STRATEGY

SMALL BUSINESS SOLUTIONS: BUILDING AND LEVERAGING A COMPETITIVE INTELLIGENCE CAPABILITY WITHOUT GOING BROKE

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ABSTRACT

The interest in and use of Competitive Intelligence (CI) programs is increasing among small businesses. While small businesses face certain limitations in terms of resources, staff, time, and expertise, they are still able to design and utilize a CI program that will address their unique challenges and needs. This article presents a framework and set of guidelines that can be used by small businesses interested in designing or strengthening their competitive intelligence (CI) program.

INTRODUCTION

As a young entrepreneur, Kelly Scott was faced with the agonizing decision of whether to geographically expand her small uniform manufacturing business and diversify her product line in an effort to enlarge her customer base. Although she was able to obtain advice from a small group of friends and other entrepreneurs, she found their inputs to be anecdotal at best. Kelly knew that she needed valid data regarding industry growth, competition, and future buying trends before a quality decision could be made. But as the sole proprietor of her company, where would she and her small team of managers find the time and resources to research and compile the mass of information needed? At nine o'clock in the evening, as she turned off the lights in her office and closed the door, she wondered if opportunities for growth would continue to allude her as her company struggled to survive, let alone expand.

This scenario is typical for many small businesses. While many opportunities and threats are present, it is difficult to collect and analyze the competitive information that is so necessary in making informed business decisions. In this article, we address this issue by presenting a framework for the growing field of competitive intelligence. We illustrate how small businesses can apply the concepts of CI in a cost-effective manner. Further, we identify a host of proven practical tips and develop a resource directory that will assist the small business firm in leveraging their resources to enhance their competitive position.

Competitive Intelligence

(See Glossary In Appendix for terminology)

The field of competitive intelligence has grown over the past two decades to become an integral part of most large organizations (Kahaner, 1996; McKinnons & 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 & Gibbons, 1993). While these same competitive issues are faced by all businesses, there has been limited attention devoted to the development of viable intelligence programs in small firms (Palubiak, 1996; Berger, 1997). Regardless of the size of an organization, there is a set of common fundamental CI concepts. Once this set is understood, the process of designing a CI program, which addresses the unique qualities of small businesses, can be developed.

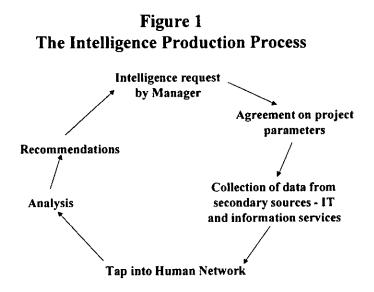
Competitive intelligence is defined as the process of developing actionable foresight regarding competitive dynamics and non-market factors that can be used to enhance competitive advantage (Prescott, 1989). Competitive dynamics refers to the evolution of a firm's industry, and the moves and countermoves 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.

Building on our definition, we see that the domain of competitive intelligence (CI) is quite broad (Berhnardt, 1994; Gilad & 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), 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 intelligence use 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. These competitive intelligence initiatives range in scope and sophistication including corporate libraries and large centralized CI staff functions. As the competitive landscape continues to change organizations are experiencing an increasing dependence on the external environment in order 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. Another important benefit of CI is that it identifies managerial blind-spots (Gilad, 1994; 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. Cl is neither a database of endless information nor does the mere investment in expensive information technology constitute a Cl 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.

THE INTELLIGENCE PRODUCTION PROCESS

The most fundamental concept in the field of Cl is the intelligence production process or what is often referred to as the intelligence cycle (see Figure 1). The production process contains all of the elements required to produce actionable Cl. While the process is intuitively simple, its operation is often quite complex. The Cl process is initiated through a request from management. Requests come in many forms. An essential aspect for any Cl professional is to gain the confidence of management so that they will continuously bring requests. The sum total of these requests represents the 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 request in terms of exactly what is sought, the time frame, and any constraints such as budget and confidentiality. For the Cl professional, interviewing skills that involve extensive probing to determine the exact needs of management enhances the chance that the request will be properly interpreted.



Once 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 however, proficiency in analytical tools is

often one of the weakest areas of many CI professionals. Continuously strengthening one's analytical skills and the ability to utilize analytical tools is paramount to the success of a CI professional (Gilad & 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. Studies of best practice companies however, 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.

The Importance of Competitive Intelligence for Small Firms

Small firms need to focus on their competitors and the competitive environment as much as large firms (Chen & Hambrick, 1995; Maynard, 1993). All firms are faced with limited resources, limited access to capital, and few slack human and physical resources. These constraints ultimately affect the size of the CI operating budget and demand focus in any CI initiatives. Understanding one's competitive position and being able to monitor relevant competitors is a mandatory survival skill. When these constraints are considered in tandem with the unique qualities of small businesses (e.g., duality in organizational roles, smaller pools of experts, little to no specialization in organizational activities, and unequal relationships with larger firms) they produce a need for creativity and innovation in designing, administering, and justifying a viable CI process (Palubiak, 1996; Berger, 1997).

KEY DIFFERENCES OF A SMALL BUSINESS

Essentially, three main differences exist for a small business in the development of a CI program: the cost of operating a CI program, the need for designated individuals devoted to CI and the required set of CI skills and tools. When the potential impact of these factors is either underestimated or unaddressed, these differences can impede the successful operation of a CI process.

The costs of operating a CI program are significant. Our research (Prescott & Bhardwaj, 1995), which has been confirmed by others, reveals that a minimum of \$300,000 is required to fund a CI program. Costs related to personnel, databases, IT, travel, consultants, and purchasing customized supplies make up the bulk of the budget. Some of the large multinational organizations such as Kodak have been known to spend millions of dollars on CI.

Large firms have designated positions devoted to CI. A typical CI department has approximately two full-time equivalent employees and an administrative assistant. In many organizations CI personnel split their time between activities other than CI. This type of job design is commonly found in planning, marketing, and R&D departments. As a result of this specialization, CI professionals in large organizations are able to develop a set of skills that allow them to practice their craft effectively. In recent years the required skills for a CI professional have expanded from data collection to include analysis, interviewing, framework development, communications, IT, and project management. There are a variety of professional societies and consulting firms that

assist firms in the development of these skills. Further, many companies have recruited highly paid individuals from government agencies such as the CIA and FBI, or MBA programs because of the belief that they have mastered the requisite skills of CI. We believe that a small business because of its unique qualities can address the above three issues in a cost-effective manner.

WHERE TO START: DESIGNING A CI PROCESS TO MEET THE NEEDS OF SMALL FIRMS

Pre-Work

Before embarking on the development of a CI capability there is a set of pre-work activities that need to be done. The pre-work is essential to orient your organization towards developing a CI program that will be both cost-effective and achieve meaningful results. We have found that by engaging in pre-work activities, many firms are able to prevent common and often costly mistakes during implementation (Prescott & Smith, 1987). Pre-work begins by selecting an individual in the firm who knows your industry, internal operations, has gained the respect of others and has the potential to be a champion. That selected person should join the Society of Competitive Intelligence Professionals (SCIP). SCIP is the leading nonprofit professional association devoted to the professionalization of CI. SCIP is comprised of over 6,000 members who practice CI. While most of the members are from large organizations, there are several benefits that will immediately assist you in developing a CI mind set. Membership immediately links you into a network of individuals who have and are struggling with the same issues. SCIP also has a variety of other resources available to members including a practitioner journal, magazine, books, skill developing conferences, and local chapters.

There are many books and articles available on the topic of CI. We recommend you begin your pre-work with The New Competitor Intelligence by Leonard Fuld and Michael Porter's book, Competitive Strategies: Tools and Techniques of Industry Analysis. Fuld's 1995 book is an excellent resource book on how to find information. It is packed with many useful tips for locating information on a wide variety of topics. Michael Porter's 1980 book, Competitive Strategies: Tools and Techniques of Industry Analysis provides a framework for analyzing industries and competitors. Together, these two books provide frameworks for finding information and converting it into actionable intelligence. In addition, they are readily available in public and university libraries, have a practitioner-orientation, and cover the essential topics of CI. Once you have had an opportunity to digest the material in the books, design a CI orientation seminar and invite those individuals who will most likely champion the CI effort and those who will be involved with its operation. The seminar needs to provide the participants with an understandable definition and overview of the field of CI in terms of how it is conducted, and its benefits and limitations. The seminar should be no longer than an hour and one-half. Either internal personnel or a consultant can deliver the seminar. At the end of the seminar the following question needs to be posed: Is there sufficient enthusiasm for proceeding with the development of a CI program? The question need not be answered t the meeting but should be addressed within a two-week period in order not to lose momentum if there is interest. Once the decision has been made to proceed with the development of a CI program we suggest that you adopt a decision-oriented focus to the design and implementation of the CI process.

A DECISION-ORIENTED APPROACH TO DESIGNING A CI PROGRAM

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

Decision Area 1: Focus of CI Efforts

Cl programs need to have a focus. A 1997 study by the American Productivity and Quality Center clearly illustrated that best practice Cl units developed a clear focus for their efforts. There are five generic focuses that can be developed (see table one). A focus on "early warning" centers on identifying opportunities and threats in the competitive landscape before they become

Table One - Decision -Oriented Approach to Designing a Cl Program Key Decision Areas

Defilin Arou	Ligy 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? 	
CI Personnel	 Champion/Manager of CI Human Intelligence Network Information Specialists Analysts 	
CI Products	Timely, Accurate, Relevant (TAR) (See Table 3)	
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 4	

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. "Tactical decision making," a third potential focus area, emphasizes the day-to-day operations of a business. Often when CI is linked to the sales function, we see a tactical focus. The fourth potential CI program focus would be "competitive monitoring and assessment." In this situation, developing a deep understanding of competitor's 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. This will be especially true for small businesses. 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 & 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 Two). From this analysis, your firm will be able to make decisions related to the focus of your Cl effort. In many ways, the audit process will create a mission statement for your Cl undertakings.

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?

Table Two Intelligence Audit Framework

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.

Small businesses must often provide a clear cost justification for all intelligence activities undertaken (Palubiak, 1996). 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. Many small businesses may chose 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.

An effective competitive intelligence process is as concerned with intelligence use as it is with collection and interpretation of information. Decisions and decision making should drive an intelligence effort. Thus, any intelligence activities undertaken and all desired intelligence should be directly tied into routine or specific decisions. By identifying how any strategic or tactical intelligence generated by a CI effort will directly impact the firm's employee's ability to be effective in their jobs, decisions can be made regarding the allocation of resources.

The determination of levels of participation in the CI process by various employees is extremely important for small firms. The decisions surrounding this issue will ultimately impact the firm's ability to coordinate and leverage the intelligence effort throughout the firm. Will participation in the CI effort be a part of everyone' job, and how will said participation be measured and rewarded? Will one or two individuals be dedicated to managing CI activities and CI projects? How and where will knowledge stocks be compiled, analyzed, and stored? Who will be responsible for disseminating intelligence? All of these questions speak to the important decision concerning the allocation of time and resources to support the CI process. Ultimately, while many people may be involved in the process, we recommend that a person be designated as manager or director of CI. As stated earlier, some of the key advantages in designating a person to lead the CI effort are that it permits specialized learning to occur and reduces ambiguity in responsibility and accountability.

Finally, the various barriers and facilitators of the firm's intelligence process should be identified and addressed where possible. Organizational structure or lack of structure, differing mental models among managers and between managers and employees, behavioral issues, or political issues may enhance or inhibit the success of your firm's Cl effort (Dugal & Prescott, 1998). By addressing various barriers or facilitators within the design of your firm's competitive intelligence process, the potential availability of actionable intelligence increases for decisionmakers.

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 over 350 intelligence unit's, 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. The decision for small businesses is further complicated since a clear demarcation across functional areas does not always exist, there are fewer slack resources, and often a separate budget for CI is not created. In this setting, the small business manager needs 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 small 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.

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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 efforts 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.

For small businesses 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 will find that the same person performs multiple roles. This occurs in large organizations as well. The first role is the one who coordinates the "human intelligence network". One of the advantages of small businesses is that there is less bureaucracy. Building on this advantage, small businesses can develop an effective network of information collectors. 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 small museum. Tour busses 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 company 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. Small businesses have a variety of inexpensive ways to tap into these sources. Small business associations, universities, and local access providers all allow inexpensive access to the Internet. 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 even a CD-ROM

has been developed to teach information collection (see the resource directory). 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 underutilized 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.

There are several ways that small businesses obtain the benefits of CI without having personnel dedicated to the activity full-time. Some alternatives include using local university classes to assist with projects, internships, partnering with other small businesses, utilizing government funded business organizations, and partnering with customers and suppliers.

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 Three), it is more important that the products have certain qualities. Products should be what we refer to as **TAR**. That is they should be Timely, Actionable, and Relevant. The products should be placed in a context that the decision-makersrelate to, formatted in a manner that users prefer, and provide and indication of missing information, sources, and what the intelligence means.

Table Three

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 Cl Forums Vendor Qualifications Best Practice Investigations Development of human networks Competitor response modeling exercise War room scenarios

Creativity is a very usefull guide for anyone developing CI products. For example, one firm delivered intelligence reports in a newspaper format. Another firm always has a special section devoted to "implications for our company".

As shown in Table Three, 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 company's 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 Cl program. That is, the operationalization of the intelligence production process is a project. Each step in the intelligence process is not followed for every project. Since each project is unique, you must utilize those steps in the production process that best fit the current demands. For example, some projects can best be handled through secondary research. In this case, involving the human intelligence network is not necessary.

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 small and large 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 into 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 competitor's market share is in the range of 27% - 30%) rather than point estimates (the competitor's 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. Finally, firms tend to use the same methods repeatedly. Best practice firms utilize a variety of methods and often experiment.

An effective way for small business to implement projects is through the use of virtual teams. Virtual teams are comprised of individuals throughout the company who can be brought into 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 the concepts of CI, 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 Economic Espionage Act of 1996 defines economic espionage as the improper receipt (i.e., receipt without proper authorization) or theft of trade secrets via any means. Additionally, the act has changed espionage from a civil to a federal crime and dictates that proceeds received as a result of espionage must be forfeited. The majority of ethical problems have centered on the methods used in collection of information. There are a few basic guidelines to follow that will keep you from running into ethical problems. SCIP has devoted a considerable amount of resources to addressing the topic of ethics and you can benefit from their work. SCIP has a code of ethics and a book entitled "Navigating the Grey Zone". There have also been numerous presentations at their conferences. Audio tapes from these sessions are available. SCIP also has a special issue of their magazine devoted to the subject of ethics. 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).

You should develop a code of ethics for CI before beginning the first project. We recommend the following process for developing your code (Table 4). A team of employees from the legal department (or external legal council), 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 four). Once the code is developed all employees should be trained. Some companies go as far as to have employees sign a statement that they will abide by the code. We 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.

FINAL THOUGHTS ON DEVELOPING A CI PROGRAM

Select and Utilize Appropriate Technologies

The most important thing to remember about technology is that it should be selected to support your CI process. The mere purchase of information technology does not constitute a CI process in and of itself. Therefore, when you begin to design your CI process DO NOT run out and purchase extensive and expensive information technologies, databases, or contract long-term relationships with information vendors. As previously stated, technologies such as the Internet are widely available and can be used effectively to collect a wide range of intelligence about competitors, non-market factors, industry changes, and current and future conditions. Through the use of news groups, chat rooms, company web pages, and business specific data dedicated to a specific intelligence area, enterprising firms are able to collect a wide range of market-based intelligence (Hise, 1996). By simply appropriating 3-5 hours per week to research on the Internet, information, previously thought to be unavailable can be gathered, analyzed, and placed in the hands of decision-makers. In addition, using the Internet to conduct initial research on new geographical locations, new customers, or suppliers and distributors can significantly reduce the costs normally associated with scouting new locations or cold calling potential clients. As you become more familiar with your true technology needs, integrative technologies such as databases, electronic bulletin boards, Lotus Notes, groupware or company specific software can also be used to compile common knowledge stocks and facilitate their dissemination and use.

Table Four

Core Principles for Developing Code of Ethics for Collection of Competitive Intelligence

Principle	Description	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 competitor's firm examining a rival's 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

Remember, the use of technology as a part of a small firm's Cl process can be extremely cost effective and time saving when properly selected. But, beware of its limitations.

Tap Into Internal and External Human Networks

Human networks can be extremely effective in assisting you in leveraging your CI effort. Networks can be either formal or informal in nature (Baker, 1994). These networks can include firm employees, competitor employees, suppliers, customers, personal contacts or other CI professionals (Moore & Buttner, 1997). Formal human networks can be established through participation in small business center activities, programs, seminars, business-related receptions, round tables, or by actively participating on the advisory boards of other small businesses. Casual networks may include other small business owners, CI professionals or personal contacts. When assessing the value or usefulness of a human network, a couple of key considerations include how often you are able to meet with the members of your network, how formalized your interactions are with other network members and how similar or dissimilar the members of your network are to you.

Measuring the Results and Impact of Your Intelligence Effort

The use of a competitive intelligence program can lead to a competitive advantage. This advantage should be measurable and use standard performance indicators similar to those used by most service areas. In reality, actually measuring the impact of CI activities is difficult and not often done by even best practice companies. When designing your CI program you may want to initially include some methods for measuring the effectiveness of the CI program. When assessing the effectiveness of your CI program you may want to consider using: user satisfaction surveys, follow-up reports, increases in requests for products and services, or project close-out reports as indicators of the degree to which your CI program is actually meeting the needs of your organization (Herring, 1996).

CONCLUSION

Competitive intelligence programs and initiatives are able to assist organizations by accurately depicting the nature of their unique competitive environments and addressing competitive blind spots. As they continue to make effective inputs to both small and large businesses, one must keep in mind that as with any other strategic investment, their ability to add value must be monitored and evaluated on a regular basis. In this article we have presented a framework and a set of guidelines that can be used by small businesses to begin to develop a competitive intelligence effort. By engaging in meaningful and focused pre-work activities, and following the key decision areas you should be able to develop a cost effective CI program that is able to increase both the quality and speed of your decision making process.

RESOURCE DIRECTORY GUIDE - NEXT PAGE

RESOURCE DIRECTORY GUIDE

<u>Books</u>

Ben Gilad and Jan Herring (Eds.) (1996) The Art and Science of Business Intelligence, In Advances in Applied Business Strategy, JAI Press, Greenwich, CT

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Sharon Oster (1994) Modern Competitive Analysis, Oxford University Press: New York.

How to Find Information about Companies, Washington Researchers, Ltd. 301-251-9550

Journals and Magazines

Competitive Intelligence Review, Wiley: New York.

Competitive Intelligence Magazine, Wiley: New York.

On-Line Magazine, On-Line, Inc.: Wilton, CT.

CI Resources

<u>The Fuld War Room</u>, Iron Horse Multi-media 1 (888) 467-5115 www.ironhorsemultimedia.com This resource is a comprehensive, interactive, CI training tool (includes CD-ROM).

Navigating through the Gray Zone: A collection a corporate codes of conduct and ethical guidelines, Society of Competitive Intelligence Professionals and the Conference Board's Council on Competitive Analysis.

Jan Herring (1996) Measuring the Effectiveness of Competitive Intelligence, SCIP: VA

Professional Associations

Society of Competitive Intelligence Professionals 1700 Diagonal Road, Suite 520 Alexandria, VA 22314 (703) 739-0696 www.scip.org

Small Business Resource Centers

The Small Business Development Center National Number: 1 (800) 8-ASK-SBA

Intel's Small Business Links

http://www.intel.co.jp/businesscomputing/small/resource.htm This web site links to several other small business sites including: American Express Small Business Exchange, American Productivity and Quality Center, Bureau of Labor Statistics, US Small Business Administration.

Entrepreneurial America, Inc. 22500 Orchard Lake Rd. Farmington, MI 48336 http://www.entameria.com

Your Mining Company's Guide to Small Business Information http://sbinformation.miningco.com/

Research Institutes

American Productivity and Quality Center 123 North Post Oak Lane, 3rd Floor Houston, TX 77024-7797 (713) 681-4020

WEB RESOURCES¹

Learn about Competitors and Industries

www.marketguide.com Market Guide contains information on 10,000 companies.

www.dol.gov Department of Labor provides information about a number of industries.

www.nist.gov National Institute of Standards and Technology (NIST) contains information on several industries.

¹ This list was adapted from Nordstrom, R., and Pinkerton, R. (1998) The Advantage of Internet Sources to Build a Marketing Intelligence System, Competitive Intelligence Review (forthcoming).

www.attcom/business AT&T Business is a source for information on industry reports and business news.

www.libertynet.org/'bftc Ben Franklin Technology center contains information on markets, industries and competitors.

www.databaseamerica.com/BusinessProfiles.com This site contains a number of profiles on businesses.

Learn about Customers

www.gallup.com The Gallup Polls can provide you will information on consumer trends and preferences.

www.surveysite.comSurvey Site will assist you in developing an on-line market research survey.

www.surveybuilder.com Survey Builder is another on-line service designed to assist in the development of customer surveys.

APPENDIX - GLOSSARY OF COMPETITIVE INTELLIGENCE TERMS

Actionable Intelligence - intelligence that has implications for specific decisions

<u>Competitive Intelligence</u> - the process of developing actionable foresight regarding competitive dynamics (e.g., industry competition, industry changes) and non-market factors (e.g., government regulation, tariffs, culture) that can be used to enhance competitive advantage. The word competitive intelligence may also be used to describe the "intelligence" products resulting from the process.

<u>Competitive Intelligence Personnel</u> - The individuals who support and work within the competitive group or team. These job titles typically include: CI Champion, CI Manager, Analyst and Information Specialist.

<u>CI Champion</u> - A high ranking individual within the business (e.g., the owner or a high-level manager) who assumes the critical role of providing resources and moral support to those who are participating in the CI process.

<u>Cl Manager</u> - The person appointed by the company to formulate, coordinate, and implement the Cl process. This person will also supervise the activities of the other member of the Cl team.

<u>Analysts</u> - The CI analyst is responsible for converting information in the actionable intelligence. This individual should have strong analytical skills, good judgment, and enough experience in the industry or field to be able to identify and understand even subtle patterns and trends in information.

<u>Information Specialist</u> - The information specialist is responsible for the collection of information from a variety of sources. Optimally, this person should have strong research or library science skills.

Espionage - The unauthorized receipt or theft of trade secrets or other proprietary information.

<u>Human Intelligence Network</u> - an internal and external network of individuals (e.g., suppliers, customers, creditors, competitors, other employees) that can be utilized to obtain information about key intelligence topics or other intelligence interests.

Information - data that has been generated within a specific context

Intelligence - contextualized data that has been analyzed

<u>Intelligence Audit</u> - the process of assessing the current state of intelligence activity within the firm and the intelligence needed by managers and other key personnel. An intelligence audit typically has three steps:

- 1. Evaluating the level and types of intelligence activities (and actual intelligence) that resides within the firm.
- 2. Identifying the gaps in intelligence needed versus available intelligence.
- 3. Evaluating the quality of the current intelligence operation or efforts.

<u>Key Intelligence Topics</u> - the types or areas of intelligence that are most valued by managers and other decision makers. Key intelligence topics may include (but are not limited to) competitor moves, industry conditions, customer needs and pricing.

<u>Managerial Blind-Spots</u> - areas of uncertainty concerning strategic and tactical decisions. Blindspots are exacerbated when managers make decisions that do not consider the actions and reactions of competitors and/or environment or industry changes.

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