Recent Developments of Competitive Intelligence in France

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Abstract: Competitive intelligence has been developed in France as a national state program during the past years. After the call of proposal from the Ministry of Industry in 2005 for the development of a national cluster policy different poles of competitiveness have been selected. In 2008 71 poles of competitiveness have been evaluated by the BCG consulting group. In the same time under the impulsion of Alain Juillet the state policy of Competitive intelligence continued to be developed and spread to various other fields but economy and R&D: finance, sport, social, etc. This present paper presents the recent progress in various areas of Competitive Intelligence in France. The presentation intentionally compact will facilitate the lecture since many other documents, reports and case studies are already available on Internet and via the site http://www.ciworldwide.org

1 - Introduction

In France, the development of a national policy of Competitive Intelligence has been organized by the government at a national and local levels in order to enabled national economic forces to compete on the world markets with adapted means. But the development of a new industrial policy is a matter of time and in spite of these efforts the deficit of the commercial balance is still important. The analysis of the main causes of this deficit is at the origin of recent progress in Competitive Intelligence and of the new development of this discipline. It is noteworthy that in France there is a wide deficit of large SMEs (500 workers or more). Many new developments aimed to create the best conditions to facilitate the cooperation between SMEs or between SMEs and large firms to impulse a new way to innovate and to help them to move to international markets. Most of this approach is done through the poles of competitiveness.

2 – Application of Competitive Intelligence

The large deficit of the balance of trade underlines also the necessity to consider the “international development” as a key challenge for most of the firms, small or large. But, to be able to get or maintain a strong and competitive position on international markets will necessitate a new state of mind as well as new tools to evaluate the opportunities and threats as well as the forces and weaknesses of the firms and of their industry. This is the
reason why, the European community promote and European cooperation between the various European clusters to enhance worldwide clusters.  

A – Innovation in the academic area

Innovation process that necessitates to transform the knowledge and competences of the research laboratories in products robust enough to be sold on the international markets makes the public and private cooperation dynamics urgent. That is what developers call the framework of the triple helix. As an example the AERES (Agence d’Evaluation de la Recherche et de l’Enseignement) asks to all the public laboratories to use the SWOT analysis matrix to present their research programs and results. This move should develop a larger use of information (academic but also patents) and a larger view of the research and innovation role and their implication in the development of a national welfare. In the same time this analysis should change the vision of the academic people.

In some research academic laboratories, Competitive Intelligence is used to increase the efficiency of the use of information, to determine niches of development opportunities, possible partnerships, etc. The use of Patents through the APA (Automatic Patent Analysis) processing via appropriate tools extend the views of the scientists and enable them to see new applications and new possible innovations to valorize their knowledge and competences. This is the case for instance for the Laboratory of complex chemical molecules Aix Marseille University III, for the laboratory of biology of the Tours University, for the LIS University of Aix Marseille II, etc. Although even if this process is often not well understood by the national board of valuation, remarkable progress have been done through the use of Competitive Intelligence and Competitive Technical Intelligence.

B – The poles of Competitiveness

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1 An example of inter-clusters cooperation in France the Life science Corridor (Discover the Lifescience Corridor France The alliance of three complementary French clusters: EU – Japan seminar, Brussels, October 29th 2008) by Agnès Legollis available through :

http://documents.eu japan.eu/seminars/europe/other/29october08_presentation/legoll.pdf (consulted in April 2010)

2 Valorization, Synergies, Innovation and Development, Dou H, Kister J, Trans2tech - Driving Innovation from Science to Business - EC - Aix en Provence - 6 Mars 2008 available through:

http://s244543015.onlinehome.fr/ciworldwide/?p=188 (consulted in April 2010)


http://www.jstage.jst.go.jp/search/dsj?dif2=and&d2=au&dp2=dou&dif5=and&d5=te&dp5=&pl=20&search=Search
In the same ways, most of the poles of competitiveness develop their own Competitive Intelligence Unit to search for key information and to set up the analysis, valuation and impact of this information upon the activities of the poles. The BCG performed in 2008 an valuation of the 71 French poles of competitiveness and issued a certain numbers of recommendations, the most important being as follow:

- To create a portfolio of indicators about the activities of the poles
- To maintain with the help of State financial support the animation of the pole which should be centered on the core activities of the former
- Development in each pole of a body to ensure a strong dialog with the strategic views of the State
- To maintain the State financial facilities to promote innovative cooperative projects within the members of the poles
- To integrate the activities of the poles within the regional development systems
- To clarified in the French agency of funding the system of valuation of the projects presented by the poles

Globally, the analysis shows that the dynamic created by the pole is effective. Some poles go faster than others, but this is due to their size and industry types as well as from their own dynamic. But, the effort of the French national institution to maintain, continue and confort the poles of competitiveness should be maintained.

Since most of the transfer of the Competitive Intelligence methods and tools to the SMEs and research laboratories as well as to the regional system of development are done through the poles of competitiveness, we will give in the following section some examples concerning various poles.

Example of the pole of Innovation of fruits and vegetables

The European pole of Innovation of fruits and vegetables has for objective to gather all the stakeholders of the sector (seed improvement, farmers, food processing, specialized equipment, research, education..) around shared strategic objectives.


5 In France, the agro-business industry occupies the first position in the balance of trade
• To increase the competitiveness of all the actors of the sectors by innovation: innovation to increase the variety of fruits and vegetables, farming innovation, product innovation, packaging innovation, distribution innovation,

• Answer the world challenge of the prevention of the present major pathologies - obesity, cardiovascular diseases, cancers - by developing the consumption of fresh or transformed fruits and vegetables.

To achieve these objectives a collaborative tool of Competitive Technical Intelligence and of Competitive Intelligence is offered to all the stakeholders of the pole to increase the innovation dynamic. The objectives of this tool are numerous.

To offer to all the actors of the pole an economic and technical survey on the tomorrow markets and products as well as on the consumption tendencies. This survey informs the people engaged in the developments and the projects of the pole about the environment economic, strategic sociologic and technical.

To favor the exchanges between the different actors of the sector from the producer to the product developer.

To analyze the development and of the position of the countries competing with the objectives of the pole. This analysis is also oriented worldwide to make available to the enterprises a knowledge of the markets and of the products of their competitors.

On this secure platform several services are available to the members and partners of the pole: an international survey, a survey of new products and ingredient, a multicriteria query to identified the potential partners (enterprises or laboratories) to participate to an action or a project, to find a specific competency in various areas (science, technology, analysis, knowledge of processes and markets, regulations ... enable to provide a technical assistance of expertise or to enter into a partnership. This is achieved through the use of a database.

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6 This case has been presented by Philippe Clerc on October, 9th, 2009 in Changsha in a conference given during the international Competitive Intelligence and Agrifood Symposium.
feeds by all the members of the pole upon the state of the art of a particular subject. An alert can be transmitted to specific members to inform them upon the new an important documents concerning their activity (thematic pre-defined by the members) entered recently into the database. Information about ther call for proposal and the innovation financial facilities, des informations sur les appels à projet et les aides à l’innovation (en construction) :

- General information on the ongoing projects
- Collaborative project management (secure virtual working space on the platform)

C – The Composite Technological Networks in Agriculture and in the Food sector

To create a new dynamic of innovation in agriculture and nutrition these networks have been created and developed since 2006. These networks have been created to associate various partners which cannot because of their structure and activities develop research programs by themselves, but which can use and disseminate applied research results. The main goal of the networks is to create the best conditions to communicate, exchange and share between the network members all type of information. The structures of these networks are lighter than those of a pole of competitiveness. The members can be the agricultural technical institutes, the agro-industrial technical centres, the agricultural chambers, the academic research laboratories, the laboratories of various research institution such as the INRA (National Institute of Agricultural Research), the CNRS (National Research Scientific Centre), the CEMAGREF (Research Institute for agricultural engineering and environment). Various examples of Technical networks are the following:

Functional Biodiversity - Innovative cultivation systems - Biomass, energy environment and territories – Agro-equipment, energy – development of biological agriculture – etc.

The global contributions of the networks are focused on internal audit, technological transfer, information guides, symposium and workshops, etc. The Networks are also useful for various research project approval which is a plus to obtain various financial

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7 Article 91 of the law of the agriculture orientation law of Januray 5th 2008
facilities from the ANR (National Research Agency). These networks place the industry development at the center of their concern, and they are a strong drive to orient research projects on the real need of the profession.

D – The PRIDES

They are Regional poles of Innovation and of Interdependent Economic development to gather companies of the same branch of industry and create an incentive for cooperation. They are one of the main parts of the regional development system. The PRIDES have been created by the Regions and are different from the poles of competitiveness. In a certain way they complicate the scenery of the financial and institutional support for the development, but in another way they open the door for cooperative work and development to associations and very small enterprises. Some of them because of their size and the proximity with the regional decision makers are more reactive than the poles of competitiveness although their budget are a lot smaller. But, nevertheless they contribute to the commitment of the region in an active industrial policy. Some SMEs can participate to both structures: poles of competitiveness as well as PRIDES.

Example the PRIDES Image (Cinema, Audio-visual and multimedia) of the Region Provence Alpes Côtes d’Azur:

The purpose of the PRIDES is to promote, instigate and gather the stakeholders of the area around cultural and economic collective projects, directed towards employment and the offer of formation. The ambition is to make the region area “Provence-Alpes-Côtet d’Azur” a platform of creation, production and diffusion of contents for the south of Europe, open on the Mediterranean. The sectors concerned are the cinema, the audio-visual, animation, the video game, the multi-media, the edition, the distribution and diffusion of programs.

The PRIDES, through a clear selection and the development of projects allows the development of different cooperative actions such as for instance the development in the

8 Pôles Régionaux d’Innovation et de Développement Economique Solidaire more information is available through:  http://www.regionpaca.fr/index.php?id=3115 (consulted in April 2010)

9 Over 22 French Regions, 21 are leaded by the opposition.

10 Information available from http://www.regionpaca.fr/uploads/media/PRIDES_03.pdf (consulted in April 2010)
region of a significant approach to scientific movies aimed to show various regional advanced research results.

The Association “Cinema with the Sun” (Cinema du Soleil) controls and coordinates the development of the PRIDES. Being based on a mode of classical organization, the association includes an Office, a Board of directors and a General Assembly. To this organization, is added an executive office and 8 colleges representing each one a key sector of the field (formation, production, support HD, animation...), for a more effective governorship.

In the former examples, the purpose is to create knowledge and to set up various processes to create and develop an actionable knowledge. This is not an information storage which will create it, but a process which will include the human skill and the workflow technology.  

3 – The extension of Competitive Intelligence

The importance of CI on the international scale for companies, clusters, territories and States in great part due to the globalization process prompted also to the creation of a non profit association of Competitive Intelligence for French-speaking countries (Association Internationale Francophone d’Intelligence Economique AIFIE). Assembling experts, practitioners and researchers from different countries this organization couples its numerous activities with the action of various Chambers of Commerce and industry an extends its activities in Africa, Oceania, Europe, South America, Caribbean and Europe.

The development of the national program of Competitive Intelligence shows the usefulness of the methods and tools of Competitive Intelligence to a diversified public (wider than researchers, economists and industrials). The result is now the extension of Competitive Intelligence to different fields such as sport, law, social or culture fields. This process is particularly interesting since it joins the works and attitude of professor Stevan Dedijer (Sweden), one of the pioneer of the introduction of intelligence into the organizations and their strategies.

A – French Competitive Intelligence Organization

The purposes of the French CI national organization are clear: to better anticipate opportunities and threats and accordingly to better coordinate governmental strategies. To create spheres of influence to compete and cooperate in a winning position


12 Hommage à Stevan Dedijer, Clerc P., Regards sur l’IE, n°5, pp. 32-39, Sep-Oct 2004
That means:
- mobilizing the strategic intelligence capacities of the firm or of the country to serve strategies in the global competitive environment;
- organising economic security through the identification, promotion and protection of key assets (Scientific and technological know-how from enterprises, R&D centres, universities...)

The national structure dealing with Competitive Intelligence in France has been modified recently with the departure of Alain Juillet from his function of coordinator of the Competitive intelligence near the French prime minister (retirement of Alain Juillet from the civil servant institution). Now M. Olivier Buquen is in charge of the Competitive Intelligence in France. He is located at the Ministry of Economy, Industry and Employment and is supervised by the Presidency of the Republic. The missions of M. Buquen and its team are in coordination with the different ministries, the following:

- strategic survey upon the trends in the scientific, economic and technologic environment
- to alert the State and the companies upon the major economic trends
- to help an facilitate the companies in their international development
- to identify the strategic sectors for France and to develop an alert system about these sectors
- to coordinate the protection of the strategic sector companies as well as the interests of the State
- to define the policy of influence and the position of France in the international organizations
- to coordinate the actions of education and the awareness in Competitive intelligence of the various government departments.

Today M. Olivier Buquen enjoys first a real interministerial power (coordination of the CI activities of each ministry as initiated by M. Juillet, HRIE). Secondly, from his affiliation to the ministry of economy, industry and employment he will be able to develop his “strategic supremacy” through the mighty networks and resources (think tank capacities, information networks at local, national and world scale, human networks of expert on industry, export, statistics, countries knowledge...) including action power allowed by his interministerial position. At least, M. Buquen works under the authority of a so-called “managing committee” taking place at “Elysee Palace”, the place where strategies are defined.

In the same time all the French Regions, under the authority of the “Prefet de region” (governor) who represents the Government at the regional level, developed various programs of Competitive Intelligence included in the so called Regional Plan for CI. These
different programs are structured according the regional specificities and the poles of competitiveness present in the regions.

B – The role of the Chamber of Commerce and Industry

The 140 local and 21 regional Chambers of Commerce and Industry participate widely to this organizational innovation and more specifically to enhance the practice of Competitive intelligence in SMEs and clusters. Numerous actions have been promoted and the coordination role of the ACFCI (Assembly of the French Chambers of Commerce and Industry) must be underlined. Various initiatives are taken by the Chambers of Commerce and Industry in close coordination with the Regional Plan for Competitive Intelligence developed in all the French regions. For instance various gateways have been developed such as the one the of Region Centre which provide to the users various information by indexing various RSS fluxes as well as local information to facilitate the communication between economic actors and to increase the global synergy. In the same region when a local initiative aimed to the development of innovation and Competitive intelligence, it is promptly integrated to the regional system of CI. For instance the ATELIS13 (Strategic Intelligence Workshop of the ESCEM Business School, Tours Poitiers) is integrated to the “schema regional d’Intelligence Economique “ of the region Centre via its director.

On a general point of view, if, at the beginning of its development the Competitive Intelligence in France was mainly centered on various aspects of the security, it is noteworthy to notice that nowadays it extends to the whole concept of competitiveness and to the search and use of valuable and workable information. In the same time, people became conscious that lobbying and influence are necessary to gain international market positions and also that cooperation and organization are necessary. It is not possible today to do everything alone, specially is a small company is concerned: cooperation and networking become essential.

4 – The Dissemination of Governmental information

On a general point of view also, the French policy makers understood that information must be used, and then it must be available (at least what is public) to facilitate the “life” of SMEs, Institutions etc. This prompted for the development of various Internet official sites, which make available to the public useful information of various types. From the regional sites of the DRIRE (Direction Régionale de l’Industrie de la Recherche et de l’Environnement) to the site of the Ministry of Finance and Industry to the site of Competitive Intelligence an official and validated information is now available. Information about ongoing working groups (eg

13 Strengthening the private and public partnership in actionable knowledge. The case of ATELIS (Strategic Intelligence Workshop of the ESCEM Business School). H. Dou, P. Larrat, Trans2tech, Muenster 1-2 October 2008, Germany, (European Community)
Les États Généraux de l’industrie) as well as new synthesis (eg agro-business industries in Poitou Charentes), Agenda, etc. are available. The site is publicly available and is a very powerful information tool. All the French regions have a DRIRE and subsequently an Internet site as the one above.

An example of such a website is given in the following figure:

Figure 1 : Example of the site of the DRIRE Poitou Charentes

5 – Methods and Tools

The work of Alain Juillet’s team which developed a referential for the education of Competitive Intelligence, levels the ground for the introduction of Competitive Intelligence in the world of education. Several Masters (Business schools or Universities) are available in France, but it is recommended because of the today condition of unemployment to follow these diplomas in continuing education. It is also interesting to see that the most of the well know masters are widely open to international cooperation14. In the same time various companies developed different tools to facilitate the access, the treatment and the

14 Malaysia, Indonesia (University Paul Cezanne), China (University of the Mediterranée), Viet Nam (University of Toulon), etc For more information see: [http://s244543015.onlinehome.fr/ciworldwide/](http://s244543015.onlinehome.fr/ciworldwide/) (consulted in April 2010)
automatic analysis of the information. Datamining, APA\textsuperscript{15}, web2.0 applications\textsuperscript{16} are the most useful tools available to French companies.

The referential for the teaching of Competitive Intelligence was very useful since it enable different institutions, Chamber of Commerce and Industry,... to promote various guides of Competitive Intelligence with a common core of principles. The action of M. Alain Juillet was also of a large benefit for the promotion of the Competitive Intelligence in various area of the French society because the newspapers, radios and TV gave a large place to interviews, comments and discussions about this subject. This comfort the position of the various actors in this area. One of a good example is the development of the patent usage among the SMEs To promote innovation, research of partners, technological analysis, etc... which has been very successful.\textsuperscript{17}

Among these tools several one have been developed thank to the work done by the French bibliometrics school\textsuperscript{18} which started from an university collaboration between the CEDOCAR\textsuperscript{19} and the CRRM\textsuperscript{20} and partially financed by the SGDN\textsuperscript{21} twenty years ago.

Various congress, meetings and workshops are still going on and maintain a significant advanced in this area (VSST\textsuperscript{22}, Villa Kerylos\textsuperscript{23}, Congrés d’Ille Rousse\textsuperscript{24}, ...) as well as the activities of various enterprises of the sector.

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\textsuperscript{15} Intelligence Competitive 2.0, Utilisation des informations de propriété industrielle pour la valorisation des ressources dans les pays en développement (Chapter)

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Competitive Intelligence 2.0, Utilisation des informations de propriété industrielle pour la valorisation des ressources dans les pays en développement, (Chapter) Dou, H Hermès publisher Mars 2010

\textsuperscript{16} Intelligence Competitive 2.0, Direction of Luc Quoniam and Arnaud Lucien, Hermès Lavoisier editor, March 2010

\textsuperscript{17} Information is available though : http://academy.matheo-software.com/ (consulted in April 2010)

\textsuperscript{18} French Society of Applied Bibliometrics

\textsuperscript{19} CEDOCAR Centre de Documentation de l’Armement

\textsuperscript{20} CRRM laboratory in Information Science of the Universiity Aix Marseille III http://crrm.u-3mrs.fr

\textsuperscript{21} SGDC Secretariat General de la Defense Nationale

\textsuperscript{22} Information available through http://atlas.irit.fr/ (consulted in April 2010)

\textsuperscript{23} Information available through http://s244543015.onlinehome.fr/ciworldwide/?p=807 (consulted in April 2010)

\textsuperscript{24} Information available through http://crrm.u-3mrs.fr/web/breve80.html (consulted in April 2010)
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Various examples of such software can be found in the literature. The French old history in bibliometrics is very strong and this allowed the development of a bibliometrics school which today is still working in various areas and gave rise to several small or larger companies. Globally three directions were developed,

- one which is the bibliometrics treatment of structured data coming from online databases (ergonomic, fast and powerful treatment to synthesized the information present in a large amount of data)
- the second which is to create the best environment for the APA (Automatic Patent Analysis)
- The third which is the extraction of concept from the full text of various information to provide relevant data which eventually be aggregated.

The usage of these tools are now expanding in the large companies, the poles of competitiveness and the research laboratories.

6 – The entrepreneurial spirit

The lack of entrepreneurial spirit has been underlined very often in the French society. The impulse this move among almost of the classes of the French society the Government promulgated the status of auto-entrepreneur at the beginning of 2009. This status allows to everybody to declare on Internet that he wish to acquire this status (even if he has another job in this is not forbidden but he must ask the permission in certain cases, or if he is retired ..). The administrative formalities are very simple and can be done through Internet in a few clicks. The interest of this status is that you will not pay any charge at the beginning. You will pay only if the activities of the auto-entrepreneur return some money via classical invoicing. The success of this status has been very large in France the number of auto-entrepreneurs is estimated to about 30,000 per months.


26 The Society for Applied Bibliometrics was founded more than thirty years ago by Clément Paoli (CEDOCAR Centre de Documentation de l’Armement) and Professor Henri Dou (CRRM)


28 See the synthesis of the villa Kerylos meeting http://s244543015.onlinehome.fr/ciworldwide/?p=807

29 Law of the modernization of the economy, n° 2008-776 du 4 août 2008, Title 1 chapter I , see ehttp://www.auto-entrepreneur.fr/
It is clear that this success is partially due to the lack of unemployment for some of them, but globally it gives a new status to people opening the way to small of more important businesses. In an old country were the enterprises are considered by many as profiteers or exploiter, this is a large step to a change in mentality. Obviously it will take some time, but the cases of success will catalyst the change of mindset. On the global enterprises creation in 2009, 58% (over 21,229) are linked to the auto-entrepreneurs. It is also noticeable that the growth of the enterprises creation compared to 2008 (124,270) is very large.\textsuperscript{30}

In the same area of the enterprises creation, a smaller move concerns the spin-off. The development of the poles of Competitiveness, of the composite networks, of the will to integrate some academic research in enterprises development will increase the spin off creation. This is one of the side effects of the Competitive intelligence and its links to innovation and this must be underlined.

7 – Conclusion

The development in France on the Competitive Intelligence reaches now in many areas its maturity. But, if the results are in some areas very good, it is necessary to maintain permanently a “push” to integrate the Competitive intelligence in the decision making steps. This is mainly due to the fact that this discipline is quite new compared to economics, physics, chemistry, medicine, etc.

In our opinion it is certain that the Competitive Intelligence, its methods and tools will be widely used in the 21\textsuperscript{st} century and will because an invaluable progress in the governance of the regions, enterprises, education and research institutions.

If at the beginning, the Competitive Intelligence was mainly centered upon the use of information to have a better knowledge of the competitors and their moves, it is clear that today the Competitive Intelligence expand in many different areas such as the social intelligence, the sport intelligence, the sustainable development intelligence, etc.

Competitive Intelligence will in term integrate the concept of Intelligence into the organizations and in the same time will put the enterprises at the center of the system of the welfare creation. This is the reason why Competitive Intelligence is not only devoted to develop countries but will be also used widely by various developed countries\textsuperscript{31}. The examples of the South Korea, of Thailand, etc. are remarkable on this point of view.

\textsuperscript{30} Agency for the enterprise creation, (APCE) March 18th see http://www.apce.com/

\textsuperscript{31} Intelligence Compétitive 2.0 - Intelligence Competitive et développement régional (Chapter) , Dou H, Hermès publisher, Luc Quoniam coordinator, Mars 2010