Looking for a fresh yet proven way to enhance your business performance while widening the gap between your company and the competition? Think about supply chain competitive intelligence.

Supply chain competitive intelligence is the process of applying the discipline and ethics of competitive intelligence to the operations of a global supply chain. Competitive intelligence (CI) is a necessary, ethical business discipline for decision making based on understanding the competitive environment, according to the Society for Competitive Intelligence Professionals.¹

As applied to the supply chain, CI is the art of acquiring, presenting, analyzing, and refining knowledge about the competition's supply chains and then reaching actionable conclusions about improving your own.

The basis for good competitive intelligence is a consistent probing and analysis of the competitive environment using primary and secondary data. Analysis, conclusions, feedback—and then ongoing refinement of those conclusions in the face of new information—are the key actions driving this process.

The return on investment (ROI) from implementing a competitive intelligence effort will, of course, vary from application to application. An analysis by PriceWaterhouseCoopers found that companies incorporating CI as “critical knowledge” into their strategic thinking have a 20 percent faster growth rate than those that do not.² A specific example of the power of competitive intelligence is Merck & Co., the global pharmaceutical company. Merck established a CI group responsible for developing a counterstrategy to a competitor's forthcoming product rollout. The effort put forth by this CI unit over a 30-month period has enabled Merck to anticipate and outmaneuver the competition, resulting in a savings to date of approximately $200 million to the bottom line.³

It's important to note here that competitive intelligence is a process, not a function.⁴ Good competitive intelligence unfolds over time and proceeds in a methodical way. When properly implemented, CI will give early warning of:

- Competitive moves.
- Competitor strategies.
- New product launches.
- New, emerging, or changing markets.
- New technologies or business methods.

These early warnings mean little, however, unless they lead to action in the form of pre-emptive strategies and competitive responses. Remember, all intelligence has a short shelf life, so speed is of the essence.

This article will explain how the principles and practices of competitive intelligence can be applied to supply chain management. We begin by describing those specific supply chain activities that lend themselves to competitive intelligence. The article next turns to how to acquire the needed data for competitive intelligence and then what to do with this information once you have it.

Why Evaluate the Supply Chain?

Why is it important to analyze your supply chain capabilities as well as those of your competitors? The most basic reason is to assure that—at the very least—you are managing your supply chain as well as or better than the competition is managing theirs. Beyond that, benchmarking can help you identify ways to improve your supply chain and heighten barriers to competitive inroads. Some key metrics to investigate include order-to-delivery cycle times, vendor response time to rush orders, and accuracy of delivery information. The supply chain analyses can be done independently or they may be conducted as part of a formal continuous improvement program, as required to comply with ISO 9002.

The competitive evaluation process should include looking at the five main types of competitive threats identified by Michael Porter in his book Competitive Strategy. These threats include new entrants, existing rivals, buyers negotiating for a lower price, suppliers negotiating for a higher price, and substitute products with similar or disruptive solution sets.⁵ Senior sales/marketing executives should take the lead in assessing which competitive threats are the greatest.
Some competitive threats may be near term, mostly from those rivals going after the same business; others may represent longer-term threats posed by nontraditional rivals with newer technologies or new approaches to getting product to market. The level of competitive knowledge needed will vary according to the threat. When a rival is consistently reaching for the same business and customers, sales and marketing must continually discover and share information on the rival's performance. In fact, to win more regularly against a specific rival, the strategies and tactics must be rival-specific. For competitive threats driven by technology shifts, other intelligence approaches are required. These could include patent searches, technical evaluations, and assessments of whether a competitor has already launched the new technology or is just announcing it.

Without competitive knowledge, you can't be sure you're competing well or poorly, and you won't know until revenues drop and customers switch. By then, it is too late. So the time for competitive intelligence is now!

Not only should you do it now, but you should do it often. We know of some companies that conduct the CI process annually, typically beginning four months prior to budget and forecast preparation. This is not enough. Competitors, particularly smaller, hungrier ones, can at any time announce new products, form strategic alliances with offshore suppliers, change their senior management, try different marketing strategies in “stealth mode”, institute new pricing strategies, launch aggressive promotions, institute marketing to co-opt large corporate buyers, and disrupt markets without notice. Managers who conduct CI only once a year will get blindsided sooner or later.

Understand the Ground Rules

Before proceeding with the discussion of how to analyze your competitors' supply chains, we need to cover a few basics about acquiring information.

First, there is the law. You need to read and understand the governing federal law titled The Economic Espionage Act of 1996. Briefly, the act defines the following: (1) economic espionage; (2) what constitutes theft of trade secrets; (3) fines for violating the law, which start at $5 million; (4) criminal forfeiture; and (5) the law's applicability to conduct outside of the United States.

The consequence of hiding your identity or misrepresenting yourself in pursuit of property belonging to your competitor can be jail. Your competitor has every right to prosecute to the full extent of the law. In all cases, you need to seek out and follow the advice of your legal counsel.

Next, there is a code of ethics for gaining competitive information, as laid out by the Society for Competitive Intelligence Professionals. These are the basics:

1. When representing yourself and/or your company, you cannot lie.
2. You must strictly adhere to your company's legal guidelines, as set forth by your legal counsel.
3. Secretly tape recording an interview is not permitted.
4. Bribes of any kind, whether in money or equivalents, are not permitted.
5. Planting eavesdropping devices is not allowed.
6. Deliberately false or misleading statements are unacceptable.
7. Under no conditions will price information be swapped, traded, or exchanged in any way with a competitor.
8. Misinformation may not be swapped, traded, or exchanged with a competitor.
9. Procurement of property indirectly, such as hoping to get trade secrets by hiring away a competitor's employees, is not permitted.
10. "Pumping" someone for information, if it may knowingly sacrifice that person's job, is unfair and unacceptable.

In general, all of the above provisions can be summed up in what is known as the “no harm” rule: Acquire what information you legally can; however, do no harm to yourself, your company, your industry, or others. Before leaving this issue, we need to touch on the “dark side”: Not everyone will comply with the code of ethics. Keep up your defenses. Be alert for illegal and unethical conduct. And importantly, get insurance on your intellectual property and trade secrets. In most, if not all cases, insurers will honor a claim of lost intellectual property or other intellectual assets only if the value of the asset has been determined and documented by an independent third party prior to the loss. Finally, remember that all information is perishable. The value of CI is enhanced greatly by consistency, perseverance, and a well-tuned effort by all market-facing personnel to ask penetrating questions.
Acquisition of Intelligence

With these basic considerations in mind, we recommend the following steps to acquire and analyze competitive intelligence for the supply chain:

Identify What's Important

What competitive information is most important to you? Some questions to ask in this regard include:

- Would the availability of metrics for your competitors' supply chains help improve your own supply chain?
- Would it be helpful to know if your competitors' supply chains were relatively better (cheaper, faster, more cost efficient, and so forth) than yours? If they are better, what actions should you take in response?
- Are your competitors automating parts of their supply chains to reduce costs and gain speed?
- Do your competitors outsource portions of their supply chains? If yes, where?
- Would it help you to know how your customers graded your supply chain vs. your competitors' supply chains? Or what grades customers give your industry in general?

Specific areas to evaluate could include the following:

- Speed—time to market from order to end-user receipt.
- Agility—ability to adapt to new products, services, or customers.
- Cost—cost of getting product to market, from raw materials to finished goods to order fulfillment and delivery.
- Data transparency or visibility—ability to share critical information on a 24/7 basis among all supply chain partners and customers.
- Strength of alliances with suppliers—flexibility to produce to demand spikes or dips, to deliver ahead of time, to manage returned goods, to cooperate in engineering revisions, to conform to lean-manufacturing standards, and to adopt technology and best practices. Factors that detract from alliance building include late adoption of advanced technology or manufacturing practices, heavily manual warehouse operations, and shipping problems that go untended.
- Strength of alliances with logistics and distribution partners—the performance of these service providers gives a good indication of how the overall supply chain is doing. Related indicators include the partners' ability to share data, their vadoption of appropriate technology, and their ability to provide real-time visibility of inventory at any time.
Focus on Key Competitors

The next step is to prioritize which competitors you need to focus on. There are direct and indirect competitors. The first group comprises those that offer similar solutions for nearly the same problems in the market. Examples of these are Wal-Mart and Kmart; Oracle and SAP; Ben & Jerry's and Haagen-Dazs, and most recently Google and Microsoft. Indirect competitors are more difficult to assess. In Safeway's case, Wal-Mart was not perceived to be a competitor in the late 1980s. But by the mid-1990s, Wal-Mart added groceries and, with Sam's Club, grew market share at Safeway's expense. Another example of an indirect competitor could be a start-up usurping market share with a better technology solution at half the price of an existing solution set.

A key criterion to use in targeting which competitors to pursue is financial—that is, how much will revenue and profits increase if we outflank one competitor over another. Another, more defensive criterion could be, What do we need to know to defend our position against new entrants?

Some competitors may be public, some privately held. Access to information will vary based on this and other factors. Pay particular attention to new entrants, competitors using new technologies, and to anyone adopting innovative business models in your space.

Identify Potential Vulnerabilities

The next step in the analysis is to determine the suspected choke points in your competitors' supply chains. Find out, for example, who their main suppliers of raw materials are and how much of their production is outsourced. You might want to know the length of their supply chains, their order-to-delivery cycle times, and the typical shelf life of their products. It can also be beneficial to know their level of production sophistication and the supply chain software they use.

The list could go on. The main point is to try to identify areas in which your competitors may be vulnerable.

Don't Wait for All of the Information to Come In

Direct and complete competitive information will rarely be forthcoming. Therefore, when looking for strengths or weaknesses in competing supply chains, watch for indicators of performance, such as adoption of new technology, erratic deliveries, slow turnaround of special orders, or uneven releases of news to the press. Any of these can be indicators of problems that need further evaluation. It can be tougher to evaluate private companies, but the information is there for the most part. (Although it should be legally and ethically sought.) The tactics used to uncover competitive facts are a combination of primary and secondary research; vigilance by your sales, marketing, and field-service teams; and good analysis. As is the case with all intelligence gathering, the entire competitive picture will never be there. Decisions must be made based on partial information.

The Data-Acquisition Process

Once you know what information to go after, how do you go about getting it? Basically, there are two types of data: primary and secondary.

Primary data comes straight from the source—in this case, your competition or people who know about your competition. Primary data generally is the glue in piecing together a competitor's position. In conducting primary research, remember that any time there's an exchange of money, information is made public. Therefore, annual reports, stockholder communications, or financial press releases can be valuable sources of primary data. Other good sources include:

- Speeches by CEOs and others in top management.
- Articles, research papers, or books authored by employees.
- Company Web site content.
- Patents and commercial registry findings.
- Surveys and interviews.
- Remote sensing (such as from cameras or satellite imagery).
- Building permits.
- Uniform Commercial Code (UCC) registrations.

Secondary data comes from sources of information at least once removed from the primary source. Obviously, the Internet comes heavily into play here. But while the Internet and a large number of Internet search services have vastly simplified the task of discovering information about competitors and industry trends, they have caused another problem: too much information. In any case, the Internet is a great place to start, pointing you to information from:

- Newspapers, business magazines, and other print media.
- Electronic sources.
- Analysts' reports and expert opinions.
Acquiring the Primary Data

People, processes, and technology all can be called into play in the acquisition of primary data. In the view of Larry Kahaner, author of *Competitive Intelligence*, the single best source of CI is your sales force. Today, however, the more likely reality is that, given the multi-disciplined, multi-leveled relationships that occur in supply chains, others in the organization are also well-positioned to gain competitive intelligence. For example, customer service, field service, marketing, engineering, and purchasing all have potential access to good competitive information.

While much of the information obtained by sales and marketing may be anecdotal and undocumented, it can nevertheless have great value. The same holds true with your field-service and customer-service organizations because of their many external contacts. Similarly, the people in your organization who talk to suppliers and truckers often can unearth valuable competitive information. IT people who go to conferences will hear a stream of conversations and hearsay. And some IT personnel speak with software service techs, who may also serve a competitor.

The bottom line is that the networks and interrelationships in a supply chain get thick and deep very fast. Accordingly, you need to engage your internal sources carefully and thoroughly in order to mine the existing internal information and quantify it where you can.

The second, equally important aspect of gaining information from these sources is training. Although some employees are naturally good at obtaining information, most don't have this knack. They need to be taught how to gain competitive information in a structured, disciplined way. They must be instructed in what, where, how, and whom to ask. They must also be well-schooled on what not to ask or do in order to avoid unintentionally doing something illegal or unethical.

One helpful tip for acquiring useful information is to first identify what information you need—and repeat that analysis on a regular basis. Competitors change quickly and unpredictably. The frequency of this information assessment will vary depending on what's happening in your particular industry and market. At the very least, you should reassess information needs every other month. In young and exploding industries, you may have to do this every week.

Different objectives will drive different data-acquisition agendas. Developing rival-specific strategies that concentrate on a few competitors limits the volume of data you'll be looking at. On the other hand, if you seek to expand into new markets, data acquisition takes on a broader perspective—and the volume of data increases accordingly. Once the data is in company databases, it becomes a form of business intelligence.

Structured interviews of customers, suppliers, and service providers in the supply chain can be a valuable source of competitive information. These interviews can be conducted either by in-house resources or by outside consultants. There are pros and cons to each approach. Internal staffs can add significant value to the process, given their combined industry knowledge. One concern about this approach, though, is that each individual brings a certain amount of bias, which may skew the results. There's also the question of whether internal resources have the knowledge and experience to develop and then execute a set of structured interviews.

Consultants, on the other hand, have the skills to execute this task and are free of the organizational biases that hamper the internal approach. What the consultants lack, however, is industry knowledge. That's why the best approach may be to team the consultants with the internal industry experts.

Experts in general are a good source of primary information on competitors. These can be line managers who have been in the industry for years and have perhaps spoken at conventions or industry events. Experts could also be market researchers, industry consultants, academics, editors, industry-association leaders, or anybody who has spoken or written extensively on the subject of interest. As a normal part of your business activity, develop networks with these types of individuals. Talk with them regularly, either informally or as part of more formal outreach program that might also include your top management. Be prepared to share some of what you know, as these relationships don't survive very long on a one-way street. Become a skilled knowledge barterer. The information available through these sources is very valuable.

Getting Secondary Data

It should come as no surprise that the main tool for acquiring secondary data today is the Web. The Web can be invaluable as a starting point. It will help identify key players in competing companies and industries. It can retrieve an article in a hometown newspaper about outsourcing, a plant shutdown or expansion, or a new direction for a company. This and other information available on the Web can
provide valuable clues about the competition.

Good researchers know the keys to finding targeted data on the Web. If you don't have that expertise on board, go outside and hire a Web research expert. If searches are unstructured or poorly defined, the Web can be a terrible waste of precious time. There are over 600 services that mine the Web. Some are free; others charge a fee. Listed in the accompanying sidebar are a few research sites worth exploring.

In addition to the Web, the library and other points of collection for records, articles, or books are all good sources of secondary information. Sooner or later, though, all of that material will likely be available on the Internet as well.

Conducting the Analysis

Even the best intelligence acquisition efforts represent an incomplete mosaic. Few companies will ever be able to obtain a full picture of the competitive situation, complete with all of their questions answered. And if they do, the time consumed in capturing that information will likely mean that the opportunities finally identified have come and gone.

A number of analytical tools and models are available. Pick one and use it consistently. Each is good in some areas and flawed in others. The Balanced Scorecard is one example of a proven and helpful analytical tool. For less complex analyses, a simple SWOT (strengths, weaknesses, opportunities, and threats) approach can be applied.

The tools must facilitate execution of the strategies needed to reach your goals. They must be easy to use and useful to all—not just to a few power users hidden in a corner. In addition, they must be able to support the quick reaching of conclusions in the face of new information. Well used, these tools—coupled with the analytical skills of persons in the organization—will bring the company to the desired position. Finding that best position requires knowing where the competition is not well established (that is, they have yet to set a defensible position themselves), knowing how you will unseat them from the position they want to defend, or knowing where they are absent altogether. Supply chain superiority—being clearly better than the competition—enables a set of strategies to unseat the competition, or at least weaken their position.

The structure of the analysis is bound by the competitive threats mentioned earlier as well as by certain common barriers to competitive entry, which Michael Porter has defined as follows.

1. Economies of scale, without which competing is most difficult.
2. High costs of switching from one vendor to another.
3. Customer loyalty and bonds created by your product.
4. Difficulty of accessing alternative channels of distribution.
5. High cost and amount of capital, coupled with the existing large investments of the market leaders.

Porter notes, however, that new technology or some type of disruptive change could bring down these barriers—so stay alert! The key tasks at this point are to analyze your competitors' supply chains within the context of Porter's frameworks, plot them against selected performance metrics, and then record how their relative positions shift over time as changes in market demand and new solutions appear.

The analysis must lead to sound conclusions about competitive responses to new threats, or how one competitor will react to another moving into its core space. In short, the analysis must yield strategies to gain market share with better supply chain management.

In a sense, successful strategy is born from understanding your competitor's soul—its market assumptions, decision criteria, risk aversion, hunger, and potentially irrational reactions if pushed into a corner. At the same time, recognize that a competitor's attitude and actions can change quickly through an...
acquisition, a new CEO, a change in direction mandated by the parent company, a PR catastrophe, a lawsuit, unexpected write-offs of plants and equipment, or even a rumor of a disruptive technology that will shake up the industry.

Over the long run, constant vigilance and analysis will yield superior opportunities that will escape other competitors (unless they are just as aggressive as you are at supply chain intelligence). Success with supply chain execution is relative, not absolute. You must do well enough to beat your competitors.

No single model of CI management will apply to every company or industry. However, Exhibit 1 offers a useful prototypical framework. The cycle begins with setting the goals of the CI initiative. Some activities needed to accomplish the goals will be short-term—a one-time project for instance. Others, such as tracking competitors and improving rival-specific strategies, will be ongoing. The key to success here is to be adaptive, flexible, and ready to act quickly.

| EXHIBIT 1 |
| The Competitive Intelligence Cycle |

With the understanding of your goals and needs, small teams can be formed to acquire the needed information. Team members should be drawn from customer service, purchasing, and sales and marketing as well as from operational areas like logistics and transportation management. Some on the team will focus on secondary data, while others will get the primary information. Meetings can be daily, weekly, or on an ad hoc basis. In all cases, though, the information should be reviewed promptly. Get the analysts involved early, and encourage everyone to move forward on the goals as a team.

Next, the analysts reviewing the incoming data—who often are a vital part of the data-acquisition team—begin to piece together the puzzle. Their sessions should be highly interactive and iterative; new information inevitably leads to new insights and questions. The strength and discipline of the team leader are key elements here, as it’s critical to keep everyone focused on the task at hand.

With the intelligence assembled, line managers are briefed on the findings, and both offensive and defensive strategies begin to take form. Remember, time is of the essence when it comes to these strategic actions. All information and intelligence has a short shelf life.
Execution of the strategies then gets underway as the analysts watch for competitive countermeasures. Measurement of your own competitive actions needs to be comprehensive and robust. How are your customers reacting to the moves? Has there been any impact on market share, revenues, or profitability? Then the competitive intelligence cycle starts all over again.

Seizing the Business Opportunity

Optimizing supply chains and managing them to outperform competitors will increase revenue, profitability, and ROI while at the same time providing the underpinning for solid business growth in the future. Yet given the forces of competition and globalization in play today, management can no longer rely on their instincts to achieve supply chain superiority. Instead, they need a structured approach to benchmarking both their own supply chain performance and that of their competition.

This is where competitive intelligence comes into play. With the data yielded by this discipline, managers will have a clearer picture of where they can leverage their supply chain superiority and where they may be vulnerable to competitive inroads. Sales and marketing staffs will have more knowledge with which to win new business. R&D can see opportunities missed by other competitors. Operations will identify new points of competitive leverage. Competitive supply chain intelligence can make it all happen.

Web Sites Worth Exploring

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<th>Company</th>
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<tr>
<td>CyberAlert</td>
<td><a href="http://www.cyberalert.com">www.cyberalert.com</a></td>
<td>Covers more than 20,000 publications, wire services, TV networks, Web message boards; 63,000 UseNet news groups; and 5 million Web sites. This service and others like it offer ways to clip desired data about competitors' activities.</td>
</tr>
<tr>
<td>LexisNexis</td>
<td>global.lexisnexis.com/us</td>
<td>LexisNexis is a leading provider of comprehensive information and business solutions to professionals in a variety of areas—legal, risk management, corporate, government, law enforcement, accounting, and academic. Most legal actions taken against competitors can be found here.</td>
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<tr>
<td>Cyfmomy</td>
<td><a href="http://www.cymfony.com">www.cymfony.com</a></td>
<td>Media measurement and analysis tool designed with communications professionals in mind. The companys' flagship product is called Cyfmomy Dashboard. Dashboard is a visual product using charts and graphs to illustrate findings, such as a brands' coverage across media types, share of voice, and geographic coverage. If you wish to better understand a competitor's communication and positioning strategies, this is a good place to start.</td>
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Endnotes:
