# INTERNATIONAL DESIGN ROUTES

Design strategies for international networks of designers and craft enterprises

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# ABSTRACT

The paper aims to define the possibilities in building a common knowledge platform between design research institutions who have already a great experience in the field of Design Driven Innovation processes with local craft territories in European and Extra-EU countries.

Through case histories which, the paper intends to investigate on the methodologies developed to enable the combination of different productive territories and the development of international networks of craftsmen and design institutions for the creation of new products.

The case histories examined are in the field of transferring Design innovation know-how to communities of craft enterprises (craft districts) giving them the tools to research strategic partners in other territories and to develop new products and achieve a higher competitive value on the global market. These case histories involve mainly communities from Italy, India, Chile and Brazil.

In the age of globalization, these actions may have a more important role in creating new product development processes which no longer act only at a local scale but involve the entire production chain distributed over a large range of territories all over the world.

In most case histories examined, the involvement of students or of young design professionals has been a key factor:

\_at a local scale: trough the development of international and multi-cultural educational programs which allow students to achieve a wider view of the differences and specificities of worldwide craft enterprises and their market;

\_at a global scale: through the development of international projects which capture the local specificities and changes of different territories and build future possible "international design paths" involving network of actors worldwide;

The final aim is therefore to define common modalities which allow exchange of resources and capabilities between different productive territories through the development of an international network of institutions which become **facilitators** and **mediators** between local specificities and global design resources.

#### 1. The Context

In the past years, due to several different factors which will be explained throughout this paper, European small manufacturing enterprises and in particular micro enterprises have had to face and adapt to fast changes and increasing global competition. In general, European SMEs have undergone a crisis which cause has been mainly attributed to the incapacity of the European productive system to face the increase of international competition (increase of the number of enterprises nationally and globally) and also the alignment of productive territories with lower wedge rates to the same technological standards (the phenomenon of the entrance of "developing countries" in the global market).

Therefore, European SMEs have had large difficulties in keeping-up with the world changes and innovating their processes in order to activate new forms of product development (product, communication and distribution).

Recently, in Italy, several researchers<sup>1</sup> have been searching the causes of this difficulty and have also developed theories on how the productive system could change in order to develop proactive strategies and face future uncertainties.

To summarize, two main causes have been identified:

<sup>&</sup>lt;sup>1</sup> To give some references: Becattini, G. Brunetti, E. Rullani, A. Bonomi, F. Bufera, G. Corbetta, D. De Masi, E. Finzi, A. Forchielli, F. Gavazzi, F. Onida, M. Sarcinelli, R. Varaldo, S. Micelli, M. Chiarvesio, E. Di Maria.

1\_the incapacity to grasp the change of paradigm from a system based on "cost deferential" to a system based on "value deferential". European SMEs have had difficulties in understanding the change in the typology of competition and in understanding the importance of investing on the production of knowledge rather then on technology upgrade. The difference between these two is that while technology can be copied and bought, knowledge cannot, therefore the investment in knowledge production could help SMEs to have original and exclusive values and compete on a global scale without the threat of being robed of their innovations.

2\_the lack of strategic tools which could help the productive system to internationalise, to meet new strategic partners and markets in territories abroad without losing their identity. Up to today international strategies have been mainly focused on ways for "exporting production" (outsourcing, delocalizing, etc.) or for exporting merchandise. These strategies have been very effective for large enterprises, but seem to be inadequate for SMEs due to the fact that they do not keep into consideration the strong relationship that small companies have with the local territory (society and culture).

This paper intends to go into depth in analysing the second cause and in identifying the role of design institutions in helping SMEs in finding possible solutions.

### 2. The Supply Chain

The European manufacturing system is mainly based on SMEs and micro enterprises which go from high technology production to artisan production. This reality is considered to be a strength due to the capacity of small realities to rapidly adapt to changes and therefore to be more flexible and open to innovation with respect to large multinational realities.

However, the phenomenon of globalization has put this system into crisis and has somehow transformed the strengths into weaknesses forcing many small realities to close or to merge into larger companies. SMEs have not been able to find strategies which were coherent to their "way to do things" and have applied methods used by large enterprises which are not adapt for enhancing their productive peculiarities and the innovative capabilities of territorial systems in which they are embedded.

These are some of the causes of the incapacity of SMEs to define an alternative to internationalisation strategies:

1\_in general SMEs do not have a foreign affair office and therefore international strategies are not defined by specific research and development processes, but are spontaneous actions mainly guided by personal relationships. Therefore there is a "lack of strategy" and each company acts independently without a synchronization of the surrounding territory;

2\_contrary to large companies, in small realities it is very difficult to separate the "head" (functions of project development, design, innovation strategies, R&D, etc.) from the "arms" (function of production and manufacturing)3. In particular, inside industrial districts, the "manufacturing know-how" is merged to the "project know-how" in order to give birth to new innovation processes4. Therefore it is very difficult for a small company to decide which part of the production should be outsourced and which should not, the only differential is "cost" which obviously pushes an SME to move all manufacturing actives abroad and to become a "logistic agency"<sup>5</sup>:

3\_contrary to large companies, small realities see delocalization as a threat to their business because the manufacturing capabilities of the territory have always been considered as their main competitive value6. In large realities, the manufacturing know-how is not linked to specific territories (traditions and culture), therefore delocalization does not deprive them from strategic competences nor knowledge.

Today's tendency in the field of defining innovative internationalization strategies for SMEs is to define tools which are capable to enhance their original strengths (flexibility and innovative capabilities) without jeopardising their identity and overall survival?.

To summarize, strategies developed should aim to:

- 1. open the value chain internationally;
- 2. identify new value creation territories;
- 3. encourage the distribution of international labour guided by local cultures and specificities;
- 4. identify the investment strategy of the local and international resource portfolio.

Therefore, research lead in this field seems to push towards new forms of internationalization which are not merely based on the delocalization of production, but which aim to define new international supply chains which have "sense" according to the creation of value for the company.

The new forms of internationalisation should be lead by the nourishment of "ongoing dialogs" (cultural dialogs) between companies in different territories with strategic productive and design specificities, giving birth to international codeigning and co-production systems. Therefore, the definition of methods and tools for identifying strategic specificities and connecting productive territories becomes the main objective of this process.

<sup>&</sup>lt;sup>2</sup> G. Brunetti, E. Rulani, a cura di "Change: Il paese, l'impresa, le persone", Egea, Milano, 2006

<sup>&</sup>lt;sup>3</sup> Stefano Micelli, Maria Chiarvesio, Eleonora Di Maria, TeDIS Center, 2003

<sup>&</sup>lt;sup>4</sup> In SMEs, the manufactutring knowledge (know how to do things) is an important factor in the definition of the competitive value of the enterprise. (Becattini, 1989)

<sup>&</sup>lt;sup>5</sup> "[...] small artisan companies become 'Logistic Agencies' because the knowledge has been decentralized." Rolf Fehlbaum - DOMUS n° 891 – Aprile 2006

<sup>&</sup>lt;sup>6</sup> Corò, Volpe, 2003

<sup>&</sup>lt;sup>7</sup> Micheli, Di Maria, 2000; Chiarvesio, Di Maria, 2001

#### 2. The People

The study of the territory and of its specificities in terms of physical and intangible resources - defined as territorial capital - has been widely recognized as a fundamental tool for the definition of strategic action plans of productive territories. The prolification of disciplines in this field, such geomarketing and geopolicy, which allow understanding of local markets through visual schemes and maps, shows how much this aspect has become more relevant in defining today's strategies.

In the field of Design, the geographical dimension of a product or project has not been a meaning of specific studies. Recently, in an article of Domus<sup>8</sup> (main Italian design magazine), this aspect has been approached by building geobiographies of products, an attempt to define a geo-policy of

Geodesign, as defined in the article, is the name given to an activity which aims to build the geography of the life of a product, from the first concept phases to its production, distribution, consumption and final demolition, a biography of complex products.

"Geodesign is a menu which allows you to order what you want from whoever is able to give it to you' (Rolf Fehlbaum - DOMUS n° 891 - Aprile 2006)

Through a geodesign analysis of a product, the actors and territories involved in its "life" are recognized as genetic components of the product itself giving birth to a unique DNA (project, production, distribution, consumption and disposal).

"Objects are born in relationship with places, sociologists call 'industrial atmospheres'. The particular creative capabilities of a place are part of the nature of the products.'

(Marco Belpoliti - DOMUS n° 891 – Aprile 2006)

The geodesign analysis of products involves both the identification of places and actors involved and the typology of international connections and flows of information and of goods. Through this new vision, a geopolitical prospective, it is possible to imagine to be able to guide design processes in order to define geographies of products which can combine different territories with specific design and manufacturing knowhow in order to develop innovative product systems.

The capability to build connections and to coordinate different multidisciplinary actors throughout the development of new products has always been a winning characteristic of the design profession. In history, designers have always demonstrated to be able to be "mediators" between producers and consumers, "catalysts" of multidisciplinary experts, "facilitators" of relationships between companies.

Today, the phenomenon of globalization has increased the number of opportunities to "be connected" thanks also to the

development of ICT technologies which allow the exchange of project information instantaneously eliminating all physical barriers and distances. Design activities are no longer limited to local territories, designers work transnationally, sometimes also through project outsourcing, giving birth to culture contaminations, international fusions between design and manufacturing knowhow. A tacit phenomenon, not studied nor analysed, where the capability of a designer to interpret needs and transform them into answers must inevitably merge with the capability to interpret cultures, capture values, signs, traditions and transform them into innovative consumption solutions.

"Today there are no local projects nor local productions [...] today everything is available all over the world, one can connect to any competence in any place [...] this allows products to access a territory of expressions and identities like never before in history.'

(Rolf Fehlbaum - DOMUS n° 891 - Aprile 2006)

The achievement of the dimension of "cosmopolitan localism" on behalf of some peripheral territories has certainly increased their ability to be connected (access capability) allowing them to achieve a higher level of liberty, but consequently also opening them to the well known risks of globalization. The complexity of geo-political and geoeconomic systems tends to paralyze many small productive realities which are suffocated by global competition and by the abundance of connection opportunities. Situations where once the lack of design and production competences spontaneously gave birth to new supply chains, today need new tools for codifying and planning the correct connection strategies. The number of opportunities of connections and the velocity of creation and destruction of networks asks for strategic capabilities capable to build sustainable networks which can guarantee the mutual respect of values, stiles of life, social and cultural specificities of all actors involved.

This phenomenon leads us to reflect on the role of a designer in the construction of international relationships (networks), on the possibility to develop connection strategies guided by design actors and on the importance of determining a geopolicy of products.

## 4. The Projects

In the field of design services for SMEs, communities and productive territories it is possible to identify case studies of projects in which designers are involved in "on-field research" activities - mainly in territories far away from their usual design studio - travelling for the development of research projects with the aim to "build bridges", to build

<sup>&</sup>lt;sup>8</sup> DOMUS n° 891 – Aprile 2006 – pp.18-121

<sup>9 &</sup>quot;Cosmopolitan localism is the result of a particular condition characterised by the balance between being rooted (rooted in a place and in the community related to that place) and being open (open to global flows of ideas, information, people, things and money - Appadurai, 1990)" in Manzini E., A cosmopolitan localism. Prospects for a sustainable local development and the possible role of design (2005)

connections between territories and to define new project supply chains internationally <sup>10</sup>.

The objective of these projects is usually not merely economic (to meet producers with lower wedge rates), on the contrary it is lead by the desire to identify strategic partners which can positively contribute in building an innovative DNA of a future supply chain for the development of new product systems. The metadesign research troughout these projects aims to identify territorial specificities which can contribute to the competitive value of final products both through high quality standards and cultural significance.

Designers active in this direction aim to stimulate the democratization of access and at the same time to build "winwin" relationships which are based on the common recognition of all actors involved in the supply chain which remain stakeholders of strategic aspects of their production.

Therefore it is possible to talk abaut a kind of globalization which is lead by the exponential growth of international cultural relationships and the creation of "cultural flows" able to give birth to "hybrid cultures" of production and consumption. With this vision, the construction of the new networks and supply chains are not merely lead by economic advantages, but mainly by cultural and social values, where the economic advantage is seen as a consequence of the success of the "cognitive differential" generated by the supply chain.

### CASE HISTORY

#### Title

## DESIGN – INTERNATIONAL PROJECT PATHWAYS

ITALY-CHILE a project promoted by: POLI.Design (Politecnico di Milano) and CI+P (UTFSM\_Design Center Valparaiso,Chile); supported by: Regione Lombardia and ICE (Italian Chamber of Commerce)

The aim of the project was to experiment the hypothesis that design research institutions can have a role inside internationalization processes of SMEs and micro artisan enterprises.

The role of design is therefore to identify strategic capabilities internationally and create networks (supply chains) of co-design and co-production processes.

In the case of this empirical experience, the territories involved were two regions:

Regione Lombardia (Italy)

V Regione (Chile)

<sup>10</sup> Designers who work in this field have been defined as: Designer mediator of knowledge, Designer as facilitator of relationships, Designer as doctor in the territory, Barefoot Designer, Designer as a catalyst, Designer as a community builder

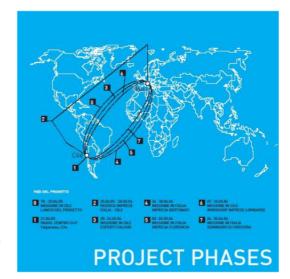
<sup>11</sup> G. Brunetti, E. Rulani, a cura di "Change: Il paese, l'impresa, le persone", Egea, Milano, 2006





Percorsi internazionali di progetto

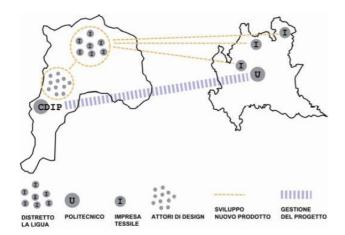


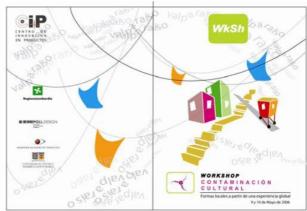


In order to define international networks, a design institution must achieve strategic, but also logistic and organisational capabilities in order to coordinate and guarantee the correct interaction between the actors involved. The variety of territories involved asks for the identification of local partners, capable to be "cultural mediators" within the project.

The project involved two "cultural mediators": POLI.Design (Milano, Italy)

CI+P (Valparaiso, Chile)





Through the strategic planning of actions and the identification of local partners (designers, enterprices, associations, design centers, etc.) it is possible to imagine that an internationalization process of a territory can be facilitated by pilot projects which aim to activate socialization between the actors.

## PROJECT PHASES:

- 0\_identification of local partners
- 1\_sensibilization of local territory (public seminar)
- 2\_research of local actors (deigners, enterprices)
- 3 definition of Pilot Projects
- 4\_development of Pilot Projects
- 5\_communication of results (exhibition, fair)

The project has involved a total of:

- 5 Pilot Projects
- 5 Enterprises involved
- 2 Design Centres
- 2 Political entities

Over 20 designers

Over 100 enterprises involved in secondary activities

The design services offered within an internationalization process can be of different nature and must be agreed between all actors involved, keeping into consideration the single needs of each entity.

The method of intervention aims to enhance the innovative capacities of all communities involved, avoiding the separation of the "conceptual activities" (innovation activities) from the "production activities" and widening the social model beyond territorial boundaries, allowing all actors to participate in the innovation process throughout the entire supply chain.





#### 5. Conclusions

Through this vision, it is possibile to think that internationalization processes are not merely seen as strategies which involve the migration of goods (import/export) nor technologies, but also the migration of designers and of productive communities in search of new "sense".

Design therefore can become a generato of new knowledge and goods flux by bulkding international connections between design and production communities. In particolare, this analysis intends to reflect on the role of design in internationalization processes and therefore to identify projects and empirical experiences in which design has had a strategic role in determining the geography of a project, where the creativity of the action plan of the project has lead to innovative results.

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