

## Business Development

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### ▼ The role of competitive intelligence in biotech startups

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**Competitive intelligence (CI) gathering is essential to developing a biotech firm's business strategy, but few startups have sufficient support systems in place to do CI effectively. This article, the first of two on the topic, addresses why it is important and how to do it.**

All biotech startups gather competitive intelligence (CI), although often they are not aware they are doing so. When a scientist attends a professional conference to learn about emerging technologies and who is working on them, when an employee stops at a rival's booth at a trade show to pick up information about their products, when a business development expert reads a market report, or even when an executive chats with a friend about trends in their industry, they are gathering CI. The problem is that in most biotech startups no one manages this flow of information, nor is it organized in a systematic way<sup>1</sup>. As a consequence, the firm does not maximize the value of these critical resources.

In this article, the first of a two-part series, we will describe the types of competitive intelligence and the benefits for a small startup, and provide some examples of CI both working well and not. In the next article, we will provide guidelines on structuring a framework for collecting and providing CI to the people in one's company who need it, and we will examine the legal and ethical considerations of gathering CI.

### Competitive intelligence defined

Competitive intelligence is often mistakenly thought of in a narrow way, as a means of gathering 'secret' information that can be used to gain advantage over competitors<sup>2</sup>. We adopt a much broader view of CI, defining it as the analytical process that transforms disaggregated market and competitor data into relevant strategic knowledge that can be readily put to use by all relevant members of the company. From this broader perspective, CI is closely related to other core management concepts such as strategic planning, business intelligence, market analysis and knowledge management.

Competitive intelligence is an ongoing process that is useful at all levels of an organization (see [Box 1](#)). It allows forward-thinking business leaders to clearly define the marketplace, to ask disciplined questions, and to receive timely and reliable answers to them<sup>2</sup>. It also can help scientists learn about new technologies in the market that could greatly benefit the company by improving discovery platforms or by reducing manufacturing costs. In addition, CI can be used to keep an organization functioning well when key employees leave, by ensuring that they do not take all of their knowledge with them. And it can be used to train new employees so that they more quickly understand the firm's strategy and competitive marketplace and therefore become fully productive faster<sup>3</sup>.

For all these reasons, CI done well can enhance a company's probability of success in the highly risky biotech environment by reducing uncertainty and improving investment decisions, whereas a failure to obtain CI can threaten a firm's survival (see [Box 2](#)).

### What types of intelligence are needed?

To begin creating a CI system, a company must determine what knowledge it needs to set its strategy and operate its business. The specific types of knowledge needed and the priority placed on them will vary according to the company's market, but companies generally should have knowledge in at least nine different areas:

**1. Intellectual property.** Depending on the company's resources, one should do a comprehensive patent literature search at least once a year. When searching for patents, it is useful to start with the European Patent Office, which publishes all patent applications *within* 18 months of when they are filed, usually after one year, whereas the USPTO will not publish patents until 18 months after they are filed. This is valuable information, because most countries do not make a patent available to the public until it has been reviewed by the patent office.

**2. Market need and size.** Identifying target market segments will allow the company to know what markets competitors are planning to move into or are ignoring. During the long development periods required for most biotech products, the market needs and size will change. It is therefore vital to keep CI up to date by regularly consulting with key people, such as members of a carefully chosen Scientific Advisory Board and a broad sample of experts in the relevant fields. Networking at professional or industry conferences is a good way to do this.

**3. Partnerships.** By monitoring new technologies entering the market and in development, the company can identify possible partnerships with other companies and academic institutions. Scientific journal and patent literature searches along with professional conferences can all be potentially fruitful sources of new partners.

**4. Competitive environment.** It is important to continuously monitor the competition. Some players will drop out, while new, potentially disruptive technologies developed by small firms may enter the market that may not be readily apparent as competitors. The company has to be very expansive in thinking about the possible kinds of competitors. By attending conferences and examining relevant ads, the company can assess competitors' product strategies.

**5. Marketing and distribution.** By talking with distributors' and competitors' sales forces, the company can determine how competitors are getting their products to market. This information can help the company develop its own more efficient and targeted strategy for product marketing and distribution. The company can, for example, look at how much competitors spend on advertising or how big competitors' sales forces are to create benchmarks for its own goals and performance. Although most people will decline to talk to a "competitor," many will talk to their "peers" in other companies if the questions are asked in the right way.

**6. Technology opportunities and risks.** By reading the publications of competitors' scientists and their academic partners and talking with them at conferences, the company can identify the bottlenecks that competitors have encountered when developing similar technologies.

**7. Regulatory and reimbursement issues.** Surveying the regulatory agencies is one way to determine the current regulatory requirements and identify new issues that might affect the approval of a product or the way it is labeled and marketed. With a CI process one can examine the various factors in the regulatory environment and anticipate changes that may profoundly affect the enterprise.

**8. Financing options.** One of the most vital tasks for the leader of any startup is ensuring the resources that the firm needs to operate are available. CI can help determine which venture capitalists are investing in the firm's technology area and what organizations might be interested in acquiring those technologies. This data can better establish the value of a company during financing and can potentially strengthen a firm's negotiating position. In addition, CI can be used in examining merger and acquisition candidates, government grants and joint-venture partners that could provide alternative sources of funding, thereby increasing the firm's negotiation leverage.

**9. Human capital.** Salary surveys and analyses of job ads can provide important insights into competitors' staffing strategies. Likewise, recruiting agencies, while keeping their client information confidential, may be good sources for industry skill trends and the strategies of non-client firms. This kind of information can allow the company to determine the type of people it needs to succeed in a market niche and what it will take to attract and retain them.

## Conclusion

Competitive intelligence is a vital part of creating a sound business strategy, and obtaining it effectively can bring multiple benefits to an organization. But small companies often do not have the expertise or systems in place to get the full value from CI. They must carefully identify their top CI priorities and the resources required to meet these specific intelligence needs, then track and control the allocation of resources to achieve these tasks. As the company grows, the CI function should also grow to maintain its competitive advantage and exploit the opportunities that CI provides.

Although broad organizational involvement is important for gaining the full value of CI, there should always be one person accountable for clearly establishing and communicating the CI development objectives. This person should be responsible for ensuring the CI process is gathering the necessary information and then distributing it to the right people. Those employees directly involved in CI data-gathering and analysis need good industry and technical knowledge, especially at the tactical level, and a solid understanding of secondary research. In addition, CI staff should have strong interpersonal, problem-solving, written and oral communication skills, because they will be collating information from both internal and external sources (see [Box 3](#)). They should also have a

thorough knowledge of ethical and legal implications of their activities, which will be discussed in the next article in this series.

**Box 1: Potential benefits of competitive intelligence<sup>2,4</sup>**

- Identify opportunities and potential customers
- Gain competitive advantage by reducing reaction time
- Improve short- and long-term strategic planning
- Create company benchmarks and reveal how competitors do business
- Provide guidance on pricing, delivery, product development, outsourcing and clinical research decisions
- Anticipate changes in the regulatory and reimbursement environment that may profoundly affect the firm or its industry
- Identify emerging technologies and their potential impact on the competitive environment
- Assess merger and acquisitions candidates, joint-venture, academic and alliance partners
- Provide warning when key strategic assumptions are changing and prevent surprises

**Box 2: The benefits of CI and the costs of not doing it**

**Example 1: bad.** Company A, a small biotech firm, had its strategy consulting firm do a limited CI study of the market for migraine medications to support projections that would be presented to potential investors. To conserve resources, the company focused on immediate competitors with similar compounds. As they were preparing for presentations, it was learned that a competitor product already on the market would be approved for this indication and would offer comparable efficacy at a fraction of the cost. The company's market had disappeared. Retrospective analysis revealed that this competitive development was the result of a large clinical trial program (with over 6,000 patients) that had been going on for the past two years and that could have been easily detected by a more thorough CI program. The company subsequently abandoned the indication, laid off large numbers of employees, and saw its stock price plunge and its financial support evaporate.

**Example 2: better.** Company B commissioned an in-depth CI study while its drug was in phase 2 clinical trials. The study confirmed that a major pharma company had a compound that was far ahead. This company already had a dominant position in the market, which would be very difficult for Company B to overcome without clearly superior efficacy. When interim phase 2 data showed that this was not the case, the company terminated development and avoiding sinking additional investment into a dead-end indication. The company estimates it saved at least \$30 million.

**Example 3: best.** Company C directed CI efforts at their competitor's product development program. Systematic discussions with dozens of researchers on the likely safety and efficacy benefits of products in development revealed that the competitor was including novel safety endpoints in their clinical trial. The company concluded that the competitor intended to use the resulting data to make an enhanced safety claim. The company refined its own protocol to one-up the competitor and was able to make even stronger safety claims that effectively differentiated its product and created a substantial competitive advantage.

### Box 3: Creatively using internal and external information

**Internal information.** Company Y hired a CI provider to determine why they were losing major accounts to a competitor. As a first step, the CI firm reviewed the company's internal data, including e-mail correspondence from its own sales force reporting rumors they'd heard from customers. This correspondence included references to a sequence of activities that clearly indicated what had happened. Over a four-month period, different company sales reps reported: (i) competitor sales reps visited the customer, (ii) the customer requested information on Company Y's discounting policy, (iii) the competitor was using "a cost-effectiveness outcomes trial" as a marketing tool, and (iv) the competitor had initiated an "outcomes trial" at the account's facility. One month later the account switched to the competitor. These pieces were not assembled and analyzed because the company did not have any internal resources dedicated to systematically keeping an eye on competitor activity.

**External information.** A large pharmaceutical company conducted a CI assessment of a competitor's product marketing strategy for a synthetically produced compound in development. An analysis of financial information revealed that the competitor had purchased a large volume of agricultural futures in a particular flower. A review of the company's foreign marketing materials revealed that their product was being test-marketed in a European country using an "all-natural" direct-to-consumer (DTC) message. Finally, a personality profile of the senior marketing executive showed a history of innovative DTC campaigns. Based on this information, it was determined that the competitor intended to produce the compound using the more expensive natural production method in order to use the "all-natural" marketing position in the US market. The product's key market positioning strategy was thus identified 12 months before its scheduled US launch.

**Creative thinking.** While attending a symposium to collect intelligence, a CI analyst heard one of his client's trial investigators comment during his presentation that a particular treatment pathway (not the client's) was likely to be an area of "future development." On returning home, the analyst researched the speaker and found that he had an association with the president of a startup company focused on this pathway. This startup company was funded by a major rival and was working on a next-generation product to leapfrog the company's own product. Additional research revealed that this researcher also had an undisclosed financial relationship with the competing startup company.

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