## THE MAGIC TRIANGLE – HOW TO DEVELOP AND APPLY COMPETITIVE INTELLIGENCE IN DEVELOPING COUNTRIES.

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This year, Stevan Dedijer<sup>1</sup> disappeared at the age of 94 years. He was one of the first people<sup>2</sup>, which in 1979, thank about the role of Competitive Intelligence in the Developing Countries<sup>3</sup>. To day, with the development of the globalization, with the talks in OMC, new disciplines such as Competitive Intelligence, Competitive Technical Intelligence, Knowledge Management, etc ... came to the scene of academic and professional education. In the same time, new terms appeared as soft technology<sup>4</sup>, (do not mix up with environmental technologies or sustainable development), etc.

As Stevan Dedijer state very often, it seems that to day, people are more or less embedded in recipes, in rigid mental models, and that the lack of Intelligence in organizations is one of the characteristic of the end of the 20<sup>th</sup> century and of course of the beginning of the 21<sup>st</sup> one. When we are speaking of Intelligence, we take the word intelligence with the sense of *Intellegere*, latin word and not with the sense of espionage (such as in the case of Intelligence Service). The process of Intelligence appears to day in one discipline which in our opinion will constitute one of the key approach of the development in the beginning of this century: Competitive Intelligence, Competitive Technical intelligence and the French counter part Economic Intelligence.

Many definitions have been given of CI, CTI and  $IE^5$ . Briefly it can be said that these matter deals with the mastering of strategic information to make the country, the institution, the enterprises (and among them SMEs), able to be more reactive, to take better decision, and to understand the relationships between all the partners, competitors, laws, regulations, geopolitics actions, social behaviour or needs, which interact with their environment. On top of the system, the vision of the future, the strategy for the years to come, are the vault of the system. From this political will, a certain number of steps will follow, this is called most of the time the Cycle of Intelligence or the Cycle of Information, etc ...

<sup>&</sup>lt;sup>1</sup> Stevan Dedijer, 1995 SCIP Meritorious Award recipient

Mario Profaca

SCIP Online, http://www.imakenews.com/scip2/e\_article000276855.cfm (December 2004)

<sup>&</sup>lt;sup>2</sup> Stevan Dedijer wrote his first paper on Global Social Intelligence at Dartmouth College in USA in 1972 (from preceding citation).

<sup>&</sup>lt;sup>3</sup> Hommage à Stevan Dedijer

Philippe Clerc

Regards sur l'IE, n°5, pp. 32-39, Sep-Oct 2004, <u>http://www.afdie.org/doc\_maj/text\_reference\_lien15.pdf</u> (December 2004) <sup>4</sup> Jin Zhouying, The Fourth Generation of Technology Foresight and Soft Technology, under publication in Futures Research Quarterly, 2002, USA

Driving Forces for Sustainable Development, Principles of harmony and balance. AI & Society, vol. 16, n°1&2, 2002 (same author)

<sup>&</sup>lt;sup>5</sup> Passer de la représentation du présent à la vision prospective du futur – "Technology Foresight1"

Henri Dou and Jin Zhouying

Humanisme et Entreprise, Dec. 2002

In this paper, we will like to analyzed and present some thoughts about how the Competitive Intelligence framework could be applied in developing countries on one side, but when the reader will go through this paper, we wish to he keeps in mind that the many aspects of this study can be applied in Europe when we are speaking of regionalization and of poles of competitivity. Not really because the economic conditions are the same, but because some of the mechanisms and mental models required to undergo the shift to Competitive Intelligence have many common points.

# 1. The Intellectual Capital

In developing countries, many people complain about the level of education and research. But, if we dig up a little more deeper, we must consider what people consider as strategic in education either in research, and we also must consider if the perception and ROI (return of investment), in the country is well understood. Various studies and books are concerned by internal or external exodus<sup>6</sup> of educated people and research subjects, we will not go to much in this directions, since it is obvious that bringing Western research standards and subjects in developing countries will give back very often exactly the reverse of what was the aim of the decision makers when they develop cooperative programs.

It is more important to speak about the intellectual capital<sup>7</sup> which must be created in the country to facilitate the development. Most of the people to day, agree that the Intellectual Capital (immaterial capital, tacit knowledge on which development could be built) is one of the most important asset of the nations. Then, if we look to the problem this way, one of the key question will be: How to develop in the country, regions, companies enough Intellectual Capital to make this entities "on the move" and to get a better development of the country.

If we take the question this way, it will be seen that very different questions as the classical (what we call the "pensée unique") will be risen, and that the scope of the answers could be very different of the classical economic of political thoughts of the moment.

# 2. What de we want to do

When, globally (and simple things should be often used to be sure that people understand) we look to the mechanism to rise up the standard of a developing country, we can represent it in the following way:

<sup>&</sup>lt;sup>6</sup> Example : "Ministère de la Recherche Scientifique et Technique : <u>www.minrest.gov.cm</u> Strategic program of the Cameroon Government in Science and Technology. <u>http://www.spm.gov.cm/cameroun/recherche.htm</u> (December 2004)

<sup>&</sup>lt;sup>7</sup> Conference "Social and Human Capital in the Knowledge Society: Policy Implications" Brussels – 28-29 October 2002, European Union





During this mechanism, the Intellectual Capital of the country could be concerned with three aspects: the IC can decrease, stay even or increase. If we aim to increase the IC of the country we may consider:

- Export. How can the IC must be increase in the export process? In our opinion, this could be done, step by step by increasing the quality of the goods which are exported, but also by creating new products with more added value from these crude local resources. This means that action should be taken to change the mental model of people (making more money by selling more, without thinking of the limited amount of resources) and also of the knowledge they must gain to be able to take a better advantage of their natural resources.
- Import. The question is the same, how during the import process be able to increase the IC of the Nation? Part of the answer as been indicated in various international studies. Most of the experts pointed out, that there is most of the time a lack of organization (or understanding), to benefit more from the FDI<sup>8</sup> (Foreign Direct Investment). In fact, most of the time, the investors look for a cheap man power, and most of the time also, the political leaders are satisfied with the job development linked to the FDI. But, when you produce, you used technologies, machines, people which understand the production process. This is in this area that a new behaviour must be created. The technology transfer must be made (or at least part of it). This will be one of the best way to increase rapidly the IC of the nation, and then to apply this capital to create new richness.

There are other models of course such as to get from the exports of crude products or natural resources enough money to develop education and standards of leaving, but when we globally look to Africa, to different middle east countries, etc.. It is difficult to admit that this virtuous model is the ideal solution. To reach as fact as possible the above results, to change the mental model of people, and to make the various classes of the decision makers going in the same direction, it seems to us that within the framework of a National Commitment, a national stake, Competitive Intelligence or CTI or EI, could be one of the best solutions<sup>9</sup>. But, before to begin to indicated what such a program could be and how

Jakarta, Hotel Borubodur, June 2004, Indonesia

<sup>&</sup>lt;sup>8</sup> Technological Governance in ASEAN – Failings in Technology Transfer and Domestic Research Jon Sigurdson and Krystina Palonka

Working paper, PO Box 6501, S-113 83 Stockholm, Sweden

<sup>&</sup>lt;sup>9</sup> See <u>http://www.ciworldwide.org</u> First International Symposium on Competitive Intelligence and Technology Watch,

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it could be developed, we still have to examine a few important points in the chain R&D, production and products, markets.

# 3. What makes people moving ?

Let us now examine the chain R&D, production and products, markets. We represented it in the next figure:



Figure 2: The soft technologies, "thinking upstream"

One of the questions which can be asked is the following: if many soft-technologies such as market research, marketing, CRM (customer relationship management), prospect management, advertising, ... are used between production and markets and between markets and customers, what is used prior to R&D. In fact, what make people developing R&D, what makes people doing research and transferring the results to Development? This question is in our opinion extremely important since it concerns the mental model of people, the entrepreneurial spirit, the strategic goals of the country or enterprise, the amount of intellectual capital able to be used in the transfer or strategic choices, etc ...

What we believe, is that the space prior to R&D could be filled by a global system very close of Competitive Intelligence, this is the commitment which should be present in all minds of people which by their position may bring value, knowledge and positive action to the country or to the firms.

This is the reason why we spoke of the magic triangle which can be represented as in the following figure:



Figure 3: The magic triangle

The magic triangle is a global system which relies on three domains upon which Intellectual Capital must be built: Hard technologies such as energy, transports, telecommunication, robotic, electronic ... Soft technologies which will facilitate hard technologies to come up to the markets embedded in various products or services, and new academic models such as cooperative work (platform to built up knowledge), distance learning, continuing education (from vocational school to university and doctorate), innovation ... It is important that in this process all the three aspects should be worked up together. The implications are important, since it means that you can not succeed by working only on one of the summits of the triangle. For instance, if you develop strategic technologies you must, in the same time work on education to transfer the knowledge to industry and also to develop the model of action which should be taken to sell these technologies as new and innovative products.

If all the consequences of such a move are analyzed it can be viewed that classical (we mean by classical the model of technological development or education of the past 20 years) models could not be used any more. New systems which a wider view of the "playground" of the social needs, competition, co-opetition<sup>10</sup>, etc... must be developed in education, business, research and development.

## 4. Recommendations for developing countries

For developing countries, we saw that creating new products from their natural resources is important as well as to benefit more from the FDI (Foreign Direct Investment). But, we believed that a more important point should be to design for these countries a National Competitive Intelligence System which will get together, coordinate, all the wills and actions of people in the three submit of the triangle to aim to a unique objective from which all the development will follow: the creation (or the increase) the intellectual capital of the Nation<sup>11</sup>.

Many countries in the world, to day moved in this direction: India which named a national responsible for Competitive Intelligence, Morocco which develop a strategic information system, Indonesia which begins to develop the framework of such a system, ... other have already show the way such as Korea (exportation 43 millions \$ in 1962 to 143 billions \$ in 1999, GNP of 87 \$ per person in 1962 to 10550

<sup>&</sup>lt;sup>10</sup> Co-opetition, Adam M Brandenburger et Barry J. Nalebuff, Editor Currency Doubleday, New York, USA, 1996

<sup>&</sup>lt;sup>11</sup> Competitive Intelligence, Technology Watch and Regional Development, Henri Dou and Sri Damayanty Manullang, MUC. Editor, Jakarta, December. 2003, ISBN 979-98236-0-9

\$ in 1997), Japan which now develops the third S&T basic plan<sup>12</sup>, China with the Academy of Soft-technologies in Beijing), etc ...

### A ten point specific recommendations:

### A – Policy

- 1. Develop various groups of decisions makers, within a public private framework to set up national strategies in various domains,
- 2. Rise strategic questions on where are we? What do we want to go? and How to get there?
- 3. Do the same at the regional level.
- 4. Ask questions to various experts groups and include their answers into the decision process.

## **B** – Facilities and tools

- 1. Set up a national information system which will take care of the tacit knowledge and expertise of people and institutions.
- 2. Facilitate the access to Internet in a decent velocity in various points of the country.
- 3. Develop national platforms enabling cooperative work between specialists.
- 4. Set up facilities to access free information (for instance patent databases, various other databases, etc ...) and other databases (commercial) such as Factiva, Dialog databases, to feed the experts with relevant information.
- 5. Train the experts to understand the meaning of the information according the strategic orientations of the countries.
- 6. Make relevant comments according the SWOT<sup>13</sup> analysis and transmit them to the right decision makers.

### General recommendation

A more general recommendation concern the consensus. To facilitate the development of most of the regional projects, a general consensus is necessary<sup>14</sup>. This part, which will precede the action is a political matter which should be work out seriously. This recommendation is general, as well for develop or developing countries. Many projects do not work out correctly because of the lack of general agreement or understanding. Explanation, TTP (Tierce Third Party) with relevant and credible data are necessary. Many methods<sup>15</sup> exist to help to set up a policy in this matter. This is part of Competitive Intelligence, the integration of the social concern in the development of regional projects, the socialization, (social lobbying could be the good term) becomes more and more necessary. But, it is also important to deals with relevant local entities. For instance if the autonomy of various entities is given by the Central State, it is obvious that this does not mean that all parts of the region, even the small one could stop all the process. The correct size of the entities with which the discussion will occur should be carefully selected.

In the same time, decreasing the corruption and increasing the democratic control of the funding are also related to the previous recommendation.

## 5. Conclusion

<sup>&</sup>lt;sup>12</sup> French-Japanese Scientific workshops, Tokyo, November 4-5, 2004

The Scientific and Technological policy in Japan. Towards the third "Science and Technology Basic plan", Yuko Harayama, Tohoku University, National Institute of Science and Technology Policy, University evaluation

<sup>&</sup>lt;sup>13</sup> Quick MBA, Introduction to SWOT analysis, <u>http://www.quickmba.com/strategy/swot/</u> (December 2004)

<sup>&</sup>lt;sup>14</sup> Competitive Intelligence and Regional Develoment within the Framework of Indonesian Provincial Autonomy, Henri Dou and Sri Damayanty Manullang, Education for Information, n°22, June 2004

<sup>&</sup>lt;sup>15</sup> Millenium (2000) – The United Nations University, The millenium project, version 1.0 ISBN 0-9657362-2-9 CD-ROM Future Projects, Future Research Methodology. American Council for the United Nations University, 4421 Garrison Street, NW, Washington, D.C. 20016-4055 USA – <u>http://millennium-project.org</u> – Voice & Fax 202-686-5179

Hard Technologies which necessitate a lot of research and development will not allow a developing country to create rapidly an internal potential to increase its GNP. There is a necessity to "push" the development in two other directions: soft technologies and new educational systems.

To move the country or the regions or the enterprises in these direction call for a strong incentive. We believe that Competitive Intelligence as a National stake, is one of the best way to create this incentive. This National Competitive Intelligence system will not cost too much, but it will allow the various administrations, industries, regions, to look at the problems the same way (according the former recommendations), and to consider that cooperation and integration of the tacit knowledge of people in project development will help to set up the best conditions of success. In the same time, this will strengthen the energies to the same goal, increase the global potential of the country and among it, to create<sup>16</sup> the conditions to develop the immaterial capital one of the best recognized asset.

<sup>&</sup>lt;sup>16</sup> Knowledge is not found, knowledge must be created. This is why the process to create knowledge is more and more important . It is not worthwhile to gather information if you do not understand it. This is also why experts are important as well as cooperative work on specialized Internet platforms.