Design and SMEs: the trigger of creative ecosystems

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ABSTRACT

In this paper we present key issues that contribute to enhancing the debate on the relationship between design and SMEs. We compare the situation in Italy and the UK both considering an historical background and by understanding how governments are currently supporting companies in using design – especially focusing on SMEs, that is the main industrial population in both countries.

We underline the importance of developing a trusted relationship between designer/entrepreneur. This collaboration is in fact historically based on a strong element of reciprocity and interdependence and it results in a successful action often because of the personal characteristics of both the designer and the entrepreneur, it being a mechanism highly based on trust and cultural matters. This relationship and the qualitative advantages it has brought to businesses is a very difficult one to measure and support for governments, although these are increasingly looking at creativity as one of the main triggers of innovation. More importantly, the profound changes underway are calling for the need to give new meaning to what a company is; only consequently looking for viable ways of growth.

We highlight the network dimension in the connection between design and business, as a viable new way to answer to the profound changes (cultural, civic, environmental, economical, and social) underway. We conclude by defining such collaborative systems “creative ecosystems”, in that they trigger knowledge exchange mechanisms, creativity and innovation by generating an adaptive environment that resembles a biological ecosystem.

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Design, Economics.

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Design Industry, SMEs, Italy, UK, Design Thinking.

1. PREMISES
Comparing the UK and Italian context this paper attempts to address the following questions.

1) How can the design profession engage with wider business sectors more effectively?

2) How can the new perspectives and opportunities design interventions can bring be communicated to companies and particularly SMEs (Small Medium Enterprises) who are often lacking in the human and physical resources to engage with these possibilities?

3) What role can local, national and EU level governmental intervention play in facilitating this?

Finally, how should we respond to the current financial restrictions and what are the possible modes for design business engagement in the future?

Many scholars and professional designers have tried to answer the first of these questions, often by listing and trying to make explicit the characteristics of designers [11, 30, 38]. This paper argues that collaboration between the design sector and SMEs has worked especially when the entrepreneur is an “illuminated” one, that is a visionary person looking to evolving its business and willing to undertake risky situations as best paths to innovation and growth [40, 45, 46]. Such cases are few and often historical compared to the day-to-day reality of a national socio-economical system. Design has in fact been able to show its full potential in helping business only with specific company niches (for example in Italy this is known as Made in Italy sector), that is companies that can see a benefit in design right away.

The collaboration between design and SMEs is highly dependent on the culture underlying the company [2, 5, 23], and reflects specific national conditions resulting in contrasting public and private support systems of design, especially now that a deeper understanding of this profession is emerging, and creative industries - with design on top - are high on the agenda of local governments and EU alike.

What can we learn from different support systems to improve them? What can we learn from the ways in which design has collaborated with companies in different national contexts?

Starting from the characteristics of designers that are valuable to the wider business community we describe exemplar cases of “illuminated” relationships between designer/entrepreneur. We then compare some interesting ways in which design is nowadays supported by the government to connect with SMEs. This double journey develops through a parallel narrative: two exemplar cases of national contexts are investigated. Italy is the first area of consideration, as a model that in the past has achieved top production and growth by incorporating design in industrial systems (Made in Italy). In the second part we focus on the UK, as one of the most advanced European cases in the governmental support of the design industry. We conclude by trying to
recognise new economic landscapes and putting forward suggestions for useful channels and models of connections between design and SMEs.

2. THE CHALLENGE

The complexity and the turbulence of the actual socio-economical system have driven the need to widen the interests of the professional figures typically working with companies [7, 21, 37]. Addressing business challenges means considering the intensified global competition and the pressure of the environmental/sustainable challenge, the rapid pace of technological advance and the changing ways to operate with distributed teams and co-created solutions. The traditional boundaries of professions are blurring, and so are the strategies a company can actuate for innovation. This requires complex interventions negotiated between different socio-economic actors (companies, institutions, citizens, etc.) working in teams of multi-experts.

This evolution affects researchers and disciplines. For example in Innovation Studies the Open Innovation paradigm [8, 9] argues for the need to establish new and open innovation models, where much of the knowledge needed in a company comes from outside its boundaries. Another example is the number of papers written in Entrepreneurship studies on entrepreneurs’ social networks [26, 27, 43]. The concepts of openness, collaboration and connectivity acquire importance in many fields.

Design is increasingly being recognized as a fundamental ingredient to integrate in companies for innovation, because it can shape ideas and translate them into practical and appealing propositions for users [10, 12]. Consequently, design - and the creative industries in general – is recognised as one of the essential competitive factors to improve companies’ performance while answering to a green imperative (Green Book on Creative Industries, European Union, 2010). Traditional forms of production are been substituted by the importance of services and interactions and factories are being replaced by collaborative networks, focusing on creativity, imagination and immaterial assets, where the main value for companies is to be able to create experiences and relationships.

Design started talking of immaterial systems more than ten years ago [6, 32, 33], and is now focusing even more on valuing exchange relationships, it being the immaterial part of a product/service system or the network of specialized companies needed to produce a product or service. "Designerly approaches are increasingly valued in the business landscape [18, 44], calling for a new entrepreneurial culture and renewed paths of integration between business and creativity – and/or design. Nevertheless the picture of the growth of the design industry and its path to being integrated in business is a fragmented one: in the UK over 60% of designers are under 40, 60% of design agencies employ five people or less, over 75% of design agencies have an annual turnover of less than £100,000, and over half of design business owners do not know what will happen to their business after they leave [19]; in Italy a recent survey on the use of design within companies, stated that 55 companies out of 100 use design as a competitive factor [18, 44], and that these work mainly in the Made in Italy area (furniture 78% and fashion 69%). 20 companies out of 100 invest 6% of their turnover in creativity; 75% of interviewees think of design as a fundamental asset for competition and 61% see it as a lever to innovation.

While it is possible to paint a very positive picture of the design industry, in reality things are more complicated. In the UK another recent survey [4] reveals an opposite picture, with a 30% fall in turnover over the past five years, and a 15% fall in employees over the last two years, signifying a significant shrinkage in the size of the industry. In Italy articles are published claiming a big gap between design and SMEs (Il Sole24 Ore Business Media, 2009), while another survey (ADI, 2009) reveals that 18% of entrepreneurs didn’t invest at all in design in the last years and over 50% of them invest less than 5% of their turnover in it. Historically design is one of the first sectors to suffer in a recession so the picture on the ground today is unlikely to be significantly better.

This poses a challenge: what are the channels to help this connection be concretely fruitful? Such investigation can be useful to many actual governmental and policy challenges (e.g. Europe 2020 policy programme), aiming at spotting interesting suggestions and models for future research projects.

3. ITALY: A GOOD PRACTICE OF COLLABORATION

3.1 Design sector/business engagement

Although the roots of the modern design profession can be traced back to the Renaissance [28], in many ways it is still a fledgling industry when compared to many other professions. Its competencies are in fact difficult to grasp for business executives and sales managers, typically looking for numbers. Designers offer instead qualitative improvements and capabilities, such as “empathy, optimism, systemic vision, integrative thinking, experimentalism, collaboration” [5]. Nevertheless the encounter between these qualities and that of particularly open-minded entrepreneurs is what has generated in history the best cases of innovation and successful growth in both Fordist and post-Fordist companies [24].

A historical evidence for this is the successful collaboration of designer/entrepreneur between Walter Rathenau and Peter Beherens. The first was the owner of AEG (German Electro-technical Company) – son of its founder. In 1907 he called an artist, Peter Beherens, to re-shape the firm. He intervened not only on the shape of the products, but also on the architecture (the organisational structure) of the company and on its coordinated image, re-designing brochures, catalogue, and advertising posters. The underlying intuition of Rathenau has been a founding one in the design profession and in its relationship to industry: since technological research was proceeding slowly and all of his competitors were selling products with similar performances, he decided to trust an unusual factor, that of art – aesthetics, image and communication. Therefore Rathenau decided to create value increasing the intensity and the quality of the design project/strategy in AEG. This intuition has steadily acquired
importance through other similar examples, affirming that design can now be applied in a company to defining a mission, a vision, a brand identity and equity, as well as the socio-economic exchange relationships of the company inside and outside its boundaries [35].

Similarly in Italy, design sector / business engagement has always been dependent on a direct and collaborative relationship between “illuminated entrepreneur” and designer. To explain the characteristics of this specific personality, Joseph Schumpeter did much of the fundamental research. He defined the entrepreneur as a social actor, strictly connected to the environment in which his/her economic activity takes place. The entrepreneur is intimately connected to a network of socio-economic relationships, which engage him/her in constant exchanges [22, 40]. He/she is the key to economic development, because he/she is at the core of dynamic and cyclical processes of innovation. Entrepreneurial activity is the engine of social transformation, and needs to be activated by “illuminated entrepreneurs”, that is persons with special psychological characteristics: the dream and will to found a private empire and a dynasty, the will to win, to fight and be successful, but overall the will and joy to create and imagine a different future [40]. The entrepreneur, thanks to his/her dreams and visions, is able to combine technical, human, organisational and relational elements, to create something new that contains possibilities for development.

The designer is for the entrepreneur the professional figure that can support him/her in giving shape to his/her vision to make it real. One example is Olivetti, a company that interpreted its role in society as a responsibility to improve it. Adriano Olivetti - director in the 30s and example of “illuminated entrepreneur” - aimed at developing the culture of his company in strict parallel with a design culture, reserving special attention for a material dimension, a symbolic dimension and a relational dimension of exchange between company and consumer. He was one of the first in Italy to ally with great designers (other well-known examples are Alessi, Brionvega and so on), who could grow up with the company, helping it be always visionary and at the cutting edge of innovation (examples of designers who worked for Olivetti are Marcello Nizzoli and Alessandro Mendini).

3.2 Characteristics of the relationship
In Italy the relationship between design and business is historically based on a strong network dimension, characterised by a continuative and constant interdependence, trust and sharing values and competencies, and by reciprocal access to resources. It is very personal, a trusted friendship as well as a professional collaboration, underpinned by a strong bond that influences the development of the whole company, that is the company’s culture [46]. The key factors that allowed design to be central in the development of the Made in Italy model are the personality of the entrepreneur and the high level of trust between entrepreneur/designer. The last has therefore become a “chemical trigger” for innovation, activating competencies and building new capabilities to answer specific business needs. Italian design emerged firstly as cultural phenomena, and afterwards it was able to integrate itself with management thanks to the development of a strong vision of design-driven growth for the company. This is why it is difficult to measure the value of design and creativity in economic terms: in its relational essence, Italian design is a territorial phenomena, that generates most of its value by being a special ingredient in idea generation processes, production and distribution processes, as well as for social innovation actions.

The activity of design and its relationship with companies emerges in the Italian system because of the capability to generate new products and modify processes in the long run, so that its strengths are acknowledged in building strategies, visions and offer systems. The Italian designer working in/with companies can be defined as a “spider-designer, that builds and organizes the value web, that is the sophisticated mechanisms of exchange with the final user […] to accomplish this task in the best way possible, the spider-designer has to be able to weave a web making it both modular and flexible, in order to meet the ideal of globalization and mix equally dynamic exchanges and the influence of local places” [3]. Value creation depends, in fact, on the complex network that surrounds the company and this is what the designer should be able to capture.

3.3 Support mechanisms
The trusted relationship, as traditional collaboration channel designer/entrepreneur, is the typical model in Italy, especially in its historical dimension. To achieve it, the so-called Italian design companies have always valued and invested particularly in the architecture of the company and its reputation, generating a diffused system of resources very difficult to measure, study and support. These relationships have in fact emerged spontaneously in the past; serendipity was one of the main triggering mechanisms, which are models that cannot be replicated top-down. Italian scholars that have studied this system [1, 14, 31] have in fact talked of a tacit dimension, that is the hidden relationships that have determined the development of the system. Because of the difficulties to grasp the structure of this national network, the government has never developed a specific line of support and funding for design. Moreover Italy is today one of the few European countries where no national design policy or organisation can be found, consequently specific and dedicated policies hardly emerge.

In a recent analysis published by Designium [41] that evaluates the national initiatives to support design in the world, Italy does not appear among the first 20 countries judged to use design in the best way for economic growth. In contrast the competitiveness of Italian design per se has resulted higher than the national economic competitiveness of the country. In the list of national programmes supporting design only local and fragmented initiatives appear, often overlapping both in objectives and for the geographical area they concern. As a result Italy often continues to replicate starting actions, which are hardly able to move forward in raising a deeper awareness of design and in finding the appropriate dissemination channels.

The industrial system in Italy builds a fragmented and challenging picture as well: it is possible, for example, to find many “editing companies”, that is thinking heads connected to an open system of suppliers and design supports (single designers/consultants especially); at the same time the legacy left by the collaborative mechanisms typical in industrial districts is strong, so much so that the country feels trapped in old-fashioned governance structures ( consortia and districts above all), that are hard to shake off. The relational dimension that is necessary to build today dictates instead the need to build and use variegated and geographically differentiated relationships, and institutions find it difficult to monitor such needs. That is, the relational dimension is
the central one and it generates a flexible and qualitative value creation process with no geographic limitations. This obviously can hardly be institutionally controlled by applying old models.

Partly this situation - that is the strong contrast between old models and the will to move forward - mirrors the consequences of the economic crisis, but above all it is the symptom of a deeper social, civic, environmental, cultural change that is underway. This can be found daily in the news (e.g. the recent rebellion to the Tunisian and Egyptian governments, that is now spreading to other Arabic countries), and it calls for a deep re-thinking of the role and structure of institutions, companies and citizens. Accordingly the phrase “Italian design”, seems to need a reconsideration of its meaning [33], in order to be able to find a new and wider consensus and be better supported by institutions. Evidences of new meanings are emerging in the fields of service design, design for sustainability and strategic design. Nevertheless we have only started to pursue and understand this change, and much more work has to be done.

4. THE UK CONTEXT
The relationship between the wider business community and the design sector is very different in the UK to the Italian context. As the ‘cradle of the industrial revolution’, the demand for technical and social innovation quickly outstripped the organic supply of inventors, hobbyists and entrepreneurs that had driven innovation to that time. The response of both business and the government was the establishment in the 1850’s of ‘Schools of Design’ in Manchester, Leeds and Birmingham promoting “visual innovation for manufactured articles” and by 1875 these schools had trained 15 000 people in designing for manufacturing across a range of sectors including textiles, furniture and ceramics [20]. This gave design a very strong and well integrated relationship with manufacturing that was effective during the beginning and middle of the 20th century. This relationship became less effective as increasingly manufacturing was not directly driving the UK economy. As manufacturing moved either closer to raw materials as indigenous resources were superseded or where labour costs were much lower.

The shift of manufacturing base and the subsequent move to both a service and knowledge based economy has created a more turbulent, disjointed relationship between design and business in the UK. There has been a decrease in importance of the traditional subject specific design agencies and professionals. There is an increasing sense of design in transition in the UK with a proliferation of innovation consultants, design leaders, design management, service design professionals. What is not clear is where the profession is going in the future and how it will relate to industry.

4.1 Support in the UK
The UK government’s key mechanism for promoting productive relationships between the design sector and wider business community is the Design Council. This leads a number of initiatives and commissions research to help understand and promote design nationally and internationally. Its activities reflect the move away from rigidly defined design disciplines (furniture, product...) with an increasing emphasis on cross disciplinary design and design education [15]. The design council has been very proactive in promoting an ecology of innovation that includes professional design as an active component.

“Designing Demand” is a large national initiative to help both established businesses and high growth start-ups to engage with the design profession, consisting of initially a program of workshops and then mentoring by a designer. The aim is to give companies the tools to be more innovative but also to be more comfortable working with designers [16].

“Innovate for Universities” takes a different approach; this is a pilot project in collaboration with 6 UK Universities. This programme is to work with Technology Transfer Officers (TTOs) who are employed by universities to facilitate the commercialisation of new research, often through the creation of new companies. Innovate for Universities placed a design associate (an experienced professional designer) with the TTOs when they were working with academics who thought they may have an exploitable piece of research. The designers helped in initial development and scoping of the potential opportunity. The results for this were rather dramatic in terms of the benefit provided to the technology transfer process. In activities that included a TTO and a design associate there was a verified 80% reduction in risk (the chance of the project failing), a 50% increase in the protected IP coming out of the project and a 30% reduction in the time taken to get a product to market [17].

Beyond the Design Council’s promotion of design there are also mechanisms aimed specifically at SMEs that, through their promotion of innovation, have relevance for design engagement. These are mostly regional initiatives developed and applied by one or more of the 9 regional development agencies in the UK (although as we go on to describe below these are in the process of being shut down). These initiatives are sometimes direct funding, for example the Innovation Voucher Scheme. This for example allowed SMEs to apply relatively easily for vouchers worth £3000 or £7000 that could be spent with a university to help develop an innovation or start some research. Inevitably a high proportion of these requests involved new product development and design academics used this funding to do some of the very preliminary work but (due to the limited funding) it was often more a case of educating the SME to engage with designers who could really help take the project forward. In a similar mode organisations such as Business Link who have a remit for supporting companies grow had a very specific innovation function employing teams of innovation brokers whose job it was to help companies be more innovative, often (but not at all in every case) through engagement with the design profession.

4.2 Current problems and future directions
The current financial situation in the UK is radically changing the support mechanisms available to facilitate the design industry engagement with the wider business community. The regional development agencies are in the process of being dissolved and by the middle of 2011 will have stopped functioning; they will be replaced by sub-regional bodies with significantly reduced scope and budget. The Design Council has been made an independent entity rather than a part of the government and had its budget cut by close to 50% with a significant contraction and re-organisation of activities. Commercially, evidence from past economic downturns is that spending on design is often seen as diversionary and so vulnerable when budgets tighten. All this indicates difficult times ahead for the design sector.

This rather pessimistic view is not the only perspective, the UK policy of offering assistance to help design companies engage
with SMEs is not the only option. For example the Swiss government does not offer any support for business engagement and the Stuttgart region provides only very limited support but employs a ‘market forces’ approach where the strongest collaborations and initiatives quickly become self financing and the others are allowed to fail. Both these approaches have the virtue of avoiding the dependency of design businesses and the wider SMEs environment on aid to sustain them.

There is a case to be made that now is the time to take advantage of all the good work done in terms of processes, methods, relationships and developed over the past few years [35]. It is time for the design profession to mature and take an active role in the innovation ecosystem rather than regarding itself as the wellspring of innovation as has sometimes happened in the past [39].

5. A WAY FORWARD?

The relationship between design and the wider business community emerges as complicated in both countries, in a delicate moment when profound civic and social changes are provoking important shifts in the global economic system. The traditional relationships between design and companies don’t seem to be able to satisfy the current needs, probably because companies themselves can no more be represented by old definitions.

In the field of design thinking scholars are trying to find answers by suggesting and experimenting on the use of design thinking as a business tool. This is characterised by the aspiration to promotion and adoption of designerly ways of thinking as a business strategy [5, 29, 34] without necessarily feeling the need to engage with professional designers. This is viewed with suspicion in some areas [39], but can also be regarded as a useful preparation of the ground for more nuanced collaborations between design and business in the future.

We argue that more importantly now it is the time to rethink the meaning and the definition of what a company is. In the past a company’s value was identified as a purely economic object that had to be possessed and exchanged to produce profit. The value of actual businesses seems instead to move towards intangible assets different from money, that is culture, relationships and reputation.

The policy think-tank Demos has recently published a report aimed at policy makers to put forward these issues. Here it is argued that “[T]here are tangible economic reasons for managers to empower and liberate their employees. A particular idea of consumer autonomy, meanwhile, is at the heart of how markets are designed and regulated. But there is also an emerging political framework that seeks to deliver greater autonomy in our economic lives (including in our workplaces) as a component part of a society less liable to domination” [13]. In the painted picture, the company seems to disintegrate and networks seem to offer a viable way of development. Such systems are increasingly becoming ecosystems. In ecology, these represent a portion of the biosphere lodging a community and an environment that are constantly engaged in reciprocal interactions, and infinitely struggling to develop a dynamic equilibrium. An ecosystem is an open system, with its own structure and function, and its life is determined by the constant fluxes of energy inside and outside of itself.

The relationship between design and business should evolve toward a similar kind of organization that is a “creative ecosystem”, characterised by reciprocal exchange and dynamic equilibrium.

Scholars in the strategic management field are already addressing the issue by building frameworks (e.g. dynamic capabilities framework) for business development in turbulent environments. These take into account an open economy with innovation, outsourcing and offshoring at the centre, while putting an emphasis on intangible and evolutionary capacities of the entrepreneurial manager and going beyond the traditional approaches to understanding competitive advantage [25, 42].

Specifically, the capacities proposed in the framework resonate greatly with right brain/designerly skills and strictly consider the business as part of an ecosystem. “(...) the environmental context recognized for analytical purposes is not that of the industry, but that of the business ‘ecosystem’ – the community of organizations, institutions, and individuals that impact the enterprise and the enterprise’s customers and supplies. The relevant community therefore includes complementors, suppliers, regulatory authorities, standard-setting bodies, the judiciary, and educational and research institutions” [42].

The firm has to evolve with the context (rather than adapting to it), and this requires a great deal of creativity, and the combination of it with management skills. Dynamic capacities are in fact hardly possessed by a single individual and therefore require a strong element of collaboration, therefore resonating both with the concept of networks in sociology and with the idea of ecosystems in biology. “While certain individuals in the enterprise may have the necessary cognitive and creative skills, the more desirable approach is to embed scanning, interpretative, and creative processes inside the enterprise itself” [42].

In the framework designers appear as implicitly entangled with the top management for achieving successful evolution of the firm. David Teece (2007) argues for the following dynamic capacities: sensing and shaping opportunities and threats by scanning market trends and users wants, seizing opportunities by applying research to concrete product/service development, and maintaining competitiveness through combining and reconfiguring intangible business assets. The inclusion of these capacities in top management teams calls for a strong tie with design capacities [3, 5], where this becomes a necessary attitude and important professional figure in companies [2].

Finally the firm of the future has to be able to collaborate and take advantage of the environment in which it operates, putting at the centre a strong creative component and solid organizational/managerial skills. This approach leads to the emergence of a ‘creative ecosystem’ that is both greatly situated in a local context and highly connected to the global knowledge.

6. REFERENCES


