

Business Development

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▼ How to conduct competitive intelligence in your biotech startup

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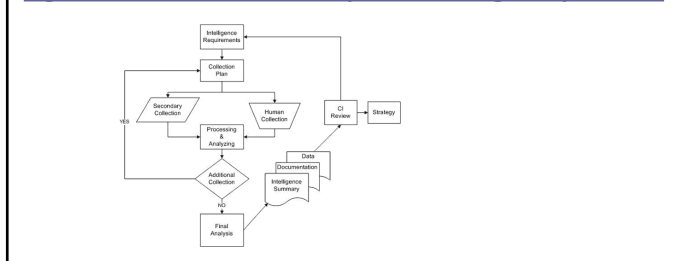
Turning competitive intelligence into knowledge is a multi-layered process. In this second of two articles on competitive intelligence, we outline the steps involved and point out some of the potential pitfalls.

Competitive intelligence (CI) is vital to the success of bioscience companies, yet most biotech startups have no systematic CI process in place. The [first part](#) of this series, defined CI and identified the benefits to firms of adopting a strategic approach to CI, along with the different types of intelligence they require. Here we outline a process and surrounding support systems needed to make best use of this information. We conclude by exploring some of the legal and ethical issues associated with conducting CI.

Establishing a CI process and support systems

A successful CI process begins by identifying what the company needs to know ([Fig. 1](#)). These needs are usually expressed as Key Intelligence Topics (KITs) and Key Intelligence Questions (KIQs). Once the CI needs have been defined, existing knowledge must be reviewed to determine where there are gaps in the company's knowledge. A collection plan is then developed to fill these gaps. The collection plan identifies what types of information need to be gathered and from what sources. Information collection has to be managed to ensure that all potential sources of information are used effectively, internal and external sources are integrated, and collection is cost effective. A great deal of useful CI can be obtained from readily available public sources such as the internet, journals and commercial databases. The goal is not to gather copious amounts of information but produce highly relevant analysis, which translates directly into improved business results¹.

Figure 1: Overview of the competitive intelligence process



After carefully mining and organizing relevant public information, systematic collection of additional nonpublic information can provide competitive advantage through superior knowledge. Nonpublic information is gathered primarily through direct or indirect questioning of people. As discussed in the final section, this area is legally and ethically sensitive and not something all employees will be eager or well prepared to cover; it may therefore be an activity where the use of a professional CI firm is advisable¹. The information collected must be stored in a way that balances the need to protect sensitive data and sources, with the need for key decision-makers to access it in as hassle-free a way possible.

Turning all of this information into knowledge requires several additional analytical steps. First, intelligence processing converts the information into a form that is useful for analysis. Processing might include validating data or writing summaries of key facts. Analysis then converts this raw

information into intelligence that answers the company's questions (KIQs). Analysis often involves decomposing complex information into discrete variables that can then be recombined to answer questions. As a simple example, let's assume the company would like to know how much the competitor is going to spend next year marketing drug X. Clearly the answer to this question would not be easily accessible to the public; however, it can be estimated by piecing together a variety of CI data. The competitor's annual report may reference the revenues of drug X. A broker's conference call may reveal that the competitor is planning to spend 10% of revenues on marketing. Combining these two data points yields an approximation of the marketing budget for drug X.

❗ CI is fundamentally a human process that relies on a network of people within the company to be successful. Optimally, CI should have strong support from an internal champion at the top of the company who can influence acceptance and support of CI. ❗

The final step in CI analysis is to determine if there is enough information to answer a specific question or whether additional information is needed. When CI has gathered sufficient information, an information product needs to be developed to communicate the conclusions. Outputs from CI may include presentations, documents and/or electronic media. Whatever the format, CI products should always be clear, concise, and organized to facilitate easy integration into the decision-making process. If there is extensive data, this should be provided separately or attached. The purpose of CI is to 'answer questions' and decision makers typically value brevity more than volume. Intelligence should also be distributed only to individuals who need to act on the information. Overdistribution of intelligence erodes its perceived value and increases the risk that strategic information will leak outside the company.

Building a supportive CI infrastructure

Even the best CI process is not likely to work well in isolation. Rather, it must be integrated into the entire organization's operations and knowledge processes to facilitate the integration of CI into decision making throughout the company. A well-designed CI process should be aligned with the company's people, its organizational structure and its reward system^{2, 3}.

People.

CI is fundamentally a human process that relies on a network of people within the company to be successful. Optimally, CI should have strong support from an internal champion at the top of the company who can influence acceptance and support of CI.

Employees throughout the company should be aware of what CI is and its value to the company. This awareness is needed at all levels, but is particularly vital among upper management since executive input is required for intelligence efforts to be proactive and optimized to support key decisions. In an effective CI system, senior management demands intelligence input to support decision making and planning, and a high level of interest and appreciation for CI is clearly visible at the executive level. At lower levels, employees should be motivated and empowered to discuss competitive issues and concerns with senior management and executives. Since conducting CI requires a highly specialized set of skills, databases, and personal networks, internal staff can often be usefully supplemented with external CI experts.

Infrastructure.

The CI team must also be adequately supported with information-related resources, including sufficient budget to achieve its objectives¹. Effective integration with existing resources is key to building a cost-effective process. For example, the CI process should have contacts throughout the organization that can provide access to specific information, including: legal (especially intellectual property), marketing, business development and R&D. These contacts help create a fuller definition of CI needs and also facilitate diffusion of CI across business units. Often 80% of the information required to answer a CI question resides within the company, but it takes a focused and well-networked CI effort to identify and analyze it.

Rewards.

The importance a firm attaches to CI will be signaled to employees by the extent to which it is recognized through formal and informal rewards that can include recognition, incentive compensation and promotions. Building an effective organization-wide CI system thus entails including CI responsibilities in job descriptions and the criteria used to evaluate employee skills and performance. The reward system should include clear performance measures for CI, such as standards to evaluate the CI gathered against the original requirements. This will allow the firm to incorporate quality improvement into the intelligence process to achieve the most value from CI.

Legal and ethical implications

Competitive intelligence is not an inherently illegal, immoral or unethical activity and should not be confused with industrial and economic espionage⁴. Properly done, CI respects laws governing trade secrets, fraud and privacy, and avoids wrongful acts such as hacking, wiretapping

and bribery. Mismanagement, or nonmanagement, of CI activities can create risks, however, it is important to be familiar with relevant laws and to recognize that laws and norms differ from country to country and that a person who gathers information from another country can be subject to the jurisdiction of that country⁵. Major corporations, such as Proctor and Gamble, have lost tens of millions of dollars as a result of inappropriate CI activities, which included such things as collecting confidential competitor documents or engaging in deliberate theft of intellectual property under the guise of 'executive recruiting'⁶. CI practitioners should be knowledgeable of relevant laws to avoid accidental violations such as paying 'honoraria' that might be construed as bribes, or engaging in inappropriate recruiting practices⁷.

Even if an organization has a rigorous legal compliance program, there are still likely to be gray ethical areas where there is no clear and absolute standard of right and wrong. It is useful for each organization to examine how far it is comfortable going in these gray areas and then to define guidelines for all employees on what behavior is considered acceptable and what is not. As an organization decides how to approach CI, it is important to recognize that not having a CI program could itself be considered unethical because it would violate management's fiduciary responsibility to be aware of the competitive environment.

Posing a set of hypothetical CI questions ([Box 1](#)) and answers ([Box 2](#)) to employees is a good way to help communicate legal and ethical guidelines and also to help sensitize employees and strategic partners to the potential CI-gathering tactics of the company's competitors so that they will better protect the company's own sensitive information. Which ones are illegal? Which would you consider unethical?

Conclusion

Views on the appropriateness of CI activities will vary according to each individual's and company's ethical standards. The latter are highly variable by country and corporate culture. Wherever CI is being conducted, however, doing it well requires a carefully disciplined and professional process that can turn the information collected into valuable knowledge, while avoiding the potential pitfalls of illegal or unethical CI activities.

Box 1: How far would you go? A self-test of CI law and ethics

Which of the following would you consider appropriate for your firm? Which may be illegal? (Answers provided below)

1. Picking up a competitor's product and marketing information
2. Picking up a competitor's internal meeting notes (not marked confidential) left behind in a hotel conference room
3. Picking up a competitor document, clearly labeled 'Confidential,' left behind in a hotel conference room
4. Speaking with experts about competitor products at a trade or professional conference
5. Paying experts an 'honorarium' for information, including sensitive competitor information
6. Speaking with doctors conducting competitor clinical trials about their research and views on the product
7. Reading information about a competitor on a laptop of someone sitting next to you on a plane
8. Including competitive questions in job interviews with competitor employees
9. Hiring former competitor employees to learn about the competitor
10. Participating in online chats with competitor sales reps to learn about their activities
11. Asking questions without disclosing who you are or who you work for
12. Staying at the hotel where a competitor is having a meeting to 'mingle' with their sales reps

Box 2: How far would you go? A self-test of CI law and ethics

Answer key: Items 3, 5, 8 and 9 are unethical and potentially illegal (in item 3, by leaving a 'Confidential' document in a public place, the owners may have given up their legal protection, but the issue could end up being determined in court). Items 2, 6, 7, 10, 11 and 12 are legal but may be considered unethical in some cases. Items 1 and 4 are the only ones that generally have no legal or ethical issues.

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