

***Educating or building awareness on Competitive Intelligence?
The case of Atelis and the introduction of a European diploma in
CI & Value Management.***

Abstract:

The question of how to teach competitive intelligence continues to be the source of much discussion. Indeed, how to transfer knowledge of such across-the-board “discipline” needs as much technical know-how as individual experience or intuition.

This document proposes an examination of the Atelis (Strategic Intelligence Workshop) experience. This organization, whose members are considered experts on the subject of competitive intelligence in France, provides training on CI by integrating the principles of Value Management. Students at the ESC Tours-Poitiers, the flagship of the ESCEM school of business and management (Ecole Supérieure de Commerce et de Management) have the opportunity to follow this educational programme and obtain the European Diploma in Competitive Intelligence & Value Management (CIVM) jointly awarded by Atelis, the French Value Management Association (AFAV) and the European Governing Board (EGB). This course mixes the theoretical and practical aspects of the subject and includes an in-company assignment. Although the initial results obtained are certainly encouraging, they merit further analysis if the efficiency of this educational “product” is to be improved.

Key words: Competitive Intelligence, Education, Value Management

Before introducing Atelis, the ESCEM Group’s Competitive Intelligence (CI) educational programme, I would like to discuss a fundamental question, namely what type of “knowledge” skills are covered by this CI concept.

This is not a straightforward question and one could quite rightly question whether CI is in fact an educational discipline¹? As Professor Deschamps (HEG Geneva) puts it “the very purpose of competitive intelligence, that is to say information, places us in the sphere of social sciences”; it is a subject at the crossroads of several branches of academic study, as it refers to all areas of management.

As we shall see later, through our own experience, the Atelis students actually fulfilled some of their assignment requirements by applying their knowledge of marketing, finance, law, logistics, IT etc...

The interdisciplinary nature of this subject can be found in the diversity of educational backgrounds and experiences of the French trainers or researcher professors involved in this “discipline”². Even the word “discipline” itself is debatable since we operate within a sphere of interdisciplinary competencies. Although “a part of the disciplines taught at university is focused on high-level professional action based on organized corpora of expert knowledge”³, it must be noted that this expert knowledge appears to be difficult to formalise. Nevertheless, the French authorities, conscious of the fact that students need to be introduced to the strategic management of information, have produced, under the supervision of Monsieur Alain Juillet (Senior Official on Competitive Intelligence for the Prime Minister) and a team of experts, a mapping of educational courses to be introduced within the framework of training on CI⁴.

This is undoubtedly a first step towards building up an identifiable scientific corpus (could one speak about a system of reference⁵ ?) which will over time make it possible to define precisely the essential contents (syllabus) for designing the equivalent of a Masters, or PhD. course which so many speakers on the subject would wish to see. On this point, Professor Henri Dou, from the University of Aix-Marseille III, and member of Atelis, is actively trying to set up a doctoral program on CI. Could this be the final phase in the process leading to the recognition of this discipline by the French academic authorities? The links between research on CI and universities have already been identified, notably in Finland⁶, or with businesses, as our chair intends to demonstrate with the group STMICROELECTRONICS*. In the future shall we be seeing CI departments sprouting up in universities? Our main interest centres on the sort of opportunity such a development would represent, for reasons explained later in this document. What progress has been made since the Martre report⁷? That report was already talking about the need to create high-level diplomas in 1994, without actually specifying the nature of the educational courses that should be on offer. The issue about introducing education is not a new one. After observing the Japanese and Swedish models, Jan P. Herring was raising the same question for American universities back in 1992⁸. Nevertheless, the debate on the difficulty of setting up such education continued about seven years later in two different articles written by Professor Jonathan Calof or Christopher Merritt in the Competitive Intelligence Management review, in 1999⁹.

With this first phase (knowledge identification) more or less completed, it now remains to put this system of reference actually in place. Indeed, in the words of Professor Edgar Morin, "It is not enough to state the need to contextualise or link knowledge; it is necessary to consider the appropriate methods, tools, operators and concepts to make these links"¹⁰. Here we can easily see the difficulty in educating students by connecting theoretical knowledge (essential to academic training) and the practical (pragmatic) aspects of the subject which refer as much to tools as to the "tricks and tips" for unearthing high value-added information... the eternal question of the CI professional: "Intellectual or Practitioner?" or, as Professor Deschamps puts it, the "epistemic versus technical" question².

In the case of Atelis, while providing students with the conceptual basics of the subject, we mainly chose to focus on the "discipline's" pragmatic side (methodological and technological) to offer as rapidly as possible the knowledge required to enable our students to become operational in a short time on the assignments given to them.

In our view, the type of "knowledge" and "know-how" that may be organized as part of a CI approach falls into four competency domains:

- technical skills related to various competency fields (economics, marketing...)
- methodology skills (information cycle, teamworking...)
- good command of certain tools (collecting, processing, disseminating...)
- HR management (inside the group or networks¹¹)

Working from the principle that technical competency was taught during the regular courses, we have focused our reflection on the means to educate our students on the other three competency domains.

* *ESCEM and STMICROELECTRONICS signed the creation of a chair on Competitive Intelligence on 30 November 2005.*

We have grouped these inside a training module within the framework of a workshop called Atelis. We speak about a training module as we have not chosen to propose a qualifying educational program such as an Msc.

There are three main reasons behind this: the first is that quite a number of similar educational courses already exist in France, and the second reason is that, as explained above, we believe that a specialisation in CI should not be applied to young students reaching the end of their studies. This is a complementary competency to be added (or, under the French higher education system, *agrégé*) to an initial competency or specialisation. Thirdly, would these young graduates find a job holding this “label” only, considering that the French industrial and economic fabric is mainly composed of SMEs as yet quite insensitive to such issues¹² or lacking the means to finance an executive position solely dedicated to this function?

The numerous internship requests for this type of work experience left unanswered would seem, for the moment, to support our approach!

In any event, even if one may assert that these young graduates are “competent” in CI, it is difficult to offer them “the full range of pragmatic skills essential to the operational implementation of this discipline in a professional environment”¹³ where information overload¹⁴ reigns.

Sorting the right information into useful knowledge¹⁵, and consequently into decisions¹⁶, also requires a little experience and the ability to step back...

Based on these considerations, we have decided to set up Atelis (Strategic Intelligence Workshop) and incorporate this into the ESCEM educational programme.

This workshop is a structure bringing together a number of partners seeking to promote the CI concept, through a training module and useful hands-on applications for businesses.

Initially, our presentation will try to answer three simple questions:

- Why Atelis: the origin of the project
- With whom: introducing the partners
- How: operating procedures

Then, we shall make a first assessment of this experience from an educational standpoint. As we are bound by a confidentiality agreement with our clients, we will obviously be unable to present any completed assignment details.

Why Atelis?

Following a change in top management some years ago, the ESCEM Group wanted to develop the school’s educational offerings. We introduced a new teaching guide (i.e. a set of course modules) generating:

- *competencies in cross-competency domains*
- *behavioural competencies (curiosity, adaptability...)*
- *consulting assignments (closer ties with the business world and research work opportunities for professors)*
- *partnerships to enhance our reputation*

The following question was then raised: how to unite all the school staff’s energies, skills and knowledge in order to develop educational solutions through fieldwork while maintaining a clear identity for the group?

It seemed to me that the different concepts of intelligence, CI, and knowledge management (KM), could be a possible answer to this issue:

- Intelligence, by its continuous surveillance nature of different macro and micro-economic aspects...
- Competitive Intelligence, which takes into account all informational elements (in-company & external) having an impact on strategy...
- Knowledge Management which tends to aggregate all employees' knowledge and know-how for a better overall performance

These three areas are the main points of consideration which could be the subject of field experimentation within the context of a dedicated entity inside the school.

Essentially, we now had the potential for having students trained in these concepts and ready to work on real-life case studies, teachers concerned about getting closer to entrepreneurial realities and decision-makers with development projects to be completed but who, for lack of sufficient resources (from both a time and expertise point of view) do not have the right information to assist their decisions.

Atelis had, in other words, many reasons for coming into existence, uniting among other things, the expectations of these different protagonists.

With whom?

To gain credibility, as much with private and state-owned businesses, as with local authorities providing us with research topics, and with the students themselves, we have sought to rally several partners round this idea, people recognized nationally for their expertise and active involvement in promoting the CI concept.

The wealth of this partnership also resides in the great complementarity of its members. Considering the very breadth of the CI "spectrum", it seemed important to us to bring together both researchers (academic research) for the theoretical and prospective aspects, consultants for the methodological and practical aspects, tools and systems specialists (especially IT systems) and of course company representatives.

Here therefore is a succinct presentation of each of them, with their motivations:

The ESCEM Group is one of the most important business schools in France. It has developed a number of activities in the field of information systems, management of new technologies and corporate strategy. Its aim is to give its students useful competencies in the area of competitive intelligence and to participate in sensitising businesses to the importance of strategic information management.

CRRM, the Marseille Retrospective Research Centre, has been involved for over fifteen years in teaching and researching Competitive Intelligence (DEA diploma created in 1989 inside the University of Aix-Marseille III). It has also contributed to the creation of many other training courses working in conjunction with other national (DESS diploma co-authorized with ENSAM) or international establishments (DESS in China, DEA in Brazil and DEA in Indonesia). This research centre, specialists in Technology Intelligence and automatic information processing, seeks to participate in disseminating its knowledge in the industrial fabric as well as to *grandes écoles* students.

ACFCI, Federation of French Chambers of Commerce and Industry, has for several years coordinated the national network of regional chambers of commerce and industry and the technical consular networks specialised in the field of competitive intelligence. It wishes to

participate actively in the dissemination of consular know-how on the subject to businesses, SMEs especially.

CIGREF, IT Club for French Large Businesses, an association created in 1970, groups 120 major firms using information technologies (insurance, banking, utilities, retail, manufacturing, services). Its mission is to promote the use of Information Systems (I.S.) as a value creation factor for the company. By joining the ATELIS project, its aim is to promote information systems as major decision-helping tools and to encourage research and executive education on knowledge and know-how management inside organisations.

CCI DE TOURAINE, Chamber of Commerce and Industry, is actively involved in business development both by supporting professionals and local authorities and by managing facilities which contribute to enhancing the value of the Touraine region. A major user of information technologies, it intends playing an even greater role serving local business actors.

INTELLECO CONSULTANTS is one of the leading competitive intelligence consulting practices on the market. In addition to corporate assignments with large firms, the practice has been actively involved in many of the largest regional CI programmes organised in France (notably in Languedoc-Roussillon, Bourgogne, Rhône-Alpes, Basse-Normandie, Région Centre). The head of this consultancy is the current treasurer of the FEPIE[†]. The practice seeks to strengthen its relations with the world of higher education by making available its methodological approach and operational tools.

Gérard HOFFMANN, Controller-General of the Armies, Fellow Professor of Political Science at the University of Jean Moulin (Lyon III). Former director of central training courses at the IHEDN (Institute of Homeland Security Higher Studies) training centre which is renowned in France and attached to the prime minister's services. His dual experience as a military officer and university professor gives us both academic and technical insights into the discipline.

We are currently finalising new partnerships. However as these have not been completed yet, it is not possible to mention them today in this document.

How?

First of all, the Atelis programme is positioned at the end of the first year of a master's degree (Msc) and is currently optional, in the same way as Tampere University's "Business Intelligence Course"¹⁷. The students may also choose from around ten other (so-called minor) options, like for instance: entrepreneurship, international law and the constitution of Europe... The specificity of Atelis sits in the fact that this option is split into two separate parts:

- a theoretical part (60 hours of lessons) providing the CI-related training modules and the value management training contents dispensed within the context of the European certificate of competency delivered by the AFAV and EGB.
- a practical group-work section concerning an issue provided by a company (5 weeks)

Most of the theoretical section is taken care of by all partners. Here is the programme for the 2006 session:

- Introduction to CI and MV concepts: 6 hours
- CI methodologies (information cycle, AFDIE[‡] model...): 9 hours

[†] Federation of CI Professionals, French association chaired by Admiral Lacoste.

[‡] French Association for the Development of Competitive Intelligence

- Value Management methodology: 18 hours
- Technology Intelligence and Patent Rights: 6 hours
- IT tools: 6 hours
- Influencing stratégies (*Infoguerre* and lobbying): 6 hours
- Legal intelligence: 3 hours
- Benchmarking Internet practices and geopolitics: 6 hours

As far as the methodology is concerned, the nine value management[§] phases are regularly recalled to the students and make up the framework for drafting the assignment report. Each speaker will be expected to mention the impact of these different phases inside his lesson.

At the end of this lesson period, we conduct an initial evaluation test involving a multiple-choice questionnaire and a piece of research work, on a general topic, to be handed in (as part of the lesson on information gathering). This assessment enables us to measure the level of theoretical knowledge acquired during this first session.

The second session corresponds to the practical part (with high expectations on the side of our students). This phase is essential in the training process. As Gibbson et Al explain, knowledge is not exclusively produced at university, but also in a multitude of places such as governmental laboratories, private businesses...¹⁸ Our students consequently learn substantially through business contacts, in both theoretical and practical knowledge terms.

Each group of four students is given one assignment.

Here are a few examples of possible topics:

- identifying a business partner
- adapting plant to a new product
- watching the competition
- finding new markets for a product or service
- monitoring regulations concerning a sector of activity
- defining a sales pitch to position a region on the business tourism sector

Before being submitted to each student group, every case has first been selected through a quality process. To take an assignment request into consideration, the company must write up a list of specifications. These are then analysed by the strategic committee who will accept or reject the assignment according to the following criteria:

- precise results targets (results-oriented culture)
- technical feasibility (these are students)
- achievable in the time allocated (5 weeks)

The person in charge of the applicant structure (company, association, local authority...) also promises to cover any inherent assignment expenses (travel costs, information purchases, etc...) and to grant a minimum amount of time to the student group (appointments fixed from the onset) in order to validate the quality of the work provided at regular intervals.

[§] The 9 MV phases: project orientation, information search, functional analysis, search for principles and concepts, study and evaluation of solutions, estimated technico-economic assessment, choice of solutions selected and decision, implementation, final review and capitalisation on experience.

The sharing out of proposed subjects is first done by affinity with regard to the topic raised (the art business, the timber industry, ...) then according to criteria of proximity between the company or local authority and the student's campus, as we are located on two campuses around 100 km away from each other.

Here are a few subjects handled in 2004:

- looking for commercial partners to distribute a product in Poland and Rumania
 - conditions:
 - financial soundness
 - not interested in a vertical integration in the sector
 - not working with the competition
- patent monitoring of a manufacturing process, identifying competitors and possible markets for this technology (food processing)
- opportunity study (launch of a new product) in the context of a differentiation strategy
- choice of area for locating a manufacturing facility
 - positioning of customers, prospects and competitors (SIG)
 - current and future logistic infrastructures
 - identification of key actors by region
 - aid setting-up (legal and financial)

Each student group receives the profile of the applicant entity in the form of an index-card specifying all relevant information (name, address and phone number, contact person, name of school tutor, schedule of meetings (referred to as status reviews) with the company manager and, of course, the assignment topic and the goals to be achieved.

Each student signs the confidentiality agreement and from this time onwards, the teams as they stand become free, except for status reviews organised as part of the quality process, to manage their own time.

For practical purposes, premises have been provided with telephones and PCs connected to databases (Lexis-Nexis, Proquest, Rime, Doge, Kompass...) as well as software, research, analysis or information mapping licences such as: Matheo Patent, I-Maker, J-Map, VS2000...

During this "hands-on" period of the work, the students must regularly input information related to their research into software called I-Maker. This tool, provided in ASP mode by one of our partners (Intelleco), enables them to structure their research programme around the "information cycle" concept (4 phases: expression of needs, search for relevant information, processing, dissemination). In other words, this tool not only has the advantage of being a methodology tool which guides them in the information handling process, it also allows applicants to remotely monitor (ASP) progress made by the group looking after their case. Each student and each client-company manager is given private and secured access to the Intelligence Maker base.

At the end of this fieldwork, the students present their findings before a jury composed of the tutor-professor, the company representative and the head of Atelis. Evaluation criteria are first the answer to the problem set, the quality of the documentation handed in and finally the quality of the oral presentation.

What have we learned?

✓ From a practical standpoint:

- On the students' side: They really enjoyed working on real-life cases. They also loved the field contact (some had to travel off the campus to go and find information). They say that they felt more pressure than when working on "textbook" cases, but that this made them more motivated. Many of them claimed to be more concerned about the company manager's assessment of their performance than about the grade given by the school! They put in hours and hours of work (late into the evening, even on weekends sometimes!) but have no regrets concerning this experience.

During the last session, all students obtained a CI minor credit (which was not the case for the previous session) but only 56% of the students received a European certificate awarded by the AFAV and the EGB. We are satisfied by this result which pushes students towards excellence, since many see obtaining this certificate, complementary to their course, as being a way to enhance the value of their CVs.

- On the "customer" side: The decision-makers greatly appreciated the students' work, sometimes qualifying this as "highly professional". All recognized that the presentations made and the reports handed in met the objectives fixed and were going to be very useful in their pre-decision thinking. We remind you that the starting point for these studies was always a reflection, a question, touching the issues behind developing the company. Many expressed the wish to assign us new studies, whilst pushing for an extended assignment length with the current period of 5 weeks deemed to be too restrictive.

- On the partners' side: A greater visibility as far as future graduates are concerned and a positive image. But also a greater reputation with the firms or organisations representing them. Several conferences were held to present this experience before a number of managers (Mouvement des Entreprises de France (French businesses movement); Dirigeants Commerciaux de France (French Business Executives); Club des directeurs en organisation des grands groupes Français (French multinationals' organizational directors' Club ...). Our wish to open this programme outside of France even came true with the signing of an agreement within the context of the chair in Geomatics at the University of Sherbrooke in Canada. All these events are likely to reassure our partners of the interest of such an alliance.

- On the side of ESCEM: This experience has been greatly appreciated by the professors and staff at the school. New contacts have been forged with the industrial and commercial fabric and extensions concerning new topics (like enterprise evaluation) have been started. The only negative point has been the student group tutoring workload which was underestimated in terms of time. This will have to be judged better in the future, despite the difficulty of putting an accurate figure on the anticipated time.

✓ From an academic standpoint

Various authors, for instance Jerry Miller, emphasize the importance of the practical side of CI education. "An effective CI educational program must emphasize practical techniques and

approaches for conducting CI rather than nebulous academic theories...”¹⁹ Neil J Simon was recently regretting the fact that many CI training modules are too focused on tools and not enough on the people dimension²⁰.

In our experience (based on around one hundred students having followed this module) we have certainly been able to validate this claim.

It is by applying techniques in the field that students achieve full awareness of the contribution of a CI approach. It is through handling the tools within the framework of a formalised process (CI and MV methodology) that they acquire not just certain knowledge but also the first reflexes required to truly understand the “discipline”.

Nevertheless, practice alone does not mean everyone will share the same success. The top students produce excellent work. The theoretical input, supported by a real application and supervised by tutors enables them to hand in files sometimes qualified as being “professional” by client-company managers. The lower-level students just hand in average work. Only 56% of the students following the 2005 session actually received the CI competency certificate. We had deliberately chosen to put the bar very high for them to know that this certificate really has “professional”²¹ value and that it was not something one could automatically obtain by simply registering to take the Atelis option. It is incidentally interesting to note that these criteria are very similar to those referred to by Messrs Craig and Fisher “Practitioners must possess specific competencies or knowledge skills and abilities to effectively execute the interaction of: traits, coursework, professional experiences and observation”²².

In conclusion, the questions which we should now be asking are the following:

What criteria should we use to evaluate the differences between students? What is it that determines whether a student (students group) will perform well or not? Taking inspiration from the thoughts and reflections of Messrs Blenkton and Fleisher regarding their experience educating various types of learner populations²³, we have decided to take several ideas on board, such as:

- interest (motivation) in the sphere of activity concerned
- degree of maturity (age, gender?)
- student’s experience (work and personal)
- motivation
- capacity for teamwork and handling conflict!
- language skills

Based on what we know and have observed about our students and the projects we have monitored (currently around 25 cases handled), we can already maintain that maturity and motivation are two key success factors behind such assignments. Naturally, these are two areas of competency which are difficult to teach...Nevertheless, we are continuing to monitor results in order to gain a better view of this results-gap phenomenon between groups.

Once we have identified the keys to analysing the results, we shall adapt our pedagogy so that as many as possible achieve the required level, namely the obtaining of the European certificate. Entwining CI and the value management methodology is one idea to consider. By paying more attention with the groups on the methodological aspects, we hope to obtain more homogeneous results in terms of quality. The 2006 session will give us the first evidence elements on this point. We could then, in accordance with the business plan laid down when Atelis was founded (in March 2003) open this certificate up to other universities, mainly outside of France. It will then be possible to get students from different nationalities to work,

via a collaborative work platform, on export development assignments. Some contacts have been made, with universities and institutions representing the professional world, in order to propose our methodology (operating process, quality approach) and our tools. On their side, our partners especially the AFAV and EGB are working on obtaining international recognition for this diploma (North America and Asia)

Our aim is to unite all the knowledge skills in this field of Strategic Competitive Intelligence (SCI) to offer our future executives a better education and satisfy what are, for the most part, local company needs. We would also like to enable all our partners to pool their knowledge skills and experiences related to this field of competencies. For it is by sharing in this way that we shall succeed in advancing the fact that information management is truly a source of value (in the economic sense of the word) and can provide a real competitive edge to those who know how to control it.

Pierre Larrat –February 2005
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