

CREATIVE SERVICES AND MANUFACTURING CLUSTERS: MANAGING
INNOVATION IN THE VENETO REGION

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ABSTRACT

Creative services can be analyzed as knowledge-intensive business services (KIBS) oriented to develop highly customized creative outputs for their business customers, usually manufacturing firms. In the literature, this process of innovation has been interpreted as interactive-based, exploiting the advantages of physical proximity between the service provider and its customer. Moreover, the presence within a well-delimited territorial context – such as a region – of manufacturing clusters has represented a positive demand-side condition for the birth and development of creative services. However, for creativity purpose the KIBS' relations only to local customers – and local actors – can become a cognitive limit for innovation. The paper aims at exploring how creative KIBS can manage regional and more extended linkages to support their creative processes, based on empirical qualitative analysis of creative KIBS located in the Veneto region – a regional system characterized by a large number of manufacturing clusters.

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1 Introduction

Creative services can be analyzed as knowledge-intensive business services (KIBS) oriented to develop highly customized creative outputs for their business customers, usually manufacturing firms (Bettiol et al., 2012). As for other KIBS' offering (Strambach, 2008), business customers ask to KIBS specializing in design or communication to offer tailored services, characterized by high level of differentiation and able to support clients' competitiveness.

In the literature, this process of innovation has been interpreted as interactive-based, exploiting the advantages of physical proximity between the service provider and its customer (e.g. Muller and Doloreux, 2009). Some scholars have in fact stressed the relevance of contiguity in order to support knowledge sharing between the KIBS and its customer: since the content of the service has to fit with the customer's request and it is highly complex, then those studies argue that spatial – and cognitive – proximity matters in the development of KIBS' offering.

Moreover, the presence within a well-delimited territorial context – such as a region – of manufacturing clusters has represented a positive demand-side condition for the birth and development of creative services. Studies on KIBS and on regional innovation systems (Koch and Stahlecker, 2006) recognize the relevance of dense business networks to create a market for KIBS. Consistently with the importance of proximity in KIBS' innovation processes, those contributions emphasize the internal mechanisms supporting knowledge creation and diffusion at the regional level. Manufacturing clusters as specialized business systems have been described as dynamic learning systems, where the high division of labor among small and medium-sized firms (SMEs) facilitates knowledge sharing (Becattini et al., 2009). This kind of specialized local market can be very important for KIBS, which can balance customization and replication within the same knowledge domain (i.e. advertising for furniture firms or new product development for sport wear firms). However, for creativity purpose the KIBS' relations only to local customers – and local actors – can become a cognitive limit for innovation.

Some scholars have on the contrary posited the advantages of extending market relationships beyond the regional boundaries (Bettiol et al., 2011). KIBS can relay on network technologies or they can exploit temporary proximity advantages – through personnel transfer (Knoben and Oerlemans, 2006) – to interact with distant customers. In addition, not necessarily creative KIBS have to develop their offering by constantly work with customers. During the different steps of the business service conceptualization and deployment, customers' contribution may be limited to the initial and final stage (Miles, 2012; Doroschenko, 2012) or KIBS can structure their organization to increase their efficiency and sustain internal creativity-based

processes (Bettioli et al., 2012). Hence, it should be further developed the analysis of the linkages between innovation opportunities related to the demand of specialized manufacturing clusters and national and international ones (Doloreux and Shearmur, 2012).

The paper aims at exploring how creative KIBS can manage regional and more extended linkages to support their creative processes, based on empirical qualitative analysis of creative KIBS located in the Veneto region – a regional system characterized by a large number of manufacturing clusters. The paper is structured as follows: the second and third sections reviews the theoretical background concerning KIBS' innovation processes within regional innovation systems and present our research questions; the fourth section explores three case studies of KIBS specializing in design located in the Veneto region near industrial districts; the final section presents conclusive remarks and future research paths.

2 KIBS, customer relationship management and innovation processes

Knowledge-intensive business services – also known as KIBS – can be considered an interesting and peculiar category of service (e.g. Miles, 2005, Muller and Doloreux, 2009; Doloreux et al., 2010). Literature on KIBS has included in this group of services firms specializing in business-oriented domain such as technology and software development, professional firms, design and communication, and R&D (Miles, 2005). According to the studies on KIBS, those services are characterized by being knowledge-based, oriented to solve business customers' needs in a framework of higher degree of customization compared to traditional services (Corrocher et al., 2009). Some scholars have also emphasized the presence of KIBS able to offer partial or fully standardized services (Tether et al., 2001). Nevertheless, the majority of contributions converge on the idea of the relevance of customization in KIBS' offering.

The process of customization is strongly associated with co-production (Bettencourt et al., 2002), by relating KIBS' offering with the well-established theoretical framework of service management (Gadrey and Gallouj, 1998). Due to the intangible dimension of the business service and its relation with the business domain of customer, KIBS are asked to interact with customers in order to outline an appropriate service. According to this view, this interaction is necessary for knowledge management purposes (knowledge creation, elaboration and transfer from KIBS to customers and also vice versa). Through interaction with customers KIBS can exchange knowledge able to support customer's innovation and it can also acquire relevant inputs for its service development (den Hertog, 2000). In their review of studies on KIBS Muller and Doloreux (2009) stressed that KIBS can play multiple roles in innovation processes, being active parts in the co-production of knowledge through interaction with customers or becoming autonomous sources of knowledge produced internally or in collaboration with others. According to Miles (2012), multiple forms of innovation can take

place, where the service innovation is just one of them, which can also include for instance new revenue models, new service technologies or new client's role in service management (customer's domain) or new KIBS' marketing or organization and routines (KIBS' domain).

Customer relationship management (CRM) for KIBS is a crucial process since it is precisely through the interaction with the business customer that the service development and provision take place. In his analysis of the KIBS-customer relationship Miles (2012) has explored how KIBS structures its approach to customers, by stressing the iterative process of information and knowledge exchange between the two organizations through the KIBS' front-end. Even though the interaction is crucial – such as during the initial phase of interaction (problem definition), Miles highlighted that KIBS manages also a back-end, where the knowledge management process is limited to the KIBS' organization and not shared with the customer. Moreover, neither KIBS always offers tailored services to customers nor customers learn from KIBS during the process. In this view, also Doroschenko (2012) explored the focus on CRM in the KIBS domain and learning implications for customers. In her study the author outlined the profile of experienced customers compared to other customers: the former are more competent than the latter in selecting the right KIBS and in obtaining benefits in terms of knowledge acquisition, based on interaction during the service development and provision. Bettiol et al. (2011) pointed out that KIBS can manage also distant customers both through a specific investment in information technology (web-based CRM) and in transferring personnel near the customer temporary. The closer the cognitive distance between the customer and the KIBS, the easier the knowledge transferred between the two – and for customers to learn (Miles, 2012). In their analysis on KIBS-customer relationships, Bettencourt et al. (2002) identified six customer's characteristics that delineate customer's role and lead to a fruitful co-production with KIBS when highly customized services have to be developed (and managed by the KIBS). Specifically the authors pointed out the relevance of communication openness, customer's engagement (in terms of involvement and personal dedication) and tolerance.

Within the broad group of KIBS it is interesting to consider KIBS specializing in creative outputs such as design and communication services. In previous studies (Bettiol et al. 2012) we pointed out that there is a parallel between the management of design and communication services and creative industries (Caves, 2000): those KIBS' specializations are creative by nature and are characterized by a high level of customization. Following Miles' classification of KIBS (2005), those organizations have been defined as professional KIBS (p-KIBS), that is firms where the role of professional resources and human competences is crucial, even if supported often by an intense use of network technologies. Design for instance is a creative process, where the generation of ideas and new products depends on the specific competencies and skills of the creative agent – the designer (e.g. Florida, 2002). Nevertheless,

especially as far as design is concerned, KIBS can also be oriented to include more technical-based activities (i.e. engineering).

In the case of creative services like the one mentioned above, there are difficulties for customers in evaluating the final result of the service provided by KIBS in terms of quality. Hence KIBS have to pay special attention to CRM in order to make possible an alignment between their offering and the customer's expectation concerning the creative output offered (Davies, 2009). In fact, clients rely on KIBS to exploit their competences and obtain interesting inputs for their business activities. On the one hand, KIBS services are unique due to their high level of customization since each customer asks for authentic outputs (i.e. a new logo). On the other hand, this uniqueness is based on the fact that such services are highly innovative in terms of knowledge produced (i.e. a new product or retail concept).

The creative output is related to the creative process that leads to that output. In creative industries such as those related to design and communication the creativity process is characterized by different level of codification applied and by serendipity. Hence, creativity-based KIBS may need to structure their own service development and provision in order to balance variety of outputs with organizational efficiency. Bettiol et al. (2012) pointed out that investing in an appropriate working method could represent a solution for such KIBS. While studies on KIBS stressed the collaborative dimension of innovation in KIBS-customers relationships, studies on creative industries (Brown, 2008; Catmull, 2008) discussed about the opportunity for creativity to be organized and codified according to specific principles and managerial techniques. In this view customer is not involved in the creative process, but he or she acts as starter of the innovation process, which can be in turn managed internally at the KIBS level.

Moreover, as it occurs in other creative industries, complex projects require also the capacity of a firm to gather or rely on different specializations, under the form of complementary inputs or resources. Studies on project-based organizations – such as those characterizing KIBS dealing with creative outputs – emphasized how it is important the development of networks of relationships with other competent partners for project development and conclusion (Sydow et al., 2004). The networking strategy of a firm may be an important leverage to overcome the limited internal resources and to rely on external competencies to face customer's demand (Gadde and Håkansson, 2001). As far as KIBS are concerned, the investment on networking relationships with other players are even more important, in that it can increase KIBS' capability to manage complex projects (Gann and Salter, 2000). Hence, the innovation process of KIBS can also include other external partners with whom to collaborate for creative purposes. From this point of view, the co-production with customers becomes less relevant compared to new connections and KIBS acts as source or carrier of knowledge (Alvisi, 2012).

3 Relationships between KIBS and manufacturing clusters in regional innovation systems: benefits and limitations

Many scholars have recognized the relevant relationship between regional innovation systems (RIS) – and also metropolitan areas – and KIBS (Aslesen & Isaksen, 2007; Miozzo and Grimshaw, 2006; Doloreux et al., 2010; Muller and Zenker, 2001; Cooke & Leydesdorff, 2006). KIBS are considered important actors of RIS in the process of knowledge creation and diffusion, sustaining innovation at the regional level and supporting the competitiveness of local business customers.

In their comparative study of RIS in Germany Koch and Stahlecker (2006) discussed the interconnected role of KIBS and regional characteristics in fostering innovation at the territorial level. The authors emphasized, on the one hand, the peculiarities of KIBS and the relevance of spatial proximity with productive customers for innovation and KIBS' growth. On the other hand, they focused on the structural and institutional dimensions of a RIS that is able to sustain KIBS' rise and development, but also benefit from the knowledge spillovers of KIBS' activities. Local contexts such as metropolitan areas and regional innovation systems show a high density of KIBS on average. This is explained by the fact that those territorial areas are able to express a high and demanding request for KIBS and hence those conditions facilitate KIBS start-up and growth. The same contexts provide a number of other location conditions that are favorable to KIBS. Andersson and Hellerstedt (2009) investigated location attributes of Swedish regions suggesting that KIBS' entrepreneurship in a region is influenced by “(i) knowledge resources conducive for the generation and diffusion of knowledge and ideas upon which new firms can be established and (ii) a large market” (p. 103).

We want to stress specifically the demand side effects in supporting KIBS' activities and the impacts of agglomerative effects on KIBS' innovation opportunities. From a demand side point of view, RIS – as well as metropolitan areas – can offer KIBS a large number of manufacturing customers to address, where also policy makers can support such interaction for the benefit of regional socio-economic development (Miles, 2005). In addition to that, interesting opportunities for KIBS can refer to markets formed by manufacturing clusters located in a region. Compared to the general market of business customers located in RIS, the market size effect could be lower when clusters are concerned. Nevertheless, in small contexts such as those of clusters the interaction with clients can be facilitated by shared language and common values, meanings and implicit rules of behavior that support reciprocal understanding and mutual adaptation (Becattini et al., 2009).

As seen in the previous section, studies on co-production usually stress the need for physical proximity among the players involved in the service offering, in order to facilitate and support knowledge exchange. The link between KIBS and manufacturing clusters – as KIBS' customers – located in the same region can be interpreted specifically in this direction of

innovation: due to the co-location of KIBS and manufacturing firms within the same territory, agglomeration economies impact not only manufacturing firms, but also on KIBS (Antonietti and Cainelli, 2008). Literature on clusters has stressed the advantages of embeddedness in a specific context, which provides firms with a wide set of advantages, in particular from a cognitive standpoint (Becattini et al., 2009). Aggregation in terms of local proximity is fundamental because of positive benefits in terms of rapid information circulation and frequent interaction among economic players.

Manufacturing clusters are characterized by a strong overlap between social and economic linkages among individuals within and across organizations, with a mix of competition and cooperation among firms. Spatial proximity plays a critical role in the cluster dynamic, reducing firms' transaction costs in terms of control, information sharing, and coordination. Physical contiguity among players allows frequent interaction and rapid feedback, based also on common languages and routines. Information exchanges are linked with the process of knowledge creation and diffusion, which are made possible by strong social and trust-based relationships among firms (Dei Ottati, 1994). A flexible and dynamic labor market, where workers' mobility is very high and especially oriented to start new own companies enhances this mechanism. Hence, benefits are in terms of rapid innovation, high quality of products and processes, flexibility, and short time-to-market (Camuffo and Grandinetti, 2011).

Clusters have been described as powerful learning laboratories and geographical "platforms" for knowledge management (creation, elaboration and exchange of knowledge, mostly not codified one) (Malmberg and Maskell, 2002). Within clusters, high levels of outsourcing characterized business relationships together with a strong presence of strategic suppliers directly involved by firms in collaborative connections. The social context is important for the choice of strategic partners and the development of interdependent innovative processes (Lazerson and Lorenzoni, 1999), as most of the firms' strategic suppliers have been localized within the clusters (Chiarvesio et al. 2010). Business-to-business district relationships can be described in terms of vertical connections, which link firms carrying out the manufacturing process, and horizontal relationships related to services and support activities provided by other players. In the original cluster model both the categories of activities were carried out by local players, improving and leveraging specialized competencies. From this perspective, we can include also KIBS as supplies of services related to both core business activities (such as new product development) or supporting one (i.e. software provision).

However, this positive relationship in terms of innovation between KIBS and its business customers located in clusters should not be taken for granted. Shearmur and Doloreux (2012) explored the relationships between the level of KIBS innovation and local manufacturing clusters, by considering not only the agglomeration effect but also the industry specialization of clusters. Their extended quantitative analysis obtained ambiguous results. KIBS seems to be more innovative when located in low-tech regions (clusters), compared to high-tech

industry specialization of agglomerated firms. However, in general terms, manufacturing clusters affect KIBS innovation more than the presence of high-order services in the region of KIBS' location. Nevertheless, the authors observed that KIBS successfully innovate also outside of clusters and that the role of metropolitan areas is not necessarily determinant for KIBS' innovativeness compared to peripheral rural area. The degree of KIBS' specialization can sustain specific innovation approaches, based on networking in the case of metropolitan areas (and clusters) or based on internal resources in the other case of KIBS' location.

Moreover, recent studies have discussed about the evolutionary trends of clusters (Becattini et al., 2009), modifying the way KIBS can interact with cluster manufacturing firms. First, it has been stressed the internal transformation of clusters from homogeneous networks of small firms into more different levels of vertical integration and firm size within and across manufacturing systems (Cainelli and Iacobucci, 2009). Second, studies have also described the internationalization processes of firms and the rise of leading firms who modify the internal cohesion of the cluster and opening the system to new competitive pressures (Chiarvesio et al., 2010). Leading firms are more demanding in terms of quality and variety of services to purchase and are able to source to those suppliers even beyond the local context if necessary.

This process of transformation at the cluster level can further enhance the relevance of cluster (regional) market for KIBS, since it offers the opportunity to cope with more experienced, qualified customers to interact with. At the same time however, not all cluster firms are leading ones and hence, KIBS may suffer from the limitation of the local market both from a quantitative and qualitative point of view. From a quantitative perspective, the scale of local market may not be sufficient in the long run for the growth of the KIBS. From a qualitative point of view, customers at the local level not necessarily are able to support effectively the KIBS' service development, especially when creativity is concerned.

Beyond spatial proximity, other scholars have considered the opportunities offered by network technologies to maintain customer relationship management at distance, even in case of innovation purposes (Antonelli, 2000). Our previous research on KIBS' strategy of market extension (Bettiol et al., 2011) showed that spatial proximity is not always relevant in customer relationship management and that a non-negligible number of Italian KIBS studied have high rate of non-regional customers and follow specific innovation strategies. National KIBS are in fact able to create new knowledge autonomously or in collaboration with other partners other than customers.

Moreover, studies on KIBS internationalization have shown that many KIBS develop relationships – with customers, suppliers and other actors – on an international scale and a greater number of them develop relationships beyond the local context (Bryson & Rusten, 2005). KIBS can follow alternative strategies to internationalize, from foreign direct investment to other organizational solutions (using personnel travelling overseas to recreate

spatial contiguity on temporal basis) (Miozzo & Soete, 1999; Blomstermo et al., 2006). This process of internationalization can be structured through phases or can be connected to the entrepreneurial approach of founders (born global firms, Falay et al. 2007; Toivonen et al., 2009).

Studies on knowledge management in general (e.g. March, 1991) and concerning specifically KIBS (Koch and Strotmann, 2008) stress the cognitive lock-in related to local relationships, where KIBS can lose new learning opportunities – and hence innovation and service offering benefits – by limiting relationships only with customers (players) closely located. Boschma (2005) has explored the different forms of proximity and his study suggests that cognitive proximity may occur also at distance. Also studies on clusters pointed out limitations of embeddedness. Belonging to a community and exploiting its social context is critical in the sense of enlarging and enhancing the firm's ability to compete, because it is able to leverage strengths of other firms within the network it is embedded. This sustains and supports the firm's competition, even if sometimes an overembeddedness can impact negatively on the firm's growth and development (Uzzi, 1997).

We argue that for KIBS in general and more specifically as far as creative KIBS are concerned KIBS development and growth in innovative terms requires the opportunity to extend the market beyond the limitation of regional boundaries. The knowledge developed by the KIBS in its interaction with the customer or other partners need to be exploited into a global market, looking for new potential customer. New knowledge elaborated in the local context can increase when included into larger circuits of global markets. In the global market there are new opportunities for developing new knowledge and for exploiting the codified one already developed in the local context. From this point of view KIBS plays the role of gatekeepers (Morrison, 2008; Grandinetti, 2011) between the RIS and the outside. This process is crucial for developing the quality of KIBS' offering from an innovation point of view and for sustaining its growth over time, with also positive impacts on the regional innovation system.

4 Empirical analysis

4.1 Methodology

In order to verify our research question we carried out a qualitative analysis (Yin, 2003). Case studies have been selected based on the following criteria: a) KIBS' specialization in creative services; b) KIBS' location in the Veneto region; c) KIBS' location within or close to manufacturing clusters. More precisely, starting from those criteria we selected three design companies: Alberto Del Biondi, Delineodesign and Emo design. We decided to explore case

studies that, albeit consistent with the mentioned criteria, have also different characteristics: Alberto Del Biondi is the largest design company in Veneto and located in one of the most ancient manufacturing clusters in Italy, the luxury shoe district of Riviera del Brenta (between Padova and Venice); Delineodesign, a 12-year-old design company located in Montebelluna, the inner city that represent the core of the dynamic cluster of the Treviso sport system; and Emo design, a young design company located in a highly intense manufacturing area also known as Inox valley, at the border of the Veneto region and very close to other cluster areas in the Friuli region (furniture cluster and metal/knife cluster). Information for these case studies was collected in various ways: a) from repeated in-depth interviews with founders, managers and designers of the design firms, carried out between 2009 and 2012; b) from an analysis of in-house documents produced by the firms; c) analysis of external resources (newspaper articles, online articles, books, etc.) relating to the firms.

We decided to focus on the Veneto region since many studies at the international level recognized this region as a regional innovation system (Cooke and Memedovic, 2003; Cooke et al., 2004). Veneto is among the more developed regions in Europe in terms of rate of employment and GDP per capita. According to the OECD classification, in 2008 Veneto had the third largest share of manufacturing firms with a high-technology content (about 9.3% of Italy's total, 3rd region in Italy). Moreover, this region is also characterized by a high concentration of manufacturing clusters, known also internationally (Belussi and Sammarra 2010). There are also intense business and innovation collaboration relationships among firms belonging to different clusters at the regional level and, hence, this further increase its relevance as distinctive domain within which to study the connections between creative KIBS and manufacturing clusters. In addition, compared to other Italian regions such as Lombardy, Veneto is not characterized by large metropolitan areas. On the contrary the urban fabric of small and medium cities is consistent – and supported – the development of distributed manufacturing systems (cluster aggregations) (Becattini et al., 2009) with impacts also on the KIBS locations.

4.2 Alberto Del Biondi Design Factory

Alberto Del Biondi Industria del Design (Design factory) (from now ADB) is an integrated firm specializing in design, engineering and prototyping working for leading Italian and international brands. This KIBS has been founded in 1983 in Noventa Padovana, a small town in the province of Padova (Veneto Region, north eastern Italy) and very close to Venice, as design center for shoes and fashion accessories. The founder Alberto Del Biondi represents the third generation of shoemakers (entrepreneurs), who by working for the family company realized very soon the relevance of design in the shoes industry. The initial focus on the design for shoes was then extended into other industries such as architecture and industrial

design. Nowadays the KIBS covers a wide range of services: fashion design, architecture and interior design, graphic design; each of them structured into internal departments (set up in 2005).

Each of the internal design departments acts as an independent entity, where the fashion design still represents the ADB core business. ADB is a real “factory” since the design process also includes more manufacturing-related activities: shoes and fashion accessories are designed from the idea to concept development – by coupling creativity and technical knowledge – to include also the prototyping and collection development. The internal division specializing in architecture works in the domain of residential and hotel building as well as in the boat design, by providing furniture and interior design proposals. The internal division of industrial design is instead focused on the process of idea generation, concept and product development, through a complex process where the customer interacts with ADB in specific steps. The graphic department provides services from brand creation, corporate identity management to packaging and communication tool development.

ADB’ turnover in 2010 has been of about 7,6 Ml Euro - highlighting the large size of the company – for about 80 people (2 founders, about 70 permanent employees and other temporary collaborators) hosted in the new headquarter of 9,000 m². Eight creative teams work on creative services, in addition to dedicated resources for market analysis, trend hunters and marketing experts. The high level of annual turnovers achieved by ADB during the years (almost doubled from about 5 Ml euro in 2003 to 10 Ml Euro in 2007) demonstrated the important role of such company in the Italian and international competitive scenario of design. Even though ADB is not the leading company in design, it represents a relevant position in the industry.

The personal experience and family origin of the founder Alberto Del Biondi influenced the location of the company within the manufacturing cluster of Riviera del Brenta (between Padova and Venice) specializing in luxury shoes. The district is characterized by strong craft and manufacturing competences distributed in a large number of small companies, most of them working for the most important luxury global brands (Belussi and Sedita, 2009). Knowledge about product style and development is widely spread in the cluster, even though many cluster firms are connected with foreign designers related to their international buyers (i.e. LVMH, Prada, etc.).

Even though there could be market opportunities for ADB at the local level in terms of product development, the KIBS does not limit its market to the manufacturing cluster: the Veneto Region counts only for 5%, while about 55% of the turnover is achieved through foreign customers (about 35% of them located in China and US, 20% in Europe) and the other 40% in Italy. The customer portfolio is highly differentiated and not concentrated toward few customers. Moreover, despite KIBS’ investments in the Veneto RIS and specifically its location within a manufacturing cluster, it is internationally oriented. The manufacturing

cluster is able to offer skilled workers specialized in the fashion and shoes products and collaborative opportunities. However, the founder has explicitly oriented the firm beyond the RIS in terms of collaboration and networking, for creative support and service development: artists and free lance designers, marketing and communication consultants as well as university and research centers are involved on a global scale. The creativity process does not rely only on inputs based on customers' interaction, but also through web analysis, visits to museums, exhibitions, fairs and also technical and scientific papers' reading. The founder Alberto Del Biondi has a crucial role in the creativity process and in the final approval of the KIBS' outputs.

The KIBS has developed a structured and codified approach to market and customer relationship management. On the one hand, ADB has an internal marketing function that explores market opportunities and customers' requests, integrated by external research analyses. On the other hand, ADB invests in direct marketing solutions, personnel and professional network opportunities and participation to fairs and events for market development. Moreover, ADB has invested in a large set of technological tools – from email to videoconferencing, from ERP to Web-based solutions, from 3D, CAD-CAM to mobile communication solutions – with the aim of improving internal knowledge management and information exchange as well as customer relationship management, also at distance. ADB has explicitly invested in KIBS' brand for reputation and market visibility, in addition to specific investments in protections of intellectual property right through patents.

4.3 Delineodesign

Delineodesign is a design studio founded by the designer Giampaolo Allocco in 2000 and located in Montebelluna, a small town in the province of Treviso (Veneto Region, north eastern Italy) that represent the core of the dynamic cluster of the Treviso sport system. The sport system cluster has been internationally recognized by the high level of specialization in the production of sport equipment and the presence of leading companies. Moreover, many large multinationals invested in the area to acquire specialized knowledge and to exploit local manufacturing and design competences. Furthermore, the cluster has shown an intense growth of design companies oriented to support local innovation processes (Aage and Belussi, 2008). To understand the KIBS strategy it is important to outline the personnel history of the founder. After his high school diploma in electronic technology, Giampaolo Allocco started to work in the sport system industry at the Dal Bello and other two companies where he developed strong technical knowledge and product development competences related with ski boots, in addition to engineering, marketing and strategy consulting. His professional and social life in the Montebelluna area allows him to acquire relevant know-how and to develop strong personal relationships with a large number of managers, designers and technical

employees of the sport system. However, when he was 25-year-old he decided to completely change his life and to invest in design, a passion born in 1996 reading the famous design review *Modo*. From well-paid manager he then started to study at the Italian Design School in Padova at the “Master in Industrial Design” to acquire theoretical knowledge about design.

At the end of his master experience, Giampaolo Allocco started to work for a famous communication studio – Giacometti Associati based in Treviso – where he acquired robust competences in project to become soon the director of the studio and to develop networking with customers and other design and communication KIBS in the Milan area. In 2000 he founded Delineodesign in Montebelluna by formalizing his need to become independent designer and developing design projects for many Italian and foreign sport companies producing snowboard, ski boots, bike and car racing. Nowadays Delineodesign is considered among the first twenty design studios in Italy with special knowledge on sport design. KIBS’ offering mainly includes industrial design in all its different steps (idea generation, CAD and 3D engineering, and prototyping). In addition to such services, Delineodesign has then included graphic and integrated communication services (i.e. corporate identity and operative marketing), which have increased their weight on the total turnover (about 40%).

The studio is a small company (not provided by the firm, included in a turnover range of 200-500,000 Euro, with rates of growth of 10-15% in the last years) with about 9 temporary and permanent employees (all graduated and young people). This small dimension has been decided strategically, since Allocco wanted to maintain a project-based approach to design with an emphasis on team and dynamicity. Delineodesign has in fact approached design with a strong technical orientation – influenced by the background of the founder – coupled with high creative dimension. Delineodesign has in fact been awarded at the international level several times for its design and product proposal.

In 2009 he decided to stop interacting with the design system in Milan especially related to furniture design to focus on sport industry and market development at the international level. Despite the small size, Delineodesign has in fact an international orientation to market: about 30% of the customers are located in Veneto – but no one in the manufacturing cluster of sport system in Montebelluna – 10% in Italy and the other 60% abroad (mainly Germany and Austria, followed by US). There is a personal investment of Giampaolo Allocco in market development and customer relationship management. The founder invests in personal relations, direct marketing and word-of-mouth to achieve new customers. The founder invested personally in customer-relationship management: the whole creative process is organized in multiple steps, agreed with the customer and characterized by face-to-face and web-based interaction.

Giampaolo Allocco affirmed to be proud of being “from Veneto and from Montebelluna”, meaning that his territorial context of origin is important in order to support the KIBS reputation at the national and international level. The Veneto RIS in general and the

manufacturing cluster specifically has offered positive opportunities in terms of knowledge acquisition and exchange with other business partners and scientific collaboration (technical studios, engineering studios, ICT companies or artists and free-lance designers). The Montebelluna cluster has been crucial for the development of Allocco's competences, reputation and for the achievement of initial professional successful experiences. However, from a market point of view, Delineodesign is oriented outside the cluster since the international experience can offer many advantages in terms of business opportunities – compared to the crisis of the cluster is currently facing – institutional support and recognition of the role of design in sustaining the firm's competitiveness. According to Giampaolo Allocco in fact the cluster know-how has been cheaply transferred internationally – also in terms of tacit knowledge related to product development – and nowadays the manufacturing cluster is no more able to compete at the global level.

4.4 Emo design

Emo design has been founded in 2009 by two experienced Italian designers - Lukasz Bertoli and Francesco Costacurta – and a specialist in marketing and account management Carlo Ciciliot. After their graduate studies in industrial design at the Politecnico of Milan, the two designers have developed lots of experience working for some of the most well known design consultancies in Austria, Italy and France, involved in design projects for leading companies specializing in consumer electronics, sports equipment and urban furniture. The third founder Carlo has instead acquired his economic and marketing competences during his Master in economic development and being employed in a firm in the building industry for several years. With a turnover 2011 of about 300,000 Euro, the company is formed by 8 people (3 founders and 5 employees), plus a young industrial designer that joint as international internship Emodesign (Erasmus working abroad program). Despite its age, Emo design has already received several international design awards.

Emo design is located in Vittorio Veneto (Treviso province, in the north-eastern part of Veneto region), a small town characterized by being at the heart of the so-called Inox Valley (Regazzola, 1999). This area located between Conegliano and Vittorio Veneto in fact has become famous at the national and international level for a high agglomeration of small and medium-sized firms specializing in working metal for the production of complex technology-based products mainly oriented to business-to-business markets such as professional kitchens or home and professional appliances. From the '50s a manufacturing cluster developed in the territory following the outsourcing strategies of the large companies like Zoppas or Zanussi, local producers specializing in home appliances (i.e. refrigerators, washing machines). This dense local network of manufacturing firms represents an interesting market for KIBS, also for those specializing in design and creativity-based services. Vittorio Veneto is also very

close to other important manufacturing clusters both in the Veneto and in the near Friuli region, specializing in furniture, knife and cutting products, mechanics and plastic products. Emo design decided to locate explicitly in Vittorio Veneto and not in large metropolitan areas such as Milan – a famous design city – for economic and social reasons. On the one hand, the founders' origin is the Vittorio Veneto area and hence they wanted to stay close to and exploit the social connections they have with the territorial context. On the other hand, even though Vittorio Veneto can be perceived as a peripheral area compared to Milan, it has an interesting local market for KIBS services, which can also exploit the opportunities of network technologies to connect with distant markets and potential customers.

According to Carlo Ciciliot in fact, the manufacturing fabric of the area is particularly rich to support the market expansion of Emo design. Consistently with the entrepreneurial processes occurring in clusters, the start-up of the design company has been supported by exploiting Carlo's local connections: the CEO of MCZ - a dynamic company operating in the indoor heating sector located in the Pordenone area, very close to Vittorio Veneto – decided to offer Emo design the opportunity to provide design concepts for its products, starting a multi-year fruitful collaboration.

Moreover, the specialization of the design company in what they call the “industrial” (design) allows them to identify a specific market niche not covered by local and – mostly important – national competitors. Hence, they grew very rapidly. Emo design develops projects for companies in different industries – from mechanics and home appliances to fashion (working with famous international brands like Lorenz) – being characterized by a large variety of size and location, in Italy and abroad. Most of the customers are from the Veneto and Friuli area, but many firms are national branches of multinational companies or they are internationalized Italian medium-sized firms. The KIBS is thus able to interact with well-structured organizations (also with specific industrial specialization i.e. mechanics), with whom the interaction for service development and provision is particularly efficient and effective.

The role of local networks is also important – and cultivated by Emo – in order to sustain its competitive advantage. The KIBS has in fact an open approach to other KIBS located in the same area, which can become important partners based on the complementarities of competences and specialization. Moreover, the KIBS has also invested in selecting “smart” regional suppliers that can reinforce the quality of the KIBS' offering or its innovativeness.

Even if the KIBS is located in a dense area of clusters – the Inox valley – it started to approach its market with a global orientation and an international mindset since its foundation. Before founding Emo design, the two designers spent several years abroad and acquired design skills and competences in an international environment. When they founded the company the name Emo has been selected for being particularly memorable and also because it does not change the pronunciation between Italian and English. In addition, the recruitment of new designers relies on international web-based platforms in order to align

Emo design needs with the opportunities offered by the global design labor market. Moreover, this connection forces the organization to be oriented and think in international terms.

Emo design is also starting its internationalization process by approaching the Poland market – also exploiting the cultural and language connections of one of the founders (Lukasz). Future internationalization plans could be oriented to US or Latin America markets. The company will attend the international design week in Lodz in October 2012, with the idea of promoting its services into a growing and interesting market. On the one hand, the KIBS is particularly rooted in the manufacturing fabric of the Veneto region – going beyond the Inox Valley cluster: the KIBS created a network of local connections with other KIBS (communication agencies, engineers) and suppliers that enhance its innovativeness. On the other hand, the KIBS has also invested to increase the variety of collaboration and project opportunities to extend its knowledge circuit.

Emo design has invested to develop a working method that combines efficiency in service development and effectiveness in the level of customization offered. In fact, Emo design interacts constantly with its customer through face-to-face aiming at approaching the customer's need correctly and augmenting the customer's perception of the value generated by the design. The KIBS' location allows the founders to easily reach the customers' offices – and also most important suppliers – also new potential ones (especially the international ones).

4.5 Discussion

The three case studies show how KIBS specializing in design and located near manufacturing clusters benefited from the knowledge flow occurring at the local level for innovation purposes. Moreover, the Veneto regional innovation system has supported KIBS' service development and market opportunities in terms of networking for service provision as well as in the initial start-up phase. However, ADB and Delineodesign have not explicitly invested in the cluster and regional area for market development, but they implemented national and international strategies. Instead, the specialization of Emo design offers the KIBS the opportunity to combine regional and inter-regional markets with an international potential expansion toward the Central East European countries.

Being located in cluster areas increases the reputation effect of the KIBS and their ability to propose their services on a broader scale. From an innovation point of view all the three case studies have underlined the relevance of networks in order to support creativity and innovation strategy, specifically for small-sized KIBS. Nevertheless, it is not only the location of the partners that influence their selection, but their different specialization and know-how. The KIBS analyzed are able to combine the knowledge inputs gathered from multiple sources,

by acting like sources or carriers of knowledge toward their (regional or international) customers. Emo design showed also to play the role of gatekeeper among different customers and partners, not necessarily related to the local manufacturing cluster.

The case studies analyzed perceive neither the manufacturing cluster nor the regional innovation system as a limitation for their innovation purposes, but at the same time the creativity – and also market – circuit is far more complex and extended than the regional scale. The innovation process is not limited to the relationship with the cluster and it is enhanced by developing new market opportunities also beyond the Veneto region. The transformation of the clusters influenced the KIBS' market development, such as in the case of Delineodesign: the cluster of sport system at the local level is not able to offer interesting market opportunities – also in terms of local institutional support or services. Hence, the KIBS invested in focusing on a specific niche of services – sport-related in this case – that offers the company the possibility to find and exploit connection with international customers. The high level of service specialization characterizes also the young design company Emo design, which was able to rapidly gain market share at the regional level and increase its reputation in the Italian design scenario.

The relationship with the manufacturing cluster in the Emo design case was opposite compared to ADB and Delineodesign. While both the design companies – and their founders – are embedded into manufacturing clusters where the role of design and creativity is explicitly relevant for the competitiveness of the firms located in the area, in the case of the Vittorio Veneto the manufacturing companies discovered design through Emo design's offering. From this point of view the role of the KIBS was to develop the market at the local level and hence the market extension follows a different path (through the interaction with Italian branches of multinational companies and medium-sized firms) compared to the other two well-established design companies.

All the three case studies have confirmed the importance of the social dimension that characterizes clusters in order to start-up and to develop the design company. Nevertheless, they do not necessarily associate the relevance of physical proximity with customers with the location of the customers within the region and the cluster itself. On the contrary, through personnel transfer as well as through network technologies the three KIBS interviewed are able to manage innovative processes also at distance. Moreover, the variety of customer and partners' relationships – also influenced by their location – impacts on the KIBS' process of knowledge creation.

As far as creativity is concerned, there is a high level of internalization of the process: the three KIBS do not rely in general on customers' input for creative purposes, but they exploit internal resources – and connections with upstream suppliers and partners – in order to nurture the process. As a consequence, the location within the cluster is important only for networking purposes with other KIBS or partners and the creativity dynamic (knowledge

generation and elaboration) benefits from inputs external to the cluster and often to the region (i.e. visiting European contemporary art museums).

5 Conclusions and future research

The paper discusses about the relationship between creative KIBS and manufacturing clusters in regional innovation systems and implication for KIBS' innovation. Focused on three case studies of design companies in different steps of their growth, our qualitative analysis investigated how those KIBS exploit their spatial proximity with manufacturing clusters – in the broader context of Veneto as a regional innovation system – to support innovation. Our results show that local specialized customers represent in general a limited number of the whole KIBS' market and that KIBS are national and internationally oriented.

This outcome highlights the need to re-conceptualize how KIBS approaches innovation and the customer-relationship management issue. While on the one hand, the manufacturing cluster has been able to support the development of specific competences of the KIBS' founders that open new international market opportunities, on the other and, the local demand for KIBS' services has not been very high.

The creative process at the core of the KIBS' offering is managed internally and it is strictly connected with the founder/s of the KIBS. Those designers do not refer generally to customers for creative inputs. Rather, they develop their own creativity-based inputs such as attending to cultural events or rely on past experience about product development in order to propose new creative (and technical solutions). From this point of view, the role of manufacturing cluster in providing an “industrial atmosphere” that provides specialized (often tacit) knowledge about products and processes is important from the point of view of the designer/s, who then exploits such knowledge into the KIBS' service provision. Moreover, the cluster is important since it offers networking opportunities that sustain KIBS' service development.

The main limitation of the paper is that our study is preliminary and should be further developed in order to better disentangle the knowledge flows between the cluster, the regional, and international levels managed by KIBS. Further research should also expand the analysis by expanding the qualitative research in other KIBS' specialization, to consider also the industry influence on the processes observed.

6 References

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