HOW TO IMPLEMENT COMPETITIVE INTELLIGENCE IN SMES?

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Abstract:

Introducing Competitive Intelligence (CI) in Small-and-Medium-sized Entreprises (Sme) is a challenge. Different skills have to be coordinated: questionning, looking for, treating, distributing and protecting. Main functions also need to be coordinated: getting informed (regular watching and ad hoc looking for), influencing the environment and protecting material and immaterial resources.

How to start introducing Ci in a Sme? With an organizational information management approach? With a personal skills approach? We investigate the personal skills approach.
We relate short case studies and present the five most common starting point to implement Competitive Intelligence: questionning skills, protection skills, treating skills, distribution skills and looking for skills. This presentation will show that there is no unique way to introduce Ci in a Sme. The approach will be chosen in context: management expectations, information management, information overlaod, information literacy, etc. Nevertheless, the looking for approach has rather good results in an Sme, as long as it does not start with environmental watching. A methodology and a model of CI introduction in Smes with a looking for approach will be presented.

Keywords:

competitive intelligence, implementation, small-and-medium-sized entreprises, information seeking, Acrie model

1. Introduction

Introducing Competitive Intelligence (CI) in Small-and-Medium-sized Entreprises (Sme) is a challenge. Different skills have to be coordinated within the enterprise: questionning, looking for, treating, distributing and protecting. Main functions also need to be coordinated: getting informed (ongoing watching and project-based seeking tasks), influencing the environment and protecting material and immaterial resources.

How to start introducing CI in a Sme? With an organizational information management approach? With a personal skills approach? We investigate the personal skills approach.

What can we expect after the CI introduction in a Sme? How long does it take to introduce CI in a Sme? Who are the first persons to work with on CI implementation? What can we expect over the first two years? These topics will be shortly presented.

2. Objectives

The authors of this article strongly beleive in a good return on investment in a Sme that implements CI effectively. Unfortunately, since the 90', the vast majority of Smes throughout the world have rather neglected CI. Some of them have tried and only a few of them have successfuly developed a profitable CI activity. First, this article aims at showing that the classic way to implement CI in a Sme-namely by implementing ongoing environment watching-has shown its very limited positive influence. Second, this article also aims at presenting an alternative to the ongoing environmental watching approach, with a project-based method and model.

3. Methodology

On the one hand, a review of literature has been carried out, mainly concerning Competitive Intelligence explicitely. Scientific articles and books selected were written by CI academics and professionals. Mosts authors taken as a reference in this article are french. Some CI users guides have also been reviewed, from the public and private sectors.

On the other hand, the authors have a total of more than twenty years of experience within companies, and Smes in particular. Their expertise allows to draw the attention on various considerations.

The authors try and explain their angle of attack, their beliefs, and their douts too. They strongly believe the current data management model is out of breath. It does not answer to the overload of data we experience in the 21st century. Adding data in the system often has a disturbing effect and does not make it easier to understand the environment. Classic approaches of focusing on a few topics, analysing the data that is conveniently available for free and then alert the leader of the puzzling finding, are not suggested here.

They question the progress paradigm related to information (Frion, 2009b). In other words, with information overload, it means that information is not always such a « good thing » as it used to be when we did not experienced an information explosion and infoxication situation. They believe we need a new model of information management for the 21st century.

4. Observations, proposals and results

4.1. General observations

Throughout the world, we have noticed various ways to implement CI in companies. Many case studies are based on large firms.For instance:
– with tools (Dou);
– with organization of technology watching (Jakobiak), etc.;
– with methods in a specific company: managerial level methods (Lesca) or non-managerial level methods;
– with competencies-tasks oriented (Frion);

- with CI e-learning (Lesca);
- with global approach, often from the political sciences (Harbulot) or military intelligence (Pichot-Duclos);
- with diagnostic (Besson & Possin) or diagnostic tool (Brouard);
- with training in a collective session for a group of companies as part of a regional program (lorraine);
- with awareness campaigns (conferences and workshops) to arouse curiosity and interest, etc.

Some special issues are also put forward: protection and economic war (Harbulot), lobbying (Clamen), internet searching (Samier), knowledge management (Prax), etc.

Each of these approach bears its own advantges and drawbacks, can depend on the context, and are not interchangeable without a high risk of failure. This article does not aim at comparing them. It rather focus on the experiences of the authors with Smes.

Here is a list of very noticable topics concerning CI implementation in Smes:
- CI case studies generaly present companies with hundreds of persons in which structures, process, information management, chain of command, etc. are rather different and inapropriate in most cases in Smes;
- CI is defined by more than one hundred definitions identified by the authors, mostly in relation with the large companies' main concerns, political sciences or incantations rather than pragmatic advices;
- CI is sometimes presented as an ongoing process-oriented view (Dou, Jakobiak) and very rarely as project-based CI (Prescott, Frion). Smes are not familiar with setting up huge organization in order to capture a deluge of information;
- CI individual competences and skills, and cognitive styles of Smes' managers are often ignored (Frion 2009a). Information is considered as the progress paradigm, stating that more information is better, leaving appart the information overload reality;
- CI is usually using information for itself, as an object, in an information-refinery process model or as a process (Guilhon), rather than as a problem solving tool (Bulinge) or as a testing and creative anticipatory measures;
- CI is often presented as a strategic tool but most of the times CI methods restrict to documents management, internet searching and other operational tasks;
- CI is usually presented with no reference to the full range of ethos, methods, theory and metatheory (Bates). In other words, mosts academics and professionals do not tell what they believe in and ignore to specify their angle of attack.

For all these main reasons, implementations in Smes are disconnected from Smes realities, aborted or abandoned. What could be the alternatives to implement CI in Smes?

First, let's specify in what ways Smes are different from large companies.
- Authors have experienced that medium-sized companies with hundreds of people behave with lots of structures and processes and to that respect, they look like large firms. On the contrary, small companies ranging from a few people to a few tens of people avoid structuring a lot of their activities and often give priority to spontaneous responsiveness, skills, experience, talent and ingenuity;
- Small firms pretend having no time to waste, no liking for long strategic meetings. They tend to prefer short actions, testing rather than planning, and reactively respond to situations;
- the number of knowledge workers in the office is often low compared to the number of people in the workshop. Therefore, the number of people is very limited to a few people that can contribute to CI a very limited amount of time and efforts. Recruiting a dedicated person for CI is usually simply out of the question. CI tasks such as: scanning, browsing, phoning, computing, capitalizing, internet searching, interviewing, etc. will often be replaced by encountering, serendipity, networking, and other informal activities;
- allocated ressources to CI are very limited to a few hours per person a week (at best), with no extra budget.

4.2. Observations over implementing CI by impouving individual skills

They are five main skills to run a CI activity: strategic questioning, information seeking, information treating, information distribution, and information protection. Here is a short presentations of case studies for each option.

- Starting by trying to improuve questioning skills should theorically be the first step to take to implement CI. Experience in Smes prevent us from suggesting this option first. Unfortunately, strategy being very complex, various considerations have to be taken into account. Many people showed us they fear to put up questions, do not want to argue with their boss and fear to loose their job if their contribution to strategy analysis and strategy formulation is incompatible with the view of the president. Starting with the strategic questioning often ends up nowhere because so many elements intervene and interfere. Environment analysis, weakness and strenghts, values, etc. are typically topics that most Smes do not feel confident to evaluate. CI is therefore not implemented and may even be rejected in the future (not to reproduce this painfull experience). Starting with strategic questioning rarely improuves the strategic questioning, increases the information distribution for a short period, fairly improuves the seeking skills, and sometimes suggests protection skills.

- Starting by trying to improuve treatment skills is probably the option most used. Browsing, scanning existing and available information is very tempting. Printing the web is not a solution. Unfortunatelly this industrial-age process will bring many disturbances and anxiety. The alert mode raise fuzzy concerns to the president who is often puzzled and annoyed to receive non-actionable information. « What are we going to do with all this information? » Many people confuse information and expertise. In most cases, this feeling does not help to inprouve the strategic questioning and rather contributes to separate the management from the CI activities. Information treating is an laborious administrative mode to process information which is often uncompatible with irregular and creative activities in Smes. Starting with information treating does not improuve the strategic questioning, increases the information distribution, limits the seeking skills, ignores the protection skills and inevitably increases the treatment.

- Starting by trying to improuve distribution skill is very common. People complain about the lack of communication and about deficient communication. If communicating more should be better, in fact the information which is transfered rather than communicated is often bringing anxiety, meetings and reporting. These situations are not what Smes expect first. Starting with information distribution does not improuve the strategic questioning, increases the information treating, improuves the seeking skills, and refutes the protection skills.

- Starting by trying to improuve protection skills will frequently confront two basic categories of behaviours: the ones that care about protection and the ones who simply don't. This approach will be successful just after a painful incident. Unfortunately, without a recent problem of security most people simply see in information protection as a means to slow down the working tasks with unclear protective considerations. Protection, and in particular computing protection is a very modern issue. We deplore the fact that it is regularly not taken into consideration in   CI implementation. For instance, fighting against misinformation should improuve the company's hability to question itself, inform and counter-inform. Starting with protection skills improuve the strategic questioning, limits the information distribution, but tends not to improuve the seeking skills.

- Starting by trying to improuve seeking skills is our suggestion. Searching existing and not-existing information has to be deferentiated from treating. Treating is concerned about the existing and often freely available information on the internet. Searching skills are more to do with ingineering, inventing a way to create and test information for new or future situations. Starting with information searching will automatiquely, quicky and simply improuve the strategic questioning, refresh the information distribution activities, limits the laborious treating skills, and at the end of the day, will favorably prepare the firm to improuve the protection skills.

During the information-seeking period, it is an important issue that the CI people discuss their points of views concerning information. Some people naturally accept any information, some tolerate it, some avoid it and some people (mostly small firms leaders) methodologically refuse it from the start. Let's investigate what are these four information approach. The Sme will need to be clear about the approach it chooses.

4.3. Observations of information philosophy: from information acceptance towards information refusal?

A familiar saying states that "Wealth does no harm". It is clear that some authors seem to implicitely diverge from this idea. Information wealth can harm and it is sometimes claimed that the quantity of information is not necessarily positively related to quality. A four-level spectrum is suggested (Frion, 2009b):

– Information acceptance;
– Information tolerance;
– Information avoidance;
– and information refusaI.

Going through these four levels will provide us with some specific criteria to choose appropriate methods, tasks and outputs.

- Information acceptance. Philosophical statement which leads to an implicite range of tasks. Enjoyable behaviour for which information appears as being fully considered as a necessary (raw) material. Liking for information. Risk aversion suggests to access and scan available information to lower the risks. Information exists by itself as a starting point and is available. Information is a given, seperated from the question. Quantitative approach: more information is better. Information will be filtered and refined. Command formulations are sometimes of this king: "Give me all you have on this topic", "I want a full statement', "I want to know everything", "Every little bit of information counts", "Let me know as soon as you can", "I want a real-time update on this". All theses sentences reveal that information is taken as a raw material, which has to be refined throught a separate process that just collecting it. Information acceptance is an open door to scanning and watching structures, rathier than projects-based approaches. Information searching, internet inquiring, data-base quering, text-mining, data-mining, environmental scanning, technical watching, etc. mainly belong to the information acceptance. Pre-conceived ideas are considered as not professional. This is a system-oriented approach. The information acceptance moto could be: "Information first".

- Information tolerance. Behaviour for which information is welcome for want of anything better. Most information acceptance caracteristics are present except the liking for information. Information seeking, serendipity, information filtering, technical watch browsing, collective intelligence, « hypothético-déductive », sense-saking mainly belong to the information tolerance. Regret aversion is not as strong as with information acceptance. This is a user-oriented approch: there is no need to give a lot of information to his boss because he will not read it. Factual information are considered as neutral question [Just-give-me-the-facts attitude].Common discussions are sometimes of this king: "We never know", "Who knows", "In case it might help", "For me information", "To whom it may concern", etc. Information pull is prefered to information push, in a concern not to miss anything important.

- Information avoidance. Protective belief. Information seeking in context prevents a person to look for some available information fearing to dislike what could be found. Tendency to avoid disconforting information. Information is not blind trusted. Information strategic looking for multi-stage methods, inductive approaches, mainly belong to the information avoidance. There is no regret not to know some information as much as the satisfaction to concentrate on some aspects of our curiosity. This is not so much a risk aversion rather than a risk taking belief. Relation to information delivery will be concemed with sentences like: "only give me the saliant points". "What is new". "Give me a one page memo on this". It is a qualitative approach. Information avoidance is naturally reluctant to structure a heavy organization to scan and watch information on the long run, and rather suggests projects-based appoaches.

- Information refusal (Frion, 2008). Methodological statement in reaction to information overload and to call the progress paradigm into question. Information availability is not the point. Information push is not accepted as an information ideology. Constructivist behaviour for which the information is not the cornerstone of the task. Actual context and expectations formulate questions and test the environment, using information to fill information gaps. Problem formulation is refined along the way, as well as information lacks and needs. Risk taking is assumed and information is tailored made, sometimes largely invented. Cognitive process within which less information is better in order to give priority to visions, wants, bounded rationality, etc. Cognitve bias and emotions are taken into account and must be investigated and "tamed" a little bit, before letting the information getting into the arena. No explicit methodological information refusaI has been published in international scientific literature so far. Sentences we

can hear with this attitude are as such: "Hang on a minute", "I need to take a step back", "I need a break", "I need to defocus". People valu more the strategic aspects of their projects rather than the available information. Information is of no use for itself. The information refusal moto could be: "purpose first".

In a Sme, the leader is often in a methodological information refular state and also in an information avoidance. Clearly, Smes can not afford to be in a general information acceptance situation.

4.4. Proposals

A new model to implement CI in Smes

Starting from the top, first we try to convince the leader of the company that a method is necessary. A commercial-oriented or marketing-oriented project is usually an attractive choice. A project necessiting to take a decision, to choose a positionning or to solve a problem is more likely to be take the team to success (no nice-to-know projects).

Some basic roots of this model:
– Less data is better than more data (as a principle);
– More inductive reasoning and tests and less deductive reasoning and inforamtion analysis;
– More curiosity, less distraction;
 Information is seen less as a process or as a product and more as the combination of a need and a lack;
– No information distribution (alert mode) if there is not a clear need and a clear lack first: stop spamming your supervisor and colleagues;
– Focus on human behaviours to approach « information » (questioning, searching, treating, distributing, protecting information) rather than on technological resources to treat data;
– Carefully watch a few strong signals rather than monitor a multitude of weak signals;
– No ongoing environment watching before relevant project-based approach;
– Causes of our problems are not data processing but our low level of prior questioning and of our inability to define accurate information;
– Place less bets on watching existing data (spend less time in treating) and more effort in inventing relevant information (information does not necessarily exist: it can be created as an operational answer);
– Stop believing that we can get all the (existing) data on a subject prior to making a decision.

How to suggest a general seeking method to a large amount of people and situations that would be accepted in Smes? Here is the challenge of the Acrie Method, created by Pascal Frion over years of practice with Smes.
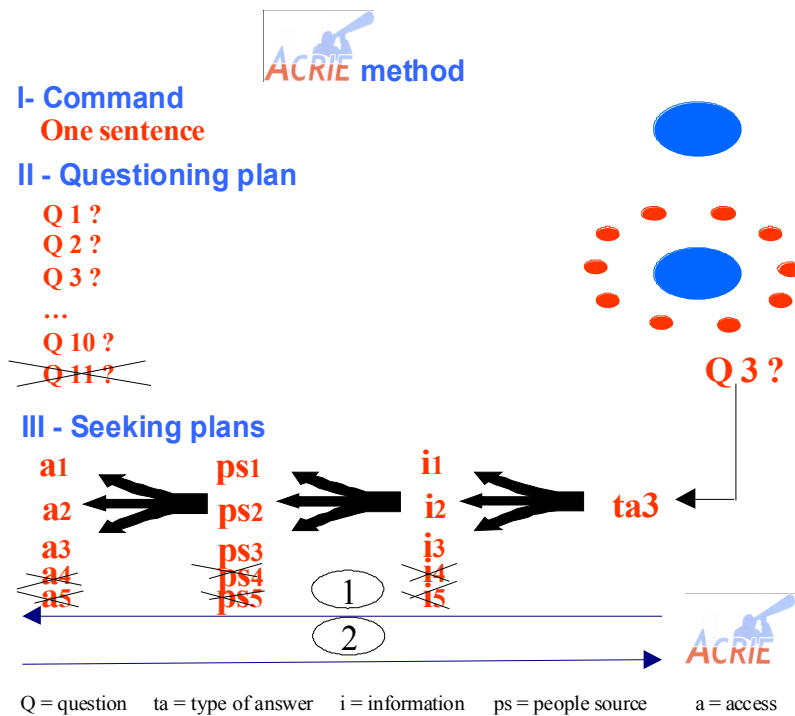
Acrie method starts from one voluntarist strategic intent of the leader (not from data collected in the environment in an alert mode). It takes place in three steps:
 1) a formal command formulation and informal discussion to reformulate the first too vague intent;
 2) a questioning plan (in three steps) made of ten questions to choose angles of attack to suround and to approach this gap in knowledge that hopefully will fulfill the leaders expectations;
 3) and ten seeking plans (one plan for each question of the questioning plan).

The main idea is to methodologically refuse the analysis of the available information. Rather the strategic intent (step 1) of the leader is modelised in a list of ten questions (step 2: questioning plan) and in a simulation of ten seeking plans. The key to avoid reasoning about accessible channels of information (a) is to dedicate his efforts to imagine and identify people sources (ps) in the seeking plans, that could help us to co-invent the informations (i) we desperately need..

The leader's intent is improuved at each step of the method (three times). This is a guarantee that his needs are really taken into consideration and not taken for granted. He synchronises with his project team. The leader does not sub-contrats his incompetence: he remains at the wheel. One major element of the seeking plan is its natural incentive to contact people. They ask us questions on the context, suggesting to

reconsider our point of view, before answering to reformulated question. The internal strategic approach can therefore be revisited and improuved by external expertise.

ACRIE method

I- Command
   One sentence

II - Questioning plan
   Q 1 ?
   Q 2 ?
   Q 3 ?
   …
   Q 10 ?
   Q 11 ?

Q 3 ?

III - Seeking plans
   a1   **ps1**   **i1**
   a2   **ps2**   **i2**   **ta3**
   a3   **ps3**   **i3**
   a4   **ps4**   **i4**
   a5   **ps5**   **i5**

①

②

ACRIE

Q = question   ta = type of answer   i = information   ps = people source   a = access

4.5 Results and limits

4.5.1. A new information management

It is clearly the strategic intent that is leading the project team and not the available data in the environment. To start with the leader doesn't know clearly what he wants. The Acrie method is inductive in order to imagine the system the leader needs to make a decision; and to identify the missing informations (these informations can be absent or nonexistant) rather than to limit ourselves to do some consultation of the only existing and available informations.

Each seeking plan will be explicitly detailed so that it becomes easy to launch the actions. If the feeling about each seeking plan is favorable (it seems compatible with the requirements of the leader: human ressources, time and moeny, etc.) it will be put into action and if not, he will be discussed and modified. After the ten distinct tree-like seeking plans are separately done, they are put together in a trellis-like action plan. If the overall feeling is not favorable the seeking plans will not be launched, they will be discussed and modified. In this case, the leader will settle down the discussion, often modifying the original command for the third time (rather than giving more time or more money for the actions of seeking plans).

This method is supported by a revealed capacity as the work goes by. The project team gets to grab the leader's strategic intent, formulating it, modeling it and simulating it, step by step, regularly over the time of the project. A kind of fusion appears between the leader and the project team who learn to work together, clarifying their thoughts. This method has been in use in companies ranging from very little companies to some of the biggests french companies, with various modes to implemante it and to insure its ongoing usage. Acrie method is suggesting a new model of information management in the company,

dismissing the industrial-age information administrative treating and introducing instead information-age considerations: information overlaod, choice, intellectual-proof construction, governance, systemic approach, etc.

4.5.2. How long does it take to implement a CI skill in a Sme?

Empirically, it takes a few weeks to accompany one Sme in a project-based mission with the Acrie method. In case of success, another mission follows to reproduce and adapt the Acrie method. From the looking for skills, we can progressively shift to and integrate the others skills. In particular, strategic skills, distribution skills and protection skills must follow. Surprisingly enough if we compare with the vast literature that highlights the importance of information analysing, treating (information) skills, are not a priority in this implementation approach. A follow up is necessary, to make sure that previous recipes do not revamp. We suggest we can say that a Sme is effectively doing CI when this company is running an ongoing coordination, prior to the tasks, the tasks related to these five main CI skills.

4.5.3. What can we expect after the first two years?

The Sme needs someone to take hold effectively of the topic (what is sometimes called a sponsor in large firms). Depending on the relative stability in the persuit of this impetus, Acrie method inevitably induces a new information management. The information analysis is kept low whereas a more strategic situation analysis is improuved. The leader is receiving less ascending reports and is now feeling more confident in sharing his stategic questioning. He is less interested in treating existing data than expliciting his lack of information to help him in his expertise to take decisions relatively to his projects. People are progressively changing their philosophy about information. Quantitative approach and computing transferts give in to qualitative approach and communication. Each year a list of « nice to know » information is established and given to a three or six-month trainee, under the supervision of the leader. After one year, working « by hand », envisage to automate very few environment-watching topics. Theyre is no need for scanning and browsing tools to start with (the possibility to use a CI information watching tool must be postponed to one year at least).

4.5.4. Limits

Decision making is not a linear and industrial process, it is more human than this. Information is an asymetric market so we need to stop acting as if it were a symetric market.
Managing data is relatively reassuring. Nobody can contest the tremendous efforts we put into processing existing data. This is not the point anymore. All these elements are pushing to dicrease the downstream activities of data processing and to increase the upstream activities of questioning. This industrial era model of data management is over. The information era creates new situations and our old tools are worn out in many cases. A sme has'nt got the time to evaluate every single bit of data it happenq to be in contact with. Let us start by giving up some of our time in the result and process culture in order to invest in the choice culture.
This possible shift in paradigm, as every paradigm shift, takes time to be fully put into action, and it is very frequent that the general craze for this new approach, is turned back. Many people give up to try convincing other people that the modern situation needs a modern approach.
The limited size of this article prevents use to precisely use the literature we have covered (see references).

5. Conclusion

What distinguishes Competitive Intelligence implementation in small companies from CI in large firmes are mainly based on ressources, information-treating aversion and business philosophy. A small company is not a little big company. Traditional recipes to implement CI in large firm simply did not prouve to be successful over the last trenty years. They were based on the acceptance paradigm. Acrie Model suggest a pragmatic approach compatible with Smes. More has to be investigated in order to accompany the implementation, such as sociologic and psychologic concerns.

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CV Pascal Frion

Pascal Frion es presidente de la red Acrie a nivel nacional e internacional desde 1999. La creacion de la red fue solicitada porl'Ecole de Guerre Economique.

El Senor Frion es autor de dos guias metodologicas sobre Inteligencia Economica publicados en 2001 y 2003. Su peritacion ha sido reconocida por las PYMES que aconsejo, por pragmatismo pedagogico.

Se le otorga la calidad de ser un promovedor activo y apasionado en su peritacion..

La red Acrie tiende a promover y apoyar la creacion de empresas y consultorias privadas de inteligencia economica. De hecho, la red es un acicate para fomentar la colaboracion entre las empresas privadas y publicas.

Conceptualizo AcrieProj, primer proceso de elearning en inteligencia economica en Francia, que consta de 1200 fichas tecnicas y pedagogicas sobre la gestion de proyecto y planification de recursos, la busqueda de datos, el tratamiento, la diffusion y la proteccion de la information.

Pascal Frion participo a muchos coloquios en Frania y en el extranjero (Vietnam, Chile, Camerun, España, etc.), en idioma ingles o frances y algo de castellano.

Pascal Frion es miembro de la Academia de intelligencia Economica y hace parte de la nueva generacion al servicio de la extension de la Inteligencia economica en Francia.