A Primer on Competitive Intelligence

DAVID CAMPBELL

Competitive intelligence is the formalized process of monitoring the competitive environment. The Society of Competitive Intelligence Professionals (SCIP) defines CI as “a continuous process involving the legal and ethical collection of information, analysis that doesn’t avoid unwelcome conclusions, and controlled dissemination of actionable intelligence to decision makers” (“What Is,” 2003). Unlike the ad hoc nature of traditional market research (as you need it), competitive intelligence involves establishing a systematic program for collecting, analyzing, and disseminating key competitor and market information at regular intervals. Most industry practitioners now believe that in the current context of rapidly evolving markets, developing a real-time or on-the-fly approach to CI is the only way to effectively cope and keep ahead of the competition. In addition, CI is at its greatest value when it is tied to and feeds strategy.

Although the CI process is multifaceted, a robust CI methodology encompasses at least these five key components:

1. **Design and setup.** This initial phase of the CI process is arguably the most critical. It involves determining the requirements for intelligence within the organization. In the past, CI was considered a strategic activity, and the results were shared only among senior management and key staff. The emerging mindset around CI is that it can be used by all levels of the organization to enhance competitive advantage. This point was emphasized by Tom Peters as

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1 David Campbell—ShiftCentral
early as 1986, when he admonished corporations to “get everyone involved—educate the factory team, the MIS bunch, the product designers and sales persons about the best competitors’ ways of doing things” (Peters, 1986).

2. **Information collection.** After determining the requirements, an effective CI program establishes a methodology around the collection and archiving of key information. This market and competitor information is collected in a legal and ethical manner.

3. **Analysis.** The real value of CI is in the strategic analysis of key informational variables. A good system will compile and archive information, but a vital next step is transforming that raw data into strategic knowledge, including benchmarking, product/service reengineering, trend identification, strategic positioning, etc. In fact, a recent study found that the success of a competitive intelligence program within an organization is tied to its role in developing and implementing strategy (Best Practices, 2002).

4. **Dissemination.** Highly tailored analysis is then presented to decision makers throughout the organization based on their individual requirements.

5. **Feedback/system reset.** The Internet has opened up whole new models for CI collection, analysis, dissemination, and archiving. With any CI program, it is important to constantly monitor the environment for CI itself to adopt leading industry methods and tools. It is also critical to integrate any feedback on the CI program from staff, as they are the ultimate users. A recent report by Best Practices, LLC, found that company-wide support for the competitive intelligence function is critical to its success (Best Practices, 2002).

**THE ROLE OF COMPETITIVE INTELLIGENCE**

Competitive intelligence methodologies provide the bridge between the vast amount of unstructured but potentially important information and empowered business strategies and action. Figure 2.1 (ShiftCentral Inc., 2002) illustrates how CI is used to turn unstructured information (content) into business action, particularly in light of emerging Web-based research tools.

The first stage, *content generation*, involves the creation of primary information that may or may not be relevant in a particular competitive intelligence context. The sources of this content
range from magazines and trade journals to company Web sites to high-end analyst reports and market research. They can also include chat rooms, message boards, and other informal information sources, especially when the goal is to better understand consumer markets.

Better-known primary content generators would include census agencies such as Statistics Canada, magazines such as *Time* and *Newsweek*, newswire services such as PR Newswire and Business Wire, and newspapers such as *The New York Times* and *USA TODAY*. Many of these sources have much (if not all) of their content available on the Web and can be searched either directly at the source or through a major search engine such as the Google, AltaVista®, or HotBot® search engines. For the most part, the content generation industry is mature; however, the Web has revolutionized how this created content reaches users by opening up whole new cost-effective distribution channels and methods.

**Figure 2.1 Competitive Intelligence: The Bridge Between Information and Action**

The second phase, *information aggregation*, is the process of compiling primary information (content) in various formats. Information aggregation is becoming a major industry in and of itself. Outsell, Inc., estimates the total content aggregation and distribution market is worth some $8 billion U.S. (Outsell, Inc., 2001). Factiva, a joint venture between Dow Jones and Reuters, is a good example of an information aggregator. The company compiles information from more than 8,000 global information sources.
sources ranging from newspapers to magazines to technical information databases. Factiva then provides custom content in various formats (e-mail, PDAs, etc.) to users based on their individual preferences.

There can be an overlap between content generation and information aggregation. This occurs when an organization creates its own primary information but also aggregates information from other sources. News portals such as CNN.com are good examples of this category.

The third phase, *competitive intelligence*, uses information from primary content sources and information aggregators to develop a comprehensive monitoring system. The CI analyst then employs tools to tailor, analyze, and archive the intelligence (detailed below). There can be overlap between information aggregation and competitive intelligence, and in fact, many of the information aggregators (Factiva, NewsEdge, Lexis-Nexis, etc.) are starting to provide more value-added services rather than just content, realizing that the real value is not embedded in the primary information per se but in its analysis.

The fourth phase, *strategy*, involves turning the gathering and analysis of competitive intelligence into strategies that are based firmly on the competitive landscape in which an organization is positioned. The final phase, *business action*, occurs when the organization turns good strategy into empowered business action.

**CATEGORIES OF CI**

A popular misconception of competitive intelligence is that it is actually “competitor” intelligence and involves only the detailed analysis of direct competitor moves. In reality, a strong competitive intelligence program includes monitoring and analysis of all information that can affect a company’s strategic positioning within its market. There are at least five broad categories of CI:

- **Market intelligence** includes industry-level information on trends, government regulation, geopolitical issues, and so on.
- **Partner intelligence** involves monitoring the activities of a company’s major suppliers and strategic partners. This keeps the company abreast of any trends that may negatively affect it down the road—and allows it to take action.
• **Competitor intelligence** involves detailed monitoring and analysis of key competitors, high-level scans of other competitors, and the ongoing identification of new entrants into the market.

• **Technical intelligence** is emerging as a major component of a robust CI program. Technical intelligence involves monitoring advancements of a technical nature that may affect a company’s business model (internal and external).

• **Customer/prospect intelligence** is an especially important tool for products and services that have a longer and more intensive sales cycle. It involves determining and monitoring key internal influences, budget cycles, key focus areas, and the like.

**USES OF CI**

*To facilitate strategic direction.* This is the traditional use of CI. By tabulating and analyzing key competitor and market information, senior management can make well-informed and rapid decisions. CI can be used to benchmark a product or service, to assist in the identification of a merger and acquisition candidate, and to stimulate wholesale changes to management direction. A recent article in *Fast Company* (Fuller, 1993) outlined the view of CEOs on why companies fail: (1) They have the right information but can’t get it to the right place, (2) they get information to the right place but don’t take the appropriate action, and (3) they don’t act quickly enough. A robust CI program can help companies avoid these three pitfalls.

*For new product/service development.* By effectively monitoring its competitors’ product development activities, patent databases, and trade journals, a company can determine the best-of-breed components of a wide variety of competitors and build those functionalities into its product or service.

*Within the sales process.* Increasingly, having a strong CI program for the frontline sales team is becoming a key strategic advantage. Traditionally, the sales force is closest to the market and typically has a fairly good read on it. However, in a time of many new entrants, mergers/consolidation, foreign competition, and wholesale technological advancements, even frontline staff cannot keep up.

*To assist with marketing/communications/public relations.* There is no more important role for competitive intelligence than in the
development and conveyance of the corporate brand and image in the marketplace. The link between these functions and competitive intelligence is becoming more visible. In 2001, there were at least seven partnerships between major marketing/PR agencies and competitive intelligence providers, culminating in the partnership between Fleishman-Hillard, one of the largest public relations firms, and Fuld & Company, a leading provider of CI services. Under their agreement, Fleishman-Hillard offers its clients access to Fuld & Company’s competitive intelligence services, while Fuld provides its clients access to Fleishman-Hillard’s communications services ("F-H," 2001).

For HR and recruiting, Using Internet-based CI, companies can monitor the job descriptions and in many cases the pay scales of their competition. In addition, U.S. Securities and Exchange Commission (SEC) filings and other public-disclosure documents provide insight into senior management and executive-level salaries as well as benefits such as stock options.

**SOURCES OF CI**

Just a few short years ago, collecting a wide range of market and competitor information was a very expensive and laborious process. However, the advent of the Internet has opened up a wealth of information sources that can be exploited for competitive intelligence purposes. Upwards of 90 percent of relevant competitive information is in the public domain. Some examples of sources include the following:

*Corporate Web sites.* The Web sites of the competition tend to be an excellent source of information about a company’s products and services and its approach to brands and marketing. Company Web sites also typically include financial information if the company is publicly traded. Most companies tend to brag about their major clients, providing valuable information for CI analysis. On a cautionary note, corporate Web sites tend to have a marketing focus and not to reveal any direct weaknesses.

*News aggregators.* A relatively new phenomenon, these are companies that aggregate information in real time from thousands of different sources, including newswires, newspapers, trade journals, general interest magazines, industry portals, etc. The information can then be searched by keyword or by category. In most cases the companies have free and premium service offerings. A list of major news aggregators appears in Figure 2.2.
Public company disclosure information. All publicly traded companies in the United States and Canada (and a number of other countries) are required to make detailed information about the company's financial situation and future plans available so that shareholders can have a clear picture of the company they are investing in. This information, submitted to the SEC, is invaluable to the CI analyst. However, plowing through hundred-page filings with a fine-tooth comb can be cumbersome. Fortunately, there are tools available to help analyze these documents.

Vertical portals. In recent years, Web sites have emerged that provide detailed information on a specific industry vertical. Called vertical portals, these sites can be advertising- or subscription-based and include a wide variety of industry-specific information. Typically, industry directories, research reports, and industry-specific news and analysis can be found within vertical portals.

Analyst reports. Most of the major investment management companies provide detailed analysis of specific companies and industries. This information tends to be well thought out and valuable to the CI process. However, since the dot-com meltdown, these analysts have come under increased scrutiny as their so-called unbiased analysis has tended to favor companies they have invested in.

Newsgroups and chat forums. Newsgroups and chat forums have become a convenient way to interact with various industry experts and glean valuable intelligence. In many cases, first contact with an expert can be facilitated through an online discussion group, but deeper analysis will come at a price.

Surveys and interviews. This old-fashioned CI collection method continues to be an important way to extract competitive information. This is not misrepresentation or interviewing under false pretenses: it involves interviewing legitimate sources with intentions stated up front.
INFORMATION OVERLOAD: THE IMPORTANCE OF A STRUCTURED CI PROGRAM

There are at least 2.1 billion unique URLs (Internet pages) that are publicly available through the Internet (Google’s, 2001). In addition, millions of new pages are added on a daily basis. For example, it is estimated that there are some 10,000 global newspapers that post content on the Internet (Campbell, 2002). There is also an emerging trend towards premium content sources that are not indexed by the major search engines (the hidden Internet) and are only accessible through a fee-based service.

To provide a sense of scope, Figure 2.3 displays the results of a simple search on various keywords related to the telecommunications industry. The search was completed using the HotBot®/Lycos® search engine, which date-codes new URLs as they are added to its database, allowing for date-sensitive searching. In the two-week period preceding this search, HotBot® had indexed 34,900 new URLs in which the word telecommunications appeared. Over the past three months, there were more than 1.3 million new URLs added with the word telecommunications included somewhere on the page. The sources of these URLs include magazine articles, research reports, press releases, corporate Web sites, etc.

<table>
<thead>
<tr>
<th>SEARCH TERM</th>
<th>URLS ADDED LAST 2 WEEKS</th>
<th>URLS ADDED PAST 3 MONTHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>telecommunications</td>
<td>34,900</td>
<td>1,300,000</td>
</tr>
<tr>
<td>Nortel</td>
<td>5,100</td>
<td>190,500</td>
</tr>
<tr>
<td>virtual private network (VPN)</td>
<td>3,200</td>
<td>216,400</td>
</tr>
<tr>
<td>Lucent</td>
<td>5,000</td>
<td>250,200</td>
</tr>
<tr>
<td>broadband</td>
<td>17,200</td>
<td>848,500</td>
</tr>
<tr>
<td>satellite</td>
<td>31,500</td>
<td>1,200,000</td>
</tr>
</tbody>
</table>

From HotBot®/Lycos®. Search run on April 8, 2002.

For any particular competitive intelligence program, only a very small fraction of the information is required. It is vitally important, then, for the CI analyst to put in place a robust and targeted monitoring, gathering, analysis, and archiving program that will scan the widest possible array of information sources but will pull back highly targeted results.
THE WEB-BASED TOOLS OF CI

Given the vastness of the information on the Web and its exponential growth, a variety of tools and services have been developed to assist companies in the monitoring, gathering, analysis, and archiving of intelligence. Some examples include the following:

**Web search and meta-search engines.** Web search engines are essential for today’s competitive intelligence professional. Essentially, Web search engines act as the indexing system for the Web. They operate by sending out automated search agents that prowl around the Web and index all of the Web pages they find. Most search engines then categorize the information in some fashion to assist users in targeting their searches.

Because of the sheer volume of information and multiple formats available on the Web, this indexing process faces significant challenges. For example, most of these engines claim to re-index the Web every three to six months. However, independent studies have found significant gaps in this process (Brantford, 2001). Generally speaking, given the monumental task, many of the major search engines have done a reasonably good job, and there are other methods (detailed below) to capture information not indexed in the major search engines.

There are dozens of major search engines. The most used are shown in Figure 2.4 (Search, 2002). Most of these search engines offer unique functions such as date-sensitive searching and on-the-fly language translation. The example of Google, the most-used Internet searching tool, is detailed in this chapter.

**Figure 2.4 Major Web Search Engines**

<table>
<thead>
<tr>
<th>SEARCH ENGINE</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>AlltheWeb.com</td>
<td><a href="http://www.alltheweb.com">http://www.alltheweb.com</a></td>
</tr>
<tr>
<td>AltaVista</td>
<td><a href="http://www.altavista.com">http://www.altavista.com</a></td>
</tr>
<tr>
<td>AOL Search</td>
<td><a href="http://search.aol.com">http://search.aol.com</a></td>
</tr>
<tr>
<td>Ask Jeeves</td>
<td><a href="http://www.ask.com">http://www.ask.com</a></td>
</tr>
<tr>
<td>Google</td>
<td><a href="http://www.google.com">http://www.google.com</a></td>
</tr>
<tr>
<td>HotBot®</td>
<td><a href="http://www.hotbot.com">http://www.hotbot.com</a></td>
</tr>
<tr>
<td>iWon</td>
<td><a href="http://home.iwon.com">http://home.iwon.com</a></td>
</tr>
<tr>
<td>LookSmart</td>
<td><a href="http://www.looksmart.com">http://www.looksmart.com</a></td>
</tr>
<tr>
<td>Lycos®</td>
<td><a href="http://www.lycos.com">http://www.lycos.com</a></td>
</tr>
<tr>
<td>MSN® Search</td>
<td><a href="http://search.msn.com">http://search.msn.com</a></td>
</tr>
<tr>
<td>Netscape Search</td>
<td><a href="http://channels.netscape.com/ns/search">http://channels.netscape.com/ns/search</a></td>
</tr>
<tr>
<td>Open Directory Project</td>
<td><a href="http://dmoz.org">http://dmoz.org</a></td>
</tr>
<tr>
<td>Teoma</td>
<td><a href="http://www.teoma.com">http://www.teoma.com</a></td>
</tr>
<tr>
<td>Yahoo!</td>
<td><a href="http://www.yahoo.com">http://www.yahoo.com</a></td>
</tr>
</tbody>
</table>

Web surveillance software. These are software agents that can be given specific tasks and set up to monitor various Internet URLs at preset intervals. While there are dozens on the market, there are very few that are powerful enough to overcome specific challenges around different databases, platforms, and content management tools.

Alerts. A number of companies now offer alerts. With these systems, a person enters in URLs and keywords to be monitored, and when there is a change, they are notified in real time. Like Web surveillance software, alerts have some technical hurdles to overcome, and the best services are pay-for-use.

Third-party monitoring services. Despite the advancements in technology, there is still no substitute for human intervention. A new group of CI companies is emerging that offers a blended solution encompassing the best of Web surveillance techniques. With these services, human analysts pore over the raw data to tailor it to the needs of a specific client.

Analysis software. A recent survey conducted by Fuld & Company found that the lack of good CI analysis software is a major issue among CI practitioners (Fuld & Company, 2000). While attempts have been made to develop software that will perform some CI functions within the system (e.g., trend identification and scenario development), the results have been less than spectacular. As more and more raw data become available, the ability to have an intelligent tool to analyze and make expert decisions will become increasingly important.

ADVANCED WEB SEARCHING: THE GOOGLE EXAMPLE

As noted earlier in the chapter, the vast amount of information available via the Internet and the volume of new information regularly added make the task of pinpointing relevant sources and information very challenging. Google, the most widely used search engine, has been adding new features periodically to assist in this process. Google’s advanced search capabilities include the following:

1. Phrase searches. The user can search for specific phrases and concepts instead of only keywords. In addition, the user can conduct either/or searches (retrieving pages containing either or both of two terms) as well as keyword exclusions,
which return search results without specific words or phrases.

2. **Specific language searches.** Google allows users to restrict a search to one of more than 30 different languages. Google also has a robust translation tool (see the discussion of multilingual CI later in the chapter).

3. **Specific country searches.** Google indexes URLs based on their country of origin, allowing users to limit a search to specific geographic regions.

4. **Multiformat searches.** In addition to standard web formats such as Hypertext Markup Language (HTML) and Active Server Page (ASP), Google also indexes Adobe® Acrobat® (.pdf), Adobe® PostScript® (.ps), Rich Text Format (.rtf), Microsoft® Word (.doc), Microsoft® PowerPoint® presentation graphics program (.ppt), and Microsoft® Excel (.xls) formats.

5. **Date-sensitive searches.** Google allows the user to search Web pages added to its index with specific date parameters. None of the major search engines has effectively conquered this problem. Date-sensitive searches are based on the most recent time that a given Web page has changed. For example, a page posted in 1997 that has a date code that updates every day will be indexed as a new page every time the search engine reindexes the URL.

6. **Occurrence in the page.** Users can restrict searches to specific areas of the Web page such as the title, URL, and main body.

7. **Domain search.** Google allows the user to search only in specific domains. Doing a Google search on a specific domain is sometimes more effective than using the search engine employed by the actual Web site. For example, many people find that Strategis, Industry Canada’s business portal, does not have an overly effective search tool built into its site. By using Google’s advanced functions and specifying, for Domain, “strategis.ic.gc.ca,” the user can do highly targeted searches not available via Strategis’s internal search tool.

    This method has two drawbacks. First, there is no way of knowing when Google last indexed Strategis (although within the last three months is a good estimate), and second, there is no way of knowing the extent of Google’s index of Strategis’s database.
8. **News search.** Google has added a News search function that searches various news media it has indexed. Google indexes news sites on a daily basis, allowing access to up-to-date information.

9. **Image search.** One of the more interesting search functions Google has introduced is the Image Search. Google indexes graphics files found on the Web, and users can search for specific images. This function is particularly useful to the CI analyst who is looking for charts, graphs, and tables. For example, a search on “GDP growth” yields more than a thousand charts, graphs, and tables that the CI analyst can plow through for relevant information.

10. **Groups search.** Google also allows users to search through Usenet newsgroup postings that are updated daily. This is particularly helpful if the CI analyst is looking to evaluate public opinion or find any informal scuttlebutt about a specific topic of interest.

## MULTILINGUAL COMPETITIVE INTELLIGENCE

CI professionals are no longer constrained by language in their competitive intelligence-gathering activities. New online language translation tools allow researchers to translate documents quickly and easily between multiple languages, and in most cases, this service is free (see Figure 2.5).

<table>
<thead>
<tr>
<th>TOOL</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>AltaVista’s Babel Fish</td>
<td><a href="http://babelfish.altavista.com">http://babelfish.altavista.com</a></td>
</tr>
<tr>
<td>Dictionary.com/Translator</td>
<td><a href="http://translator.dictionary.com">http://translator.dictionary.com</a></td>
</tr>
<tr>
<td>FreeTranslation</td>
<td><a href="http://www.freetranslation.com">http://www.freetranslation.com</a></td>
</tr>
<tr>
<td>Google</td>
<td><a href="http://www.google.com">http://www.google.com</a> (choose Language Tools)</td>
</tr>
</tbody>
</table>

Google, for example, translates Web pages from English to German, Spanish, French, Italian, and Portuguese, as well as from some of these languages to others. Google will also translate on the fly, meaning that when it detects that a search term in a Web page is not in the user’s preferred language, it provides a “translate” option that the user can click to translate immediately. Google then continues to translate pages as the user clicks through the Web site. The AltaVista search engine offers an even
more expansive list of languages, including Japanese, Korean, and Chinese.

On a cautionary note, these language tools are still not very advanced and tend to conduct literal, word-for-word translations. Therefore, the translated text is to be used with caution but typically can provide the essence of what the researcher is looking for.

**COMPETITIVE INTELLIGENCE ON PUBLICLY TRADED COMPANIES**

Since the Securities Act of 1933, U.S.-based publicly traded companies have been required to disclose detailed information on their financial situation to their shareholders. Specifically, the act “require[s] that investors receive financial and other significant information concerning securities being offered for public sale; and prohibit[s] deceit, misrepresentations, and other fraud in the sale of securities” (“The Laws That,” 2003).

The Securities and Exchange Commission is the governing agency for all U.S. securities regulation. All companies publicly traded on U.S.-based stock exchanges are required to file company documents with the SEC, and since 1995, the Commission has provided this information to the public at no charge via its Web site, [http://www.sec.gov](http://www.sec.gov).

Of specific interest to the CI researcher are the 10-K and 10-Q filings, which are the annual and quarterly filings to the SEC, respectively. In the filings is a wealth of intelligence, including the following:

- Detailed financial information
- A review of product and service offerings
- Mergers and acquisitions
- Geographic markets
- Any outstanding legal proceedings against the company
- The company’s market risk factors

In addition, the CI researcher can use these SEC filings and others for a number of specific CI functions, including identifying power holders in an organization; performing a social responsibility audit on an organization; and completing a due diligence process for a potential merger, acquisition, or new partner (Vibert, 2000).
Other countries have different legislation, policies, and procedures governing disclosure of public company information. Many European countries, for example, do not require disclosure at anywhere near the level that the SEC mandates. Other countries, such as Canada, have similar reporting requirements. SEDAR is the public filings Web site for the Canadian Depository for Securities, the agency governing publicly traded companies in Canada.

There are two potentially significant challenges facing CI analysts with the use of public company SEC filings. First, if the company they are analyzing is not publicly traded (or is foreign), access to this information is much more difficult. However, it has been shown that most of the information required to properly analyze a company from a CI perspective (i.e., competitive threat) can be found in public information sources. Second, a number of high-profile companies recently have not followed the spirit of the Securities Act of 1933 and have filed false or misleading information. Therefore, CI analysts must examine information from a variety of sources to uncover anomalies that may not be evident from using just one information source.

THE CI PRACTITIONER

Who performs the CI function? Typically, a good CI professional has a strong business background with one or more specific industry strengths. The person also has strong research skills and a good understanding of technology.

Finally, and of vital importance, the best CI practitioners have very strong analysis and writing/communication skills. The graph in Figure 2.6 shows a breakdown of CI professionals by area of expertise. It is based on the membership of the Society of Competitive Intelligence Professionals (“Membership,” 2001). CI practitioners can be found in a variety of functional areas within organizations.
EXAMPLE OF USING CI METHODS TO COLLECT AND ANALYZE COMPETITOR FINANCIAL DATA

At the time of this writing, there had been a lot of discussion about the firing of Ford’s CEO and the financial troubles that faced the company. Implementing a formalized and systematic approach to analyzing the competition’s financial position in a relative fashion can be a valuable tool in developing and maintaining a competitive advantage.

Figure 2.7 provides a financial snapshot of Ford against three of its major competitors right before the firing of the CEO. Set within a proper CI program, senior management would review these figures on at least a quarterly basis.

For Ford, the numbers reveal some interesting facts. While their employee-to-revenue ratio and gross profit margins are as good as or better than those of their competition, bottom-line profits and the profit trend are noticeably down relative to at least two of their competitors. In addition, their leverage and debt-to-equity ratios are out of line, which indicates the company has too much debt, undermining its ability to grow. The current and quick ratios are both significantly lower than their competitors’ and indicate real structural problems within the company.

Closely monitoring and analyzing financial performance is a key feature of a robust competitive intelligence program.
Competitive Intelligence: A Framework for Web-Based Analysis and Decision Making

Figure 2.7 Competitive Landscape Review

<table>
<thead>
<tr>
<th></th>
<th>FORD</th>
<th>DAIMLER-CHRYSLER</th>
<th>GENERAL MOTORS</th>
<th>TOYOTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Sales ($mil.)</td>
<td>170,064</td>
<td>152,446</td>
<td>184,632</td>
<td>106,030</td>
</tr>
<tr>
<td>Employees</td>
<td>345,991</td>
<td>416,501</td>
<td>386,000</td>
<td>215,648</td>
</tr>
<tr>
<td>Market Value ($mil.)</td>
<td>29,369</td>
<td>36,841</td>
<td>61,187</td>
<td>92,954</td>
</tr>
</tbody>
</table>

**Profitability**

<table>
<thead>
<tr>
<th></th>
<th>FORD</th>
<th>DAIMLER-CHRYSLER</th>
<th>GENERAL MOTORS</th>
<th>TOYOTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Profit Margin</td>
<td>24.4%</td>
<td>24.3%</td>
<td>27.6%</td>
<td>24.9%</td>
</tr>
<tr>
<td>Pretax Profit Margin</td>
<td>2.2%</td>
<td>-1.4%</td>
<td>1.6%</td>
<td>9.2%</td>
</tr>
<tr>
<td>Net Profit Margin</td>
<td>0.4%</td>
<td>-0.9%</td>
<td>0.9%</td>
<td>5.1%</td>
</tr>
<tr>
<td>Return on Equity</td>
<td>5.0%</td>
<td>—</td>
<td>5.5%</td>
<td>9.5%</td>
</tr>
<tr>
<td>Return on Assets</td>
<td>0.2%</td>
<td>-0.7%</td>
<td>0.5%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Return on Invested Capital</td>
<td>0.4%</td>
<td>-1.1%</td>
<td>1.0%</td>
<td>6.6%</td>
</tr>
</tbody>
</table>

**Operations**

<table>
<thead>
<tr>
<th></th>
<th>FORD</th>
<th>DAIMLER-CHRYSLER</th>
<th>GENERAL MOTORS</th>
<th>TOYOTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Days of Sales Outstanding</td>
<td>10.7</td>
<td>—</td>
<td>266.9</td>
<td>89.4</td>
</tr>
<tr>
<td>Inventory Turnover</td>
<td>18.4</td>
<td>6.7</td>
<td>11.3</td>
<td>11.0</td>
</tr>
<tr>
<td>Days COGS in Inventory</td>
<td>20.0</td>
<td>—</td>
<td>32.0</td>
<td>33.3</td>
</tr>
<tr>
<td>Assets Turnover</td>
<td>0.6</td>
<td>0.8</td>
<td>0.6</td>
<td>0.7</td>
</tr>
<tr>
<td>Effective Tax Rate</td>
<td>34.5%</td>
<td>—</td>
<td>42.2%</td>
<td>43.3%</td>
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**Financial**

<table>
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<tr>
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<th>FORD</th>
<th>DAIMLER-CHRYSLER</th>
<th>GENERAL MOTORS</th>
<th>TOYOTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Ratio</td>
<td>0.88</td>
<td>2.77</td>
<td>3.26</td>
<td>1.24</td>
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<tr>
<td>Quick Ratio</td>
<td>0.50</td>
<td>2.30</td>
<td>2.40</td>
<td>0.90</td>
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<tr>
<td>Leverage Ratio</td>
<td>21.05</td>
<td>5.37</td>
<td>10.24</td>
<td>2.40</td>
</tr>
<tr>
<td>Total Debt/Equity</td>
<td>12.66</td>
<td>2.38</td>
<td>4.86</td>
<td>0.74</td>
</tr>
<tr>
<td>Interest Coverage</td>
<td>1.30</td>
<td>(15.20)</td>
<td>1.30</td>
<td>30.30</td>
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**Growth**

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<th>GENERAL MOTORS</th>
<th>TOYOTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-Month Revenue Growth</td>
<td>-4.7%</td>
<td>-1.7%</td>
<td>0.1%</td>
<td>-11.4%</td>
</tr>
<tr>
<td>12-Month Net Income Growth</td>
<td>-83.5%</td>
<td>-100.0%</td>
<td>-70.6%</td>
<td>20.0%</td>
</tr>
<tr>
<td>12-Month EPS Growth</td>
<td>-89.5%</td>
<td>-100.0%</td>
<td>-72.9%</td>
<td>20.7%</td>
</tr>
<tr>
<td>12-Month Dividend Growth</td>
<td>-40.0%</td>
<td>-6.3%</td>
<td>8.1%</td>
<td>32.4%</td>
</tr>
</tbody>
</table>

From Media General Financial Services, SEC filings, annual reports.

**COMPETITIVE INTELLIGENCE IN GOVERNMENT**

Traditionally, techniques for competitive intelligence gathering and analysis have been employed primarily in the private sector, particularly in highly competitive markets or markets with a high rate of technical change. In recent years, however, governments and other public sector and quasi-public sector organizations have begun to understand the importance of competitive intelligence. Although government departments or agencies may not be competing in a traditional sense, they are competing in many other ways, including the following:
With other jurisdictions and countries
• With other government departments and functions for increasingly scarce public funds
• For public support of their activities
• To attract and retain key staff

A good CI program can provide critical information to assist in fulfilling a government mandate. Because most government functions do not have a profit motive or other market drivers, the value of their services has become increasingly subjective in the minds of elected officials and the public at large. Competitive intelligence can provide insight on a variety of themes, such as the following:

• Best practices in government service delivery
• Developing public policy in the context of a global economy
• Developing legislation and regulation
• Best practices and methods for global economic development
• Taxation issues
• Environmental issues

EXAMPLES OF COMPETITIVE INTELLIGENCE USE IN THE PUBLIC SECTOR

In recent years the competition for new business investments among states, provinces, and even countries has reached a fevered pitch as governments have realized the economic impact that this activity can have in their jurisdictions. High-profile expansions such as the Mercedes-Benz plant in Alabama and the BMW plant in South Carolina have forced governments to hone their value proposition, marketing techniques, and approach to financial incentives. The Michigan Economic Development Corporation (MEDC) is using innovative competitive intelligence techniques to assist with lead generation activities for investment attraction (Blake, 2002). MEDC developed a comprehensive database of companies headquartered outside Michigan and uses competitive intelligence techniques to determine linkages with the state that will help it target its business development activities. MEDC’s assumption is that if a company has a solid linkage to the Michigan economy, it is more likely to establish a business
function in the state. Using CI, MEDC ranks companies within the database in the following ways:

- **Products**—are they made with a Michigan resource?
- **Present location**—do they have a need for additional capacity in the U.S. Midwest region?
- **Customers**—do they have major customers in Michigan?
- **Growth projection**—will they have to expand anytime soon?
- **Proximity needs**—would it be advantageous to be located near a major supplier based in Michigan?

By using a systematic and formalized CI model, MEDC is able to target companies that have a higher probability of locating in Michigan. As a result, it can be much more focused in its business development activities. Does this approach work? Michigan was among the top ten U.S. states for new and expanded facilities during 1997–2000.

Another government example is the Alberta Agriculture, Food and Rural Development Department (Blake, 2002). In 1996, the department established a competitive intelligence unit mandated to collect and analyze critical market information that would help Alberta-based farmers and agri-food producers compete in the global marketplace. The CI unit compiles and analyzes information on a wide variety of topics, including food safety systems, other countries’ agriculture biotechnologies development strategies, investment attraction, and the competitiveness of Alberta’s industry. It also provides training on competitive intelligence to players within Alberta’s agriculture and agri-food industry.

**CI IN A GLOBAL ECONOMY**

The Internet has opened up tremendous opportunity for the collection of important market and competitor information in the global context. While the requirements for public disclosure of relevant information are highest in the United States, other countries are beginning to demand more accountability from publicly held companies. In addition, the Web has opened up international newswire services, magazines, trade journals, portals, and corporate databases, all of which can provide valuable information on international companies and markets.
THE VALUE OF ANALYSIS

We have outlined the process of good competitive intelligence gathering and have provided a few examples of the implementation of CI in organizations. The true value of CI is in the analysis of data and action on that analysis, not in the process of collection and reading. This section of the chapter provides a summary of some of the specific tools that CI practitioners use to analyze data and then develop accompanying strategies.

Competitor/Company Profiling

Developing detailed information on specific competitors can be very valuable to an organization as it creates strategies for everything from product development to marketing to executive compensation. Constructing detailed profiles of potential clients is equally important, especially in markets offering higher-value goods and services. Understanding a potential client’s business model will assist a company in structuring the most appropriate business development process for that individual client.

SWOT Analysis

CI can be very useful when developing a traditional “strengths, weaknesses, opportunities, and threats” (SWOT) analysis for an organization. The research gleaned from the competitive landscape will allow the CI analyst to develop these four quadrants effectively. For example, the strengths and weaknesses of a company can be assessed in the context of a solid analysis of an organization’s major competitors. Opportunities can be determined by reviewing industry-level data such as reports and white papers and scanning the general competitive landscape for clues as to what might be on the horizon. Threats to an organization can come from multiple sources, including competitors, suppliers, large customers, and governments. Pulling information from a well-structured CI program can help a company formulate strategies to limit risks.
Trend Analysis

One of the great advantages of implementing a formalized CI program is the long-term capture and archiving of key competitive intelligence. Over time, an organization can map out trends among its competitors, trends in the industry at large, changing consumer preferences, changing cost structures, etc. Instead of starting the research process from scratch each time, with archived intelligence, developing trends becomes a fairly simple process.

Simulation/War Gaming

Simulation uses computer-based tools that enable a company to engineer a strategic game plan and test it in a risk-free environment. Simulation helps ensure that the planning process yields realistic, achievable strategic plans. It assists managers in determining the dynamics of their competitive landscape by allowing them to experiment within a safe environment. Users make decisions, watch indicators, and view competitor actions and reactions as they would in real life. But because of the speed of game play, users can try many different strategies and view many different outcomes—all without risk. The ongoing CI program feeds the simulation process with the required market- and competitor-level intelligence. A recent white paper on the subject of simulation puts it this way:

[The] safe practice environment levels political tensions, builds consensus among your management team and aligns them with the resulting strategic decision. It also helps define the action plan required to implement the strategic decision. This process builds confidence in the decision since it is based on real industry information and explicit assumptions. (Monitor, 1998)

Forecasting

Related to both simulation and SWOT analysis, a good CI program will provide the information required to forecast sales, the need for new product enhancements, changes in the competitive landscape, etc.
ETHICS IN CI

The perception of competitive intelligence as a mix of illegal and unethical practices to extract internal, private corporate information continues to be a problem for the industry. The association of CI with military intelligence gathering is most likely a major cause of this reputation. In military intelligence practice, activities such as monitoring private communications, infiltrating governments, and spreading disinformation could be considered legitimate (depending on the context). However, in normal business markets, these practices are not only unethical but, in most cases, illegal. A better analogy would depict savvy (and ethical) journalists who are able to ferret out public information that for whatever reason is being deliberately hidden from the public.

The following are some examples of unethical (and, many times, illegal) industrial espionage:

- Hacking into a competitor’s Web site to extract confidential information
- “Dumpster diving”—sifting through memos and other confidential documentation (either physical or electronic) to gain access to private intelligence
- Misrepresenting oneself as a potential customer to extract pricing information or other information that the company intends to keep private
- Interviewing (paying) ex-employees of the competition to extract information when the former employees are bound by a nondisclosure agreement
- Deliberately spreading disinformation about a competitor (or even one’s own company), especially in the age of the Internet and day trading

In 1999, John Pepper, then chairman of Procter & Gamble, remarked when speaking to the Society of Competitive Intelligence Professionals:

I can’t imagine a time in history when the competencies, skills and knowledge of the men and women in competitive intelligence are more needed and more relevant to a company being able to design a winning strategy and act on it. I can’t imagine a company not realizing the fundamental need for this today. (Miller, 2001)

In August 2001, Pepper confessed that P&G managers had implemented an elaborate and unethical spying campaign against a major competitor, Unilever. Procter and Gamble’s
operation to glean competitive information on its rival’s hair-care strategies in order to protect its own important brands of Pantene and Head & Shoulders lasted eight months, cost about $3 million, and involved a CI consultancy (“P&G,” 2001). The lesson of this case is that not even the most respected global corporations or CI industry experts are above crossing the line.

Organizations such as the Society of Competitive Intelligence Professionals have taken a strong stance on the ethics of the CI industry. SCIP has developed a detailed Code of Ethics (“SCIP Code,” 2002). All members must be in compliance with this code to maintain membership.

Interestingly, most CI practitioners would say that approximately 80 to 90 percent of all useful information is in the public domain anyway and that proper extraction and “filling in the blanks” would yield the same results, in most cases, as gathering the information through unethical and/or illegal activities.

Resisting the temptation to cross the line will continue to be a major challenge facing the industry as it moves forward.

**DOES IT WORK?**

While the process of CI seems intuitively valid, there has been limited research into the tangible, long-term benefits. One study, however, completed in 1995 at the University of North Texas, found that businesses that used formal CI programs generally outperformed those that did not in three areas: sales, market share, and earnings per share. The study suggested that “there is a positive relationship between emphasis on CI and successful financial performance” (Cappel & Boone, 1995).

**STRATEGIC CONSIDERATIONS**

There are a number of strategic issues facing the CI industry over the next few years:

*Outsourcing versus in-house CI activities.* Increasingly, the expertise associated with the CI function itself has become a core competency, and a number of companies are building that expertise and offering it as a service. Because the skill sets, methodologies, and technologies required to develop a strong CI function are quite complex, a blended solution of CI partner(s)
complementing a strong internal analysis competency may be the optimal configuration.

*Synergies with other business functions.* There is a definite overlap between CI and a variety of other business functions such as marketing/communications, traditional R&D, financial analysis, and industry consulting. There will most likely be some merging of those functions over the next few years (e.g., CI as a service of marketing firms or within the Big Five’s suite of services).

**CONCLUSION**

The case for implementing CI within organizations has never been stronger. With the emergence of the Internet and Web-based CI tools, the cost of deploying a robust CI program is within the reach of SMEs (small to medium-sized enterprises) as well as large corporations. A recent survey conducted by The Futures Group found that some 80 percent of large U.S.-based organizations had a formal in-house CI department ("Corporate," 2002). It also found that 60 percent of companies in general utilized some CI functions to assist in the development of their business models (Miller, 2001).

However, just establishing a CI function per se is no guarantee of success in the market. What organizations do with CI (i.e., turning market knowledge into strategic action) is ultimately the true test of its utility as a competitive advantage. An example of problems that can arise when formalizing a competitive information gathering, analyzing, and dissemination program and not acting on the results is demonstrated by the telecom equipment manufacturing industry. The major players (Nortel, Cisco, Alcatel, Lucent Technologies, et al.) were growing at a tremendous rate (primarily through acquisition) and jockeying for position within what was perceived to be an industry with unlimited growth potential. However, from the time that John Roth (former CEO of Nortel) first warned that the company’s quarterly revenues would be off significantly, the entire collapse of the sector occurred in less than six months. The industry had shed almost 50 percent of its revenues and employees and had shown record quarterly losses. Paradoxically, the telecom sector had been one of the largest proponents of competitive intelligence, and many of the companies that fell the hardest had been applauded for their competitive intelligence activities (Miller, 2001).
The inability of CI professionals within the telecom equipment manufacturing industry to adequately forecast its meltdown only strengthens the argument that an effective CI program must have more than just a lateral view—i.e., it should not be absorbed by analyzing only the competition. An effective CI program must look upstream at its suppliers to monitor their competitive environment, cost pressures, and legislative issues, and it must look downstream at its customers and keep abreast of their movements. It must also monitor general trends in geopolitics, government regulation, trade policy, and public attitudes, all in the context of a specific business model. Ultimately, it could be argued that it was the telecom equipment manufacturers’ preoccupation with each other while ignoring downstream and general economic trends that caused such a hard landing.

Over the next few years, competitive intelligence activities will become even more mainstream as the unit cost of competitive information access will continue to fall and the software tools to aggregate, disseminate, analyze, and archive strategic intelligence will continue to improve. The emphasis going forward will shift from information-gathering models and knowledge management to effective analysis and the resultant strategic action. Successful organizations will be those that have the best knowledge of a broad set of competitive intelligence criteria and that are relentlessly integrating that knowledge into product/service development, marketing/sales, and strategic positioning activities.