Introduction

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Companies of every size have established formal or informal methods of learning about their industries and competitors. While many organizations do rely on their own libraries or information centers for some of this kind of information, there continues to be a trend toward the establishment of "intelligence departments," sometimes called "BI" (business intelligence), "CI" (competitive, competitor, or corporate intelligence), or "ICN" (internal collection network) departments. The literature on this topic is commonly found in business and management journals rather than library journals and frequently addresses topics already very familiar to business librarians—i.e., finding information on products, industries, companies, and the business environment. Not all kinds of information gathering are considered to be appropriate for corporate libraries. Extra-library methods can involve field work, informal or formal, during which information is acquired from other than printed or electronic sources—e.g., sales visits, trade shows, consultants, advertising agencies, commercial credit agencies, and competitor intelligence firms. Stressed by the leading authors in the field is that these legal activities must be clearly distinguished from the illegal and unethical techniques of corporate spying or industrial espionage.

DEFINING COMPETITIVE INTELLIGENCE AND RELATED TERMS

Terms such as competitive intelligence and strategic intelligence are often used interchangeably, yet some have acquired specialized
A solid discussion of definitions is provided by Miller in his article in this issue of *Library Trends* about the education of intelligence professionals. The location and function of such activities within organizations are the two most important factors that determine the labels. A handy definition of "business intelligence" may be found as a scope note in the *Library of Congress Subject Headings (LCSH)* (1993): "Here are entered works on the systematic accumulation of information regarding business competitors and their products, including trade secrets" (vol. 1, p. 666). Another definition from a respected text in the field (Gilad & Gilad, 1988) reads: "BI is the activity of monitoring the environment external to the firm for information that is relevant for the decision-making process in the company" (p. viii). These authors define BI broadly to include monitoring activities of many kinds (Gilad & Gilad, 1988, p. 6):

| Current competitors | Economic environment |
| Potential competition | Social and community environment |
| Growth opportunities | Demographics |
| Technological environment | Suppliers |
| Markets | Acquisition candidates |
| Political and regulatory environment | |

Most of the current literature emphasizes that BI and related terms, such as CI, refer to *legal* information gathering, not to unethical or illegal practices. Gilad and Gilad state outright that, "[b]usiness intelligence is *not* industrial espionage. The latter is an overrated and largely ineffective—not to mention illegal—way of gaining temporary access to the golden egg, used by those who lack the skill to raise the right goose" (p. viii).

Sutton (1988) accepts that "competitor intelligence" and "competitive intelligence" are synonymous. He further distinguishes competitive intelligence from basic market-share and product-tracking information by the strategic purpose of the former (p. 4).

A clear definition is provided by Vella & McGonagle (1988): "Competitive intelligence is the use of public sources to develop information on competition, competitors, and the market environment" (p. 1). An enumeration of the phases of CI is informative:

- **Requirements Phase.** In this phase, you both recognize the need for CI and define what CI you need. This means considering what type of issue (strategic or tactical) is motivating the project, what questions are to be answered by the CI, who will be using the CI, and how the CI will be used.
- **Collection Phase.** In this phase, the data needed to develop the CI are systematically acquired. This involves a determination
of who should be performing the CI (a separate CI professional, the user of the CI, or both), a frank understanding of the constraints on the assignment (time, money, organizational, informational, and legal), identification of the relevant competitor(s), and identification of potential data sources.

- **Processing Phase.** In this phase, the data which [have] been collected [are] evaluated and analyzed to transform [them] into CI. This may involve comparing the information with CI from other sources, integrating it with other CI, or measuring the results of the CI research against predetermined “benchmarks.”

- **Dissemination Phase.** In this phase, the CI is distributed, on time, to those who have requested it and, in some cases, to others who may profit from having it. Here the final form of the CI as well as security may be important considerations (pp. 3-4).

In their competitor analysis outline, Vella & McGonagle (1988) list perhaps the most important elements of a competitor analysis, thereby partially defining the primary focus of CI activities. Two of the several major categories proposed by the authors itemize some of these elements:

- **Competitive Environment:**
  - Industry structure
  - Number of competitors, product lines, and locations
  - Market shares, sales, and profits
  - Industry marketing, distribution, and pricing practices
  - Expansion potentialities of competitors
  - Important differences among competitors
  - Barriers to entry and exit
  - Potential entrants and future competitors
  - Indirect competition

- **Products and Services Offered:**
  - Product lines and services currently offered
  - History of key products and services
  - Depth and breadth of products and services
  - Analysis of new products and services offered, including market impact and impact on competition
  - Level and consistency of quality control
  - Experiences with recent new products or services
  - Probable new products or services to be introduced/eliminated (pp. 121-22).

Other major categories, each with its own list of elements, include the following: sales; pricing policies; sales force and customers, marketing, personnel, resources, and facilities; technology, research,
and development; financial and legal position; ownership, control, and management; overall business strategies, policies, objectives, and perception of itself; and perception by competitors and by customers (Vella & McGonagle, 1988, pp. 122-25).

As demonstrated by the mentioned categories, there are sources and types of sources that are not accessible to traditional librarians or information professionals. In a survey by the Conference Board, Inc., there were four categories of information sources perceived to be "very" or "fairly" important (Sutton, 1988):

- **Sources within the company:**
  - Sales force; marketing research staff; analysis of competitors' products; planning staff; engineering staff; former employees of competitors; and purchasing staff.

- **Contacts within the trade:**
  - Customers; meetings, trade shows; distributors; suppliers; trade associations; consultants; retailers; competitors' employees; and advertising agencies.

- **Published information:**
  - Industry periodicals; companies' promotional materials; companies' annual reports; companies' 10K reports; security analysts' reports; financial periodicals; speeches by managers; general business periodicals; national newspapers; newspapers in cities where competitors have facilities; directories; and government publications.

- **Other sources:**
  - Security analysts; tracking services; electronic databases; investment banks; court records; want ads; and commercial banks (p. 19).

Most of these activities are concerned with external environments. In their article in this issue, Auster and Choo define "environmental scanning" as "the acquisition and use of information about events and trends in an organization's external environment, the knowledge of which would assist management in planning the organization's future courses of action" and indicate that it includes both general exposure to external information and focused issue-oriented searching, all to the end of providing management with strategic decision-making information. The authors trace the term back to the late 1960s. H. Frances Greene (1988) suggests that "[i]nformation gathered on the environment in which a company operates has come to be known as competitive intelligence" (p. 285). Referring similarly to the general business environment, Lancaster and Loescher (in their article in this issue of Library Trends), suggest that "issues management" is an activity or group of activities that can be performed by an issues management group within an organization for the purpose
of identifying technological or social issues likely to have positive or negative impacts on the organization. The term is traced back to the mid-1970s. While the terms "environmental scanning" and "issues management" seem to be practically synonymous, an argument could be made that the former is contained within the latter; a preliminary search of ABI/Inform (see the last article of this issue) indicates that they have individual literatures with a small degree of overlap.

Hohhof (1994) proposes a set of three practical explanations of terms:

- [Business intelligence (BI)] is the organizational means by which information about a company's external environment is systematically collected, processed, analyzed, and distributed to managers responsible for taking whatever action is called for. Such a system organizes the flow of critical information and focuses it on important operational and strategic issues and decisions (p. ix).

- Intelligence information is made up of data compiled from an organization's external environment through a focused, continuous collection process. When analyzed in concert with the internally gathered data contained in the company's general IS [information system], intelligence information gives managers as complete and as accurate an understanding of the external environment as possible and helps them reduce the uncertainty associated with their decisions (p. x).

- Competitive information systems (CIS) help managers stay abreast of market and world events. Using information technology to keep companies ahead of the competition, CIS does not simply deliver large amounts of information: it provides the information managers need to make informed decisions (p. xi).

Despite many admirable attempts to define them, the terms used to describe the activities discussed in this issue overlap or are interchangeable in practice. As Samuel Johnson admitted, language is a living changing thing, and any attempt we may make to prescribe usage may, at most, slow the changes.

**How is Competitive Intelligence Applied?**

Uses of data acquired by competitive intelligence professionals are as varied as the activities of organizations in general. In the broadest terms, CI is information that supports positive change in an organization. More specifically, a Conference Board, Inc. survey reported the following examples of decisions relying on monitoring information (Sutton, 1988): pricing, strategy, new products/services, acquisitions, changes in manufacturing capacity/processes, product specifications, sales force changes, advertising/promotion, and joint ventures (p. 20).
THE COMPETITIVE INTELLIGENCE PROFESSION

Is competitive intelligence a profession? The status of librarianship as a profession has received frequent attention in the literature. Very few writers discuss CI as an independent profession. There are attributes of CI that can be categorized as professional; yet, on the whole, it may be difficult to so class CI activities in general (of the many works concerned with professional attributes, the following may be recommended: Abbott [1988], Freidson [1986], Hernon [1991], and Winter [1988]). Following is a short list of professional attributes against which CI activities may be compared. For several a clear match with librarianship would seem to exist; however, for others, a correspondence is less clear:

- a profession is supported by a specialized body of practical and theoretical knowledge;
- professionals have a service orientation;
- a demand exists for professional services;
- professional organizations exist and may be concerned with the following: identifying professional functions, determining professional standards, and certifying competence;
- there exist relationships between professions and formal systems of higher education;
- there exists a minimum expected level of educational attainment for professionals;
- criteria exist for evaluating professional achievement;
- society recognizes the importance of professions;
- there exists a system of rewards;
- a sense of autonomy and community exists within a profession;
- a professional-client relationship exists;
- a large-scale commitment is required of professionals; and
- professionals maintain a monopoly on their services.

The number of these attributes that apply to CI activities may be dependent upon the location and nature of CI activities in a given organization. Addressing the issue more directly, Fahey (1990) applies five tests of professionalism specifically to CI:

1. A Knowledge Test, which identifies the presence of a unique knowledge base, a knowledge base that is constantly being enhanced, and knowledge codified in the form of principles, practices, and standards.
2. An Intellectual Test, which demonstrates the presence of two related intellectual characteristics: distinct thought processes and diagnostic processes.
3. An Operations Test, which addresses a shared conception of what constitutes specific CI functions and tasks.
4. A Decision Making Test, which demonstrates that abilities to perform recognized decision relevant roles within organizations are present and that they are broadly similar across organizations.
5. A Value Test, which is concerned about the presence or lack of a demand for CI practitioners and seeks evidence about the degree to which they are valued by organizations (pp. 1-4).

Fahey believes that CI practitioners in general do not meet these criteria and suggests that, in order for the field to achieve the status of a profession, much attention would have to be paid to “establishing the parameters of a requisite knowledge base, relevant conceptual and thinking skills, clearly specified tasks and functions, potential decision making roles, and value enhancing contributions” (p. 4).

COMPETITIVE INTELLIGENCE EDUCATION

Closely related to the professional character of competitive intelligence are educational issues. Where in existing systems of higher education should training for such an interdisciplinary group of activities take place? While it has been suggested that such education be provided in specialized institutes (see the Miller article about education in this issue), there presently exist scattered courses in schools of business and of library and information science. At Boston University, Liam Fahey has taught “Competitor Analysis” in the MBA program (Leonard, 1990, p. 5). Besides required readings (about sixty articles and nine books), the course requires analyses of five business cases, three to five short papers, an analysis of an organization, and one large paper developing a comprehensive framework for studying some aspect of a competitor’s strategic position. At least two schools of library and information science provide CI courses—Simmons College and Indiana University. Going beyond “business reference sources and services,” the courses target those interested in acquiring more specialized analytical skills or those considering CI careers.

THE CONTRIBUTIONS TO THIS ISSUE

This issue of Library Trends includes contributions about various aspects of the general subject of strategic intelligence, including the following:

- suggestions of innovative uses of electronic sources in identifying issues of potential strategic importance;
- a case study of environmental scanning behavior of managers in a large manufacturing corporation;
a study of chief executive officers' acquisition and use of information about their business environments;
a summary of corporate CI activities from a practitioner's perspective;
a suggestion that CI activities have applications outside business;
discussions of the CI profession, education, and competencies; and
a CI literature review.

Lancaster and Loescher examine the role of corporate librarians in issues management. The issues of concern, which could include large-scale economic or legislative events, social issues such as health or the environment, or technological advances, have potential organizational impact and are monitored for purposes of strategic advantage. The authors suggest that corporate librarians augment the traditional scanning of relevant print and electronic literature by taking advantage of databases to track issues or trends. This can be accomplished by observing increases in numbers of references and increases in numbers of databases in which an idea occurs, and by tracking movement of the issues from narrow literature to those reaching broader audiences.

Two articles are concerned with environmental scanning. Reporting the results of a case study of a Fortune 500 manufacturing firm, Miller examines the relationships between aspects of corporate culture and the frequency of environmental scanning activities. The study, which was prompted by an observation that organizational success and scanning frequency tend to be related, describes the scanning behaviors of 220 managers. Auster and Choo highlight the primary functions of environmental scanning in a study of the acquisition and use of information about business environments by chief executive officers in the Canadian publishing and telecommunications industries. Their work was driven by concern about: (1) relationships between perceived environmental uncertainty and the amount of scanning, (2) effects of source characteristics and environmental uncertainty on the use of information sources in scanning, and (3) ways in which environmental information is used by CEOs in decision making. Such studies greatly enrich the research base in a field in which many decisions about implementation of CI or related systems are made on an informal basis. The studies, supplemented by their cited literature, can serve as models for systematic examinations of other industries or individual organizations.

Providing a front-line practical perspective for this issue of Library Trends is Bonnie Hohhof, a prominent figure in the competitive intelligence community, the author of a recent book about CI
system design, and the editor of the leading CI journal. Hohhof briefly summarizes corporate CI activities and describes in general terms the most important practical issues of concern to information managers. In so doing, she frequently refers to information, professionals, and activities with a specialized vocabulary—one that is descriptive and, as a quick scan of the professional literature will demonstrate, current. Some terms are well entrenched in business information jargon ("business intelligence" or BI—of course not to be confused with Biography Index, Bibliography Index, or "bibliographic instruction") and some less so ("competitive intelligence" or CI). Terms may seem redundant or unclear ("intelligence information"), but these all have definite meanings in practice. "Intelligence information" is not "intelligent information" and is also not the opposite of "unintelligent information"; the term merely distinguishes one category of information from another. Some terms, which are easily understood in general contexts, have specialized meanings in a CI environment: "human intelligence," for example (or as Hohhof indicates as an alternate, "humint"), refers to an investigative activity in which information is gathered from human primary sources. Hohhof also refers to "cybrarians." This term is not new to many librarians and information professionals, especially those familiar with the Internet, and it has been criticized for being unnecessary, faddish, and linguistically inaccurate. In defense of cybrarian, its occasional use simply calls attention to the expanding roles of librarians, especially in business and electronic environments. Those who propose the term are emphasizing an important point and are not generally calling for it to replace "librarian." Those of use who believe the latter term is perfectly appropriate for an evolving profession need not fear that we will soon, or ever, be reading issues of Cybrary Trends.

In their article about CI and social advantage, Davenport and Cronin propose that the concept be "more generally operationalized in terms of social advantage." The authors examine CI from several perspectives: academic, governmental (nonmilitary), commercial, and demotic. From the esoteric to the ordinary, the applications they discuss include diverse data types present in CI systems, the role of electronic networks in such operations, "cooperative intelligence," and competencies for CI professionals.

Linked to the latter portion of their article is the treatment of educational issues by Miller, who teaches a business intelligence course at the Graduate School of Library and Information Science at Simmons College. Miller discusses relevant terminology, outlines major competitive intelligence functions, and proposes professional competencies. One of very few writers to address the status of CI as
a profession, Miller suggests means of establishing an appropriately interdisciplinary curriculum and describes the role of formal education in the careers of intelligence professionals.

Lastly, a guide to the literature of competitive intelligence has been provided for those who would like to learn more. Important books and articles are introduced and a short study of the coverage of CI in periodicals is presented in order to provide a glimpse at an “information” literature that lies almost completely outside that of library and information science. However, the literature, in whatever form, represents only a small part of current CI activities. The field is changing quickly, and the leaders of the field are not always inclined to reflect and write about what they do. CI practitioners communicate efficiently among themselves in their primary professional organization, the Society of Competitor Intelligence Professionals (SCIP), and many are also active members of the Special Libraries Association.

As the articles in this issue state or imply, librarians and other information professionals have been under-represented in CI and related activities. By taking advantage of specialized education, innovative methods, advanced technologies, and personal contacts, information professionals can demonstrate the strategic importance of their services.

REFERENCES


