The Evolution of Competitive Intelligence

DESIGNING A PROCESS FOR ACTION

The purpose of a competitive intelligence (CI) program is to develop action-oriented implications for managers. This is an overview of the evolution of competitive intelligence and of the fundamental concepts of CI, including the intelligence production process. Effective CI is critical in helping the proposal management professional create competitive responses to RFPs and commercial opportunities.

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The purpose of a competitive intelligence (CI) program is to develop action-oriented implications for managers. Intelligence also needs to be delivered on a timely basis so it can be incorporated into the decision making process. Building on this basic conception, I first provide an historical overview of the evolution of competitive intelligence, and then an overview of fundamental CI concepts, including the intelligence production process. Six key decision areas related to the development of an action-oriented CI program are discussed. Next, applying an evolutionary framework, four levels of sophistication in CI programs are examined. Although CI and proposal development are separate and distinct activities, effective CI is critical in helping proposal management professionals create more competitive responses to Requests for Proposals and commercial opportunities.

COMPETITIVE INTELLIGENCE: DESIGNING A PROCESS FOR ACTION

Proposal management professionals (PMPs) who base their decisions on action-oriented CI will outperform their counterparts who do not invest in the intelligence process. While this may seem to be a bold statement, there is growing evidence demonstrating that an action-oriented CI program leads to positive organizational and individual outcomes (APQC 1996; 1997). The process of CI involves the development of intelligence products, their flow to decision makers on a timely basis, and the incorporation of said intelligence into the decision making process. The tripartite activities of CI do not occur naturally, but must be managed as a core business process.

The topic of intelligence is vast. In any one paper it would be impossible to describe the history of the intelligence field, which has its roots in the military. One of the earliest sophisticated references is *The Art of War* by Sun Tzu (Griffith, 1967). This set of essays was written around 500 B.C. and is the basis for many of the developments in military intelligence. A second stream of intelligence activity concerns national security as a policy issue (Berkowitz & Goodman, 1989). This stream, particularly in the U.S., has its roots in the World War II era and is linked to political science. A third stream that is the focus here places the business organization at center stage (Ecells & Nehemkis, 1984). A systematic orientation towards business intelligence in organizations is a recent phenomenon.

> "One cannot use spies without sagacity and knowledge, one cannot use spies without humanity and justice, one cannot get the truth from spies without subtlety. This is a very delicate matter indeed."
>
> Sun Tzu

In this article, I will provide a historical perspective on the development of the field, a conceptual framework for CI, and an overview of six key decision areas for the development of an action-oriented CI program. I will conclude with a brief look at the implications of CI for proposal management professionals.

APPLYING AN EVOLUTIONARY FRAMEWORK TO ASSESS YOUR CI EFFORTS

The field of competitive intelligence has passed through three stages and is currently struggling to define its next stage of development. The first stage, "Competitive Intelligence Gathering," occurred through the 60s and 70s.

Around 1980 the second stage, "Industry and Competitor Analysis," emerged and was most strong during the mid-to-late 80s. Currently, the stage of development can be characterized as "Competitive Intelligence for Strategic Decision Making." The future rests on developing CI as a source of competitive advantage and is labeled "Competitive Intelligence as a Core Capability."

The value of this classification for managers is that they can identify the level of sophistication that best meets their needs. Each of the stages can be thought of in terms of successive stages of sophistication in CI programs. While the descriptions below represent a time line analysis of the evolution of best practices, in reality most firms have yet to move beyond the second stage: Industry and Competitor Analysis.

The stages portrayed in Table 1 and described below are based on the combination of five attributes: the sophistication of the formal and informal CI network, the balance between intelligence oriented towards strategic versus tactical decisions, the type and extent of analysis conducted on the data, the degree of top management attention, and the linking of CI into the decision making process.

The movement between stages in the evolutionary framework is based on key defining events. A defining event fundamentally alters the direction, scope, and acceptance of CI in the business community. The discussion below describes each of the stages in the evolution of CI. I have drawn on empirical surveys to develop the stages and their descriptions (Sutton, 1988; Wall, 1974; and the Pittsburgh studies of 1987, 1990 and 1994).

My focus is bounded in four ways.

- First, the historical analysis begins in the 1960 – 1970 period. The choice of that date is admittedly judgmental. However, academic writing and practitioner activity was limited before 1970. A database search of citations on the topic of competitive intelligence confirms this assertion.

- Second, the analysis and discussion of the historical periods centers on "leading-edge" firms. Leading-edge firms were chosen because they represent the state-of-the-art within a particular period. Since many firms are just beginning to implement competitive intelligence programs, it is important to recognize that both the field of CI and a program within a particular firm follow an evolutionary path.

- Third, the historical analysis centers on North America and to some extent Western Europe and

Table 1

Evolution of Competitive Intelligence				
Time Period	**Pre-1980**	**1980-1987**	**1988-Present**	**Future**
Stages	Competitive Data Gathering	Industry and Competitor Analysis	Competitive Intellgence	Competitive Intelligence as a Core Capability
Key Defining Event	Porter's 1980 book, *Competitive Strategy*	The founding of the Society of Competitive Intelligence Professionals	The establishment of the Competitive Intelligence Review	CI courses taught in business schools across the world
Attributes:				
Degree of Formality	Informal	Emerging Formal Units	Formal	Integration of formal and informal
Orientation	Tactical	Tactical	Mixed	Strategic
Analysis	Little or none	Limited quantitative	Both quantitative and qualitative	Qualitative emphasis
Top Management Attention	Low	Limited	Moderate	High
Link to Decision-Making Processes	Little	Weak	Strong	Direct input
Location:				
Principle Location of CI Personnel	Library/Marketing	Planning/Marketing	Marketing/Planning/ CI Unit	CI Units/Marketing/Planning
Key Issues:				
	Development of skills in information acquisition	Building a business case for CI Spy image Analytical skill development	Demonstrating bottom-line input Demand vs. supply-driven CI Counter-intelligence International CI CI Technology Role of information technology	Managing the parallel process Intelligence infrastructures for multinationals CI as learning Network analysis

Australia. CI activities in Asia and developing countries are beyond the scope of this paper (for discussions related to these areas (see Prescott & Gibbons, 1993).

• Fourth, the academic literature rooted in organizational theory and strategic management, while important in its development of theoretical constructs, has had limited impact on the practice of competitive intelligence (for a useful classification framework and review see Lenz and Engledow, 1986). In this regard, I will draw on the literature only to the extent that it directly pertains to CI.

COMPETITIVE DATA GATHERING

Prior to the end of the 1970s, CI can be classified as fundamentally involving the collection of competitive data. Leading-edge firms' use of CI could be described as follows:

Competitive intelligence was primarily a library function although market research with an orientation towards customers was well established. There was little in the way of a formal CI process or network established throughout the firm. CI was done on an ad hoc basis involving limited (if any) analysis. Overall, there was a generally low level of top management involvement and relatively little input into the decision making process.

This description characterizes an ad hoc, informal process. The firms collected data and created files on their competitors and industry structure. The analysis, if conducted, was static. The primary skills of CI personnel were oriented towards the "finding" of information. While this was not a particularly glamorous time for the field, it was important. Its significance centers on academic writing and the establishment of firms such as Washington Researchers.

Firms such as Washington Researchers, Fuld and Company, and Find/SVP concentrated their efforts on cataloging information, training, and information brokering. The underlying assumption of these firms was that intelligence

is only as good as the data on which it is based. The primary need for these firms was the fact that most of the companies that needed CI did not have in-house intelligence capabilities.

Critical information planted in the customers organization was found to flow back to the supplier in small, distorted bits.

During the formative years the academic literature was disjointed. A survey conducted by the Harvard Business School in 1959 focused on the current state of the practice of intelligence. This study illustrated that the process was in its infancy and informal. Albaum's (1962, 1964) research was an important beginning in the sense that he not only developed arguments for the development of business intelligence, but empirically illustrated some of its consequences. He was interested in what would happen to the quantity, accuracy and speed with which information traveled between a customer and one of its key suppliers. Critical information planted in the customers organization was found to flow back to the supplier in small, distorted bits. The information was planted with individuals in the customer organization who had frequent contact with employees of the supplier firm.

Pinkerton (1969) produced another significant set of research. A set of five articles outlines in detail the steps undertaken by a company in the Midwest that established a marketing intelligence system. This is the most detailed case study in the field. Other significant articles of this time period included Guyton (1962), Kelly (1965), Greene (1966), Aguilar (1967), Cox & Good (1967), Wall (1974), Cleland & King (1975), and Montgomery & Weinberg (1979).

There were two characteristics of these works. First, they primarily were oriented towards marketing intelligence. Thus, the scope of the material was narrower than today. Second, most of the work was conceptual or contained anecdotal evidence of leading-edge firms. Aguilar's (1967) work was an exception to both of these points. However, it took the publishing of Porter's (1980) book to bring CI to the next stage of its development.

INDUSTRY AND COMPETITOR ANALYSIS

The early 1980s saw the transition of CI from an emerging field to one in a growth period. During this time, there was a strong emphasis on the analysis of industry structure and competitors. Three challenges faced proponents of CI as they strove to make the transition from collection to analysis. First, the groundwork that was laid during the initial stage of collecting data gave employees in leading-edge firms an upper hand in their ability to "build a business case" for CI. Building a business case was centered on illustrating to management what CI was, why CI was important, how it could assist in decision making, where the process should be located in the organization, and the resources that should be devoted to CI. Line managers were particularly interested in CI personnel demonstrating the bottom-line outcomes of their efforts.

A second challenge facing in-house advocates was the spy image. Reporters working for newspapers and magazines such as *The Wall Street Journal, Fortune, Business Week,* and the *Financial Times* appear to be more interested in espionage and breaches in ethics than the methodology for doing CI. As a result, many managers were concerned that being involved with CI might result in their organizations being featured in articles in a manner that was not particularly attractive. In fact, this occurred on several occasions and to this day, some firms are very reluctant to discuss their CI processes.

A third challenge was developing skills in a variety of analytical techniques to transform data into intelligence. This challenge had two outcomes. First, the field of planning took center stage. Planners had long been interested in relationships of a business to its environment. Now they had a set of frameworks (e.g., Porter's work and the early writings on the design of marketing intelligence systems) that allowed them to systematically apply environmental analysis in a manner line managers could relate to more easily. Second, a division of labor between those who specialized in collection and those who did the analysis/management of CI began to crystallize. Today, this division is even more entrenched with the increased availability of information technology.

The leading edge CI operation of this time is described below:

> The CI effort is in the process of developing and refining a formal structure and network. At least one person is responsible for CI activity. The collection of data includes a mix of general information and ad hoc projects related to industries and competitors. The analysis of the data is limited and

involves primarily quantitative summaries. Emphasis is placed on tactical, as opposed to strategic, decisions. Top management's involvement in the process is limited to issues of high salience, and as a result there is a relatively weak link to the decision making process.

There was an explosion of writing during this stage. Practitioners (Sammon, Kurland, & Spitalnic, 1984) and consultants (Fuld, 1985; Kelly, 1987; Myer, 1987; Tyson, 1986; Vella & McGonagle, 1987) were particularly active. These books primarily focused on how to collect information and techniques for analyzing data. The books were important because they further helped institutionalize and demystify CI (Smith & Prescott, 1987a). Academic writing was beginning to appear but was scarce. There were a couple of articles that focused on the role of intelligence in industrial marketing (Smith & Prescott, 1987b; Zinkhan & Gelb, 1985). Both of these articles focused on the practices of practitioners. Drawing on field research, Prescott & Smith (1987) formalized a project-based orientation to CI. A large group of academics primarily in the planning area were oriented during this time to developing and implementing a variety of analytical techniques for the assessment of competition. Their efforts related to CI were summarized in two articles (Prescott & Grant, 1988; Prescott, 1986) and books by authors such as Hax & Majluf (1984). These works summarized and illustrated the rich diversity of techniques available to the intelligence analyst. In Europe, the emphasis on CI was directed more towards security issues in general and national security in particular. Steve Dedijer organized a bulk of the work at Lund University. Unfortunately, much of his writing has not been widely distributed.

COMPETITIVE INTELLIGENCE FOR STRATEGIC DECISION MAKING

Currently, the field has progressed to the point where an increasing emphasis is given to the strategic implications of CI efforts. Often, this involved the integration of CI efforts with other initiatives such as the quality movement. A much broader array of issues has surfaced in recent years as firms push the envelope of CI practices. The impetus occurred during the late 1980s when many organizations that had funded CI units were beginning to seriously question their contributions. While there was evidence that CI efforts assisted in the sharing of ideas, sensitized managers to the value of addressing competitive dynamics, identified new business opportunities, and avoided surprises, there was a lack of consensus on how it influenced the bottom line and whether it was user-oriented (Prescott & Fleisher, 1991; Bardnt, 1994). One technique that addressed the issue was benchmarking. Benchmarking grew in popularity because it was a focused activity that had become an integral part of the quality movement and had a demand as opposed to a supply-driven orientation. That is, managers who want to address a particular issue commission benchmarking studies. The user (demand driven) directs what the CI analysts (suppliers) do. By focusing CI on benchmarking activity, CI analysts were able to address the bottom line issue in a manner that was more tangible than other outcomes such as predicting the effects of industry evolution.

> The current debate is about the role that governments should play in business intelligence operations.

A second issue that was emerging was the focus on counterintelligence. The downsizing that was occurring in the U.S. armed forces and related intelligence activities resulted in many qualified intelligence officers looking to apply their skills in other arenas. One arena where they found a home was in business organizations. Related to this issue is the current debate on the role that governments should play in business intelligence operations (see the Fall 1994 issue of the *Competitive Intelligence Review*). The question is not whether governments should play a role, but rather what role they play in different countries and how it impacts competitiveness.

A third issue was to what degree would information systems play a role in CI. While information systems had been available for many years, the question focused on the strategic

use of those systems. For the CI unit, the emphasis was on how they could design, access, and interface with internal and external data in a manner that facilitated managerial decision making. Organizations such as Corning were leaders in this area as it related to CI.

A fourth area was the role of technology CI (see the Spring 1994 issue of *The Competitive Intelligence Review*). Again, many organizations had technology orientations as a central part of their strategic planning efforts. Part of the rise in the interest in technology and CI can be attributed to the type of organizations that were becoming more interested in CI. The computer, telecommunication, and pharmaceutical industries wanted to explore how technological CI could assist them.

A fifth, previously ignored area was international CI (Prescott & Gibbons, 1993). As firms increasingly competed across boarders, regional trading groups emerged, and industries felt the sting of new foreign competitors as their interest in international CI grew. This interest provided another opportunity for the information specialists. How to collect data and how international CI is different from domestic CI became an opportunity for information brokers. For example, one organization, OPEN SOURCE SOLUTIONS, was formed to serve as an international public information clearinghouse. This interest also gave rise to a desire to better understand how to manage CI units that operated in different geographical areas (Prescott & Gibbons, 1992b).

The leading-edge firms today can be characterized as follows:

> The CI unit has a well-developed, formalized process and network. There exists a strong link to the users of intelligence, who primarily dictate and fund the types of projects undertaken. There is often sophisticated analysis involving a combination of both quantitative and qualitative data. A significant number of projects are oriented towards strategic decisions. Top management explicitly recognizes the value of CI and links it directly to the decision making process.

The writing during the third period has even further intensified. Practitioners and consultants (Fuld, 1988, 1995; Gilad & Gilad, 1988; Roukis, Conway, & Charnov, 1990) have increasingly turned their attention to the management processes of competitive intelligence. An analysis of the content of 100 articles published in *The Competitive Intelligence Review* between 1990 and October 1994 shows that 41 focused on management-related issues while 59 involved some type of data collection or analysis orientation. In this content analysis, it is interesting to note that only two articles focused exclusively on ethics and four on computer/software.

Academics have still not devoted much attention to the field of competitive intelligence. Some of the works during this time that are applicable to practitioners have focused on the management issues of CI (Ghoshal & Westney, 1991; Prescott, 1989; Prescott & Smith, 1989a; Prescott & Gibbons, 1992a, 1993; Zahra & Chaples, 1993). There are, however, three research streams that have the opportunity to make an impact on CI. First, the area of issue management holds the promise of bringing information processing research more directly into CI (for a set of key references see Greening & Gray, 1994). This is particularly important as analysts focus on demand-side CI. A second area is encapsulated by the work of a group of colleagues at the University of Maryland (Smith, Grimm & Gannon, 1992). These researchers are examining how competitive dynamics can be studied with an orientation towards moves and countermoves. A third stream involves the learning literature (Senge, 1990). The development of learning principles and learning organizations rests heavily on competitive information and its conversion into intelligence. However, to date none of these streams of research have been oriented towards the competitive intelligence professional.

COMPETITIVE INTELLIGENCE

The field of competitive intelligence has grown over the past two decades to become an integral part of most large organizations (Fuld, 1995; Kahaner, 1996; McKinnons and Burns, 1992; Goshal and Westney, 1991). Global competition, the emphasis on quality management, and the realization by managers that actionable intelligence can be a key competitive advantage have spurred this growth (Prescott and Gibbons, 1993).

Competitive intelligence is defined as the process of developing actionable foresight regarding competitive dynamics and non-market factors that can be used to enhance competitive advantage. Competitive dynamics refers to the evolution of a firm's industry, and the moves and countermoves of competitors, suppliers, customers, alliance partners, and

potential competitors. Non-market factors such as government regulation, tariffs, and the culture of a country impact competitive dynamics but are not suppliers of products or services in the industry. CI is concerned with developing intelligence that has actionable implications. Only by developing actionable implications does a CI program have the opportunity to create a competitive advantage and truly deliver value.

> Many Fortune 500 companies have made the decision to invest resources in the development and utilization of competitive intelligence processes and products.

Building on my definition, we see that the domain of CI is quite broad (Berhnardt, 1994; Gilad and Gilad, 1988, Prescott, 1989). Competitive intelligence moves beyond traditional environmental scanning and market research by focusing on all aspects of the firm's environment (i.e., competitive, technological, social, political, economic, and ecological) and at various levels of the firm's environment (i.e., remote, industry, and operating). Competitive intelligence delineates between information and its analysis to produce intelligence. It also emphasizes the importance of the use of intelligence in decision making. Ultimately, competitive intelligence is not only a product, but also an organizational process designed to serve several key roles including early warning of opportunities and threats, decision making support, competitor monitoring and assessment, and strategic planning support.

Many Fortune 500 companies have made the decision to invest resources in the development and utilization of competitive intelligence processes and products. The competitive intelligence initiatives which I will describe below range in scope and sophistication from corporate libraries to large centralized CI staff functions. The rationale for conducting CI is provided by the continuous change in the competitive landscape. As a result of these changes, organizations are increasingly dependent on the external environment to access critical information. In addition, mere access to information is no longer sufficient. Rather, it is the firm's ability to compile, interpret, and ensure that it reaches the hands of appropriate decision-makers that leads to an advantage (Dugal & Prescott, 1998). Another important benefit of CI is that it identifies managerial blind-spots (Gilad, 1994; Zahra & Chaples, 1993; Zajac & Bazerman, 1991).

In addition to understanding what competitive intelligence is, it is equally important to understand what competitive intelligence is not. Competitive intelligence is not a high stakes game of industrial espionage aimed at uncovering a competitor's trade secrets and other proprietary information (Fialka, 1997). A successful competitive intelligence effort is neither haphazard nor unfocused. CI is neither a database of endless information nor does the mere investment in expensive information technology constitute a CI process. Rather, a value-adding competitive intelligence process is a series of systematic organizational activities that are driven by specific intelligence needs within the firm with the objective of achieving competitive advantage.

DISTINGUISHING BETWEEN THE METHODS AND MANAGEMENT OF CI

One of the central tenets of strategic planning has been that relationships between a firm and its environment affect performance (Andrews, 1987). While there was some early strategic planning-oriented work in the area of CI (Aguilar, 1967; Fair, 1966), a substantial amount of it was not easily operationalized by those struggling to understand their competitors. Strategic planning, however, has played a major role in the areas of analysis where a range of techniques have been developed to assess competitive positions (see Oster, 1994; Prescott, 1986). It is important to note that most strategic planning techniques assume away the data collection issues. That is, they assume that the data is available or easily collected. This is a troublesome assumption.

> The spy image has been perpetuated to a large degree by the media industry.

There is a growing acceptance of the "methodology" of CI, which is drawing from these three areas and developing methods on its own. Practicing competitive analysts now have a broad set of books to draw on to both demonstrate the methodologies of the field to skeptical managers and to assist them in conducting a study (Gilad and Herring, 1996). For example, Washington Researchers has developed a series of books on virtually every topic of information collection. One final topic related to "doing" CI relates to ethics (Paine, 1991). CI continues to emerge from the shroud of the "cloak and dagger" image. The spy image has been perpetuated to a large degree by the media industry. The media, interested in selling copy, continues (Caudron,

1994; Robinson, 1998) to play up the role of spying. Yet, there has been no large-scale study in the business community that demonstrates that ethical issues are a major concern. In fact, the little empirical data that does exist (my 1990 and 1994 surveys of competitive intelligence professionals) suggests that ethics are becoming less of a concern. Many firms have codes of conduct and practice the following advice: do not do anything that you would be embarrassed seeing on the front page of the *Wall Street Journal* or *Financial Times*.

The management of CI is less well developed than its counterpart, "doing." Academics (Cox & Good, 1967; Cleland & King, 1975) played an early role in describing how monitoring systems should be designed. In recent years, other academics (Prescott & Smith, 1989b) and consultants (Bernhardt, 1994) have refined and extended the early prescriptions (see also the *Competitive Intelligence Review*). In a following section, management issues will be discussed in detail.

THE INTELLIGENCE PRODUCTION PROCESS

The most fundamental concept in the field of CI is the intelligence production process, often referred to as the intelligence cycle. The production process contains all of the elements required to produce actionable CI. While the process is intuitively simple, its operation is often quite complex. The CI process is initiated through a request from management. Requests come in many forms. An essential aspect for any CI professional is to gain the confidence of management so that they will continuously bring requests. The sum total of these requests represents management's key intelligence topics or, in other words, key areas of intelligence interest. Often, key intelligence topics are broad and requests are not well articulated, thus making the second phase of the process particularly important. Before the intelligence process can effectively begin, agreement must be reached on the parameters of the specific intelligence request in terms of exactly what is sought, the required time frame, and any constraints such as budget and confidentiality. For the CI professional, interviewing skills that involve extensive probing to determine the exact needs of management enhances the chance that the request will be properly interpreted.

When the request is established, the collection of information begins. The CI professional develops a collection plan that can include secondary sources, tapping the human network and the design of primary research. The design and implementation of a collection plan involves project management skills. The collected data is transformed into intelligence through analysis. Analysis permits the CI professional to draw conclusions from information. Those conclusions then need to be interpreted in light of the original request leading to the production of implications and recommendations. Unfortunately for many CI professionals, however, proficiency in analytical tools is often one of their weakest areas. Continuously strengthening one's analytical skills and the ability to utilize analytical tools is paramount to the success of a CI professional (Gilad and Herring, 1996). Action-oriented CI is the result of producing implications and recommendations for managers.

At first glance, the intelligence cycle may seem to be reactive in nature, based on the appearance that intelligence is only produced through the requests of managers. However, studies of best practice companies have revealed that the process is actually dynamic and interactive (American Productivity and Quality Center, 1997). Throughout the intelligence cycle, feedback and updates from CI professionals allow for midcourse adjustments and new issues to surface. Further, the proactive CI professional brings intelligence issues to the attention of managers. This description of the intelligence cycle illustrates the variety of skills that are required for an effective CI operation. Thus, best practice companies also typically have many individuals throughout the organization involved with the intelligence process.

A DECISION-ORIENTED APPROACH TO DESIGNING A CI PROGRAM

The design of a CI program requires answers to six key decision areas. While I present the decisions independently, it will be clear that the decisions are interrelated. Table 2 provides a summary of the decision areas for your reference.

Table 2

Decision-Oriented Approach to Designing a CI Program Key Decision Areas	
Decision Area	**Key Concerns**
Focus of CI Efforts	Early warning of opportunities and threats Strategic decision making support Tactical decision making support Competitor monitoring and assessment Strategic planning support
Location and Structure	Decision Parameters: Where are profitable sales? Where do new products come from? Where are the largest threats?
Location and Structure	Champion/Manager of CI Human Intelligence Network Information Specialists Analysts
CI Products	Timely, Accurate, Relevant (TAR) (See Table 4)
CI Projects	Project-based approach Focus on decisions Prioritize intelligence needs Virtual teams Try a demonstration project Pitfalls
CI Ethics	Develop a code of ethics before first project Economic Espionage Act of 1996 (EEA) (See Table 5)

Decision Area 1: Focus of CI Efforts

CI programs need to have a focus. A 1997 study by the American Productivity and Quality Center clearly illustrated that best practice CI units developed a clear focus for their efforts. There are five generic focuses that can be developed (see Table 2):

- A focus on early warning centers on identifying opportunities and threats in the competitive landscape before they become obvious to all industry players. The primary efforts of this focus center on how the firm should position itself in light of a potential opportunity or threat.

- A second focus is providing support for strategic decision making. These CI activities are designed to bring information and analysis to bear on important strategic thrusts. For example, deciding if a proposed

expansion of operations into another country should proceed is a case where CI can deliver strategic decision making support.

- A third potential focus area, tactical decision making, emphasizes the day-to-day operations of a business. When CI is linked to the sales function, we often see a tactical focus.

- The fourth potential CI program focus would be competitive monitoring and assessment. In this situation, developing a deep understanding of competitors strategic and tactical intent and how to position the firm receives central attention.

- The fifth focus area is assistance with the strategic planning process of the organization. CI supporting this focal area centers on the collection and analysis of information that is an essential input into the design and implementation of strategic plans.

It is tempting to design a CI process that addresses multiple foci. In reality, CI operations are often requested to assist on multiple fronts. However, if a CI operation is spread across too many foci, it is likely to be ineffective because its resources will be spread too thin. Thus, a central question to ask is: How should we decide on a focus? One of the more effective methods is to conduct an intelligence audit (Fuld, 1988; Gilad and Gilad, 1988).

An intelligence audit is the process of identifying from mangers and other key personnel such as the sales force the intelligence needed to make informed decisions and the state of current intelligence efforts (see Table 3). From this analysis, your firm will be able to make decisions related to the focus of your CI effort. In many ways, the audit process will create a mission statement for CI undertakings.

Table 3

Intelligence Audit Framework	
Key Questions	
Question One	What intelligence activities are currently being conducted in the firm?
Question Two	What types of intelligence do my employees and I need to do our jobs better?
Question Three	How will a CI effort assist us in our jobs?
Question Four	What role will my employees and I play in an organized intelligence effort?
Question Five	What are the current facilitators and barriers to developing an action-oriented intelligence effort?

Most firms engage in some type of intelligence efforts, even if it is on an ad hoc basis. While these efforts may be as simple as talking to customers, suppliers and distributors, reading trade magazines, or using the Internet, they are all viable sources of potential intelligence. By determining the extent to which organizational members are currently conducting intelligence activities, an initial assessment can be made of the usefulness and intelligence yield associated with these activities.

By determining the types of intelligence that are most critical, both currently and in the future, management will begin to lay the foundation for the development of key intelligence topics and key CI needs (Herring, forthcoming). Many businesses choose to focus on competitor moves, industry conditions, customer needs, or pricing as key intelligence topics (Oster, 1994). Other key intelligence topics may stem from the firm's mission statement or long-term objectives. Key intelligence topics and CI needs, regardless of their origin or focus, ultimately drive the entire CI process.

Decision Area 2: Location and Structure

A CI operation can be located virtually anywhere in the organization. We know from the study of large organizations that they locate their CI groups primarily in marketing, planning, R&D, or directly reporting to the CEO. More importantly, we have found that location matters. In a study of more than 350 intelligence units, Prescott and Bhardwaj (1995) found that the activities undertaken by the CI groups were strongly influenced by where they were located in the organizational structure. Managers need to answer the following three questions to determine where to locate the CI effort.

Where do profitable sales come from?

It is a mistake to conclude that your product offerings are the source of profits. For many businesses, location, customer service, dedicated employees, networks, and efficient operations are the source of profitability. Identify your value position and understand the CI issues surrounding that position to determine the location of your CI efforts.

Where do our new products come from?

What is the real source of new products for your small business? Do customers, suppliers, or alliance partners provide the impetus? Does your sales force or operations provide new ideas? CI should be located near the key sources of new products. After all, your competition is probably creating their new products in a similar manner.

Where is the largest threat to our competitive position?

What keeps you up at night? The answer to this question will highlight areas of your business that you feel are under competitive threat. Areas of competitive vulnerability need to be identified and addressed. For example, would a new manufacturing process proposed by a competitor in the

trade press undermine your cost structure? Will loyal customers take their business to a competitor because of a more convenient location or new service offerings?

The answers to these three questions are also linked to the decision of where to focus your CI efforts. The advantage of focusing on these questions is that the CI effort can immediately demonstrate value by letting you sleep better at night.

Decision Area 3: CI Personnel

Someone in the organization has to assume the role of, and be recognized as, the CI champion. This person is the focal point for the CI effort. While the champion will typically have other duties, this person assumes the critical role of providing resources and moral support to others participating in the process. Further, the champion must interact with mangers to determine the key decisions where CI can play a role. The responsibilities of the champion should flow from the previous two decision areas.

There are potentially three additional roles for individuals assisting in the CI effort. Each of the roles requires different skills, and in some cases, training. In your business, you are likely to find that the same person performs multiple roles.

The first role is the one who coordinates the human intelligence network. Employees have their own networks that can be tapped for intelligence without serious disruptions to their normal job responsibilities. However, someone needs to be the point person to periodically tap the overall network and be available when an employee has extremely important, time-sensitive information. Information technology can facilitate this process, but is often expensive to install and operate. An example of effectively tapping the network is provided by a museum. Tour buses were a key source of revenue for the museum. One of the employees made a point of talking with the tour bus drivers to learn more about how they decided on destinations and tapped potential customers. Using this information, the museum was able to develop improved relationships with several tour companies and significantly increase the flow of tourists through the museum.

A second role involves the collection of secondary information through information technology. There is a wealth of secondary information on databases that can be tapped through the Internet and information vendors. On some occasions, you may want to outsource an information search to a professional firm. However, developing skills in the use of these sources is becoming easier and, if possible, someone should be designated to learn the process of secondary searching (Berinstein, 1998). There are also a variety of classes, and a CD-ROM has been developed to teach

information collection. The limitations of secondary research are that it is yesterday's information, it rarely answers your question directly and the validity of the data needs to be confirmed. Secondary research is good for learning about a topic area that then sets the stage for more specific CI.

The third role that is fundamentally important but under-utilized is the analyst. Analysts convert information into intelligence. The analyst needs to develop skills in a variety of areas including forecasting, profiling, financial analysis, and statistics. Above all, analysts need to have a mindset oriented toward developing implications and recommendations.

Decision Area 4: Products

Like any other service area within a firm, CI programs must produce products and services of value to managers. While there are a variety of products and services (as shown in Table 4), it is more important that the products have certain qualities. Products should be what I refer to as **TAR**. That is they should be **T**imely, **A**ctionable, and **R**elevant. The products should be placed in a context that the decision-makers relate to, formatted in a manner that users prefer, and provide an indication of missing information, sources, and what the intelligence means. Creativity is a very useful guide for anyone developing CI products. For example, one firm delivered intelligence reports in a news-paper format. Another firm always has a special section devoted to implications for our company.

As shown in Table 4 on the following page, services such as training can be extremely valuable tools for companies. The study by the APQC (1997) found that training was one of the most valued services that best practice companies offer. For example, before introducing new products, one firm always conducts a competitor response modeling exercise. In the exercise, teams representing the competitors develop responses to the companys new product offering. As a result of the competitor modeling exercise, many products and their positioning have been modified and some even canceled.

Decision Area 5: Systematize the Process by Using a Project-based Approach

Projects are the basic building blocks of an action-oriented CI program. That is, making the intelligence production process operational is a project. Each step in the intelligence process is not followed for every project. Since each project is unique, you must use those steps in the production process that best fit the current demands. For example, some projects can best be handled through secondary research, and involving the human intelligence network is not necessary.

Table 4

CI Products and Services	
CI Product Offerings	**CI Service Offerings**
Newsletters: Summary of many intelligence topics Information search: Secondary source information Intelligence report: Human network assessment Analytical alert: Analysis of current hot topic or issue	Training Participation in multifunctional teams Database management CI Forums Vendor qualifications Best Practice investigations Development of human networks Competitor response modeling exercise War room scenarios

Key intelligence needs or topics that result from the intelligence audit are also best handled through projects. Key intelligence topics and CI needs must be prioritized. Those topics and needs assigned the highest priority should be developed and approached as a focused CI project as opposed to ad hoc or random searches. Methods for handling routine intelligence requests and intelligence intakes must be developed and institutionalized. Here the development of either an intelligence request form or intelligence hot line is useful in ensuring that the intelligence needs of internal customers (e.g., sales representatives) not currently being addressed within the context of a formal project are not neglected. Although many firms rely heavily on informal processes to provide the impetus to their CI activities, a more formalized, project-based approach to CI has several benefits. The benefits include effective and efficient data collection, cost effectiveness as compared to a comprehensive approach, and actionable intelligence that is directly tied to decisions.

In their study of project-based CI, Prescott and Smith (1987) found five pitfalls for firms to avoid:

- Fuzzy objectives often lead to project outcomes that do not meet the requirements of management.

- A heavy emphasis on style as opposed to substance including implications weakens project deliverables.

- If key competitors or central non-market players are omitted from the analysis, the conclusions are likely to be suspect.

- Most CI projects are looking for general accuracy (the competitors market share is in the range of 27% - 30%) rather than point estimates (the competitors market share is 30.237%). If corroborating evidence is found from several sources, there are diminishing returns in trying to locate the last piece of evidence.

- Firms tend to use the same methods repeatedly. Best practice firms utilize a variety of methods and often experiment.

An effective way for businesses to implement projects is to use virtual teams, which are comprised of individuals from throughout the company who can be brought onto the project as needed. Thus, there is minimal disruption to their normal business activities.

Demonstration projects are an excellent way to showcase the benefits and methods of CI. Since there will be skepticism when you try to introduce CI concepts, a demonstration project breaks the ice for many employees. Select an important project from the outputs of the intelligence audit and use the results to illustrate the benefits of CI as well as the good and bad lessons learned from conducting the project.

Decision Area 6: Ethics

Ethics is one of the most important topics of our field. Many firms have avoided conducting CI for fear of appearing on the front page of the *Wall Street Journal*. President Clinton's signing of the Economic Espionage Act of 1996 has further heightened this concern. The majority of ethical problems have centered on the methods used in the collection of information. Questionable collection techniques are those methods that obtain information that a firm has not disclosed, is not obligated to disclose, and is not willing to disclose to the public (Paine, 1991).

There are a few basic guidelines to follow that will keep you from running into ethical problems (see Table 5). The Society of Competitive Intelligence Professionals (SCIP) has devoted a considerable amount of resources to address the topic of ethics, and proposal professionals can benefit from their work. SCIP has a code of ethics and a book entitled *Navigating the Grey Zone* (1997). There have also been numerous presentations at their conferences, and audiotapes from these sessions are available. SCIP also has a special issue of their magazine devoted to the subject of ethics. You should develop a code of ethics for CI before beginning the first project. I recommend the following process for developing your code. A team of employees from the legal department (or external legal counsel), along with the CI champion and individuals from the primary human collection network should work together to create the code. Develop a simple and brief code based on four principles related to deception, influencing the judgment of individuals, covert intelligence, and unsolicited intelligence (see Table 5). Train all employees when the code is developed. Some companies go as far as to have employees sign a statement that they will abide by the code. I recommend that all vendors and consultants used by your firm be exposed to the code and sign a statement that they will abide by your code when working for you.

One of the added benefits of exposing your employees to the ethics of CI is that they will see the value of protecting your company secrets. Often, employees inadvertently give away key information due to a lack of awareness. Training in this area is money well spent.

Competitive Intelligence as a Core Capability

Having laid out the past and present state of competitive intelligence, I will develop some ideas related to the future of CI. A key assumption of this scenario is that CI will continue to become institutionalized in the business community. A description of how the leading-edge firms of the future will use CI is described below:

> The CI process within a multinational firm is institutionalized on a worldwide basis although there is local responsiveness. The vast majorities of the employees appreciate the value of CI and participate in the process including counter-intelligence efforts. Data analysis is extensive with qualitative input often dominating quantitative data. The intelligence is integrated directly into strategic decisions often through sophisticated information systems. Top management uses CI as one of the ways it shapes the future of the organization and considers it an integral part of the "learning" organization.

A key component of the firms of the future is that managing behavioral dimensions of CI becomes critical. While collection and analysis are important, how organizations mobilize the informal CI process will determine their effectiveness. The

Table 5

Core Principles for Developing Codes of Ethics for the Collection of Competitive Intelligence		
Principle	**Decription**	**Examples**
Misrepresentation	To purposely mislead or falsely represent oneself or organization	Posing as a vendor or academic when collecting information Conducting phony job interviews
Improper Influence	To induce others to divulge information for which they have an obligation to keep confidential	Promises of jobs, promotions, gifts, bribery
Covert Collection	Applying collection techniques in a manner where the observed person or organization does not know that intelligence is being sought	Electronic espionage Planting a mole in a competitors firm Examining a rivals trash
Unsolicited Information	The receipt of information that was not requested	Strategic plan of a competitor found in a hotel conference room Overhearing a conversation about new products in a bar

process of integrating the formal and informal CI activities has been labeled the "parallel CI process" by Prescott & Gibbons (1992a). Their research identified reasons why the parallel process exists, and actions that organizations can take to integrate, but not eliminate, the process.

The parallel process is closely linked to the integration of CI operations across geographical locations in multinationals. While the international business literature has grown rapidly, it has not adequately addressed how multinationals manage the flow of information across subsidiary-subsidiary and corporate-subsidiary relationships. This is a rich area for research. It will be increasingly important in the coming years, especially given the advances in IT.

One set of analytical techniques that will gain wide acceptance is network analysis (Burt, 1992). Network analysis is concerned with the nature and type of relationships that firms establish. In this view, competition is concerned with how productive relationships give the firm access to information and control benefits. The field of network analysis has a rich tradition in sociology but is only beginning to emerge in the business arena.

The evaluation of CI programs and products has been slow in developing (Herring, 1996; Simon, 1998). Even the benchmark firms have spent little time developing performance indicators. This is a rich area for future research.

Academics can contribute to the field in at least two ways. First, as mentioned earlier, they need to begin to teach the topic of CI in their curriculum. Second, I suspect that one reason why CI has not gained more attention in academics is the lack of a theoretical framework. Given the promotion requirements of most schools, publication in a select set of journals is required. Those journals require theoretical frameworks. When a theoretical framework is developed that is subject to empirical testing, academics will flock to the field.

Implications for Proposal Managers

A recent Benchmarking Survey Report by Marianne Gouveia and John Ballard presented at the Fifth Annual Association of Proposal Management Professionals Conference in 1994 (Gouveia and Ballard, 1994) concluded that none of the companies included in the study made Proposal Management Professionals (PMPs) responsible for managing their firm's CI. Nonetheless, the use of CI was considered to be within the purview of PMPs. Typically, PMPs are the recipients of CI, not the group charged with managing the CI process.

As I stated at the beginning of this article, I strongly believe that PMPs who effectively use action-oriented CI will outperform their competitors who do not use CI or who use it ineffectively. In companies with a high proposal win rate, CI is usually critically important in the following proposal management functions:

- Bid/No Bid Decision Process
- Program Win Strategy Development
- Proposal Strategy
- Pricing (especially pricing to win)
- Ghosting

In other words, before a company can make an informed Bid/No Bid decision, managers and PMPs need to have detailed knowledge about the competition. Are competitors planning to bid on the procurement? Do they already have a contract with the customer? What are their strengths and weaknesses? What is your past relationship with the customer? What products, services, approaches, and solutions does your firm have that will make your proposal the most highly rated? Important questions such as these can only be answered with good CI. In order to answer the big question "what will it take for our company to win?" PMPs must have continuous and useful CI or their proposals are not likely to be competitive.

CONCLUSIONS

The field of competitive intelligence has experienced rapid growth and considerable legitimacy over the past 30 years. Developments in IT, analysis, ethics and the management of CI continue to be the significant issues facing the field. While we know how to establish an action-oriented CI program focused on addressing managerial needs, developments in IT, analysis, and ethics need to be monitored carefully. My approach has been to address practitioner concerns by detailing six key decisions regarding the design of a CI effort. Further, the evolutionary framework developed here allows managers to evaluate their current level of sophistication. Using the evolutionary framework and the design principles, managers can determine how they need to enhance their current CI efforts.

To be successful, PMPs must closely coordinate their efforts with those individuals involved in CI. Without good CI, PMPs will be at a serious competitive disadvantage because their proposals will be developed without the critical background information needed to make an informed bid decision and to write the winning proposal.

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