Patent Information analysis and competitiveness

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From Stevan Dedidjer, one of the pioneers of the introduction of Intelligence into the organizations

Three main questions
Where are we?
Where do we want to go?
How to go there?

Let us now make a tour in various countries to see how Competitive Technical Intelligence and patents are developed and used.
Incremental innovation or creative imitation

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<th>Potential barrier</th>
<th>Energy</th>
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Technological evolution goes step by step to decrease the energy to go from A to B and to create the competences.
South Korea

Very soon in its development, South Korea understood that its development was linked to the strong interaction of

*Education, Research and Industries*

To develop their industries and to reach its actual state of development the South Korea created the necessary industrial basis by developing Research and Education, by increasing the partnership between Industries and Universities and by creating from the government initiatives the necessary Incentive. These conditions enable the South Korea to benefit widely from the FDI (Foreign Direct Investments).

This is certainly with Japan the country which develop a national integration of Governmental Institution, Education, Research, Industry to fulfill its objectives.

**Today, China follows exactly the same path, but the speed is a lot faster.**

The main Korean Clusters today

CMA-CGM ordered 8 super-container ships to South Korea

Samsung, Hyundai are now well know worldwide
Brazil

Competitive Intelligence and Technology Watch were introduced more than 15 years ago by an initiative of the INT (Instituto Nacional de Tecnologia) and the CRRM (France) with a course lato sensus and the DEA Competitive Intelligence and Technology Watch (University Aix-Marseille) (Gilda Massari, Henri Dou and Luc Quoniam)

I spite of various administrative problems with the Brazilian Ministry of Education, and with no help from the French National Institutions, we succeeded through the inquiry made by the Brazilian Minister. This was followed by the appointment of Professor Luc Quoniam as Director of the Cendotec, for a period of 4 years. Results of the inquiry available: http://www.ciiworldwide.org (category Brazil)

Brazil

Development of Competitive Intelligence in various industries and Institutions (INT, Embrapa, Embraer, Petrobras, Senai ....)

Development of consulting activities

Creation of the Competitive Intelligence Society of Brazil (ABRAIC)

Development of various tools on a national base (database of science Competencies for instance (LATTES: 600.000 cv available on Internet)

Distance learning for poor people: A Voz do Mestre

Creation of the CGEE Unit – This Unit near the President answers key questions about the development of the new science orientations to impulse a new research policy development of the country.
Brazil

Competitive Intelligence was developed in Brazil by the INT (National Institute Technology) and the CRRM (University Aix-Marseille III). After several years various students obtained in continuing education the title of Masters and Doctors and created the Brazilian Society of Competitive Intelligence (headquarter in Brasilia). This Association is sponsored by the State, the Industry, the members and benefits from educational and consultancy activities.

Associação Brasileira da Inteligência Competitiva

Various meetings, conferences and workshops are made in this country with the help of local partners.

The Franco –Brazilian Chamber of Commerce and Industry organizes different workshops in Competitive Intelligence

Mission 2007, Alain Juillet, Philippe Clerc, Henri Dou

For more information consult: [http://www.ciworldwide.org](http://www.ciworldwide.org)
China

Curious, patient, pragmatic … They want to understand the experiences done in other countries to develop their own Competitive Intelligence System aiming to regional and industrial development. The French cluster policy as well as other clusters developed in the world by USAID (Porter, e.g. South Korea, Thailand …) presented a deep interest to them. Education is also a crucial point, Masters in China or in France.

Research on Information resource. Allocation of China regional Development

CHINA

Institute of Scientific and Technical Information of Shanghai

November 14, 2006

International Symposium: Competitive Intelligence, Regional Development and Role of the Government. Speakers Jonathan Calof (Canada), Henri Dou (France)

See http://www.ciworldwide.org for the executive conclusions
CHINA

The French way of Globalization through Competitive Intelligence: Public – Private Strategies

China Executive Leadership Academy Pudong
2007 – Philippe Clerc (ACFCI)

CELAP is a national institution based in Shanghai. It is financed by the central government. The formation is intended for the senior officials and for the senior executives of medium businesses. Teaching and research concentrate on the improvement of the articulation between questions of social development and economic development.

CELAP is an international academy. It wants to be innovative in the design and the contents of its Educational program.
THAILAND

Using Patent Information to sustain innovation and pick up strategic applications.
Example: Added value products for the coconut industry

The notion of industrial clustering clearly appears in this approach.

Technology Watch is closely mixed with Competitive Intelligence

Niche policy and systematic information analysis (eg APA Automatic Patent Analysis)
http://www.toryod.com/publicationmapping.php

เอกสารประกอบการเสวนาทางวิชาการ
เรื่องการแปรรูปและการใช้ประโยชน์จากมะพร้าว
2 มิถุนายน 2548

การวิเคราะห์แนวโน้มเทคโนโลยีเกี่ยวกับมะพร้าว
จากเอกสารสิทธิบัตร
พบว่า ตั้งแต่ปี 1905 ถึงปัจจุบัน มีสิทธิบัตรที่สัมพันธ์กับคำสืบค้น “Coconut” ในส่วนชื่อเรื่องของสิทธิบัตร (Title) จำนวน 532 เรื่อง มีผลการวิเคราะห์ข้อมูลสิทธิบัตร ดังนี้

Data from Internet - Bred data were indicated in English in he paper
To prepare the expert's analysis, strategic information related to SMEs are extracted from the patent mapping.

An agressive policy of competitive clusters

TCI: Thailand Competitiveness Initiative, A program funded by USAID

Structuring a cluster

Work Plan
TCI plans to explore about 8 cluster initiative in 2 years and at least 2-3 of them should have come to action. TCI divides its work process into 4 stages as follows:

1. Screening stage – the team discussed and agreed on some selection criteria,
   - Geographical concentration
   - Leadership
   - Readiness (commitment and cost sharing)
   - Impact to overall economic/social
   - Consistent with national agenda

2. Changing mind-set – after a few gathering and discuss with leaders and key stakeholders to be assured of their receptivity, a competitiveness consultant shall seek MOU in order to continue project (3-4 months)
3. **Diagnosis and strategy** – TCI help the cluster prepare activities plan that fit to their needs, provide analytical tools and train them to apply such tools as seem appropriated.(4-5 months)
- Diamond
- SWOT
- Benchmarking
- GAP
- Value chain
- Market assessment,
- Etc.
4. **Actions and evaluation** – the clusters should be able to operate by themself and depend on their own resources. Related government has agencies must be linked hence paving way to the policies changes. (after 10 – 12 months)

For more information see KI.ASIA in http://www.ciworldwide.org

The 5 active clusters:

1. Multimedia and Computer Graphics Cluster
2. High Value Agricultural Products (HVAP) for the Western Region
3. Tourism in Phuket Island
4. Gem & Jewelry Cluster in Chantaburi
5. Silk Cluster Project
Malaysia

The development of Malaysia is grounded to the political will to create various substitution products to the products imported in Malaysia. Step by step Malaysia using the FDI develop the necessary knowledge to be able to acquire the competences necessary to exploit oil field, to be the first country exporting palm oil and to create the Proton (guenuine Malaysian car) as well as various electronic systems (electronic corridor).

The country also created different universities which for most of them are oriented towards the regional development and the resolution of Malaysian economic or industrial problems.

Malaysia

Competitive Intelligence is introduced in various companies by the bias of a Master program in cooperation with the IMPGT (University Paul Cezanne).

This Master program is done at OUM Open University of Malaysia in a Continuing Education Program.

This speed up the introduction on Competitive Intelligence into various Companies and Governmental Institutions.
Low political will, remains of an heavy corruption, no clear status for the foreign investments, very weak information systems, believe that natural resources are sufficient to ensure the country development without creation of added value products, political philosophy.

International Symposium in Jakarta, Indonesia to be one of the 5 most important economic powers in the world in 2025!
Indonesia

2006

Puncak, International Seminar for the department of the development of the Government Department of Industry. Goog analysis of the situation but slow move to solve it.

Chile

Official French mission with Chilean representatives
Chile

Competitive Intelligence is new
Interested by the French experience in the development of a national program
Interested by the development of clusters
Development of incubators network with the Competitive Intelligence concept and method
University consider Competitive Intelligence as a potential field of study
Atelis program from ESCEM and UBO
Fundacion Chile (created in 1976)

But the objectives of Competitive Intelligence for Chile are difficult to define.
The country is 4000 km long and 250 km wide, with a climate from deserts to artic.

Today:
wine, port (Valparaiso, but declining), vegetables for the Western countries (counter season), tourism, salmon.
Will to develop niches

Main problem: energy

Fundacion Chile: by 1999 launched 36 entrepreneurship and technological innovations. Recent focus areas include Forestry genetics and DNA vaccines for aquaculture.
PHILIPPINES

Concerned by a mix from Technology Watch and Competitive Intelligence

Developing from public domain ideas of new product. Example for preventing the soil erosion. From idea to products and markets. The APA automatic patent analysis was made using Matheo-Patent available from http://www.matheo-patent.com // www.imcsline.com

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Philippines

Other patents available > 17 years old

WATER COURSE PROTECTION 1969
Patent number : GB1323118
Publication date : 11/07/1973
Inventors : Applicants : NAUE KG ROSSHAAR GUMMI (--);
Publication date (Year) : 1973;
Application number : GB19700053441 10/11/1970; Priority number(s) : DE19691956411 10/11/1969;
Equivalent(s) : NL7008082; FR2056301; DE1956411; BE752338

EROSION PROTECTION MAT 1972
Patent number : GB1403944
Publication date : 28/08/1975
Inventors : Applicants : NAUE KG E A H (--);
Publication date (Year) : 1975;
Application number : GB19730023369 16/05/1973;
Priority number(s) : DE19732321362 27/04/1973; DE19720042291U 17/11/1972;
Equivalent(s) : NL7306678; FR2182251; ES414763; DD104115; CH566452;

PROTECTION AND AFFORESTATION OF SLOPE SURFACE 1979
Patent number : JP56025520/Publication date : 11/03/1981
Inventors : MOMO TAKEMI (--);
Publication date (Year) : 1981;
Application number : JP197900101466 08/08/1979;
Priority number(s) : JP197900101466 08/08/1979;
Family : JP56025520;
Most of the data and ideas about soil protection (against erosion) were published in Patents around 1986, and then were since 2003 in the public domain. The Geotextiles from Philippines came to market in 2003-2004.

From: [http://www.usp.ac.fj/ireta/Span%20February%202005.htm](http://www.usp.ac.fj/ireta/Span%20February%202005.htm)

The Philippines exported US$176m worth of geotextile made from coconut husks to China, one of its largest markets for coconut products. The "whole nut" approach involves the processing of what used to be called "coconut waste products" into high value-added coconut products, with environment applications like geotextile, coco peat and coco water, as sources of additional revenue for farmers long used to depend on copra alone for coconut.

176 Millions US$
Morocco

Use widely its geographical position to collaborate with Spain (EU facilities) and France. Strong influence of the USA (for instance in the pre-study eg. District Oujda (Oriental). (http://www.oriental.ma)

There are various institutions which take care of Competitive Intelligence and develop various meetings (AMIE, agence Oriental…).

See http://www.ciworlwide.org

Le Matin
L'oriental un nouveau Dubaï au cœur de la Méditerranée
La région est le premier investisseur au Maroc dans le domaine de la mise à niveau urbaine Publié le : 25.01.2009 | 10h31

The lack of large industries (except the phosphates) will orient the Competitive Intelligence to the tourisme, the craftsmanship the urbanism and port activities.

A large program to implement small projects in various areas is a good tentative to implement incremental development in Morocco.

Mauritius

The geographical location of Mauritius in the Indian Ocean is interesting for the French Community because of the presence in the same area of the Reunion And Mayotte islands.

Extract from SADC INDUSTRIAL UPGRADE AND MODERNISATION PROGRAMME FOR MAURITIUS
May 7th 2009 – Patrick Gilabert UNIDO REPRESENTATIVE FOR COMOROS, MADAGASCAR, MAURITIUS, SEYCHELLES

SADC Southern African Development Community
A recent study of UNIDO highlighted that two types of adjustment strategies are emerging among industrial firms: **defensive and offensive**. Defensive ones involve traditional cost cutting approaches while **offensive involve innovation** and the search for new alternatives. The SADC Industrial Upgrading and Modernization Programme will intervene through two components:
- Support for improving competitiveness of industries
- Establishment/upgrading of the technical support institutions.

The regional programme will be implemented in two phases of three years each:
- **Phase 1**, the “start-up” or “pilot” phase of a 3-year period, will kick-off the industrial upgrading and modernization activities for the pilot manufacturing enterprises.
- **Phase 2**, the “roll-out” phase of the Programme will draw on lessons learnt during Phase 1 and will be opened to all the remaining enterprises and support institutions.

I am also glad to see that the cooperation between Mauritius and UNIDO is on the right direction. Our first project in the country was in 1969 for the establishment of **industrial zones**. Since then, we have developed **54 projects** in different fields, such as investment promotion, subcontracting, quality, metrology, SME development, export promotion. The most recent ones are related to the establishment of a **fashion institute** last year, the future founding of a **cleaner production programme** (and center), a joint project on **food security** with Indian Ocean Commission and of course the development of the SADC upgrading and modernization programme for Mauritius.

Extract from the address of Patrick Gilabert, representative of UNIDO
Conclusion

Patents can be used to understand the environment of a technology of an application and they can also be used to protect your intellectual capital.

Most countries in the world are turning their eyes to innovation. Patents are a good entry point since the databases are free and very inexpensive tools allow Patent Mapping.

Technologies can be understood in term of local knowledge, and then help companies and individuals to progress.

Good ideas, products applications can be protected not only in the country itself but also in foreign ones. Utility patents allow a certain degree of protection for a lower cost.

Patent are a key issue for the development