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CLUSTERS, GOVERNANCE AND BUSINESS INTELLIGENCE

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Abstract

One of the most important aspects of current economical and social reality of each local and regional territory, and very much determinative for its economic development potential, is the nature of its territorial organization of the productive processes, as well as, the characteristics, and sophistication level of the enterprise strategies that are functioning in it.

This article seeks to contribute to the ongoing discussion on the role of clusters as engines of economic and social development of local and regional territories.

Based on a study research methodology, we intend to answer to the following research questions: 1. What is the importance of clusters in the increment process of the local and regional conditions of governance? 2. What is the role of clusters in the development of territorial processes of collective learning? 3. What is the importance of clusters in promoting the territorial based processes of economic diplomacy and business intelligence?

Key-words: Collective efficiency strategies, regional development, clusters, territorial competitiveness, business intelligence.

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1 INTRODUCTION

In the perspective of the territory, competitiveness results from the symbiosis between the dynamics of local businesses and the dynamics of creation and/or reproduction of territorialized factors of competitiveness. Local competitiveness is function of the attributes or competitive potential, inherent in companies located in the territory, but also is based on the comparative advantages of the local economy, which along with the attributes of companies, form what may be called static attributes of the territory (Lopes, 2001: 155).

A competitive territory is the one that, through combinations of relevant resources, including knowledge and organization, acquires an inimitability compared to other territories over a period long enough to support a development strategy (Figueiredo, 2002: 487).

In strategies, and ways contemporary industrial firms combines an economic model "spatially intensive" (i.e. focused on local conditions in labor markets, initiative, professional competence and expertise) with a "spatially extended" model in which the region becomes a dominated space as part of a global dynamic that encompasses, beyond it. That results from the action of agents with strong spatial mobility, so the outer regions, assumes a major role in shaping economies (Reis, 1992: 62).

One of the most striking aspects of the current economic and social reality of each territory, and more decisive for its economic development, is the mode of territorial organization of production processes characteristic to it, as well as the nature of business strategies usually in operation in it. For companies in general, and multinational companies in particular, emerges a “market of territories” that are striving to equip themselves of infrastructure, according to a dominant model that is supposed to emerge from a competitive supply of replacement locations.

It seems to be unavoidable the necessity on the part of local and regional territories to participate in this extended competition by the attractiveness of companies and people. Given this potential for relocation of businesses, political and administrative authorities and regional locations are subject to having to deal with a process of territorial competition which results in an attempt to assume in each territory a set of equipment, infrastructure and reception conditions, based on supposedly universal criteria of attractiveness (Zimmermann, 1998).

This paper seeks to contribute to the ongoing discussion on the role of clusters as engines of economic and social development of local and regional territories.

Based on a study research methodology, we intend to answer to the following research questions: 1. What is the importance of clusters in the increment process of the local and regional conditions of governance? 2. What is the role of clusters in the development of territorial processes of collective learning? 3. What is the importance of clusters in promoting the territorial based processes of economic diplomacy and business intelligence?

In this paper will be analysed the French public policy of competitiveness clusters initiated in the 2004 as an industrial and territorial public program for the promotion of territorial processes of innovation and competitiveness.

2 THEORECTICAL FRAMEWORK

"The lynchpin of regional policies that were traditionally focused on territorial equity and cohesion are gradually moving towards the concern of global economic and territorial efficiency of process planning" (DPP, 2006: 14).

"Knowledge-based strategies stand out as a key element of new regional policy (...). National and regional governments are re-orienting their policies to emphasise the role and interaction among economic actors" (OECD, 2005: 9).

The recent growing investment on public policies promoting economic activity, and the recovery of relevance of specific territorial contexts, stand on the recognition that knowledge management and dissemination is a key factor for the level of productivity and efficiency of any collective territorial context.

Thus, public policies aimed at creating regional processes of competitiveness, are increasingly based on intervention models with a strong emphasis on a coordinated action, in a specific territory, of public interventions in five key strategic areas:

1) Strong infrastructure projects investments, with direct economic relevance, conducive to the development of regional processes of cooperation and public and private inter-action and technology transfer;

2) Initiatives to support the development of localized clusters of firms through the implementation of measures to encourage development of initiatives with high collective efficiency;

3) Measures to encourage the strengthening of research-industry connection, through the articulation between 'producers' and 'consumers' of knowledge and technology;

4) Actions and regulations to encourage the development, and refinement, of procedures and models of territorial governance in order to increase local and regional competitiveness;

5) Measures to promote inter-territorial communication channels and transnational marketing, distribution and technology transfer.

Other general consensus in current thinking about territorial policy is the emphasis on exploiting place-specific externalities and unused potential. “Policy instruments now tend to focus providing collective goods that improve what has been termed the ‘enabling environment’ on the quality of place – the attractiveness and functioning of the region as a system” (OECD, 2005: 10).

The approach of the competitiveness clusters is naturally indebted to many other approaches that preceded it. Namely the Industrial Districts of Marshall (1920), Bagnasco (1977), Becattini (1989); Growth Poles Perroux (1955); the Territorial Production Systems Brun (1985) and Crevoisier and Maillat (1989); the Industrial Systems Located in Courlet and Pecquer (1990); Areas-System Garofoli (1994); District Technology Antonelli (1986); Clusters of Markusen (1996) and Gordon and MacCann (2000); the Innovative Millieux Aydalot (1986) and Maillat, Crevoisier and Lecoq (1991), Perrin (1989) and Ratti, Bramante and Gordon (1997); Regional Innovation Systems in Störh (1986), Planque (1991), Lundvall (1992), Cooke (1995), Storper and Scott (1995), Asheim (1996), Asheim and Isaken (1997), Morgan (1997) and the Learning Regions of Florida (1995) among others.

Potter and Miranda (2009) systematize key factors of success and barriers hindering cluster development (Table 1).

Table 1 – Key Factors of Success and Barriers Hindering Cluster Development

Key Factors of Success	Barriers Hindering Clusters Development	Public Policy Recommendations
- Strong co-operation - Research commercialization - Critical human capital mass - Skills enhancement - Strong commitment of the public sector - Strong partnerships and leadership - High quality of life - Social capital	- Weak entrepreneurial cultures - Weak involvement of small firms in cluster projects - Lack of seed capital - Problems of congestion and social divisions - Shortages of qualified labor - Poor coordination of policies	- Supporting spin-outs and small firms collaboration - Leading a transition to the entrepreneurship university - Supporting the launch and growth of start-ups - Fostering industry-research collaboration - Encouraging enterprises networks by introducing SME into formal networks - Stimulating spin-offs - Better marketing of products - Strengthening public-public and public-private partnerships - Encouraging evolution in cluster activities - Updating education and training to meet the requirements of the cluster - Ensuring availability of talent locally - Ensuring the appeal of the area and a good quality of life - Encouraging private investment - Facilitating access to public funding - Creating forms to seek financing -Tackling congestion and social inequalities resulting from the emergence of the cluster - Create mechanisms to inform about the activities of the cluster

Source: Potter & Miranda (2009)

Marshall (1920) examines the relationship between capital, knowledge, organization and growth. For Marshall, knowledge is the most powerful engine of production and organization assuming the relationship between the companies a strong role on knowledge development. His concept of industrial district is based on the idea that the industrial concentration, and

sectoral specialization in a particular territory, induces the concentration of skilled labor and promotes the circulation of information and knowledge between firms creating an atmosphere conducive to business development.

Weber (1929) introduces the concept of agglomeration factors to identify factors that determine the location of economic activity. Ohlin (1933) identifies what he calls the 'economies of concentration' and splits into three categories: i) the industry' concentration economies; ii) the external concentration economies of a specific industry; iii) the concentration economies of an internal unit production.

Perroux's growth poles theory (1955) was based on concepts like "motor industries" and "key industries". This theory proceeded on the assumption that the dispersion effects that radiate from points spatially localized transmit impulses to other points of growth - "dispersion effects" which hopefully exceed the effects of polarization.

Porter' clusters (1990) are geographic concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries and associated institutions that compete but also co-operate.

MacCann and Gordon (2000) present a typology of clusters based on three distinct categories: i) the plant model; ii) the pure agglomeration model; iii) the social network model.

"Markusen (1996) identified three other forms of clusters, including: the 'hub-and-spoke cluster', centered around a hub firm, which plays a leading role within the district and which is able to orchestrate the evolution of the local industry through the creation of a number of linkages with suppliers and subcontractors; and the 'satellite platform' and the 'state anchored district', which represent two variants of the former in which the leadership is located outside the locality (satellite) or controlled by a state enterprise or institution." (Parrili & Sacchetti, 2008: 390)

Aydalot's "innovative milieu" (1986) consists (Quévit, 1990; Lecoq, 1991) on: i) an engaging space without pre-determined physical boundaries, framed by a certain behavior homogeneity of their social actors and a common technical culture; ii) a set of actors with decisional autonomy strongly anchored in local economies; iii) developed and sophisticated forms of

organization between public sector and civil society; iv) strong relational capital among agents that promotes the development of local dynamics of using available resources; v) collective learning procedures in the training of agents and on their adjusting to markets and technology changing.

Florida (1995) introduced the "learning regions" concept as areas that function as repositories of knowledge and ideas and provide environmental and infrastructure conditions facilitating territorial based flows of knowledge, ideas, practices and learning .

Hoover (1937), Romer (1986), Lucas (1988), Porter (1990), Jaffe, Trajtemberg & Henderson (1993) and Jones (1998) analyzed knowledge, and the knowledge spillovers, as the main determinant factors for economic growth. "Knowledge spillover entrepreneurship will tend to be spatially located within a close geographical proximity to the source of knowledge" (Audretsch, Keilbach & Lehmann, 2006: 355).

The French cluster concept that will be analyzed as a case study on this paper is different from the concept of Perroux' growth pole (1955). Mainly on what concerns the role of the technology in it.

In the French public policy, clusters are defined as a combination of companies, training centers and research public and private units, within a specific territory, engaged in a partnership focused on creating synergies around common innovative projects[3].

In Perroux' approach, "poles" are understood as a geographical agglomeration of industrial "motor" and "dependent" companies, suppliers or customers, that benefits of transport costs and economies of scale.

In the case of French clusters the "motor" units are those who are producing knowledge and flows (information flows not only goods flows) between motor units and their dependents. The territorial presence of multiple science valences and technology is expected to generate knowledge and training cross-fertilization effect with economic value. In the cluster territorial context, the scientific and technological development projects and the geographic proximity is

[3] Vd. Official site of Competitiveness Clusters Program in France: http://www.competitivite.gouv.fr

an absolute facilitator of personal contacts, trust and economic relationships (Figueiredo, Chorincas & Martins, 2005: 166).

The 'unintended' spatial knowledge spillovers, from excellence centres, extended their positive effects to other agents (firms, universities, research centres) located on the neighbourhood areas (Maggioni, Nosvelli & Uberti, 2007).

3 TERRITORIAL GOVERNANCE AND BUSINESS INTELIGENCE

Territorial governance is discussed extensively in the contemporary literature, some examples of woks in this area are, among others, Healey (1997), Bogason (2000), Castells (2000), Van Tatenhove and Leroy (2000), Peters (2001), Le Galès (2003), Brenner (2004), Gualini (2004) Pollit and Bouckaert (2004), Salet (2006), Voets and Rynck (2006).

"The new emphasis on co-operation involves constructing new policy relationships for a strategy development and integrating new actors in the planning exercise in a multi-governance environment, i.e. not only public bodies, but also coalitions of interests, including private investors, business associations, property developers and the community of voluntary and non-governmental organizations. In many areas, the increasing focus on large projects and the development of particular districts have given the business sector a driving role in planning" (OECD, 2007:108).

The territorial governance lays on the accomplishment, in a specific territory, of proceedings and mechanisms that we may call of horizontal subsidiary, mobilizing for the territory development, the different institutional and managerial abilities that the territory has (Neto, Couto & Natário, 2009).

"During the past decade, data warehousing has been widely adopted in the business community. It provides multidimensional analyses on cumulated historical business data for helping contemporary administrative decision-making. Nevertheless, it is believed that only about 20% information can be extracted from data warehouses concerning numeric data only, the other 80% information is hidden in non-numeric data or even in documents. Therefore,

many researchers now advocate that it is time to conduct research work on document warehousing to capture complete business intelligence" (Tseng and Chou, 2006: 727).

The treatment, storage and management of information and knowledge in territory, and its transmission and transfer, are indeed a privileged area for strengthening the conditions of competitiveness of firms and territories. And very much dependent on the operation in the territory of new relational and organizational constellations that, exploiting the physical proximity of agents, and strengthen of organizational and functional proximity between them.

It is important to implement formal systems on the territory for exploring strategic information at different territorial scales, which may gather relevant information, treat it, store it, organize the information according to their relevance and send it to potential beneficiaries (Neto, 2003; Serrano, Gonçalves & Neto, 2005).

Strategic information on markets (i.e. foreseeable developments in today's markets, strategic information on potential markets and cyclical changes) on products and on production processes. Also on business options, on relational models between operators, about potential partnerships, models and solutions on planning, on investment opportunities, and on technical and technological innovations, among other things (Neto, 2003; Serrano, Gonçalves & Neto, 2005).

“Business intelligence may be defined as all the research, processing and dissemination of information (...) useful to economic agents" (Martinet & Marti, 1999: 14).

The introduction, on the territory, of business intelligence systems requires a major shift in the government sector and the local political administrative authorities, on how to understand their way of relating to the private sector. In particular, a clear choice for a pro-active position in favor of business and economic players and therefore in favor of local and regional territories.

This requires the creation, and implementation, of competitive intelligence systems in territories, that may ensure to the territory, and to the other economic and social territorially present, an absolutely crucial collection of information to their development and survival.

Competitive intelligence, as both a systematic, coherent, organized collection and processing of information, and its transformation into knowledge, is a tool able to detect threats and opportunities of all kinds and has the vocation to provide all that relates to enterprises and territories (Neto, 2003; Serrano, Gonçalves & Neto, 2005).

The information collected through competitive intelligence could be divided by thematic content, and each content becomes in turn the subject of an exploration of their own search (Possin & Besson, 1999).

For operational reasons and confidentiality, the data processing system of competitive intelligence in the territory should be developed and be located in regional structures of government. Data processing can be defensive or offensive determining approaches and distinct implications for the type of information sought to collect and how to use the information gathered.

The territory and the economic actors that compose it may use the collected information to adapt to market conditions and correct term effects more or less aggressive, and to anticipate trends and constraints, enabling them to better adapt to cyclical and structural changes and implementation of strategies for pro-active type.

A survey of information with strategic relevance is always expensive and often hard to reach/achieve. Therefore, the costs of competitive intelligence, especially in economically disadvantaged areas, should be funded by public funds, without prejudice that the information beneficiaries could, in some way, pay (at least partially) the costs of information received (Neto, 2003; Serrano, Gonçalves & Neto, 2005).

Moreover, the importance of collecting this type of information will only be truly effective if it constitutes a systematic, continuous, structured, organized, consistent collection and processing of information in and to the territory.

A key element to take into account, and consider, in terms of business intelligence is the *memory* of enterprises and institutions and the *memory* of the territory. Territory's *memory* in the sense of being possible to establish relationships among dispersed information (whether it is in sectoral terms or in terms of places of storage of information). In the territory much of the memory exists in an informal condition, but public administration institutions and many of

the firms (depending on the territory's development stage) have a lot of archived information but often they don't used as a memory source (Neto, 2003; Neto, 2007).

A memory about the social and economic history of the territory, but also about the public policies implemented in it and about the private strategies and initiatives, often for long periods of time.

The formal and informal memory of economic agents and of local public administration in a specific territory, strongly conditions their perception and evaluation about the historical development process of the territory, and their expectations about the possibilities of future and on development solutions to be adopted.

So, is therefore absolutely essential that the territory can be sensitized to the relevance of this strategic process of collective knowledge management and storage in the form of informational *memory* and relate it to the territorial business intelligence system.

4 THE CASE STUDY – THE FRENCH COMPETITIVENESS CLUSTERS

4.1 The French public policy concept and objectives

The world economy is becoming increasingly competitive, and to reinforce his global position, France launched in 2004, a new industrial policy that mobilizes the key factors of competitiveness based on the leading role of innovation for territorial and industry development.

Such French public policy is focused on the implementation, in a specific territory, of a bottom-up partnership involving firms, research centers and training organizations, committed on a common development strategy aimed at creating synergies around innovative projects directed to national and international markets.

For this public policy, the key to success depends on four main elements: i) implementation of a common strategy for economic development consistent with the overall strategy for the territory; ii) solid and stable partnerships between actors around a project; iii) focus on

technologies for markets with high growth potential; iv) affirmation of mainly industrial activities, with strong technological and creative content; v) a critical mass to develop international visibility.

4.2 French competitiveness clusters' challenges

The industry is an engine of growth for the French economy: it is the main source of innovation (with 90% of expenditure on R&D) and of competitiveness (80% of exports) and exerts a strong stimulating effect on the rest of the French economy.

The rapprochement of stakeholders of industry, science and training in the same territory, acquiring a territorial based cluster typology, is in effect: i) a source of innovation (proximity stimulates the flow of information and skills and facilitates the birth of the most innovative projects); ii) a source of attraction (the concentration of the players on an area offers international visibility); iii) a brake on the relocation of industry (the competitiveness of enterprises is linked to their territorial anchoring, thanks to the presence of skills and partnership working).

4.3 Clusters principles of operation and governance

The cluster is understood as a generator of collective projects (between companies, research centers and training organizations) of three specific types: i) the R&D projects (which are the heart of the action of the clusters and their main factor of competitiveness); ii) the innovation platforms projects which are the cutting-edge infrastructures to encourage business innovation through resources and shared services; iii) the other R&D projects (training, property investments, ICT infrastructures, economic intelligence, promotion planning, international development).

Each cluster is represented and animated by a legal entity itself, most often by an association (see Table 2). This structure of government gives a preponderant place to stakeholders in industry, scientific and academic leaders in their instances, allowing a representation of the local authorities concerned and assures important guarantees of continuity and stability to the partnership.

Table 2 – Synthesis of Structural Elements of Organization and Functioning of Clusters in the French Policy of Competitiveness Clusters

The cluster participants	-The state, which is responsible for only the role of political actor (configuration, launch and program monitoring and facilitating the institutional level for the main actors); -The main actors (companies, units of R&D and training centers), which constitute the elements of the cluster (production, research and innovation and learning) and that together are responsible for their implementation; -The larger partners (local authorities and financial institutions partner).
The cluster' main actors priorities that guide their cluster activities and initiatives	-The establishment of partnerships with outside elements to the cluster but related to it (state, local authorities and funders); -The definition and implementation of concrete joint projects induce production of high added value and employment of qualified and highly skilled; -To ensure international visibility, they must therefore have a critical mass sufficient for industrial and technology will eventually be able to deploy worldwide in the first places of activities with strong growth potential.
The clusters nature	-Dominant technologic - when the clusters are characterized by the importance of research activities and the interactions between R&D centers and companies in a given field of technology, and research activities and industrial applications that determine their logic; -Dominant industry (in the broadest sense, involving all types of productive activities) - when the clusters are characterized by a concentration of companies developing R&D more applied and near market, whose growth potential determines the logical development of clusters.
The clusters' territorial relevance	-Global competitiveness clusters – those who are leading clusters in global terms; -Globally oriented competitiveness clusters – those which are considered to be clusters that may became global clusters; -Competitiveness clusters – those who their national visibility and foreseeable future development is mainly national.
The clusters' geographic principles perimeter	To define the perimeter of the geographic cluster' locations should be considered: - The geographic locations of the main actors - which may be located within the boundaries of a region or locate in more than one region; - The geographical location of human and material resources for R&D center, which should ensure a critical mass to the mass of the cluster and geographically agglomerated taking into account the interests of the geographical proximity between researchers.
The clusters ' governance	Governance of the pole must be performed by all the structures, formal or informal, that will ensure consistency and quality of the partnership. Each cluster should be constituted as a legal institution with individuality.
The clusters' thematic	The cluster should be organized, and developed, around a particular market, or sector, and a specific scientific field.

Source: Authors' structuring based on http://www.competitivite.gouv.fr

The association responsible for the animation of a cluster has the following main tasks: i) the development and implementation of the general strategy of the cluster; ii) the coordination, selection, certification and evaluation of research projects supported by public funding; iii)

the cluster communication strategy, particularly at international level; iv) the cooperation with other French and foreign clusters.

In terms of structure and nature of participants in each cluster is particularly interesting, the fact that they chose to include both the state as a partner in its national dimension in its regional dimension.

That ensures, to the cluster implementation model, a double articulation and anchoring of economic strategies at regional and national scale.

In the cluster structure of participants, are included, as "key players", the companies, the units belonging to the scientific and technological system and training and financial institutions. Which, naturally, contributes greatly to the consolidation and sophistication of the clusters' governance structure and reinforces a close relationship between industrial policy and regional development and planning policy.

It was thus possible to associate, to the construction and governance of each cluster, the major French companies, many of them multinationals, making possible the re-organization of the territorial implantation model of economic sectors in France and improve the levels of territorial solidarity between the more relevant enterprises.

The option for defining the geographic boundaries of each cluster it is also very interesting because makes possible to include and consider, as within the perimeter of the cluster, entities or companies that are not located geographically in the region where is located the cluster.
In terms of public policy, this option on a solution not exclusively based on geographical contiguity, has enormous possibilities for the consolidation of economic sectors and for the development of trans-regional row effects.

Thus, the number of clusters in France, their characteristics, the territorial context in which they operate and the nature of its visibility and relevancy is presented in Table 3, below.

Table 3 – Territorial Framework of French Clusters and Nature of Their Visibility and Relevance

Competitiveness Clusters	Regions Envolved	Core Economic Activity	Website
GLOBAL COMPETITIVENESS CLUSTERS			
AEROSPACE VALLEY	Aquitaine, Midi-Pyrénés	Aeronautics	http://www.aerospace-valley.com/
FINANCE INNOVATION	Île-de-France	Finance	http://www.finance-innovation.org/
LYONBIOPOLE	Rhône-Alpes	Health , Medicine	http://www.lyonbiopole.org
MEDICEN PARIS REGION	Île-de-France	Health , Medicine	http://www.medicen.org/
MINALOGIC	Rhône-Alpes	Microelectronics	http://www.minalogic.org/
SOLUCTIONS COMMUNICANTES SÉCURISÉES	Provences-Alpes-Cote d'Azur	Nanotechnologies	http://www.pole-scs.org/
SYSTEM@TIC PARIS RÉGION	Ile de France	Information Technologies	-
GLOBALLY-ORIENTED COMPETITIVENESS CLUSTERS			
ALSACE BIOVALLEY	Alsace	Biotechnology	http://www.alsace-biovalley.com/
AXELERA	Rhône-Alpes	Chemistry, Environment	http://www.axelera.org/
CAP DIGITAL PARIS REGION	Île-de-France	Digital techonologies	http://www.capdigital.com/
IMAGE & RÉSEAUX	Bretagne	IInformation Technologies	http://www.images-et-reseaux.com/
INDUSTRIES & AGRO-RESSOURCES	Champagne-Ardenne, Picardie	Agri-food	http://www.iar-pole.com/
I-TRANS	Nord-Pas-de-Calais	Rail Transport	http://www.i-trans.org/
MER BRETAGNE	Bretagne	Biotechnology and Marine Technology	http://www.pole-mer-bretagne.com/
MER PACA	Provence-Alpes-Cote d'Azur	Biotechnology, Marine Technology	http://www.polemerpaca.com
MOV'EO	Haute-Normandie , Île-de-France, Basse-Normandie	Automotive Industry	http://www.pole-moveo.org/
VÉGÉPOLIS	Pays de la Loire	Genetics	http://vegepolys.eu/
COMPETITIVENESS CLUSTERS			
ADVANCITY (Ex Ville et mobilité durables)	Ile de France	Building, Infrastructer, Urban, Transportation	www.advancity.eu
AGRIMIP INNOVATION	Midi-Pyrénées	Agro-Engineering, Master of character products	www.agrimipinnovation.com
AQUIMER	Nord-Pas-de-Calais	Acquaculture	http://www.poleaquimer.com/
ARVE INDUSTRIES	Rhône-Alpes	Mechanics	http://www.arve-industries.fr/
ASTech	Île-de-France	Business Aviation, Space Transportation, Motors & Equipment	www.pole-astech.org
ATLANPOLE BIOTHÉRAPIES	Pays-de-la-Loire	Immunoloy	http://www.atlantic-biotherapies.com/
CANCER-BIO-SANTÉ	Rhône-Alpes, Limousin	Health and Medicine	http://www.cancerbiosante.fr/

CAPENERGIES	Provence-Alpes- Côte d'Azur	Energy, Sustainable Development	http://www.capenergies.fr
CEREALES VALLEY	Auvergne	Agricultural Genetics	http://cereales-vallee.org/
COSMETIC VALLEY	Centre , Haute-Normandie	Cosmetics and Perfumary	http://www.cosmetic-valley.com/
DERBI	Languedoc-Roussillon	Energy, Building	http://www.pole-derbi.com/
ELASTOPÔLE	Centre,Auvergne,Pays -de-la-Loire,Île-de-France	Rubber Industry	http://www.elastopole.com/
ELOPSYS	Lymousin, Midi-Pyrénées	Information Technologies	http://www.elopsys.fr/
EMC2	Pays de La Loire	Chemistry, Metallic Materials	http://www.pole-emc2.fr/
ENFANT	Pays de la Loire	Childhood	http://www.poleenfant.fr/
EUROBIOMED	PACA,Languedoc Roussillon	Genetics	http://www.eurobiomed.org/
FIBRES GRAND' EST	Loraine, Alsace	Wood, Paper, Composite, textil	www.polefibres.fr
FILIÉRE EQUINE	Normandie	Tourism and Veterinary	http://www.pole-filiere-equine.com/
GENIE CIVIL ECOCONSTRUCTION	Pays-de-la-Loire	Civil Engineering	http://www.pole-geniecivil-ecoconstruction.fr/
IDFORCAR	Bretagne, Pays-de-la-Loire, Poitou-Charentes	Automotive	http://www.id4car.org/
IMAGINOVE	Île-de-France	Image, Technologies, Multimedia	http://www.imaginove.fr/
INDUSTRIES DU COMMERCE	Nord-Pas-de-Calais	Distribution and Logistics	http://www.picom.fr/
INNOVIANDES	Auvergne,Bretagne,Limousin,Rhône -Alpes	Food, Hygiene and Health	http://www.innoviandes.org
LYON URBAN TRUCK & BUS	Rhône-Alpes	Automotive Industry	http://www.lutb.fr/
MATERALIA	Lorraine	Steel, Materials	http://www.materalia.fr/
MAUD	Nor-Pas-de-Calais	Chemistry	http://www.polemaud.com/
MICROTECHNIQUES	Franche- Conté	Nanotechnologies	http://www.polemicrotechniques.fr/
MOBILITÉ ET TRANSPORTS AVANCÉS	Poitou-Charentes	Automotive Industry	http://www.pole-mta.com/
NOV@LOG	Haute-Normandie	Logistics	http://www.novalog.eu/
NUCLÉAIRE BOURGOGNE	Bourgogne	Energy	http://www.polenucleairebourgogne.fr/
NUTRITION, SANTÉ, LONGEVITÉ	Nord-Pas-de-Calais	Health and Biotechnology	http://www.pole-nsl.org/
OPTITEC	PACA	Optical	http://www.popsud.org/
PASS	PACA, Rhône-Alpes	Cosmetics and Perfumary	http://www.pole-pass.fr/
PEGASE	Provence-Alpes-Cote d'Azur	Aeronautics	http://www.pole-pegase.com/
PLASTIPOLIS	Rhône-Alpes, Franche-Comté	Plastics	http://www.plastipolis.fr/
PÔLE EUROPÉEN D' INNOVATION FRUITS ET LEGUMES	PACA, Rhône-Alpes,Languedoc-	Agri-food	http://www.peifl.org/
POLE EUROPEEN DE LA CERAMIQUE	Centre,Limousin, Midi-Pyrénés	Ceramics	http://www.cerameurop.com/
PROD' INNOV	Aquitaine	Health	http://www.prodinnov.fr/
Q@Li MEDITERRANÉE	Languedoc-Roussillion	Agri-Food	http://www.qalimediterranee.fr/
QUALITROPIC	Île de la Reunion	Agri-Food	http://www.qualitropic.fr/
RISQUES	Alpes-Côte-d'Azur	Natural and Technological Risks	http://www.pole-risques.com/
ROUTES DES LASERS	Aquitaine	Optical, Health	http://www.routedeslasers.com/
S2E2	Centre	Energy	http://www.s2e2.fr/
SPORALTEC	Provence-Alpes-Côte	Sport	http://www.sporaltec.fr/

	d'Azur	Equipement	
TECHTERA	Rhône-Alpes	Textiles	http://www.techtera.org/
TENERRDIS	Rhône-Alpes	Energy	http://www.tenerrdis.fr/
TRANSACTIONS ELECTRONIQUES SÉCURISÉES	Basse-Normandie	Electronics	http://www.pole-tes.com/
TRIMATEC	LanguedocRoussillon, Rhône-Alpes, PACA	Energy, Chemistry	http://www.pole-trimatec.fr/
UP - TEX	Nord-Pas-de-Calais	Chemistry, Textiles	http://www.up-tex.fr/
VALORIAL	Bretagne, Pays de la Loire	Agri-food	http://www.pole-valorial.fr/
VÈHICULE DU FUTUR	Alsace, Franche-Comté	Automotive Industry	http://www.vehiculedufutur.com/
VIAMÉCA	Auvergne, Centre, Languedoc Roussillon, Limousin,MidiPyrénées, Rhône –Alpes	Mechanics	http://www.viameca.fr/
VITAGORA	Bourgogne	Agri-food	http://www.vitagora.com/
XILOFUTUR	Aquitaine	Wood, Paper	http://www.xylofutur.fr/

Source: http://www.competitivite.gouv.fr

In 2008, the total amount of companies involved on these cluster was 6.826, distributed by 300 European economic groups and 228 foreign groups.

Concerning the nationality of companies within the clusters there is a predominance of French origin companies, distributed among the following groups: French groups (2.673), European groups (431) and foreign groups from outside Europe (323).

The total employment in independent firms (not belonging to a group) was 58.721 employees, while the firms controlled by groups reached 754.331 jobs, distributed as follows: French groups (574.774), European groups (97.781) and foreign groups from outside Europe (81.776). French companies provide the major bulk of employment.

Concerning the skills management, there were implemented 124 training actions following an explicit request from cluster.

The distribution of public funds by type of beneficiaries was: training organizations (2%), laboratories (40%), Enterprises excluding SME (28%) and SME (30%).

Concerning the international reach, there was 814 firms accompanied by a cluster in a trade promotion action and in foreign partnership.

4.4.Clusters' public policy (2nd phase 2009-2011)

After the first phase of implementation (2006-2008), the French policy of clusters has been positively evaluated in 2008. Following this assessment, the Government introduced the new cluster policy for the period 2009-2011.

In addition to maintaining the principles of the first phase implemented new measures were decided.

This new phase of cluster policy aims at: i) to promote synergies between clusters and with all the political actors; ii) to support research and innovation, at both national and regional level, in order to build real ecosystems for growth and innovation .

The implementation of this new phase "Poles 2.0" hinges on three main axis: 1) To enhance coordination and strategic piloting of the poles (bet the signing of performance contracts between the clusters and on the coordination between clusters with the same theme); 2) To finance infrastructure projects (greater commitment to the innovation platforms); 3) To develop other dimensions of innovation ecosystem and growth in clusters, notably through greater reliance on private funding and better territorial synergies.

Why economic intelligence is important in clusters context?

The economic intelligence consists of organized search procedures, and processing of information, useful for decision making (strand offensive) and the protection of such information particularly if they are considered sensitive (defensive side).

The economic intelligence allows available relevant information to: 1) create elements of differentiation from competitors; 2) understand and anticipate changes in business environment; 3) access new markets; 4) encourage innovation and creativity; 5) defend themselves from competitors; 6) report activities, projects and strategy; 7) work with partners in the logic of sharing useful information with the identified targets.

In a future framework for the knowledge economy, the economic and business intelligence is increasingly a key factor for development and strengthening of clusters competitiveness and its members.

Economic intelligence is also very important for the protection of technological heritage, monitoring of regulatory developments, and for the monitoring of technological, scientific and industrial developments.

“By nature the cluster are the key players to put in motion initiatives territorial economic and business intelligence initiative because they are very important sources of production and circulation of a large mass of information of high added value that can be spread without control”.

French competitiveness clusters are “showcases of French technology that can raise the greed foreign competitors, so it is essential that the management of their information flow is ensured in good security: rules for classifying data, using numerical platform for secure information exchange” are very important element of its economic and business intelligence systems.
Exactly why the new French public policy for clusters (2009-2011) gives a strong emphasis on economic intelligence and supports in a significant way the development of such activities in the clusters.

The French government, through the support of national economic intelligence at its disposal (ie http://www.intelligence-economique.gouv.fr/ and http://www.adit.fr/) strongly supports its clusters in this area. In the set of clusters that have been analyzed on this paper, at the present time, all the seven global competitiveness clusters develop this type of activity and many others too.

5. CONCLUSIONS

Public policies aimed at creating regional processes of competitiveness, based on intervention models with a strong emphasis on a coordinated action in a specific territory, are proving to be particularly effective in terms of ensuring sustainability for territories where they operate and to economic sectors in which they are based.

The case study shows that in France this public policy is having a decisive role in terms of sustainability and competitiveness for territories and industries involved.

French clusters approach is based on a combination of companies, training centers and research public and private units, within a specific territory, engaged in a partnership focused on creating synergies around common innovative projects and on knowledge production and sharing processes.

As demonstrated, French clusters approach is also very much based on a effective territorial governance context, and business intelligence practices.

Territorial governance is an integrative model based on cooperation/competition and trust between citizens, firms and authorities within a specific territory. The relational component of governance assures the availability of the actors to be involved in collective learning and planning processes. Governance combines simultaneously associative (cooperation) and disjunctive (competition) social and economic processes, and assures an effective territorial bases context for long term planning and sustainability.

Cluster has a physical dimension but also a social, cultural, economic and technological content. Governance potentiate the functional dimension of clusters, its particular social order and its system of authority, as well its competitiveness and sustainability.

The clusters activities, and the human resources and skills involved, promotes a new differentiation/stratification of economic activities, a new division of labor between firms and regions, and new processes of cultural identities and sociability on a territorial bases.

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