Competitive intelligence: Crossed views on four international models

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Résumé :  
L’objectif de ce papier est de mettre en lumière les pratiques publiques de l'intelligence économique à l’échelle internationale. Une analyse comparative, basée sur une matrice de rapprochement portant sur cinq critères, est établie pour montrer les spécificités de chaque système. Cette analyse comparative a été réalisée à partir d’une revue de la littérature approfondie. Les pays choisis sont des cas d'école dans le monde entier et ont inspiré de nombreux chercheurs et praticiens. L'étude nous a permis de relever les facteurs clés de succès des pays étudiés, non seulement en termes de pratique d’intelligence économique mais aussi en termes de réussite économique. Nous présentons d'abord un bref aperçu de la discipline de l'intelligence économique avant de présenter et de discuter les résultats de l'analyse comparative.

Abstract: The purpose of this paper is to highlight the public practices of international competitive intelligence. A comparative analysis, based on a reconciliation matrix relating to five criteria, is drawn up to show the specificities of each system. This comparative analysis was conducted through an extensive literature review. The countries chosen are school cases from around the world and have inspired many researchers and practitioners. The study allowed us to raise the key success factors of the countries studied, not only in terms of CI practice but also in terms of economic success. First, we present a brief overview of the competitive intelligence discipline before presenting and discussing the results of the comparative analysis.

Keywords: Competitive intelligence, strategic information, comparative analysis, international models.
INTRODUCTION

The practice of competitive intelligence, which we will refer to throughout this paper as "CI", differs from one nation to another. If its methods are known and shared, they are deployed in a heterogeneous way by countries. The CI posture (offensive, defensive or a combination of both) adopted by each country depends on its information culture, its degree of openness, its political system, its economic model and its strategic objectives. These are the aspects that have the most influence on the CI system, which is only the reflection of the strategic positioning on an increasingly competitive world market. From this point of view, globalization plays an important role in determining priorities in terms of research and exploitation of strategic information.

In this paper, we carry out a comparative study of four public CI models: the German model, the Anglo-Saxon (American) model, the Japanese model and the French model. We attempt to draw the main characteristics as well as strengths and weaknesses while presenting the implemented mechanisms that are making the approach successful. We do not cite all the organizations and institutions involved, but we mainly focus on the most important ones. In addition, this study covers a research gap in this area. Indeed, very few authors have been interested in comparing international competitive intelligence models.

We begin with the German model, one of the most successful, known for its rapid adaptation to the needs of economic development. We then move on to the American model, which considers information to be a tradable material good. We then present the Japanese model, marked by the anchoring of a collective culture of information, to finish with the French model, which is highly centralized and leans more towards internal development.

1. Competitive intelligence: What is it?

1.1. Historical development

Competitive intelligence is the result of a long process of maturation. Although apprehended as a modern and modernist concept, its history goes back to the time of Sun TZU. Indeed, it inspired military intelligence which was built around the principles of external information control, protection of information about oneself, and influence activities. Modern authors have adapted Sun TZU's advice to the context of the business world. Thus, competition monitoring, the study of competitors characteristics, strategic and anticipatory analysis, are all concepts and methods that have become commonly used in managerial decision-making (Mallowan, 2012).
The practice also has origins in the Republic of Venice, where its ancestor - commercial intelligence - was the source of great economic success for an entity that had no natural resources and no production, but which managed and constantly improved its supply chain (Delbecque & Pardini, 2008). The Republic of Venice was the center of the world economy at that time, but its success did not last, as it was unable to adapt to the major changes that occurred in the middle of the fifteenth century, with the redirection of trade to the new world and the modification of maritime routes (Delbecque & Pardini, 2008). During the industrial revolutions, a strategic value was attributed to economic information (Encyclopædia Universalis, 2019). Business banks began to occupy an increasingly important place and develop efficient information networks. During the second half of the 19th century, the need for organization and rationalization of structures, hierarchical links and decision-making methods gave even more value to information. Commercial intelligence will acquire a capital importance particularly in Germany and Japan, where it is necessary for the young companies to have a strong strategic sense in order to succeed in the development (Delbecque & Pardini, 2008). At the end of the Second World War, CI experienced a phenomenal boom in Japan. The telex (then a fashionable invention) was installed in Japanese consulates and embassies in order to gather information on world market trends and on the technological advances of the time. A centralized system was set up, fed by the documents sent back by the diplomatic staff, and where the information received was processed in order to exploit it in the orientation of the Japanese economy towards high added value sectors (Alaoui, 2009). In the Anglo-Saxon world, CI was integrated into teaching programs in the 1980s under the impetus of Michael Porter (Harbulot & Baumard, 1997). In addition, Bill Clinton played a key role in the development of the practice. From the beginning of his mandate in 1992, the former American president set up a security policy, with the help of young retirees from the intelligence services who have joined the company. Closely linked to the power strategy of the United States and equipped with influential tools, Clinton's CI contributed to a spectacular development, at all levels (Alaoui, 2009).

1.2. Objectives and main axes

Generally, organizations adopt a CI approach to:

- Monitor market trends and detect opportunities and threats;
Process and analyze data/information from the environment to create knowledge about competitors, customers, and suppliers and to anticipate changes in the environment as well as political changes;

- Strengthen the competitiveness of the organization;
- Provide useful information for strategic decision making...(Benassi & al. 2015)

Moreover, this approach can only succeed if it is based on three pillars namely: strategic watch, information protection and influence. With an anticipatory vocation, **strategic watch** aims to have a permanent eye on the subjects/information that can impact the organization, in the long term. It can also be very useful to give a warning for threats and a sign for opportunities (*weak signals*), to follow the competition and to support the strategic planning (Afnor Association, 1998). As for the **protection of information**, it is no longer a subject of divergence. Organizations are more than ever, aware that investing in information security is an obligation and not a luxury. For Fontanel, "economic security aims to ensure the harmonious maintenance of a country's economic activity in the face of external attacks". (Fontanel, 2016, p.19). Grigoreva and Garifova, 2015 also consider that economic security is part of the national security policy of a State, and that there is no economic security in the absence of a typology of internal and external threats to the economy, while putting forward that the main factors of economic security of a country are its geographical positioning, its natural resources, its industrial and agricultural potential, etc. (Grigoreva & Garifova, 2015). **Influence** is the third and final pillar. We see it more as an objective than a component. Strategic watch and information protection assets are at the service of influence, which consists of pushing stakeholders to change their paradigm and vision of things (Juillet & Racouchot, 2012). It is a question of getting the person we wish to influence to adhere to our prism by subtle means (*soft power, public diplomacy*) or more aggressive means (destabilization, discredit). It is not a question of manipulating the target, but of getting him to change his fundamentals through his own will.

II. Methodology

We used a literature review to develop a reconciliation matrix between the four models studied. The choice of these models is related:

- To the fact that they are case studies from all over the world;
- To the need to ensure diversity and representativeness in the comparison, hence the choice of the Germanic, Japanese, Anglo-Saxon and French models.
We based our work on comparative criteria that allow us to give the most exhaustive picture possible of the way each model operates. The characteristics give us an idea of the specificities and the general orientation of each model; the institutional framework informs us about the existence of a written policy (or strategy) or not; the level of centralization informs us about the centralized or decentralized character of the model; finally, the posture informs us about the nature of the model, in an offensive or defensive sense, or both.

III. The international competitive intelligence models

In the following, we present the results of our comparative analysis of the four selected models. We first based our analysis on a comparison in terms of strategy, and then on a comparison in terms of CI systems to conceive a matrix of similarities according to characteristics, institutional framework, level of centralization, information sharing, and posture.

3.1. The German model: A system based on leadership and coordination

The political system of the Federal Republic of Germany is polycentric, based on partnership federalism that has two main characteristics: the balance between autonomy and competition of the regional states "Länder" and the sharing of competences between the federal government "Bund" and the Länder. This partnership spirit has a manifestation in the CI system, which is not based on a strategy defined and formalized by the federal-state, but rather on a principle of impetus and coordination. Indeed, the federal-state encourages and coordinates the initiatives taken by the regional states on the one hand and the private actors on the other (Delbecque & Pardini, 2008). All the information flows go up and converge towards the Bund, thus creating a decision-making synergy between the different actors (Groff, 2018). We can say that this is a bottom-up policy advocating a participatory approach.

3.1.1. The German competitive intelligence system

Four government agencies are at the heart of the German CI system, which focuses on competitiveness, economic security and technological development.

i. The Federal Foreign Office “Auswaertiges Amt”

The Federal Foreign Office collects economic information on foreign markets through its embassies. Their intelligence tasks are primarily to provide information on the economy and on businesses of interest to the federal and state governments, to support German companies in the various countries and to promote bilateral trade (Auswaertiges Amt, 2019).
Germany currently has 227 representations abroad, all of which work to promote German economic interests (Auswärtiges Amt, 2019).

ii. Germany Trade and Invest “GTAI”

As a foreign trade agency, the GTAI provides German companies with all the economic information they need to access foreign markets. In the area of foreign investment attraction, the GTAI makes use of its good sector knowledge in prospecting and advising foreign investors. It has fifteen foreign offices, six in Asia, five in America, three in Europe, and one in Australia (Gtai, 2019).

iii. German Chambers of Commerce Abroad “Deutsche Auslands Handels Kammer”

The "AHK" chambers of commerce abroad advise, support, and represent German companies wishing to expand their international business. The 120-year-old AHKs are an important source of information for German companies and are present at more than 140 locations in 92 countries, representing the business interests of some 51,000 companies worldwide (Ahk, 2019).


Despite its mission to preserve the vitality and strengthen the innovative capacity of SMEs (« Programme d’action “Zukunft Mittelstand” (Avenir PME) » 2015), the BMWi carries out foreign trade support tasks in cooperation with the AHK, the foreign representations, and the GTAI. Thus, the ministry supports SMEs in the penetration of new markets abroad, particularly through the program for the prospection of new markets (Federal Ministry of Economics and Energy, 2019). The BMWi also advocates the modernization of trade defense instruments for German manufacturing industries (Federal Ministry of Economics and Energy, 2019).

3.2. The American model: A pragmatic and integrated approach

American style CI is a true reflection of the country's purely liberal culture and foreign policy. "Competitive Intelligence" is the term for the practice in the United States and the Anglo-Saxon world. It is mainly focused on monitoring competitors and is seen as an adaptive approach to the perpetual evolution of the market and the industrial world (Murphy, 2005; Sawka, 1996; Ben sassi & al. 2015). The Americans have long understood that globalization has two facets, the first presenting unprecedented advantages and the second presenting major challenges that must be taken into account.
This is why their CI policy is based on an integrated approach involving the entire intelligence community and federal government structures (Delbecque & Pardini, 2008). Defense of economic interests, control of information, lobbying, and mobilization of competencies are conditions for the approach’s success (Dhaoui, 2008). The federal government supports companies on the domestic market and an international scale, allowing them to acquire competitive advantages, through agencies specialized in the collection of strategic information (Faracha & Qasdi, 2015).

3.2.1. The American competitive intelligence system

Research and development are important components of U.S. CI policy. This can be explained by the United States' desire to remain in the race of technical progress in a context marked by increasingly tough competition (China, Japan, and Korea) (Office for science & technology of the embassy of France in the United States, 2018). The state network of intelligence agencies includes countless structures that are, more or less, federated by the Office of the Director of National Intelligence. Here are some of them.

i. The Office of the Director of National Intelligence "ODNI"

ODNI's primary mission is to unite the Intelligence Community (IC) ¹ around an integrated intelligence system by providing the most relevant and reliable intelligence possible. This means for the agency to operate effectively as a single body for synchronized information gathering, analysis, and counterintelligence. This integration enables the government to make informed decisions (Office of the Director of National Intelligence, 2019).

ii. The Department of Commerce "DC"

The United States is among the most public data-producing nations. More than 30 million U.S. businesses, 325 million citizens, and 93,000 state and local governments rely on the department's data to make informed decisions. The information produced shapes fiscal and monetary policy and operational decisions to improve the nation's economic and social conditions (U.S. Department Of Commerce, 2019).

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¹ The Intelligence Community (IC) is a federation of government agencies and bodies under the executive branch (17 organizations) working independently or in close collaboration to conduct intelligence activities necessary to conduct foreign relations and protect the nation's national security.
iii. The Bureau of Intelligence and Research "BIR"

The primary mission of the BIR is to use intelligence in the service of U.S. diplomacy. Drawing on a variety of information sources, it provides independent, value-added analysis of events to State Department decision-makers, ensures that intelligence activities support foreign and national security policy, and serves as the focal point for all matters relating to the review of counterintelligence activities (Bureau of Intelligence and Research (BIR), 2019).

iv. The Advocacy Center

Reporting to the International Trade Administration (ITA), the Advocacy Center coordinates government agency advocacy efforts on behalf of U.S. exporters bidding on public contracts with foreign governments and government agencies. It works closely with the domestic network of export assistance centers and with trade offices at U.S. diplomatic missions abroad (ITA, 2019). Through its actions, the Advocacy Center gives U.S. products and services the best chance to compete internationally (ITA, 2019).

3.3. The Japanese model: A system based on a culture of information sharing

The Japanese CI model is based on a collective and offensive approach to information with two main characteristics: the intensive use of information for industrial and economic development, and the dynamic preservation of strategic information, distinguishing between what must remain secret and what can be shared (Dhaoui, 2008). Communicating, connecting, informing, exchanging, and sharing are the keywords of the Japanese information policy, which is manifested in particular by the intensive use of mobile telecommunication, which shows, as Sabouret puts it, that: "the Japanese work in a spirit of both technological and social vision: they have always sought to connect individuals. It is a sociological component, a quasi-existential obsession. As soon as technology allows the mass of the population to "connect", success is almost assured for it. Some people will undoubtedly speak of Japanese men as "homo-technophiles". (Sabouret, 2016, p.30).

3.3.1. The Japanese competitive intelligence system

In Japan, CI is practiced everywhere and by everyone. State, companies, universities, and associations are all engaged in a permanent quest for strategic information. Here we are interested in the state system.

i. The Japan External Trade Organization "JETRO"
In addition to 46 national offices, JETRO has 74 overseas offices in 54 countries. Its activities are dedicated to Japanese companies and consist of:

- The promotion of trade and business between Japan and the rest of the world;
- The production of specialized information: A range of specialized information to meet the needs of internationally engaged companies (JETRO Business News (electronic journal received by emailing), AREA REPORTS (online reports) JETRO Global Trade and Investment Report (annual report) (Japan External Trade Organization, 2019);
- The production of knowledge for international cooperation (Institute of Developing Economies, 2019).

ii. The Ministry of Economy, Trade and Industry "METI"

In partnership with the private sector, METI provides companies investing in Japan with information on Japanese and international industries. For example, the government's advisor system offers international companies planning major investments in the country the opportunity to consult directly with senior officials for personalized advice (Meti, 2019). It has regional offices throughout the country and specialized agencies in the ministry's fields. Information protection is also one of METI's major concerns. The country's technological development and its goal of becoming a world leader in artificial intelligence, the internet of things, and big data forced it to adopt the Act on the Protection of Personal Information in 2005, imposing strict information management provisions on companies. The established guidelines are accompanied by awareness-raising activities (Meti, 2019). Also, the Japan Patent Office contributes to the development of IP policies at the international level and provides support services and customized information to interested parties (large corporations, SMEs, individuals, academics, etc.). It provides access to approximately 80.4 million official journals dealing with all fields related to intellectual property (Japan Patent Office, 2019).

iii. The Japan Chamber of Commerce and Industry "JCCI"

In addition to its representative role, the JCCI contributes to the dissemination of information on government policies and programs and the promotion of projects on a national scale. It particularly encourages innovations not only in the technological field but also in the commercial, administrative and social fields (The Japan Chamber of Commerce and Industry, 2019).
In addition to the work of promoting SMEs domestically, the CCIs produce economic information to support them in their international expansion, including market intelligence and information on the business climate in foreign countries' fields (The Japan Chamber of Commerce and Industry, 2019). JCCI is constantly working to improve awareness among its targets and the general public through public relations initiatives to keep all stakeholders informed about projects on behalf of member companies and their local communities' fields (The Japan Chamber of Commerce and Industry, 2019).

3.4. The French model: The Public Policy of Competitive intelligence "PPIE"

It seems that France has been more interested in the conceptualization of CI than in its operationalization since its emergence in the country. The proof is in the multiple changes of name and administrative form that illustrate the difficulty of this practice to find the adequate positioning within the State apparatus. From the Martre Report to the current institutional form (more than twenty years of official existence). The French CI model has undergone a protean institutional development (Portail de l’IE, 2019).

Unlike other systems, French CI policy is top-down (deployment at the territorial level of a strategy developed at the central level). This can be explained by the fact that France is a unitary state. The PPIE is a component of the economic policy and has as its goal to participate in growth as well as in the preservation and creation of jobs. It is articulated around three main axes: Strategic intelligence, support for competitiveness, and economic security. It is declined on three levels:

- At the central level through the public administrations;
- At the regional level under the aegis of the regional prefects who steer the territorial CI action of the various departments under their authority (La préfecture et les services de l’État en région Centre-Val de Loire, 2019);
- At the international level under the responsibility of the ambassadors (Le portail des ministères économiques et financiers, 2019).

3.4.1. The French competitive intelligence system

i. The Strategic Information and Economic Security Service "SISSE"

The SISSE is a service with national competence. It is responsible for developing and implementing public policy for the protection and promotion of France's economic, industrial,
and scientific interests, and for evaluating its effectiveness, in consultation with the General Secretariat for National Defense and Security and the ministries concerned. The department's responsibilities were later extended to include the coordination of foreign investment commitments in France made by certain companies. Thus, the SISSE is entrusted with missions related to strategic information and economic security.

ii. **The General Directorate of Internal Security "DGSI"**

Reporting to the Ministry of the Interior, the DGSI contributes to the protection of France's economic, scientific and technological assets through its economic counter-intelligence activities. It carries out awareness-raising actions and publishes alerts to warn companies of unfair practices of which they may be victims (the economic interference flash) (Chambre de Commerce et d’Industrie Auvergne-Rhône-Alpes region, 2017).

iii. **The General Directorate of Companies "DGE"**

Placed under the authority of the Ministry of Economy and Finance, the main mission of the DGE is to develop the competitiveness of companies in the industry and services sectors. This involves supporting and disseminating innovation as well as anticipating economic changes, to achieve growth and create jobs (Légifrance, 2019).

The DGE's work is based on a close relationship with the companies themselves and their representatives (professional organizations and federations, consular chambers, support networks, etc.). This knowledge of companies enables them to adapt their actions (Direction Générale des Entreprises, 2019).

iv. **The Ministry of Europe and Foreign Affairs**

The promotion of French companies on foreign markets and the attractiveness of France abroad are among the priorities of this ministry. The Ministry of Europe and Foreign Affairs relies on a large network of embassies and consulates abroad to develop its economic diplomacy policy. This network is in permanent contact with the central administration. France is the third most represented country in the world abroad, thus exercising one of the most proven *soft power* policies (Ministère de l’Europe et des Affaires Etrangères, 2019).
The Ministry's Center for Analysis, Forecasting, and Strategy provides information that is not systematically collected through traditional channels. Also, in terms of economic diplomacy, two institutions under the supervision of the Ministry deserve to be mentioned:

- **Business France**: which supports French companies in their export activities and their implementation abroad (Business France, 2019);
- **Atout France**: which supports tourism professionals in terms of tourism production thanks to an in-depth monitoring and analysis system (Ministère de l’Europe et des Affaires Étrangères, 2019).

### IV. Synthesis

We believe that there is no perfect model but models that have succeeded because they have been able to adapt and respond to specific needs. The German system is mainly offensive with an orientation towards technological development and the internationalization of companies, information is at the service of companies and communication is fluid for a permanent gain in market share. However, the defensive side needs to be reinforced, the example of the industrial scandal that has been nicknamed "DieselGate" is quite telling. The Japanese system is based on a traditional information culture that has been successful since the Second World War. Japan has adopted CI as a means of economic development with an industrial and technological orientation. However, the country has become aware of the shortcomings of its system on the defensive side and has implemented a dedicated cybersecurity strategy since 2015. The American system is rather integrated and does not neglect any component of CI, it is turned towards international conquest and the defense of economic interests with a great interest in competitiveness and innovation. The intelligence culture is dominant. As for the French system, it is considered opaque, with broad missions that can overlap between several organizations. The French public CI system is also perceived as compartmentalized, with little interaction with companies (Dameron, 2018). However, France is the first country to have adopted a public policy dedicated to CI, which is not the case for the other three countries. Finally, some common points can be raised between the models that have resulted, namely: low centralization, informational gateways, the place of CI activities in the highest levels of the State, and the definition of the nation's priorities and strategic objectives first. We, therefore, draw up below our reconciliation matrix of the four models studied:
### Table 1: Reconciliation matrix of the four models

<table>
<thead>
<tr>
<th>Features</th>
<th>Institutional framework</th>
<th>Level of centralization</th>
<th>Information sharing</th>
<th>Posture</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Germany</strong></td>
<td>Principle of impulse and coordination.</td>
<td>No public policy on CI.</td>
<td>Low.</td>
<td>Mainly offensive.</td>
</tr>
<tr>
<td></td>
<td>Decision-making synergy between regional states, the federal government, industrial groups, banks and companies.</td>
<td>Bottom-up system. Liberalism based on inter-regional competition.</td>
<td>Sharing of information between all spheres.</td>
<td>International conquest.</td>
</tr>
<tr>
<td></td>
<td>Information flows converging towards the federal state.</td>
<td>Competition between territories.</td>
<td></td>
<td>Information culture.</td>
</tr>
<tr>
<td></td>
<td>Device focused on competitiveness, economic security and technological development.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Device focused on the defense of economic interests, information control, competitiveness, research and development, and lobbying.</td>
<td>Competition between federal states.</td>
<td>Informational bridges between the State and the companies. Strong involvement of the White House. Information considered as a material good.</td>
<td>Search for competitive advantages.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>International conquest.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Intelligence culture.</td>
</tr>
<tr>
<td>Country</td>
<td>Approach</td>
<td>CI Policy</td>
<td>Level</td>
<td>Information System</td>
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</tbody>
</table>
Comment on the table: The main similarity between the first three models of the matrix is the non-existence of a written (formalized) competitive intelligence strategy or policy. This has not stopped these countries from being pioneers in the field.

It should be noted that competing models such as that of the United States and Japan represent a major similarity: the race for technology and research & development.

It should also be noted that the French model is characterized by a high level of centralization (unitary state VS federal state), by a top-down system and a rather defensive posture. In contrast, the German, Japanese and Anglo-Saxon models are bottom-up oriented.

Finally, the information culture is a common point between the first three models, while the last model is rather closed and does not give importance to information sharing.
Conclusion

This comparative study of international public CI models has allowed us to raise the key success factors of the countries studied, not only in terms of CI practice but also in terms of economic success.

Each nation has its own vision of CI and practices it according to its own strategic orientations and changes that may arise. Furthermore, we believe that there is no perfect model, but rather models that have been successful because they have been able to adapt and respond to specific needs.

The adoption of a clear CI policy (without necessarily being formalized) contributes considerably to economic development, and the models presented are school cases as we have previously mentioned. However, each country has its specificities and its orientations in terms of CI. The information culture plays a crucial role in the success of the approach.

The study of these models also shows that globalization plays an important role and poses multiple challenges, including access to relevant information. Moreover, the role of the State is essential in the encouragement of voluntary initiatives of development of competitive intelligence actions.
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