payne *et al.,* 2007). We can analyze this mutual co-creation of value by applying the S-D logic, since we speak about complex and *knowledge-based* offers (Aarika and Jaakkola, 2012). Reporting Bettiol *et al*. (2012) in creative KIBS, due to the complexity of the process, costumer and service supplier interact throughout the whole process: while, on the cognitive level, interaction leads to a co-production of knowledge, it also generates an output itself, which is the product. If the output is complex, personalized and in a dynamic environment, co-creation is a necessary means for the client to create successful solutions (Bettencourt *et al.,* 2002). It appears also necessary due to the asymmetry of information: the more the asymmetry increases, the more client and supplier rely on each other in order to create value (Aarika and Jaakkola, 2012).

It is therefore clear how co-creation is a useful way to create value, especially within Creative Industries. However, can the presence of creativity affect the value co-creation process?

CHAPTER 3 – CAN CREATIVITY AFFECT THE CO-CREATION PROCESS?

3.1 THE ROLE OF CO-CREATION IN CREATIVE INDUSTRIES

Creative Industries are constantly growing and evolving, and their success is due to the capacity to recognize and satisfy the needs of clients through a strategic use of creativity (Symbola and Unioncamere, 2015). The competitive anti-crisis power of culture and creativity is actually used in order to reinforce several industries different from the creative ones and they are the basis for future progress (Symbola and Unioncamere, 2015).

Creativity cannot only be seen a simple "product": it is a process, an extraordinary tool through which it is possible to create new ideas (Santagata, 2008) in order to satisfy as best one can clients' requests. Effectively in this paper *applied creativity* is discussed, i.e. canalized in a productive process and used in order to reach economical purposes (Hill and Johnson, 2003).

Nowadays avant-garde products are required, both in terms of functionality and in terms of symbolic and emotional content (Sedita and Paiola, 2009). In particular two phenomena have particularly incentivized the analysis of the Creative Industries: 1) the increasing importance of the creative products and services in the modern economy and 2) the increasing importance of the cultural consume with the *ordinary creativity*[4]as a model of productivity and innovation (Potts *et al*., 2008). Both aspects are compatible with the value co-creation process, which adapts perfectly to the Creative Industries nature, characterized by an unpredictable demand and an infinite quantity of possible solutions (Caves, 2001). These industries are dynamic, innovative and able to modify themselves following the emergent needs of the market, sustained by new technologies which permits an innovative approach in the production and fruition of their services; the clients are not (just) spectators but also co-creators (Symbola and Unioncamere, 2015). The trust towards co-creation in the economic field reflects on the sphere of cultural production (Linksvayer *et al.*,2010); Creative Industries and co-creation respond to clients' needs and together they own a high potential in terms of innovative value creation.

[4] "Consumption is a social and culturally contextual process and creativity is an ordinary aspect of this" (Potts *et al.,* 2008, pp 463)

Particularly in B2B contexts, the creative output is personalized (Bettiol *et al.*, 2012), and its production can benefit from the exploitation of the resources created during the co-creation process. In Creative Industries, through co-creation, the client creatively participates in the productive process, both in terms of contents production and services innovation. This, more than a new socioeconomic phenomenon, can be considered as an evolution of the ideology concerning a higher success of the client in the productive process (Potts *et al.*, 2008).

The concept of *situated creativity*[5] is dynamic and it recognizes the importance of the productive process extension towards the client, and in these relations creativity is incentivized (Potts *et al*., 2008). So the relationship between provider and client is a situational element which can favour the use of creativity, thanks to the *knowledge spill over* (Sedita and Paiola, 2009) which is created between the parties, favoured by the presence of permeable and fluid boundaries between provider and client (Potts *et al*., 2008). If from this point of view, the co-creation process, seen as a social context, can increase the creativity potential, however it is necessary to also analyse how the creativity nature can obstacle co-creation.

Creativity is a process which can be incentivized by determined external social contexts, thanks also to the creation of social capital and its specific form of *relational capital (*Sedita and Paiola, 2009). But, defining it through the *individual perspective*, it always remains a personal attribute which can be found particularly in the subjects which show an *intuitive cognitive approach*[6] (Sagiv *et al*., 2010). In a certain way, it is as if the creativity in part escapes from the organizational structures and procedures, which define its utility in terms of client satisfaction, responding first of all to the individual necessity of solving the problems in a creative way (Santagata, 2008). However, as sustained by Sagiv *et al.*(2010), referring to organizational situational factors which can influence creativity, a *freedom approach*[7] does not favour successful creative activities. Contrarily, with a *structure approach*, the presence of some external restrictions in creative processes can favour an efficacy use of the creative potential, thanks to the creation of determined techniques which can provide some approaches

[5] "in which knowledge resides not only in the minds of individuals and in external codified norms, but also in situational contexts of spaces and places, languages, and other media, organizations, networks and other systems of social interaction" (Potts *et al*., 2008, pp 460).

[6] "Intuitive person tends to analyse information from various paradigms simultaneously, and is therefore likely to come up with original solutions to problems" (Savig *et al.*, 2010, p 1091).

[7] This approach is based on the concept that the creative process involves a leap that cannot be adequately formulated, analyzed, or reconstructed (Sagiv *et al*., 2010).

for the use of creativity. It is necessary to refer to conditions which shrink the scope of the problem and which decrease the variables in which creative subjects have to focalize (Savig *et al.*, 2010). As defined by Simon (1986), in order to be creative the natural character is not enough; it needs to be prepared, expert and risk-seeking, and these objectives can be reached with the tacit or explicit knowledge transmission and favoured in a structured context.

Sustaining this theory, Bettiol e*t al.* (2012) suggest that the strategy to adopt at KM level is the hybrid one, based on the harmonization of codification and personalization. An ambivalent strategy is linked to the achievement of the so-called *ambidexterity* based on both exploration and exploitation (March, 1991). If from one side the practices relative to the last one are necessaries in order to create a personalized output, on the other side the codification of creative activities can sustain an efficacy organizational development. They are not talking about restrictions in the use of creativity, being the latter a kind of tacit knowledge, but about the definition of creative processes and work division organization (Bettiol *et al.*, 2012).

In creative contexts personalization is the predominant strategy, due to the presence of complex and highly personalized to clients' requests outputs. However, the presence of creativity determines the need of a codification strategy, reaching the ideal organizational mix of 80%-20% strategies (Kumar and Ganesh, 2010).

Another focal point of the creativity role in Creative Industries is the presence of a duality of dimensions, a creative one and a commercial one. The first determines the nature and the essence of these industries, while the second regulates the first one in order to enhance it in economic terms and to make it usable by clients. In order to favour an alignment between commercial and creative objectives, the management of the provider firm has to cover the role of *boundary spanner* (Roser *et al.*, 2009), i.e. to be a link between organizational internal networks and external sources of information (Hustad and Bechina, 2012). Effectively the *boundary spanner* covers an ambivalent role, devoted to both internal and external integration (Ansett, 2005). This figure has to be able to integrate provider and client using his managerial skills and his competences relative to the specific creative activity, creating a relation which enables the achievement of a co-creation shared goal.

As previously sustained, a strategy which can create a fertile field for creativity has to:

- Create some social contexts, characterized by relations which can favour the knowledge creation, exploiting shared creativity;
- Create a structured context in order to regulate, but not limit, creativity;

- Align creative and commercial objectives of creative firms.

Even if creativity is structured and addressed towards commercial ends, it remains partially free from the schemes. Firstly, due to its tacit nature, it cannot be totally recognized and framed within work organization logics, because the output of Creative Industries remains always partially unpredictable (Bettiol *et al.*, 2012). Secondly, the use of creativity can be favoured in sharing contexts, as the co-creation, but at the same time, being a characteristic linked to a high level of *intrinsic motivation* (Lehrer *et al.*, 2012) and to organizational *human capital*, it cannot be totally shared and made explicit. Particularly in creative contexts, the tacit knowledge divulgation is not just impossible, but also counter-productive, making the *knowledge substitution* [8]unusable (Conner and Prahalad, 1996). In synthesis creativity is maximized when interaction with other individuals is given, especially if endowed with different abilities and knowledge, but it still remains an individual characteristic (Sedita and Paiola, 2009).

This leads to again to some fundamental questions: which is the creativity role in the co-creation process? And can this process enhance the creativity?

In order to answer these questions, will be analysed the B2B Creative Industries because, as reported in Chapter 2, they show some characteristics more analogical to the traditional co-creation or the one of KIBS than in the case of B2C Creative Firms.

3.2 OBJECT OF THE ANALYSIS: COMPUTER ANIMATION INDUSTRY

Creative Industries are a growing reality, supported by the advent of new technologies, which make their products more easily usable and at the same time they extend the spectrum of possible solutions (Symbola and Unioncamere, 2015). A creative and dynamic B2B industry, which is characterized by the importance of technological dimension, is the Computer Animation one, populated by *creative studios*. In order to provide these specific services, firms require *cross-functional competences*: a combination of *creative skills* and technological knowledge constantly updated. Effectively, near creative competitiveness, technological

[8]"The knowledge substitution effect concerns how presently held knowledge is applied to the activity" (Conner and Prahalad, 1996, pp 484).

knowledge determines an organizational competitive advantage: due to the rapid technological progress, the technics that have been used beforehand become obsolete in a short time, so a constant updating is required.

Computer Animation bases its existence principally on the technological progress because it provides the necessary instruments in order to concretize creative ideas, but the principal competitive resource is creativity. In this context creativity is not incidental to the generation of the business solutions, but it is a desired outcome itself (Hill and Johnson, 2003).

3.2.1 CO-CREATION PROCESS IN COMPUTER ANIMATION FIRMS

When the client commissions a project to a provider firm, a formal relationship starts and it will flow in a highly personalized output. In a certain way it is possible to find some of the characteristics which distinguish the artistic/creative project organization, particularly for what concerns their *product-driven* nature (at detriment to the *manager driven*) and the low managerial specialization of the project manager (Sedita and Paiola, 2009). The provider has to be able to use the *creative genius* and technological competences in order to create a product coherent with the requests of the counterpart (Lessard, 2014). The client can sustain the development of the project through the co-creation process, providing proper resources and competences: the result is the formation of a whole of heterogenic but complementary competences (*related variety)* (Sedita and Paiola, 2009).

Through co-creation the parties interact, and thanks to knowledge flows, they are able to create an output coherent and personalized to what the commitment requires. The co-creation process and the role of the *boundary-spanner* are particularly useful in this context, because the high level of *specialized knowledge* creates a possible gap in terms of goals and communication between client and provider, both in terms of creativity and in terms of technology. This can be caused by the fact that the specific competences and knowledge of the provider can be incomprehensible for the client (Hustad and Bechina, 2012). In this case the heterogeneity of competences leads to possible conflicts which have to be managed in a proper way in order to avoid the interruption of the *value chain* (Blonska *et al*., 2013). The co-creation is part of the situation in which creative individuals do their job, but it leads to an increase of complexity level of the relation management (Potts *et al.,* 2008). As described before, creativity cannot be totally framed in organizational and collaborative processes,

because creative experts consider creative process as an activity of problem solving one to an interior need and through the use of the *big idea* (Hill and Johnson, 2003) they create the solution. Therefore, on the one hand creativity disturbs the co-creation process, and on the other hand the impellent presence of the client disturbs the creative process.

Following the S-D logic, the *value-in-use* is co-created through the combined efforts of the two parties, but it is always determined by the service beneficiary (Vargo *et al*., 2008). However, the high rate of involved technology and the predominant presence of the creativity can affect the collaborative value process between client and provider because they are often linked to *tacit knowledge* (Polanyi, 1966).The provided services are *people-based* (Hill and Johnson, 2003) and the firms, especially the ones with small dimensions, base their competitive advantage and innovative capacity on tacit knowledge of individuals, i.e. on *private held knowledge* (Conner and Prahalad,1996). Returning to the RBV, it is possible to confirm how different performances are determined by *knowledge asymmetries* (Conner and Prahalad,1996). Near specific competences, an element which determines the competitive advantage of these firms is the experience of single individuals (Sedita and Paiola, 2009), which is strictly linked to the individual participation and not to the organization.

3.2.2 TECHNICAL CORE AND TASK ENVIRONMENT IN CREATIVE STUDIOS

Creativity is the element that characterizes this type of industry, but the technology covers a fundamental role in the formation of a competitive advantage. In fact, the creation of these creative products, especially in the field of Computer Animation, depends heavily on the technological component. In particular, it is possible to recognize two challenging situations: the first concerns the accessibility to technology, while the second is related to the mutual dependence between organizational technology and the surrounding environment.

In the first case high accessibility to technologies leads to exponential increase of possible competitors, maybe other companies or freelancers. A creative idea and an adequate technology are the only resources required in order to be able to offer the client what he wants.

In order to give a better insight into the second case it is necessary to describe the relationship between the concepts of *task environment* and *technical core*, introduced by Thompson (1967). On the issue of conflicts in organizations, the scholar has defined that between the

sources it is possible to identify the differentiations and interactions required by the technologies available in the organizational system. However, it is possible to identify as a source of conflict the *task environment,* i.e. the part of the environment that is not indifferent to the organization, because of competing pressures created. Changes in the environment can cause changes in the *technical core,* thus violating its ideal isolation. In the case of *creative studios,* not only the presence of technology creates uncertainty in itself, but also its importance in the production process and its dependence on the environment can create situations difficult to manage. In this case, there are two components of the environment that may interfere with the technical core of *creative studios*. Primarily the technological level of the environment: rapid technological progress implies the need for constant updating of techniques used to compete adequately. An uncertain environment determines an increase in complexity within the organization, and greater difficulty in isolating the *technical core*. Acknowledging the presence of intensive technologies, it also determines the difficulty in creating *closed-systems strategies* (Miner, 2006). No less important, however, it is the case of co-creation, and therefore of the presence of the client in the production process can be seen as a part of the task environment that affects the isolation of the technical core. The presence of this type of stakeholder is usually limited to certain activities, mostly at the edge of the value chain, while by co-creating his role it takes on greater importance and level.

In the co-creation concept used in KIBS, the client is a fundamental resource for the process. It occurs especially in complex and uncertain contexts, where provider and client are dependent on the value creation (Aarika and Jaakkola, 2012). However, as reported in the previous point, in creative frameworks co-creation is neither simple nor very productive. Creativity in itself owns some characteristics incompatible with the co-creation process nature; but this is not the only challenging element. Effectively the client can disturb the creative and productive process of the provider. If on the one hand the client can bring some useful resources, on the other his limited knowledge about the technical features of products and processes make the integration of the parties difficult.

This situation is consistent with one of the challenging characteristics of Creative Industries, i.e. the presence of a duality of dimensions, one more commercial and the other more creative. If from a first point of view the creative firm variety is required in order to create new ideas, for instance through co-creation, on the other the technical core requires autonomy in order to work efficiently. In B2B businesses co-creation is required by the client as a discriminator element in order to select a particular provider. The problem is that the client often doesn't recognize his potentialities in terms of added value to the product and, at the same time, he

does not recognize the boundaries between required competences. In this case co-creation is not a useful instrument for the provider, but it is an additional request of the client which makes the design and productive process for the provider more difficult.

Following the logic of *competency architecture*, the client has to provide some general competences of product definition. On the other side, the provider has to exploit its specific competences in order to realize the output (Draganidis and Mentzas, 2006); so the productive process and its specific decisions are a black box for the client. From this point of view, the role of the client is limited to some phases of co-creation, and when creativity is a predominant element of the business a higher separation of the competences may occur, with a limitation on the ones of the client.

3.2.3 INDUSTRY ANALYSIS

Caves (2001) defines that Creative Industries can be populated by two big categories: small, medium and big enterprises. In Italy the firms which provide these type of services are called *creative studios* and they are mostly SMEs. Accord to the description provided by Caves (2001), they are more involved in the selection and in the development of the creative resources than in the case of big enterprises, being more focused on the realization of the potential implicit in the creative process. In terms of co-creation, the collaboration between provider and client is particularly useful in SMEs contexts because it enables both parties to use their resources and to combine them with the ones of the counterpart in an optimal way (Muller and Zenker, 2001). The Italian *creative studios* show realities with few employees, up to a maximum of 10/20 people, and they base their potential on their individual skills more than on their organizational knowledge. However, the small Italian firms, sustained by the innovation of the stylistic technique, are able to remain competitive and to move agilely in a constantly growing market (Symbola and Unioncamere, 2015).

This industry is not recognized in a consistent way, so it is not possible to identify the features which characterize *creative studios* industry, due to absence of specific data and researches. However, the analysis of some cases reveals some characteristics which can help in the description of this young and growing industry.

The degree of concentration is not particularly high and the number of companies operating in this industry is constantly changing, sustained by two particular elements: high mortality rate and low entry barriers. The context dynamicity is due to a high mortality rate, which includes

all the companies not able to create a strong competitive advantage, especially due to the absence of an effective structure of processes. Moreover, the absence of huge entry barriers determines a huge number of possible competitors, being technology a resource accessible to almost everyone. The diffusion of computerized programmes of Animation enables an easy creation of these creative products: creativity and a computer are enough in order to enter in the market, offering more competitive prices in respect to consolidated firms, due to the lack of the requirement of a huge initial capital investment. Entry barriers are very limited and for the *creative studios* the best alternative is trying to build a strategy based on resources difficult to access, as experience or advanced technology.

The products are differentiated both on technological and creative base; in particular the second one, thanks to its intangibility, guarantees a lower risk imitation. *Creative studios* base their competitive advantage on tacit knowledge which arises from individuals, especially through creative process, and from co-creation process. While in the case of technology, it is a resource which competitors can easily obtain, and in order to avoid it, a constant update is required. From this point of view, efforts by a firm to exploit the existing technology enhances the risk of imitation (Kogut and Zander, 1992). In order to do so, *creative studios* has to obtain the proper technology from suppliers, which are firms operating in industry, focused on technological devices production. The degree of concentration of suppliers is particularly low, especially for the generalist technology, but it increases in the case of specific and updated products. In the first case the client owns most of the power: the homogeneity of offers gives them the possibility to be very price sensitive. While in the case of specific technologies, the provider owns rare resources which guarantees him a high competitive advantage. This input can also be the base for the competitive power of *creative studios,* which can create some contract of exclusivity upstream in order to reach it.

Being prevalently B2B business, the clients are other firms which commission creative products to *creative studios* in order to use them for organizational or commercial purposes. The demand is huge but fluctuating and the nature of clients can vary from the small firm to the multinational enterprise. There are a lot of alternative products, especially for the creative output used for another purpose than the creative one, as for example organizational training. The budget covers an important role in the co-creation process, determining a discrete price sensitivity, counterbalanced by the specificity of the service. *Creative studios* has to exploit the possibility to create long term relationships with clients, trying to decrease the demand fluctuation and price sensitivity.

If in Italy the Computer Animation is not already a totally formed and recognized reality, in other international contexts it has been a recognized and consolidated context for some years. A limit case is the American one, sustained by the presence in the same territory of the biggest cinematographic industry in the world, Hollywood (USA). In this case, it is possible to recognize a geographic cluster, which incentivizes the circulation and the production of the knowledge thanks to the dense relational texture between the different parties (Sedita and Paiola, 2009). A research done by the association BestWebDesignAgencies[9]decreed the Top 3D Illustration and Animation American firms, and among them we can find PacificomMultimedia, founded in 1999 in Virginia and which today is an international reality with clients from The Middle East to Australia. Another example is Paradigm Productions, founded in 1992 in Memphis and which today counts for more than 90 active clients.

These firms are specialized in Computer Animation and on a dimensional level, they differ from the Italian reality by still maintaining a medium dimension, with revenues which vary between $1 and $5million. Effectively, excluding the leader case of the industry, which present about 100 employees – Harevst3d – in the American Top Ten the number arrives to a maximum of 50 employees, one of which is Ignition72, based in Baltimora, which counts 12 of them. This tendency can be explained with the concept of *knowledge outsourcing*, being the particularly specific offered service and based on the importance of the tacit knowledge (Costa and Gubitta, 2008). These organizations operate in a world market but they still maintain a relatively contained medium dimension.

Another example is the Indian case, which is sustained by the presence of a strong cinematographic industry, Bollywood, which enables a business of about $ 1.5 billion in the 3D, 2D Animation and visual effects industry. The success of this business is based on two key elements, i.e. a high availability of *highly skilled labour* and low production costs. In this specific case the government covers a fundamental role, sustaining the industry and the organizations which work in order to encourage the creative and technological development of the firms, as the TASI (The Animation Society of India) or the SAID (The Society for Animation in Delhi)[10]. From what is possible to deduce from the ranking made by

[9] http://www.bestwebdesignagencies.com/rankings-of-best-3d-illustration-and-animation-companies

[10] http://www.telugufirst.com/2013/10/26/hyderabad-a-global-hub-for-animation-and-gaming

BestWebDesignAgencies, the most quoted firms are principally based in Nova Delhi and they count for between 10 and 50 employees, with revenues of up to $5 million.[11]

Finally, another interesting case is the Japanese one. The Animation industry has always been one of the more distinctive businesses in Nipponese context, sustained by the high production of anime inspired by the manga subjects. Since the '20s, Japan has been one of the Animation leaders, but new technologies and the advent of new global competitors, for example China, have determined a drop in the business. Today the Japanese firms have to explore new worlds, different from the classic 2D Animation and in this practice they are sustained by the national technological progress. This new Animation sphere is an opportunity in terms of new businesses and jobs, due the high competition in the traditional Animation field. The Animation business today is worth about $2 billion, with about 400 firms, half of which are based in Tokyo.

3.2.4 SERVICES PROVIDED BY CREATIVE STUDIOS

Talking about the characteristics of this industry in the Italian context, *creative studios* present a portfolio of several services. The principal are:

- ILLUSTRATIONS – It is a visual representation, which can be in form of picture, a painting, a photomontage or another technique. Generally, it is used in editor in order to represent a written text or to describe it visually, but it can also be decorative, used for advertising or as base for storyboards of films and animations.

- CONCEPT ART – It is an illustration form used in order to convert an idea for its use in movies, video games, animations, product design and comic books, before putting it into the final product. The service varies from rapid preliminary sketches of research to detailed illustrations ready for publication.

[11] http://www.bestwebdesignagencies.com/in/best-3d-illustration-and-animation-companies-in-india

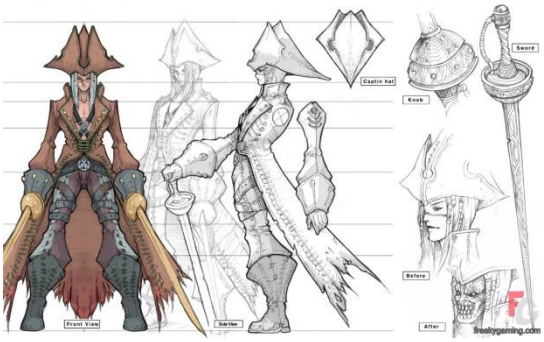


Figure 8– Example of Concept art (www.freakygaming.com)

- STORYBOARDS – It is a graphical representation of the shots of a comic or filmed work in form of drawing sequences in chronological order.

- MOTION GRAPHIC – They are digital shooting and/or animation technology used in order to create the image of movement or rotation illusion and they are usually put in combination with audio in multimedia projects.

- 2D ANIMATION – The images are created and/or modified in the computer using a bitmap graphic or a graphic of vectors. The animation is done with the rapid succession of manual or graphic pictures in order to create the image of movement.

Figure 9 - From illustration to 3D (animationpitstop.blogspot.com)

- 3D ANIMATION - This service is based on the animation concept, properly defined as the process which arises from the Phi physical effect, i.e. on the rapid combination in succession of static images in order to give the illusion of movement. In its 3D version, the solid body is born as a digital model with a surface formed by polygons, which recreate its essential lines and is manipulated by an animator. Once modelled,

characters are collocated in a virtual set and they are animated; completing the image of movement, the solid is covered with some textures in order to be coloured. Animations can be recorded on analogical supports, flip-books, cinematographic film, videotapes and digital medias, as well as animated GIF, flash animation or digital videos, and in order to visualize them digital camera, computers, televisions or projectors are used.

Figure 10 – 3D Animation in "Game of Thrones" (www.pakistanprobe.com)

- RENDERING – It identifies the process of "surround", i.e. the generation of an image starting from a mathematic description of a three-dimensional scene interpreted by algorithms, which define the colour of each point of the digital image. In the process of computerized three-dimensional graphic generation this is the last important thing which provides the final aspect to the model and to the animation.

- UX/UI – The*User Experience Design*is the discipline, which studies the experience of the users with the purpose to create the optimal conditions in order to live a positive experience. The scope of the UXD is to understand the experience of the people before, during and after between them and a website, an interface or a service. The

User Interface design (UID)is the creation of the link, which permits the person to have a relationship with the product.

Other firms require these creative products and they will be used for *branding, commercial design, TV promotion, network and channel, broadcast, marketing, and events* in different types of industries, such as cinema, broadcasting, fashion, television or simply for organizational internal purposes. In particular, there are three main goals: marketing, entertainment and training.

3.3 KIBS AS BASE REFERENCE

Due to the lack of specific contributors related to B2B Creative Industries and especially for what concerns the Computer Animation, KIBS represent an optimal candidate, thanks also to the presence of their creative forms, such as design or advertising (Bettiol *et al.,* 2012), which are limited cases between these two worlds.

3.3.1 ANALOGIES BETWEEN B2B CREATIVE FIRMS AND KIBS

B2B Creative Industries and KIBS show some analogies which permit to use the logics of seconds in order to analyze the second. Particularly, considering the key point of this work, we can identify four main elements (Figure 10):

1. **BUSINESS-TO-BUSINESS FIRMS WITH SPECIALIZED KNOWLEDGE**– As reported before, one of the characteristic of KIBS is that they provide services to other companies and organizations, so not produced for private consumption. In the case of B2B Creative firms, the client is another firm which commissions to the provider the creation of a creative product. As in the case of KIBS, the *specialized knowledge* is a fundamental element, which ensures an output *knowledge based*, innovative, based on client's requests and specific to specific *technical discipline.* (Muller and Doloreux, 2007). The presence of *specialized knowledge* comports the use of KM practices,

which regulate both tacit and explicit ones, which arise from the provider-clients' interaction and require *knowledge conversion process* (Nonaka, 1994).

2. **TECHNOLOGY** –In the specific case of Computer Animation the role of the technology is fundamental and the competitive advantage is also determined by the capacity of technological development (Den Hertog, 2000). The services provided by KIBS and Computer Animation firms are examples of *knowledge outsourcing,* due to an avant-garde position in their specific technological niche.

3. **S-D LOGIC** – KIBS firms provide innovative *knowledge-based* services to other firms, clearly following the S-D logic practices. The latter "recaptures the original notion of applied, specialized knowledge and skills and value-in-use as primary" (Vargo *et al.,* 2008, p 147). From this perspective, the value created depends on the maximum exploitation of knowledge in the creation of customized output.

4. **IMPORTANCE OF THE CO-CREATION PROCESS** – Due the complexity of the projects, single firms, especially SMEs, are supposed to exploit the resources, which arise from the relations with other actors, such as the clients. In the case of KIBS, the production of the services is often the result of a *joint effort* by the service provider and client (Den Hertog, 2000). Within this relationship, the *knowledge flows* cover a fundamental role in value co-creation. In addition, in Creative Industries the co-creation is fundamental and, especially in B2B contexts, the provider has to exploit the client's knowledge in order to reach the desired goals.

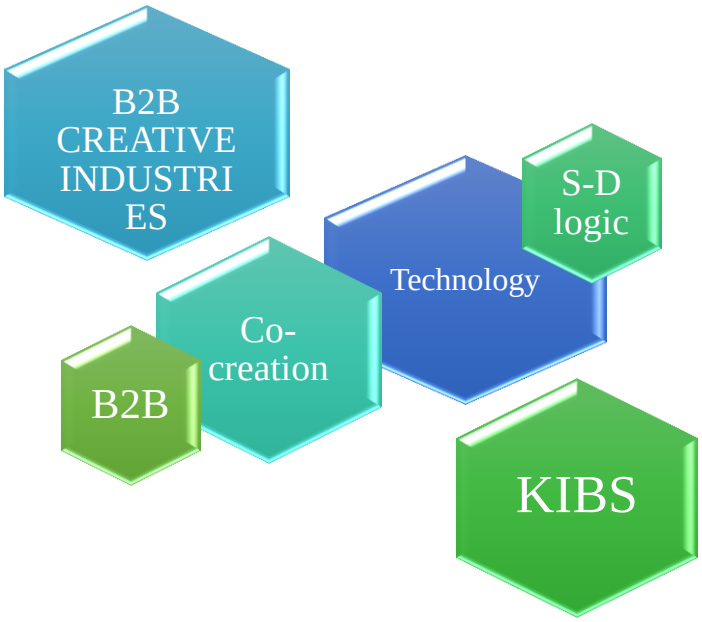


Figure 11 – Common elements between B2B Creative Industries and KIBS sectors

The objective of this work is to test if the theory sustained by Lehrer *et al.* (2012), about the presence of a U-shaped relationship between co-creation stages and client involvement described in the previous Chapter, can be applied to Creative Industries Case, adapting the research to the reality of Italian *creative studios.*

CHAPTER 4 - METHODOLOGY AND TOOL

4.1 METHODOLOGY

The analysis of the co-creation process in Creative Industries began with the search for data on a national level, with the aim to carry out a survey of *creative studios* businesses, defining certain general characteristics, such as the number, size or geographical location. However, as already explained, *creative studios* industry is not specifically covered by ATECO 2007 codes actually in force in Italy. Taking as a reference the activity codes proposed by Symbola and Unioncamere (2015 - see Appendix1) for Creative Industries, the lack of a specific classification of the objective industry has been revealed. Through the portal AIDA has been identified as the classification of industries and professions at least partially consistent with those searched. Between these:

INDUSTRY

- 74 OTHER ACTIVITIES
  - 74.1 SPECIALIZED DESIGN ACTIVITIES
    - 74.10.1 GRAPHIC DESIGNERS ACTIVITIES
    - 74.10.29 OTHER ACTIVITIES

- 59 PRODUCTION ACTIVITIES OF MOVIES, VIDEO AND TELEVISION PROGRAMMES, MUSIC AND SOUND RECORDINGS
  - 59.1 PRODUCTION, POST-PRODUCTION AND DISTRIBUTION ACTIVITIES OF MOVIES, VIDEO AND TELEVISION PROGRAMMES, MUSIC AND SOUND RECORDINGS

59.11 PRODUCTION, POST-PRODUCTION AND DISTRIBUTION ACTIVITIES OF MOVIES, VIDEO AND TELEVISION PROGRAMMES

59.12 POST-PRODUCTION ACTIVITIES OF MOVIES, VIDEO AND TELEVISION PROGRAMMES

PROFESSION

- 62020 – Consultancy in the industry of information technology
- 62090 – Service activities in information technology
- 62010 – Production of software not connected to the edition
- 58210 – Edition of computer games

As can be seen from the description of each section, it is possible to bring *creative studios* services to some of these categories, but none appears to be sufficiently comprehensive and specific in order to identify an objective industry. Taking into account classifications such as n° 62020 and n°62090 about 7,000 companies are identified, but most of them are entirely outside the activities related to Creative Industries, such as computer companies or banks that operate with mobile banking services.

The current Italian situation is similar to one reported by Richard Caves (2001) which was one of the first to study the structure of the Creative Industries. At the beginning of his studies he realized the lack of systematic data, yet the abundance of information about individual projects or business practices published in professional journals. Thanks to the heterogeneity and the qualitative nature of the sources, Caves managed to bridge the gap of general data of the organization and the behaviors of these economic sectors. In our case, the services offered by *creative studios* are relatively young and not yet identified in their entirety by the European and national classifications.

At this point it was necessary to identify a new search method. Based on the information available about these sectors and on the solutions adopted by Caves (2001) and Lehrer *et al.* (2012), the best solution was that relating to the study of multiple case studies.

To locate the Italian companies whose activities were consistent with the classification of Creative Industries adopted in the first Chapter, we used the help of a leader of the industry, located in Northern Italy and operating throughout Italy, classified under ATECO code 59.11 (for privacy reasons this will be called Creative 1). Through the concept of perceived rivalry, i.e. through the perception of the position of competitors in the satisfaction of the same target clients (Castaldo, 2012), the company Creative 1 was able to determine which companies are its direct antagonist in the offering of competitor creative products, identifying about 6 companies in Italy.

The search is then continued with the analysis of these businesses, in terms of products, techniques and sizes, to determine which variables can characterize this type of companies in general.

As noted above, one of the main sources in terms of the object in question and the used method was that of Lehrer *et al.* (2012) related to the influence of creativity in the value co-creation process. Their method consisted in analyzing, through a given questionnaire with open questions, three case studies, defined as creative KIBS and sized to have approximately 200 employees in various divisions. The questionnaire therefore needed a review to be applied to the context of small-medium size creative companies in Italy.

The definition of the instrument began with an initial screening of applications useful to the end of our research, inspired by those of the aforementioned study. To make the instrument more efficient and effective, it was decided to turn it into a semi-structured questionnaire, composed mostly of multiple choice questions with open specifications provided in specific cases.

In order to structure this tool, the questionnaire resulting from the first screening was subjected to a company working in the audio-visual industry, which being not part of the field populated by *creative studios*, could not be part of the object of analysis. But since the two sectors partially overlap, thanks to this contribution it has been possible to define specific areas of analysis and further to investigate on the characteristics and mechanisms common between the two industries. In terms of analysis tool, the result was the possibility to focus the questions to specific areas of investigation and, where possible, to define the possible answers to a few possible scenarios.

4.2 TOOL

The questionnaire is sectioned into three macro sectors which involve the three main topics of this analysis: the organizational structure, the co-creation of value and the development of skills and knowledge (see Appendix 4).

4.2.1 ORGANIZATIONAL STRUCTURE

This first section is designed in order to identify the general characteristics of the company and in particular to explore how the company prepares and carries out the process of co-creation with the client in terms of internal procedures. The first topics covered include the corporate structure, through the representation of the company organization, and the range of services offered. In particular, the size factor is crucial to frame the company in a broader context and to confirm, or not, the hypothesis that the *creative studios* are mostly SMEs. If confirmed, this hypothesis could increase the importance of the analysis of the co-creation process, this being particularly useful for smaller companies (Muller and Zenker, 2001). In addition, the explanation of the roles helps to understand how the company is structured in terms of commercial and creative dimensions, and then how much weight, at least in quantitative terms, each of them have. In this case, the primary objective is to find the dimensions of duality that characterize the Creative Industries (Caves, 2001), and identify if the key figures, and then the core business benefits, are represented by the creative dimension. In this case, tacit knowledge would represent the essence of the business strategy and the selection criterion in determining the competitiveness of the company (Hill and Johnson, 2003). Co-creation determines the output customization according to client requirements (Santos- Vijande and Gonzalez-Mieres, 2013) and, at organizational level, the choice of the composition of the executive team can detect a greater or lesser propensity to adapt the organization to all types of projects, especially in the initial phase of the process (Kumar and Ganesh, 2011). Talking about co-creation, a key issue is the definition of client requirements and the subsequent process of creating solutions. The fundamental purpose is trying to identify the steps that comprise the process and to determine which is the incidence of the client, especially in the initial phase of definition. Since this is in fact influenced by the company's decision to KM between exploration and exploitation, thus not only defined by the level of aspiration, but also by the needs of the client, which usually considers the most attractive solutions that result from practices of exploration (March, 1991). In this frame, a

discriminating factor is the budget, which may limit the investment devoted to the creation of the solution, or on the contrary, can be a component which is subsidiary to output totally satisfactory and innovative.

4.2.2 CO-CREATION OF VALUE

The second section focuses on the exploration of techniques and mechanisms used in the process of co-creation. First, it is necessary to define what meaning this practice has for companies. Many contributions regarding KIBS describe the co-creation as "integral to service success" (Bettencourt, 2002, p 100), but the processes are dynamic and complex (Lessard, 2014). In our case, the creative component accentuates these difficulties, making the relationship with the client a real challenge. The figure of the client is in fact useful for the creation of a competitive advantage, thanks to knowledge flows that are created between the parties, but at the same time often they don't recognize the limits of their skills and knowledge related to the technical core (Thompson, 1967).

The analysis has to start with the identification of the phases of the process of co-creation. To this end, it asked companies to recognize and indicate the possible relationships between two types of production and co-creation phases. The steps shown on the left are the result of the questionnaire given to the company operating in the audio-visual sector, in response to the following question:

> *Which are the various phases, milestones, or formal steps of a project, from the initial contact with the client to the completion of the same?*

If this version identifies the steps to a more technical level, in Chapter 2 those with regard to co-creating world of KIBS are identified by Aarika and Jaakkola (2012). The goal is to try to integrate the two versions and find the steps that incorporate both the component of production and co-creation.

After defining the general phases, a focal point is to investigate what the presence and role of the client are in stage of co-creation process. To achieve this, it is possible to analyze several variables and grouped to cross the results in order to find a common trend. Between these, the interaction between supplier and client is probably the most significant, being itself a key element of the co-creation (Prahalad and Ramaswamy, 2004). In this case the methods

adopted and the intensity detected at each stage may be used as components that determine the degree of interaction between the parties.

It will then be useful to compare the results obtained indirectly by measuring direct interaction with those instead, in which the company indicates the level of client engagement at every stage and the actual decision-making power of the client. The latter is limited to the creative dimension because the client hardly provides resources specific to the processes, but merely to give general guidance especially on the creative sphere (Draganidis and Mentzas, 2006).

A practice used in KIBS regards the fixed presence of the client, in the form of one or more representatives, in the provider firm for the whole duration of the project (Lehrer *et al.*, 2012). While this represents an extreme case, it is interesting to find out if this exists even for small businesses and how often. In fact, the high customization of output that characterizes Creative Industries (Bettiol *et al.*, 2012) defines a variability in the practices used in various projects. In the case in which the practice is used only by some companies, it may indicate a different proactive approach towards business co-creation. In their study Aarika and Jaakola (2012) recognize the KIBS constant cooperation between client and supplier throughout the process of co-creation, identifying the different roles that the client takes in each phase. In our case, the objective is to determine whether creativity can somehow lessen the degree of co-creation and being tied to a specific role each stage, what can be inferred from the responses of the companies regarding the roles covered.

4.2.3 COMPETENCES AND KNOWLEDGE DEVELOPMENT

The last section is dedicated to the knowledge and skills that are used or created through the flows between the parties through the process of co-creation. As stated previously, the knowledge is a fundamental element in co-creation, as the strongest competitive advantage is created just at the level of tacit knowledge (Vidal and Popadiuk, 2009), inherent in the *relational capital* resulting from the interaction between the parties (Blonska *et al.*, 2013). Although the exploration is the strategy that allows the creation of new solutions, a company must balance it with the practices related to the exploitation of knowledge and skills already present in the company (March, 1991). To make the knowledge accessible to everyone in the organization created by the process of co-creation it is necessary to use coding practices and cataloguing of the processes involved in the creation of the solution. These practices are important in terms of KM strategy and capture and externalization of tacit knowledge (Kumar

and Ganesh, 2011), which, as already stated, is a crucial resource for the creation of competitive advantage of the *creative studios*. The type of knowledge mainly used in the initial definition and creation of solutions can indicate a greater propensity to exploration or exploitation in interfacing with the client.

Especially when the solutions created are the result of practices of exploration, it is necessary to mention the secrecy constraints that bind the parties. This issue is critical when it comes to co-creation, as collaboration leads to an integration of their processes and therefore the knowledge of information that could be critical (Lehrer *et al*., 2012). In particular, the company creative must be free to be able to create unique and innovative solutions, without the risk that they may be disclosed prior to the disclosure of the product.

Following a search of such *creative studios* between those identified were likely to be the subject of this study thanks to the contribution of Creative 1, the questionnaire was delivered and completed by 4 companies, spread throughout the Italian territory.

What arises from the questionnaires and their analysis are given in the following chapter.

CHAPTER 5 - RESULTS AND ANALYSIS

The purpose of the questionnaire as reported in the previous chapter is to investigate the value co-creation process in Creative Industries, examining a young and dynamic industry such as that of *creative studios*, characterized by a mix of creativity and technology. Apparently these two components are antithetical, but their integration creates the competitive advantage of *creative studios.* And this represents a fundamental element which characterized this industry and it makes it interesting, being an innovative reality able to base its identity on a new set of resources. The analysis of the theoretical contributions brought out the importance of the co-creation process, backed by the creation of the *relational capital and knowledge flows* between the parties (Burt, 2004). However, in the specific case of *creative studios*, creativity and high specificity of the service provided make the clients relationship difficult. In fact, often the latter do not recognize their limitations in terms of skills and knowledge, making co-creation an ambiguous practice, but it itself is requested as discriminating. A study of KIBS sustains that, contrarily to traditional co-creation view (Aarika and Jaakkola, 2012), in creative contexts to get an effective co-creation the presence of the client should be limited to the stages at the beginning and at the end of the process (Lehrer *et al.*, 2012). This theory is supported by the argument that in the middle stages of the process, where there is the creative process, the client is no more than a nuisance. Will it be so in the case of small creative Italian studios?

5.1 ORGANIZATIONAL STRUCTURE: A MIX OF CREATIVITY AND TECHNOLOGY

The four companies chosen to fill out the questionnaire are part of the well-known category of *creative studios,* but, although part of the same industry, each of them possesses general features which distinguish them from each other, especially at the level of services offered. In particular, some of them do not only deal with the product on commission, but also their own productions that they sell to clients once finished. In this work only the former will be

considered, being the most consistent with the theme of client interaction. Companies will be listed as Creative 1, Creative 2, Creative 3 and Creative 4.

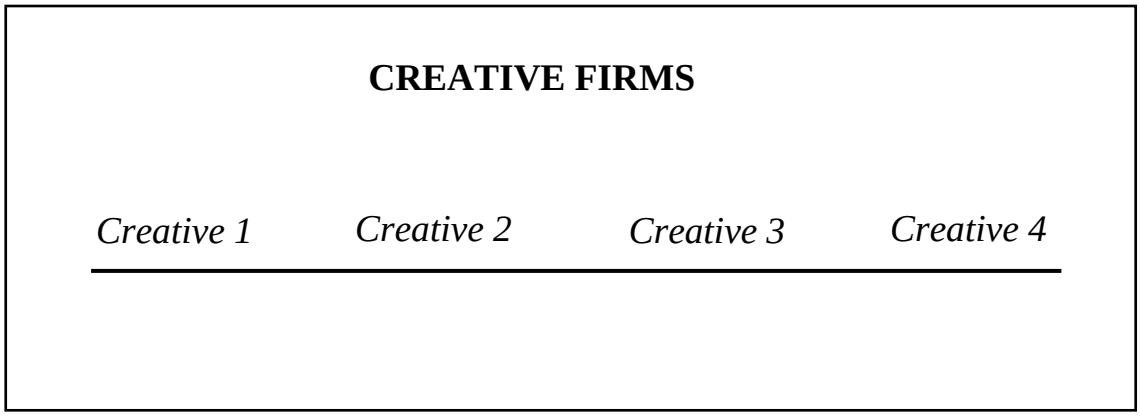


Figure 12 – Denomination of anlyzed *creative studios*

While representing different realities, the creative dimension remains the differentiating factor and *creative studios* are distinguishable from other similar business thanks to their "core benefits of applied creativity" (Hill and Johnson, 2003, p 222). Their ability is in fact to generate original creative ideas to serve the needs of clients, as defined by the company Creative 3 which defines their services as "creative services to brands, advertising and promotion to broadcast" or the company Creative 4 which "offers creative solution".

All four companies are located in Northern Italy but operating throughout the national territory, with a number of employees of 4 for Creative 2 and Creative 3, 8 for Creative 4 and 20 for Creative 1. They are really young, born less than 10 years ago, and therefore in constant evolution and adaptation. The organizational structure detected is fairly flat, mostly run by a coordination of different areas by the company management. The reciprocal interdependences between the activities require coordination mechanisms through feedback, as the mutual adjustment or the direct supervision (Mintzberg, 1983; Costa and Gubitta, 2008). In all four cases, about 80% of roles concern the creative sphere, while the remaining 20% is dedicated to the managerial / commercial sphere, with the CEO or Project Manager. The importance of the so-called creative roles does not emerge only quantitatively, but also qualitatively. In fact, in all of the cases, companies recognize as key figures roles such as

creative director, art director or who, as stated by the company Creative 2, oversees projects from an aesthetic and artistic point of view. The only difference is that it is possible to note organics in company Creative 2 which is the only one to have a Technical Director.

These firms therefore confirm the trends described in Chapter 3: the industry is young and the companies that are part of it are still in the initial stages of their lives, basing their competitive advantage especially on creativity. However, the dynamic environment makes the supply of these products risky and uncertain, especially in terms of demand fluctuations. To create a solution to this possible gap between supply and demand, a solution is to use external consultants for specific projects, such as freelancers. The same Creative 3 states that the composition of its executive team will vary depending on the nature or complexity of the services provided through the integration of freelancers. Creative 2 also adopts this practice, involving employees who contribute operationally to the project. This trend can be analysed from two points of view: on the one hand the creative company tries to adapt to the characteristics of the application by modifying its own structure, thus creating a buffer to protect the *technical core* from the influences of the *task environment* (Thompson, 1967). On the other hand, the same freelancers are direct competitors for the same companies, such as the embedding, which can exploit their potential and know-how through temporary *horizontal integration* of knowledge and skills (Layne and Lee, 2001).This practice is probably easier for these companies as they base their competitive advantage on the *tacit knowledge of human capital* rather than on knowledge and practices at the organizational level. The integration of an external figure in the mechanisms enterprise is in fact facilitated in cases where the absence of rigid internal structures makes the boundaries with the exterior permeable, and as already seen, this may have negative or positive implications.

The integration of external collaborators for specific cases is not confined only to attempt to better manage an uncertain demand, but also in order to change the offer, adapting it to client requests when a work is commissioned. All this is consistent with the RBV, as the company has to seek outside what in some cases it cannot create internally (Kraaijenbrink *et al.,* 2009). This applies not only to the creative dimension but also to the *technical one*, as certain projects require specific skills that surpass those of the *creative studios,* as stated by Creative 1: the company cannot develop them internally and then rely on the practice of *outsourcing.* The latter is especially useful in context with an high competitive pressure, in this case caused

by the technological progress and the low degree of entry barriers, where it is necessary to maintain a certain flexibility in order to be efficient (Costa and Gubitta, 2008) Especially in a dynamic and uncertain contexts, creative companies must be able to customize their output according to specific requirements of the companies which committed the works. Creativity is in fact *applied*, and the "creative core of the product is used purely for the attainment of the specific needs of the client" (Hill and Johnson, 2003). The ability of *creative studios* is therefore to be able to create complex, customized solutions that result from the match between internal skills and client requirements (Bettencourt *et al.*, 2002).

In these contexts, which are dynamic and characterized by a highly personalized output, the co-creation is a necessary tool in order to decrease the risk perceived by the client in the purchase of these creative products (Hill and Johnson, 2003). When the client interfaces with the *creative studios* with the objective of commissioning a project, he himself proposes those which are its requests, sustained by the fact that he is the only one which knows exactly the goal of the product. These requests can be of two basic types: general, leaving ample scope to the development of *creative studios*, or specific. From the questionnaires different types of situations emerge: for instance Creative 2 recognizes an equal distribution between the two cases. Creative 3 instead gives greater weight to the situation with requests that the *creative studios* have to further process, giving it an 80%, and the situation of specific requests by clients represent the 20% of cases.

While greater freedom can seem like the best choice, because creativity needs *autonomy* (Lehrer *et al*., 2012), on the other hand it is useful to recall the concept of *situated creativity*. According to the structure approach, creativity expresses better its potential when some restrictions are placed, that limit the variables in which it must focus (Sagiv *et al.*, 2010), such as clear requests from the client. So after an initial phase where several ideas are put together in order to create variety, the process has to focus on a particular item also through the requests of the client. On the other hand, these are often not consistent with each other or not feasible or functional, especially at a technical level. So *creative studios* have to be able to interpret what is required, particularly through the figure which covers the role of *boundary-spanner*, which must be able to be a mediator between the *technical core* of the business and the client (Thompson, 1967). In this framework it is fundamental the use of *combinative capabilities*, i.e. firm's ability to exploit its knowledge and the unknown potential of its technology through both internal and external learning (Kogut and Zander, 1992).

Another key issue regards the budget: the monetary variable is in fact discriminatory in cases of highly customized and specialized service required. All agree on the timing of definition of the budget, pointing it to a percentage close to the totality regarding the definition during the initial stage: once the budget is fixed, it will be modified only for additional client requests. In addition, companies Creative 4 and Creative 2 provide consistent answers for what concerns the manner of negotiation, indicating a very low rate for cases where the client places the budget constraint as starting request. While they lead back the totality of the cases residues, about 90%, to the situation in which the client requires various alternatives and chooses in accordance with the best combination of effectiveness and budget. Creative 3 instead shows a different trend, leading back to the first half of the cases exposed situation, and then the budget constraint as initial, and dividing the remaining cases and the other two state proposals equally (25% each). Among these is a situation not recognized in other cases, namely the client defines the content without worrying about the final budget. Every company has a high number of clients and among these we can recognize the so-called loyal, the result of established relationships between the parties (Kotabe *et al*., 2003). The response in contrast offered by Creative 3 can be justified by the behaviour of those clients who, having already worked with the company in the past, recognize the value of the product and the relationship based on mutual trust (Bettencourt *et al.,* 2002). And this same situation is reported by Creative 1; in fact, in cases of repeated relationships with the same client, the budget can be less relevant than the value that the client knows it will be created by the company. In this case both the parties can benefit from the benefits of *long-established links* (Kotabe *et al.*, 2003), which promote the alignment of the parties through greater ease of interaction and integration, given the *exploitation of the transaction-specific investment* (Blonska *et al.*, 2013).

Returning to the theme of creativity as a main element of the business, the results regarding the core competencies are interesting. The technology is certainly a key element for the survival of the business, being part of the knowledge applied in the technical core of the business and part of the potentiality which a firm can embed in its boundaries (Costa and Gubitta, 2008). But the analysed *creative studios* sustain that what really creates a competitive advantage compared to its competitors is the presence of a style, a unique and easily recognizable signature. This identity is a result of the characteristics of each individual part of the company staff, which added together create a distinctive feature associated with a specific company. The resources brought by each member are mostly tacit, like creativity itself, something that exists but that it is difficult, if not impossible, to communicate and explain

(Polanyi, 1966). All this coincides with the S-D logic behind these organizations, which are focused on so-called *operant resources*, such as knowledge or skills (Vargo *et al*., 2008). Hence the individualities are both the richness and weakness of these companies, which base their potential on the combination of the single, which, however, cannot be easily replaced (Kogut and Zander, 1992). The inability to fully encode the knowledge used in the creation of solutions creates problems in terms of employee turnover, as the weakness of the organizational memory makes the organization itself vulnerable to possible changes in staff (Simon, 1991).

In particular, the company Creative 1 defines that the real core competence can be recognized in the ability to be original, and then create something innovative, relying on internal resources and client needs. All agree on the nature of their competitive peculiarity, and in this specific case the company Creative 2 adds an additional element, namely the experience. This element is very important for all small businesses that base their survival on their team, and everything had already emerged from the answers of the company operating in the audio-visual. This indicates that it is not closely related to the creative sphere, but at the size of the company: the smaller an organization is, the more possible it is to benefit from the experience of individuals in the field (King, 2009). Again it is a resource difficult to imitate, which results from the interaction of the individual with different situations and subjects, mixed with the individual characteristics (Polanyi, 1966).

5.2 INTEGRATION BETWEEN CO-CREATION AND PRODUCTION PROCESSES

Therefore, by identifying the general mechanisms that regulate this type of business, it is necessary to pass to the analysis of the basic part of this study, the value co-creation process. As already mentioned, with this procedure the client has the ability to be integrated into production processes, providing to *creative studios* general skills that will guide and influence the process of creating the solution (Bettencourt *et al.*, 2002). Since this is a young industry with mechanisms and dynamics not fully known, the first step is to investigate the modalities of the production process.

The steps described by the four companies in question coincide almost exactly, recognizing mainly the following steps:

- An initial briefing and brainstorming to create a first design to be sent to the client;
- A development and research proposals;
- Acceptance by the client and / or any changes based on the debriefing;
- Development and implementation of the solution;
- Optimization, finalization and delivery.

This should not be perceived as a rigid and static succession of phases, especially in the middle stages. Since the occurrence of the first proposal to the client, the two companies are in continuous contact with and feedback from the client. From the draft to the finished work, the client has the ability to monitor the continual updates and to change the work.

An interesting concept is derived from the statements of the company Creative 3, which indicates the presence of a tournament at the time of the initial brief. This practice is probably used to stimulate competition and further motivate creative directors for the allocation of the project, whose creativity might benefit from the comparison with other subjects (Sagiv *et al.*, 2010). The initial allocation shall take place within corporate boundaries, but, as seen above, the same company declares the use of partnerships with freelancers for specific projects, creating an agreement that serves as a bridge between make or buy (Macchia, 2009).

Along with the development of these phases the co-creation takes place, a practice widely used but not always easy to define. The theory suggests the notion that "it refers to the range of client collaborative behaviors that contribute to more optimal *knowledge-based* project solutions, effective working relationships with provider firms, and the increased likelihood of goal achievement" (Bettencourt *et al.*, p 102). In these terms, the cooperation with the client is a benefit for the supplier company, because thanks to this interaction more value can be created, in terms of output and knowledge (Vargo *et al.*, 2008).

But what does co-creation really mean for companies? In this case, two of our case studies agree on the positive meaning of the same, stating that co-creating means "to respect client's

needs both in the creation and in the implementation phases" (Creative 3). The continuous feedback from the client allow the *creative studios* to be always aligned with the client, optimizing resources through "cooperation together to achieve a common goal" (Creative 4). All this, however, is not confirmed by the Creative 2, which defines the co-creation as self-defeating, because the client does not know exactly what he wants and is not able to develop a functional product to his expectations. The result thus, more than a creation of greater value, is "a lengthening of the working times and a final product of medium-low quality" (Creative 2). Creative 1 keeps this line of thinking, arguing that co-creation would be useful, but it needs to be structured in order to limit the client involvement to the phases where he can lead valuable resources.

The negative sense could be encouraged by the impact technology in the services provided: co-creation is in fact a practice "disruptive innovation of traditional closed systems" (Potts *et al.*, 2008, p 464). In particular, as suggested by Den Hertog (2000), the greatest benefits in terms of co-creation will be in cases where there is a low level of technology involved in the same collaborative process. The interactive relationship should be confined to the sphere of the creative project, but often the client, unaware of his limitations, goes over its own area of expertise, affecting the creating value process of the supplier. All this does is make it even more complex a process that, even in cases in which it is limited to only the creative dimension, creates many problems in terms of reaching co-creation objective, based on integration and alignment between the parties (Lessard, 2014).

As stated already, the co-creation process is parallel to the production one and the different phases can be matched together. The definition of co-creation process phases is based on the study of Aarika and Jaakkola (2012), while, for the technical/productive process, those used were suggested by the company operating in the audio-visual field.

What arises from the different questionnaires is variegated, but it is possible to recognized a reality similar to the following represented in Figure 13:

PRODUCTIVE PROCESS	CO-CREATION PROCESS
1. DEFINITION OF THE PROJECT	DIAGNOSING NEEDS AND OBJECTIVES ORGANIZING PROCESS AND RESOURCES
2. PRE-PRODUCTION	DESIGNING AND PRODUCING THE SOLUTION ORGANIZING PROCESS AND RESOURCES
3. PRODUCTION	DESIGNING AND PRODUCING THE SOLUTION MANAGING VALUE CONFLICTS IMPLEMENTING THE SOLUTION
4. POST-PRODUCTION	MANAGING VALUE CONFLICTS IMPLEMENTING THE SOLUTION
5. DELIVERY AND POSSIBLE CORRECTIONS	MANAGING VALUE CONFLICTS IMPLEMENTING THE SOLUTION

Figure 13 - Production and co-creation processes in *creative studios*

The phases of the co-creation recognized in the KIBS field by Aarika and Jaakkola (2012 – see Figure 13) are repeated throughout the production process. All this is consistent with the above in terms of interaction with the client: constant feedback makes it necessary to modify the design, repeating some steps that determine the creation of a customized product and co-created, as the organization of processes and resources or the management of conflicts of value. During these activities the supplier serves as a *value process organizer*, as the process of structuring and management of relevant resources is up to him.

The client is not always able to fully assume the role of *co-producer*, as indicated by the companies, allocating the frequency of this situation at a very low value. At the same time the value conflicts management occupies a key position in the process, because the parties must be able to reconcile different ideologies about the *optimal value-in-use* (Muller and Zenker, 2001). In fact, on one side the supplier is perceived as a professional who does not openly accept the potential contribution of the client; on the other hand, the client often has unrealistic expectations instead. And it is this gap that requires the presence of figures, mostly related to management, able to cover the role of *boundary-spanner* between the parties, aligning and integrating them (Lessard, 2014). Especially in contexts in which there is the involvement of external stakeholders, these figures are essential to create a strategic overlap (Ansett, 2005). The questionnaires show that despite being small businesses, the *creative studios* in question have the typical dimensional duality: creative and commercial. On one side there are the creative/technical key figures, which operate according to the logic of the creative process, and on the other there are those figures that are a link between the technical core business and client requirements. The CEO or Project Manager are present, especially in the initial and final phases of the production and co-creation processes, working as an interface with the client in order to reduce conflicts arising from differing between the parties (Blonska *et al.*, 2013). At the same time, however, their presence remains constant throughout the process, as a monitor of the consistency of the ongoing work with what was designed with the client.

5.3 DEGREE OF CLIENT'S INVOLVEMENT IN CO-CREATION PHASES

Data related to the level of client engagement at each stage can be translated in this way:

• **INITIAL PHASE** - In the initial phase the client is particularly active and present, and here there is the increasing powers entrusted to him. The client actively covers his role as *co-diagnostic*, and in particular, the activities in which it is more involved, which is precisely the design, thanks to its requirements and its objectives, interfacing mostly through meetings.

• **CENTRAL PHASE** - In the middle phase the client is back in the wings instead, leaving most of the work to *creative studios*, as it was already possible to foresee. At this stage it takes the central and fundamental part of the creative process, based on the creativity and technical competences of the professionals involved. The same companies claim that at a creative level, the power division is broken down approximately as 75% creative studios - 25% client.

The creative company then, apart from the first initial phase, does not count on the active client in its role of co-designer and co-producer but that does not mean he is not present. In particular companies and Creative 2 Creative 4 state that the intensity of communication is particularly high right in the middle stages of the process, but by no direct interfaces, such as email. During the creative process the client is not therefore totally excluded: in some ways it is as if many creative processes are repeated, and between each of them, there is client feedback. It must then direct, and at the same time be able to move aside at this stage.

• **FINAL** - In the final stage the client returns to the present and its vital role in that, being the beneficiary of the service, he is to define the value-in-use of the final output (Lessard, 2014). However though decisive, the client does not appear as active as in the first phase in the process of co-creation.

Only a company, Creative 2, declares that happens in the situation in which the client remains in company creative for the total duration of the project. This practice, used mostly at the level of KIBS as the IT firms, represents a mode of extreme co-creation, in which the client and creative firm operate together as a single organization (Lehrer *et al.*, 2012). In this case, albeit the creative study recognizes this possibility, the frequency of the use of this practice is 10%. This value is very small, and negligible in the analysis of the general mechanisms of co-creation, but it is interesting to try to determine what the cause of this discrepancy is. A possible answer could be the customization required by these types of business conducted according to the S-D logic, not only at the level of the final output, but also at the level of the processes themselves (Den Hertog, 2000). An organization must be able to know how to change their procedures and mechanisms based on what the client requires, thus showing their skills in terms of dynamic capabilities (Teece, 1997); knowledge-creating is particularly important for companies.

The questionnaire show that in the case of the Italian *creative studios* there is a clear presence of the client that, rather than quantitative, is fundamental at qualitative level, especially in the first stages. From the four analysed cases arise that the relationship between the phases of co-creation process and the degree of client involvement does not exactly match with the one defined by the study on KIBS creative Lehrer *et al.* (2012). In Figure 14 can be seen how it is possible to try to interpret the situation of Italian *creative studios.*

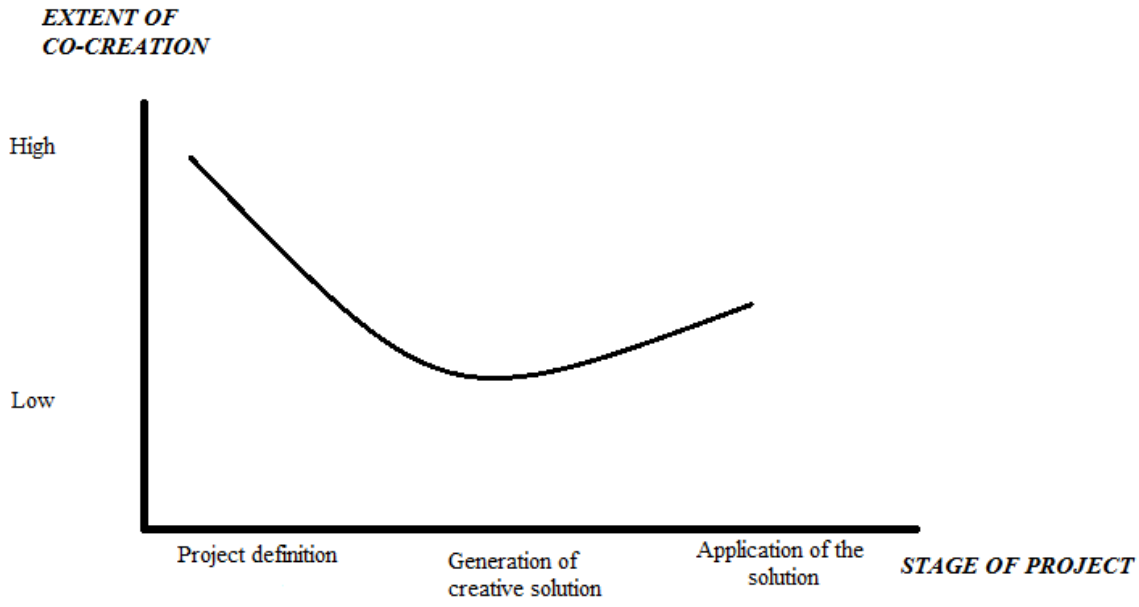


Figure 14 - Extent of *creative studios* and client co-creation along key stages of project (Elaboration on the basis of Lehrer *et al.*, 2012)

Therefore, compared to KIBS creative, anecdotal evidence suggests a minor gap between the beginning and middle phases, as a company and the client remain in constant contact and the latter shall make a contribution in the form of feedback on the progress of the project. The involvement then in the final phase gradually increases, without reaching the levels of the initial phase.

5.4 KNOWLEDGE MANAGEMENT IN CO-CREATION PROCESS

Creative studios are *knowledge-based* organizations, and for the implementation of each project, a mix of tacit and explicit knowledge is used. In particular, the tacit may have two main sources: the co-creation with clients and the company *human capital*. In the first case, knowledge is derived from flows that are created between the parties, which are not limited only to exchange but to the creation of new knowledge (Vidal and Popadiuk, 2009) resulting from the interaction. The greater value of tacit knowledge, especially in terms of *relational capital*, becomes a competitive advantage for the service provider (Blonska *et al.*, 2013). The knowledge created will then be absorbed and used in the future by the same supplier, thanks to the exploitation of the organizational *absorptive capacity* (Cohen and Levinthal, 1990). The ability to establish and share common objectives become increasingly higher when the parties work together several times, and then "the ability to benefit from knowledge transfer depends on the prior link duration" (Kotabe *et al.*, 2003, p 296). At the same time, the organization benefits from the tacit knowledge of individuals. Technological skills are definitely a basic competence in this area, which varies depending on the technological level of services offered. However, as already stated, the distinguishing factor is the result of the creative abilities of employees which, taken together, create corporate style. And it is now clear how creativity is a kind of tacit knowledge, as each individual has the experience, skills and abilities that are different from the other and can only be learned through personal experience (Polanyi, 1966). This is perfectly adapted to the reality of SMEs, in which the added value is based from their *human capital* and each person is critical to the business, especially if *knowledge-based* (Kogut and Zander, 1992).

Personalization is therefore the practice of KM more suitable to these contexts, favored in contexts with high knowledge and customized output, in which the *people-to-people* interaction is the best way to transmit knowledge itself (Bettiol *et al.*, 2012). However, as already seen in previous chapters, it does not mean that the practice of codification is not efficient. The same creativity benefits from a structuring of the surrounding context: in fact, allowing it to focus on a few significant variables, it can improve its effectiveness (Sagiv *et al.*, 2010). And in this process the co-creation, itself a source of new knowledge, thanks to client requests, can direct the development of the creative process. In addition, in this specific case, the technology is explicit knowledge that can be acquired not only within the corporate boundaries, but also externally; in this case so everything falls within the boundaries of the codification activities.

What is apparent from the questionnaires is precisely this ambivalence in terms of KM and the variety of the responses represents exactly the differences which characterize each organization. From these four cases it is not possible to recognize an univocal trend, but this is the natural consequence of the industry situation, populated by young organization not already consolidated.

In general there is a preponderance of the use of new knowledge, and therefore tacit knowledge, both in the original proposals for the client and in the development of solutions. This is consistent with the concepts previously defined in terms of co-creation, which is a source of new knowledge, and in terms of competitive advantage, based on the ability to develop innovative and original ideas.

For what concerns the coding and cataloging practices, some of the *creative studios* in question show embryonic forms of these types of knowledge management. In fact these are the result of a corporate structuring that currently lacks in the small Italian reality. For instance Creative 1 declares the existence of a set of practices that define how the creation of a project needs to be addressed, recognizing a sense of belonging for those who work in the organization as important. And this is consistent with what sustained by Bettiol *et al.* (2009): codification, even if less used, has to be referred to the structuring of *creative process*. While it is only now creating a real system of projects coding, believing it useful but currently difficult to implement for a young and evolving organization.

The mechanisms that regulate the *creative studios* can vary radically from one reality to another. A strong change in methods of approach to knowledge management can be justified in several ways, one of all the strong output customization. The client in fact, through the definition of their needs and demands, delimits the scope of the *creative studios*, which are having to come up with solutions often also limited by the budget factor. The latter can also be reconnected to another issue in terms of knowledge management, i.e. the exploration or exploitation, and then how the knowledge is managed at static and dynamic levels (Conner and Prahalad, 1996). With limited resources, these small companies have to decide where to invest primarily, and an economic limit placed by the largest carrier of value can create limitations in terms of exploration. The benefits arising from the investment in the latter practice are uncertain and often related to the long term (March, 1991), however, the dynamic environment requires to the organization to adapt itself quickly to the changes in order to survive, preferring the short run. In addition, the technological factor does not help this situation, requiring considerable effort to *creative studios* to be able to keep up with the

continuous progress. Hence the need arises to exploit the resources already present in the company thanks to the codification of knowledge, wherever possible, to make it accessible to the entire organization (Nonaka, 1994). In general, every project is a unique situation, approached by *creative studios* in a manner consistent with the characteristics of the process that is required in terms of requests, budget, role of the client etc..

The responses did not therefore show a valuable outcome, because it is not possible to define a clear trend or justify certain differences between the realities. But this is the reflection of the turbulence and the variety which characterize this industry, populated by young and growing businesses often destined to an early death. The consequence is that each organization has to adapt its mechanisms in order to survive, and the result is the presence of a reality composed by a richness of alternative solutions. The KM is a fundamental system but it is difficult to create, particularly in dynamic realities and situations characterized by those difficult to frame. However the lack of an univocal situation has not to be interpreted in a negative way, being just the result of a turbulent and young environment, where each organization has to exploit its *dynamic capability* (Teece et al., 1997).

5.5 CREATIVITY AND CO-CREATION PROCESS ANALYSIS

Given the analysis of questionnaires, it is possible to now try to answer the question from the beginning, so if creativity will somehow influence the process of value co-creation and how.

As shown by the basic study used for this research, creativity has characteristics that make it partially fleeting dynamics of the process of collaboration between provider and client. The client "participates creatively in the productive process" (Potts *et al.*, 2008, 461), but the core of the creative process, in particular the steps of *immersion* and *idea generation* (Hill and Johnson, 2003 - see Chapter 1) must be left to the creative service provider in order to have a co-creation of value. This concept differs from the traditional co-creation, reported for example by the automotive cases (Dyer, 1997) or in KIBS cases (Aarika and Jaakkola, 2012) where, in order to be effective, the interaction has to be present along all the process. However, this need of creative process autonomy is linked to the concept reported by Thompson (1967) related to *technical core* isolation. When creativity is the winning element,

the creative process is the *technical core* of the organization, and it requires autonomy from the *task environment,* in this case the client, in order to exploit all its potential.

That view was confirmed by the Italian cases examined, although there apparently emerges a U-shaped relation flatter than that reported by Lehrer *et al.* (2012). In fact, the client is always present through continuous feedbacks that allow *creative studios* to operate in a consistent manner with the requirements. The need of a lower client's presence during the *creative process* is justified by the real nature of the Creative Industries. In fact, the distinctive feature, the winning element or at least what really sets them apart, is creativity: this is their added value and in this must operate autonomously (Lehrer *et al.*, 2012). Create true value can deviate from what the client requires, but the ability of *creative studios* must also be this: create a project more effective than what the client thinks it wants to achieve its goal. And that's why in creative contexts the co-creation can actually be of value if limited to the initial and final phases of the process.

In Italian cases, however, the detachment is not so clear, and it often brings benefit to creative companies, as alleged by the *creative studios*. Given the nature of the product, the client often believes that to make it is enough a good idea, then not recognizing in full the added value of the research capacity of *creative studios*. The reality is that the value of the Creative Industries not only have an idea, but also be able to implement it effectively and value through the use of technical skills and specific. Although the co-creation can boast of several benefits, notably in terms of creation of *relational and social capital* (Burt, 2004), not always this close interaction with the client just brings them to create more value. Creativity factor aside, the client is often awkward, incompetent and not particularly aware of its capabilities and limits. His demands are not feasible or value, and then go to play down what could be an effective idea. Here the fact that one of the contingent factors that influence the curvature of the U- shape is just the level of client capabilities (Lehrer *et al.*, 2012).

In this case the issue is far from simple, given the presence of a *knowledge-based* service by the creativity that owes its existence to the technology. The specific technological output makes the integration between the parties even more difficult, and therefore justifies once again the non-presence of the client at the heart of the production process (Den Hertog, 2000). The result is that companies often invest more of their time on looking after the demands of the client than on creating original and creative projects exploiting their competitive advantage.

To limit the scope for intervention of the client, *creative studios* can adopt a style of design aimed at creating concrete solutions to client needs, to prevent the client himself, feeling experienced, somehow intruding in an ineffective way. So in this case there may be a need to deviate from the requirements, approaching to an output with a higher value; but this is often limited by the time factor. In fact, clients often commission creative products that will be used in the last stages of their production process, for example for communication or marketing, and therefore require them in a short time. In this case the testing necessary to create a purely original product has no chance to express fully, and co-creation, even if negative, should be performed in a penetrating manner.

The rare cases in which the client is capable enough to be able to interact on a par with the client are the result of continuous relations between the parties, thanks to which they can create a consolidated relationship. In fact, thanks to the knowledge flows of past experience (Muller and Doloreux, 2007), the client is able to help the creative company in its internal processes, and in this case it is possible to discuss new projects and perspective effectively. The contribution of the client appears valuable even if is not limited to the hilt of needs or general content. The benefit of consolidated relationships arises from the exploitation of the *relational capital* (Burt 2004) which results from several experiences between the two parties. In these cases *value adding relationships* occur, creating a whole set of intangible resources which derive from network of relations between organizations (Kotabe *et al.,* 2003).

Then, is it possible to reach a co-creation of value between the parties in creative contexts? The answer is yes, but only in cases in which it is structured: the client must interact with the supplier, but only at certain stages. If it is not able to provide resources specific to the production process, the client should be limited to three main information:

- OBJECTIVES
- CONTENTS
- FINAL EVALUATION

Then *creative studio* has to be able to absorb the initial resources and turn them into something eye-catching, original, valuable and consistent with the goals shared by both sides. If the interaction goes beyond the necessary *structure approach,* which has to guide but not

limit creativity (Sagiv *et al*., 2010), it rarely leads to a value creation greater than or constructive, as much as to a loss of time and resources. In these cases co-creation occurs, but not of value.

Actually *creative studios* cannot boast a structured co-creation, in particular because of their young age and the inability to create effective procedures and adaptable to all needs. Their only resource is to build a *reputation*, defined as "a set of attributes ascribed to a firm, inferred from form's past actions" (Weigelt and Camerer, 1988, p 443), gaining trust from the clients who choose them according to their style and then to the value that can be created for a given project. Reputation is a fundamental element of corporate strategy in each industry, but in this specific case it has also a value in term of co-creation relationship. In these situations, the client is able to enforce its position, providing at the initial creative stage what is necessary, so the needs or general inquiries. All this cannot be created in the short term, but is the result of established mechanisms that are difficult to achieve in an environment with such a high mortality rate and characterized by high dynamism.

A structured co-creation can be an useful tool for *creative studios*, helping them to become a more functional organization, through the exploitation of both internal and client resources (Den Hertog, 2000). As each productive process, also co-creation of value has to be structured in order to be effective.

The lower isolation of the client of the small Italian cases than those giants KIBS, may be partly justified by the size factor. In fact, just in SMEs, as defined by Muller and Zenker (2001), the co-creation is particularly useful because the parties can combine their complementary resources to create an *optimal value-in-use.* Decision-making power is distributed differently than in cases of large vendor, and what makes it more dependent on the client.

5.6 LIMITATIONS AND EXTENSIONS

This study, limiting the analysis of case studies of a particular context, is only the first small step towards the exploration of co-creation in Creative Industries. As already reported in the previous chapters, this issue is particularly addressed with regard to the creative contexts

B2C, while in this case the focus is directed to the B2B business, as more consistent with the traditional concept of co-creation. To analyze the incidence of co-creation on the process of co-creation of value has been chosen as the reference sector populated by *creative studios*, and then a really young, dynamic and at the same time uncertain field, marked by a high mortality rate. The current situation of this evolving sector does not guarantee a uniformity of mechanisms used or dynamics, both internally and externally. However, it gave the opportunity to investigate the nature of the relationship between client and company on commission production.

Further studies will have to be focused on the development of this sector, or alternatives more established, to determine whether the current lack of structuring may be a factor quota or not. The study suggests that the client is not completely excluded from the central stage of the process as the *creative studios* in the early stages of their life cycle does not possess instruments suitable to the management of co-creation and the role of the client. It is necessary to determine if this is in fact established and if this trend is present or not in more structured cases, or if it is inherent in Italian creative firms.

In addition, this area is marked by the presence of technology as a key element in the production of output. However, as already stated, the knowledge gap between the business and creative client can somehow stimulate the distance between the two actors, and thus affect the obtained situation. From this then it is good to expand the outreach to the Creative Industries not overly influenced by the technological level, to demonstrate whether it is or is not a factor contingent.

To define so if the presence of structuring or the presence of technology may have in some way influenced the obtained answer, the next step should be towards a sample analysis on a large population, so as to capture the possible nuances of the process. In fact, since the sector of Computer Animation is currently not fully recognized, it was not possible to carry out a sample survey, in favor of the study of some case studies. However, the results cannot be recognized as a symptom of a clear trend in the industry, but simply as a first step of the research sector, which will be extended to a larger field of action. Consistent with the above, this study, while analyzing a particular sector, wants to be a pioneer of a theme oriented to any Creative Industries. Later then, by analyzing the possible contingencies, the goal must be to identify a general process for all Creative Industries, moving to other creative sectors. And

finally to structure this process by providing companies with a useful tool for the process of co-creation, which will ensure a positive contribution of the contribution of the client.

CONCLUSION

The basic aim of this study was to determine whether, in the Creative Industries, creativity could influence the development of the value co-creation process and, at the same time, if co-creation itself could somehow stimulate or lessen creativity. Creativity and co-creation are two issues seemingly incompatible, but in *creative studios* are forced to co-exist in order to create an original output with a high *value-in-use* (Lessard, 2014). The first is an individual characteristic, based on a high degree of intrinsic motivation (Lehrer *et al.*, 2012) and on a tacit understanding that it is not possible to share (Polanyi, 1966). Co-creation instead, although also a source of tacit knowledge (Vidal and Popadiuk, 2009), is based on principles of shared knowledge (Blonska *et al.*, 2013) and the *relational capital* (Burt, 2004), appearing contrasting with what supported by creativity. The latter is the basis of the competitive advantage of Creative Industries, whose mechanisms are influenced by the creativity, albeit applied (Hill and Johnson, 2003), among them the same co-creation between supplier and client.

So how does creativity influence the process of co-creation?
It was possible to investigate the topic through the analysis of a young and largely unexplored industry in the Italian context, namely Computer Animation. This reality in fact is not totally recognized and established in Italian boundaries, and therefore it lacks contributions or data that can describe the structure or mechanisms that characterize it. However, the choice fell on it as it is one of the field with the highest growth rate, and it also represents the evolution of Creative Industries, which represent increasingly important businesses not only in the Italian context. Moreover, this context is based on two winning elements of the future, creativity and technology, antithetical to each other but that can be coordinated, creating a very high potential. This B2B sector mainly works on commission, which requires a strong creative participation of the client in the production process, and then the well-known co-creation.

What emerges from an empirical research on creative KIBS (Lehrer *et al.*, 2012) is the presence of a U-shaped relationship between the development of the phases of the process of co-creation and client engagement, which decreases during the development phase of the creative process. This view is not coherent with the concept of traditional co-creation, based mainly on a total involvement of the client in each stage of the process. In order to explore Italian realities, the questionnaire used for creative KIBS was adapted to *creative studios*

characteristics, while maintaining the macro-themes of the organizational structure, the co-creation and the development of knowledge.

What arises from the questionnaires submitted to the 4 *creative studios* are consistent with the view taken in the context of KIBS creative, but have some of the different trends. Even in some Italian cases creativity influences the co-creation and they recognize the presence of a U-shaped relationship between the development of the stages of co-creation and the level of involvement of the client. However, they express a different degree of client exclusion than what is apparent from the study of Lehrer *et al.* (2012) because the client never disappears completely. The companies sustain that in the middle phase, and then during the development of the *creative process*, the client gives continuous feedback regarding the evolution of the project. Furthermore, the communication, directly proportional variable to the level of co-creation, is higher in the phases in which, following the characteristics of creativity, the creative company should operate in complete autonomy. Albeit therefore not directly involved, the client remains present throughout the duration of the process.

But which are the consequences of this trend?
What comes from increased client engagement is not positive as creativity, which is expressed especially in the middle phase of the process, requires autonomy in order to achieve its full potential. The contribution of the client is critical, but should be limited only to the initial phase, in which it expresses the needs and objectives of the project, and to that end, through the final evaluations and the decree of the value of the completed product. The companies sustain that if client presence goes beyond, as in the cases of the Italian *creative studios*, co-creation does not create value but instead creates a difficult situation to manage and counterproductive for both parties. The client in fact often submits requests not consistent with each other or not of value and, although not normally competent, feels an industry expert, claiming that an idea is the only input needed to create a creative product.
Quite the contrary, the value added of the *creative studios* is not limited to the creation of the idea, but it regards its implementation and making it valuable. To create a unique and original solution that comes from a creative re-organization of the needs and goals set by the client during the initial phase, *creative studios* needs creative independence. With this in mind then, client engagement should be limited by structuring the process of co-creation, in which the interaction between the parties can only be aimed at creating greater value (Lehrer *et al.*, 2012). Quoting Thompson (1967), in this case the *technical core* is represented by the creative process, which requires autonomy from the *task environment* represented by the

client and other factors. If used efficiently, the co-creation can stimulate the creative potential, because according to the structure approach, after an initial phase in which the variety is preferred, this process is able to target positively creative activities (Sagiv *et al.*, 2010).

If the co-creation in the Italian *creative studios* often does not create a significant value, what are the solutions?

Currently in Italy these realities are young and not yet structured and co-creation is a practice that requires a lot of experience to be totally aimed at creating joint value between the parties (Prahalad and Ramaswamy, 2004). The predominant presence of creativity in the business determines the need for a structured co-creation, in which the client is limited to certain stages. Communication, trust and shared goals are the elements that determine a good co-creation and so they are what every creative company should aspire to (Bettencourt *et al.*, 2002).

The first step may be to establish a *reputation* (Weigelt, 1988) in order to gain the trust of clients, who, recognizing in advance the value of the company, are able to step aside and allow greater creative freedom to the *creative studios*. One of the rare cases in which the client is able to interact with the *creative studio* effectively throughout the process, is caused by the situation of consolidated relations. In this case the *knowledge flows*, which result from past collaborations, have created a situation where creative studio and client can work in perfect harmony (Burt, 2004). And then it goes back to the basic concept of co-creation, that is, the *relational capital*, with which the mutual understanding is fostered by idiosyncratic interactions (Kotabe, 2003).

These two solutions are the intermediate steps that can lead to the ability to define a structured co-creation, but that takes time and commitment on the part of the creative businesses. In summary then it is possible to define that, according to the information collected in Creative Industries, the value co-creation process is influenced by the presence of creativity as a predominant factor, coherent with the U-shaped relationship. However, in Italian cases under review, the co-creation is not structured in such a way as to exploit the full potential value of the partnership between the parties, determining a co-creation but not of value. Only through an adequate structuring you will have a co-creation of value which in turn is able to stimulate the creativity.

Further studies should be focused on contingent factors of this study and focus later on a possible definition of co-creating the ideal. In fact, this research represents one of the first studies on the co-creation in B2B Creative Industries, and in particular one of the first to

recognize and analyze the field of computer animation. What results is, however, impossible to determine a clear and absolute trend on the issue, based on the exploration of a small number of case studies. However, this can be considered a starting point which offers several points for reflection and analysis regarding the subject in question, which can also be extended beyond the single sector.

First of all the focus should be placed on contexts more structured compared to the one in question, so as to define if this is not the structuring is decisive for a U-shaped relationship compared to that of KIBS or less. If not, it appears that this trend could be part of the nature of Creative Industries. Then, through a sample analysis with a large number of observations based on the structural evolution of this industry, it is necessary to determine whether the collected information were influenced by the strong technological component of the industry, which can somehow further alienate the client by technical core business.

Moreover, in order to resolve the previous issues, it would be helpful to build a structured process of co-creating value to be able to better manage client relationships, and it could be considered a distinguishing skill for creative providers. *Creative studios* could benefit from the use of this practice, which would be a key element in the consolidation of the potential of the sector. Creative Industries are populated by numerous companies heterogeneous between them and it is therefore difficult to extend the practices used in one sector to another. However, what is clear from this study is that creativity is recognized as fundamental and common to all creative fields; it can affect all situations in cooperation with the client. This represents a foundation on which it is possible to build further studies on other fields, moving also towards the world of B2C, and in terms of co-creation, much different from what was discussed previously.

In spite of these limitations, this research offers some contributions.

First, this is one of the first study which extends the co-creation process analysis to B2B Creative Industries, recognizing the contingent role of creativity in these kind of businesses. Second, it is particularly focused on an innovative and not well-known Italian industry, i.e. Computer Animation, which, thanks to its potentiality based on creativity and technology, represents the future of Creative Industries. Third, what emerges from the four case studies can be the base for further studies. In fact the questionnaires reveals that co-creation is a fundamental tool which actually is not able to express its potentiality in this industry, due to several possible challenging factors. So it creates the first step of further researches which can help Creative Industries to manage the integration between creativity and co-creation, in order to create a sustainable competitive advantage, based on internal and external resources.

APPENDIX

A1- Perimeter of the economic activities of cultural productive system (Symbolaand Unioncamere, 2015)

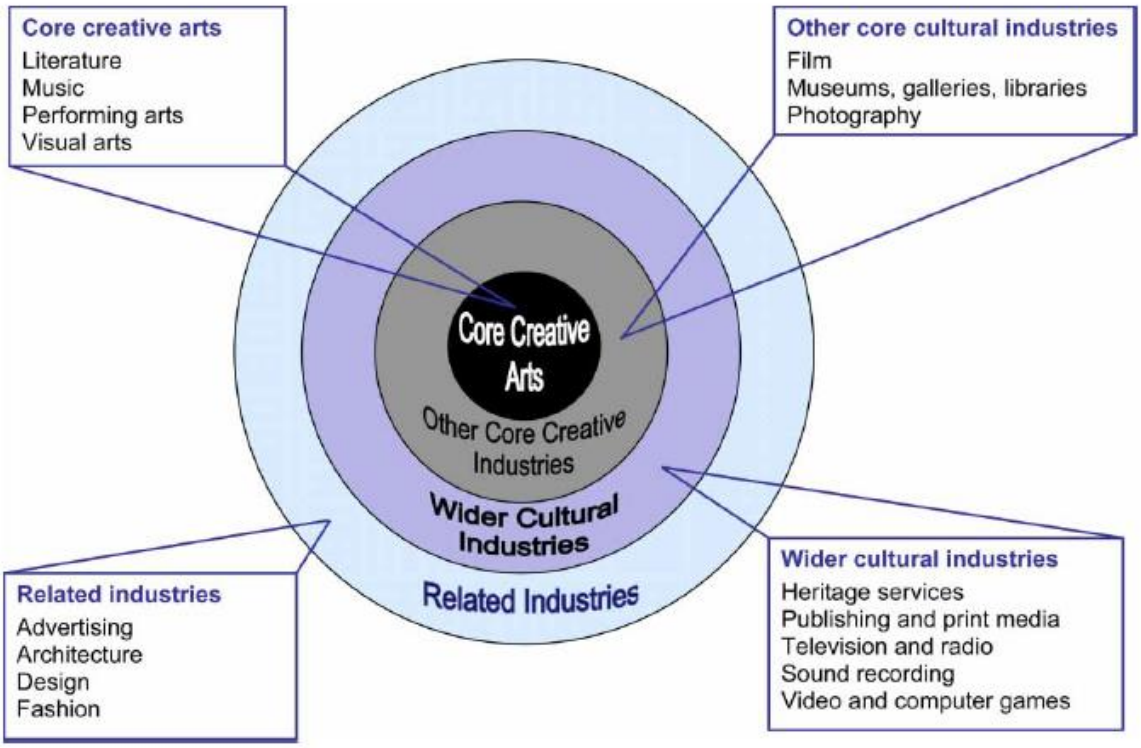
Settori	Sottosettori	Codice Ateco 2007	Descrizione attività
Industrie culturali	Film, video, radio-tv	59110	Attività di produzione cinematografica, di video e di programmi televisivi
		59120	Attività di post-produzione cinematografica, di video e di programmi televisivi
		26400	Fabbricazione di apparecchi per la riproduzione e registrazione del suono e delle immagini
		60200	Programmazione e trasmissioni televisive
		59140	Attività di proiezione cinematografica
		26702	Fabbricazione di apparecchiature fotografiche e cinematografiche
		59130	Attività di distribuzione cinematografica, di video e di programmi televisivi
		60100	Trasmissioni radiofoniche
	Videogiochi e software	62010	Produzione di software non connesso all'edizione
		62020	Consulenza nel settore delle tecnologie dell'informatica
		62090	Altre attività dei servizi connessi alle tecnologie dell'informatica
		58210	Edizione di giochi per computer
		32401	Fabbricazione di giochi (inclusi i giochi elettronici)
	Musica	59202	Edizione di musica stampata
		59201	Edizione di registrazioni sonore
		18200	Riproduzione di supporti registrati
		59203	Studi di registrazione sonora
	Libri e stampa	74202	Laboratori fotografici per lo sviluppo e la stampa
		90030	Creazioni artistiche e letterarie
		18120	Altra stampa
		47610	Commercio al dettaglio di libri nuovi in esercizi specializzati
		18130	Lavorazioni preliminari alla stampa e ai media
		58140	Edizione di riviste e periodici
		58110	Edizione di libri

		58130	Edizione di quotidiani
		17230	Fabbricazione di prodotti cartotecnici
		63910	Attività delle agenzie di stampa
		18110	Stampa di giornali
		18140	Legatoria e servizi connessi
		58190	Altre attività editoriali
		82992	Agenzie di distribuzione di libri, giornali e riviste
Industrie creative	Architettura	71110	Attività degli studi di architettura
		71121	Attività degli studi di ingegneria
		71122	Servizi di progettazione di ingegneria integrata
	Comunicazione e branding	70210	Pubbliche relazioni e comunicazione
		73110	Agenzie pubblicitarie
		73120	Attività delle concessionarie e degli altri intermediari di servizi pubblicitari
	Design	74101	Attività di design di moda e design industriale
		74102	Attività dei disegnatori grafici
		74103	Attività dei disegnatori tecnici
		74109	Altre attività di design
	Produzione di beni e servizi creative driven*	56101	Ristorazione con somministrazione; ristorazione connessa alle aziende agricole
		10730	Produzione di paste alimentari, di cuscus e di prodotti farinacei e simili
		11022	Produzione di vino spumante e altri vini speciali
		11010	Distillazione, rettifica e miscelatura degli alcolici
		11021	Produzione di vini da tavola e v.q.p.r.d.
		31091	Fabbricazione di mobili per arredo domestico
		95240	Riparazione di mobili e di oggetti di arredamento; laboratori di tappezzeria
		16294	Laboratori di corniciai
		23410	Fabbricazione di prodotti in ceramica per usi domestici e ornamentali
		23702	Lavorazione artistica del marmo e di altre pietre affini, lavori in mosaico

		15110	Preparazione e concia del cuoio e pelle; preparazione e tintura di pellicce
		23199	Fabbricazione di altri prodotti in vetro (inclusa la vetreria tecnica)
		32122	Lavorazione di pietre preziose e semipreziose per gioielleria e per uso industriale
		32121	Fabbricazione di oggetti di gioielleria ed oreficeria in metalli preziosi o rivestiti di metalli preziosi
		32200	Fabbricazione di strumenti musicali (incluse parti e accessori)
		13991	Fabbricazione di ricami
		13992	Fabbricazione di tulle, pizzi e merletti
		31095	Finitura di mobili
		25993	Fabbricazione di oggetti in ferro, in rame ed altri metalli
		23192	Lavorazione di vetro a mano e a soffio artistico
		15120	Fabbricazione di articoli da viaggio, borse e simili, pelletteria e selleria
		14132	Sartoria e confezione su misura di abbigliamento esterno
		30120	Costruzione di imbarcazioni da diporto e sportive
		31093	Fabbricazione di poltrone e divani
		31011	Fabbricazione di sedie e poltrone per ufficio e negozi
		32402	Fabbricazione di giocattoli (inclusi i tricicli e gli strumenti musicali giocattolo)
		31092	Fabbricazione di sedie e sedili (esclusi quelli per aeromobili, autoveicoli, navi, treni, ufficio e negozi)
		31020	Fabbricazione di mobili per cucina
		26520	Fabbricazione di orologi
		31099	Fabbricazione di altri mobili (inclusi quelli per arredo esterno)
		31094	Fabbricazione di parti e accessori di mobili
		25121	Fabbricazione di porte, finestre e loro telai, imposte e cancelli metallici
Performing arts e arti visive	Rappresentazioni artistiche, intrattenimento, convegni e fiere	90010	Rappresentazioni artistiche
		93299	Altre attività di intrattenimento e di divertimento nca

		90020	Attività di supporto alle rappresentazioni artistiche
		93210	Parchi di divertimento e parchi tematici
		90040	Gestione di teatri, sale da concerto e altre strutture artistiche
		82300	Organizzazione di convegni e fiere
Patrimonio storico-artistico	Musei, biblioteche, archivi e gestione di luoghi e monumenti storici	91020	Attività di musei
		91030	Gestione di luoghi e monumenti storici e attrazioni simili
		91010	Attività di biblioteche ed archivi

A2 - The concentric circles model of the Cultural Industries (Throsby, 2008)



A3- KIBS sectors and sub-sectors (Muller and Doloreux, 2007)

NACE	DESCRIPTION
72	Computer and related activities
721	Hardware consultancy
722	Software consultancy and supply
723	Data processing
724	Data base activities
725	Maintenance and repair of office, accounting and computing machinery
726	Other computer related activities
73	Research and development
7310	Research and experimental development in natural sciences and engineering
7320	Research and experimental development in social sciences and humanities
74	Other business activities
741	Legal, accounting, book-keeping and auditing activities; tax consultancy; market research and public opinion polling; business and management consultancy; holdings
7411	Legal activities
7412	Accounting, book-keeping and auditing activities; tax consultancy
7413	Market research and public opinion polling
7414	Business and management consultancy activities
742	Architectural and engineering activities and related technical consultancy
743	Technical testing and analysis
744	Advertising
7484	Other business activities n.e.c

A4–Co-creation questionnaire submitted to Italian *creative studios*

A. ORGANIZATIONAL STRUCTURE

1. *Show the organizational chart*

2. *Which are the services provided by your firm?*

3. *Do some key figures exist for what concerns the creative/artistic section of the firm?*

   ☐ Si ☐ No

   If yes, which ones?

4. *Which is the core competence of the firm?*

5. *Does the composition of the executive team change depending on the type of the project?For example depending on the nature or the complexity of the provided services.*

   ☐ Si ☐ No

   If yes, how?

6. *In a percentage, during the initial phase of the process, the requests of the client are defined or do they propose some essential inputs which will be elaborated by you firm?*

   % cases with defined requests

   % cases of inputs to be elaborated

7. *In general how is the solution creation process articulated after the initial phase, where the client defines what he is asking for?*

8. *When is the budget determined? (Please indicate the frequency of each options in %)*

   % During the initial phase

   % During the work

   % At the end of the project

9. *How is the budget negotiated?(Please indicate the percentage of each case)*

% The client fixes the budget as the first constraint

% The client requires different alternatives and then he chooses depending on the best combination efficacy/budget

% The client fixes the contents without thinking about the budget

B. CO-CREATION OF VALUE

10. *What does "co-creation with the client" mean for you?*

11. *Do you recognize some correspondences between the phases on the right and the ones on the left? If yes, please indicate on the right the letter of the correspondent phase on the left (it is possible to match two or more phases to one option, or vice versa, you can recognize no match for one or more phases)*

a. Definition of the project	.Diagnosing needs and objectives
b. Pre-production	. Designing and producing the solution
c. Production	. Organizing process and resources
d. Post-production	. Managing value conflicts
e. Delivery and possible correction	. Implementing the solution

Which are the involved figures in each phase? Please indicate the involvement of the internal employees (it is required a macro-division, for example between managerial and creative sections) and of the client. For example: PHASE 1. DEFINITION OF THE PROOJECT. Manager and client

12. *With which intensity does the communication occur in each phase? (1-no present;5-extremely intense)*

a.	Definition of the project	☐1	☐2	☐3	☐4	☐5
b.	Pre-production	☐1	☐2	☐3	☐4	☐5
c.	Production	☐1	☐2	☐3	☐4	☐5
d.	Post-production	☐1	☐2	☐3	☐4	☐5
e.	Delivery and possible corrections	☐1	☐2	☐3	☐4	☐5

13. *Which is the interface prevalently used in each phase?*

a.	Definition of the project	☐Phone	☐Fax	☐Email	☐Meeting
b.	Pre-production	☐Phone	☐Fax	☐Email	☐Meeting
c.	Production	☐Phone	☐Fax	☐Email	☐Meeting
d.	Post-production	☐Phone	☐Fax	☐Email	☐Meeting
e.	Delivery and possible corrections	☐Phone	☐Fax	☐Email	☐Meeting

14. *In which percentage is the decisional power divided between firm and client for what concerns the creative/artistic setting?*

    % Firm% Client

15. *In which activities is the client more involved?(for example development, planning, marketing..)*

16. *Does it occur that the client is permanently represented in your firm for the length of the project?*

    ☐ Si ☐ No

    If yes, how often?

17. *How often does the client cover this role?(1-never, 5-always)*

- Co-diagnoser (he helps the creative firm in identifying his the request/needs for the project)

  ☐1 ☐2 ☐3 ☐4 ☐5

- Co-designer (he is proactive in proposing the solutions, resources, or indicating some supplementary information about the industry or competitors)

  ☐1 ☐2 ☐3 ☐4 ☐5

- Co-producer (he is a fundamental part of the production process)

  ☐1 ☐2 ☐3 ☐4 ☐5

- Co-implementor (the propose to the client is just part of the final solution because he will run the implementation for the use) ☐1 ☐2 ☐3 ☐4 ☐5
- Co-marketer (he promotes the creating value skills of the creative firm which creates the required solution) ☐1 ☐2 ☐3 ☐4 ☐5
- Co-developer (he develops know-how or new knowledge for the provider firm thanks to the collaboration with it) ☐1 ☐2 ☐3 ☐4 ☐5

C. COMPETENCES AND KNOWLEDGES DEVELOPMENT

18. *Do you usually make an internal mapping (codification and cataloguing) of the process during its development?*

    ☐ Si ☐ No

19. *Do you make a codification and cataloguing of the project when it is terminated?*

    ☐ Si ☐ No

20. *In percentage, how many solution are realized with the use of codified knowledge (obtained from previous projects) and how many with the use of new knowledge (contents, technics…)?*

    % Codified knowledge % New knowledge

21. *Which secrecy constraint exists with the client in the management and creation of the project?*

22. *How is managed the generation of the initial proposals?*

    % It is shown a portfolio obtained from solution previously used

    % The proposal are defined ex novo

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