



Northern Light



EXCLUSIVE CHECKLIST REPORT

Choosing a Competitive Intelligence Platform

Generative AI Meets Competitive Intelligence

By Marydee Ojala, Editor-in-Chief, *KMWorld*

When considering a competitive intelligence (CI) program, many people think it's a simple matter of identifying who your competitors are and setting up an alert to follow the news about those companies. The reality is considerably more complex. Competition is not limited to companies; it could be the economy, technology, regulations, or something totally unforeseen, such as a global health emergency. Nor is it restricted to companies whose existence as a competitor you are already aware of. It could be a brand new company flying under your company's radar. What it does require is an understanding of the potential competitive impacts not only of a variety of factors, but also from a variety of sources.

Competition is more intense than ever. It's harder to gain competitive advantage, more difficult to stand out from competitors, and easier for customers to compare products and services. It's also harder to keep corporate strategies and future plans secret. Predicting market trends accurately often seems more art than science and yet with algorithms, machine learning, and other AI-based technologies, it's possible to amplify the role of CI professionals in giving companies a competitive edge.

The practice of CI today involves not just finding information, but also determining its value, synthesizing it, and sharing it with the appropriate people and business units. Data analysis to gain insights remains an important role for CI professionals. But with the increase in the amount of available data and the accelerating pace at which it becomes available, data gathering is a daunting endeavor, requiring assistance from AI-based technologies.

TAKING A BROAD VIEW OF CI

Gaining competitive advantage requires a broad view of CI. The economy has a profound effect on your competitive position. Inflation affects buying power, which in turn affects sales and, ultimately, profitability. Worries about an impending recession can do the same. On a more localized level, weather events could count as contributing either to a boost in sales or a decline. Knowing in advance about droughts or floods allows companies to plan alternatives to particular crops if the company is in the food business, for example, or to reroute trucking routes, if supply chains would be disrupted.

A new government regulation could have a material effect on your company's business. Let's suppose a government decides to ban a component critical to the manufacturing of your product. If you've been tracking the possibility of this ban becoming reality, have thought of an alternative, and implemented a substitute component, you have a competitive advantage—all thanks to good CI work.

Competition can come from technology as well. Video might have killed the radio star, as The Buggles sang, but streaming media looked set to kill video along with television and the movie industry. The actual effect was somewhat different. But other technologies have killed off entire industries. Email is cutting into the postal service business. Newspapers are suffering, largely because of online advertising and online free news outlets. Online shopping

is putting a serious dent in shopping malls. Looking ahead, what will the impact of preferring—or mandating—electronic vehicles over gasoline-powered cars have on the automobile and petroleum industries? How will telemedicine affect doctors and hospitals?

AI AND MACHINE LEARNING

AI-based machine learning has been in place for several years, providing document summarization, recommending additional information, and surfacing the most relevant data. It has enabled the linking and analysis of disparate data sets. AI technologies have helped CI professionals organize the increasing volume of information available, eliminate irrelevant data, identify important trends, and gain insights to power strategic planning and possibly adjust current activities.

The next step is generative AI, exemplified in the popular mind by ChatGPT, the new Bing, and Google Bard. These hold great promise for streamlining and enhancing the practice of CI as the technology develops. But generative AI is only of benefit if its training model consists of proven quality data and if competitive intelligence professionals understand all the possible implications of the models and take a comprehensive view of CI.

Keep in mind that generative AI chatbots and large language models (LLMs) are not synonymous. GPT is the acronym for Generative Pre-trained Transformer. LLMs are trained to generate human-like text by predicting what word should come next in a sentence and what text should follow another text. ChatGPT, Bing, and Bard are specific implementations of GPT. For CI purposes, recognize that these specific iterations may not be sufficiently useful.

CHALLENGES POSED BY AI AND LLMs

Recent advances in generalized AI and LLMs raise many questions for many industries. Will graphic artists be supplanted by AI-generated art? How about those who write marketing collateral? What does it mean for education? Could lawyers be replaced? Who, or what, will be writing legal briefs? Where do the competitive advantages lie, and what should companies worry about?

AI is powerful but can deliver incorrect or outdated information. Evaluation of AI-generated information calls for human knowledge to assess the value of information. Suppose you've asked about the future of wind turbines and received a report from 1990. If the date was not evident, you'd be making decisions on old data. Or you ask if a chemical provisionally selected to be used in a pharmaceutical compound has health consequences and the answer is that it doesn't, even though it does. You face serious repercussions if you continue to use the chemical substance.

AI is not a crystal ball, although many wish it were. Wouldn't it be great if you could simply ask a chatbot to tell you what you should be looking out for, in a competitive sense? If only a chatbot could accurately predict the actions of your competitors, the emerging technologies that will challenge your market position, or the future economic situation. Today you can ask the questions—you

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can even ask really good questions—but whether or not you can trust the answers is problematic.

COMBINING HUMAN INTELLIGENCE WITH TECHNOLOGY

The trick to establishing a useful CI program is to create an alliance between human intelligence and technology. There’s a tremendous amount of information we can tap into using search technologies, but ascertaining what it means is up to humans. Machine learning is superb at finding patterns that allow us to discover connections. What those connections mean, however, is beyond the capabilities of machine learning. At least, so far it’s beyond machine learning’s capabilities. Sense-making is a uniquely human ability.

Gathering information is not the same as interpreting its meaning and applying those insights for actual business purposes. Information exists in a number of different formats and contexts. Business news is of primary interest. Company financials are always valuable. They appear in annual reports and in presentations by top executives on investor quarterly earnings calls. Those information sources assume that your competitors are public companies that release their financial information. Newer potential competitors that are privately owned present some difficulties in identifying their financial situation.

Company press releases, often posted to company websites, are good candidates for scrutiny through a CI lens. They could be about a new product, new hires, or an acquisition that heralds the company going in a different competitive direction. Equally, they could be designed to mislead the competition about how far along the company is in developing a new product or radically redesigning an existing one.

But it’s not just company news that contributes to an overall understanding of the competitive landscape. News about industries, technology, and the economy are also important. Industries are composed of companies, and companies can be in more than one industry. Knowing the direction in which an industry is moving contributes to the competitive assessment, as is the possibility of one industry invading another’s space.

TRUSTED SOURCES

For technology, writers of trade press articles generally have their ear to the ground, which is reflected in their articles detailing latest tech developments. What they don’t do is explicitly say how those developments affect your competitive stance. Is release 6.5 of Wondrous Widget going to be a threat or an opportunity? The trade press can spell out the details, but only the competitive intelligence professional can make the judgement call.

Scientific conferences are another potent source of competitive intelligence data. A conference presentation about a new

development in laser spectroscopy may be of interest to other scientists on a philosophical level, while its impact on industry could be immense. As with the trade press, it requires the human touch to determine whether the insights in the paper have consequences for a particular company.

Syndicated market research reports and industry analysis reports add the element of human review and opinion to news and scientific studies. They make an attempt to assess the meaning of business and technology news as it affects an industry or a market. However, it is still up to the reader of the reports to determine if the external analysis aligns with what is known internally.

SEARCH QUALITY

Question answering is at the heart of business use of generative AI. It should be obvious, then, that the best way to improve the quality of search results is to improve the quality of the searched materials. One approach to this is to concentrate on trusted content, particularly information licensed from external third parties or created internally to support decision making. Press coverage of generative AI pointed out their tendency towards hallucinating—making up citations, creating spurious articles, and returning false information in response to search requests. This can be avoided when the language model consists of trusted, reliable sources.

A basic tenet of CI work is not simply asking questions, it’s asking the *right* questions and asking them of reliable sources. Before generative AI came on the scene, traditional search engines returned a list of documents with a snippet of information about them in response to the keywords put into a search box. Generative AI is completely different. It gets to the heart of the searcher’s interest much better than traditional search. Done well, it guides the searcher to make a better selection of documents to read.

At the Data Summit conference, held in Boston in May 2023, David Seuss, CEO of Northern Light, said, “The future belongs to those organizations that can apply the power of the new search possibilities created by generative AI to the crucial questions being answered, one way or another, every day throughout their strategic functions such as product management, marketing, product development, and research.” Let’s add CI to those strategic functions.



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Choosing a Competitive Intelligence Platform

By C. David Seuss, CEO, Northern Light



The business discipline of competitive intelligence (CI) taps into a wide range of information resources and requires that practitioners synthesize voluminous information quickly and accurately. Then, they have to share the insights broadly within the organization to product managers, marketing managers, product developers, R&D, strategic planners, M&A, and executive business leaders. In other words, CI is ripe for a

knowledge management solution.

But what exactly should one look for in a KM platform for competitive intelligence?

To enable this vital and complex process, a competitive intelligence KM platform requires particular content management, search, distribution, and artificial intelligence (AI)-based machine learning capabilities. Accordingly, here are several questions to consider when evaluating CI platforms.

1. WHAT FORMS OF CONTENT DOES THE SYSTEM ACCOMMODATE, AND HOW DOES THE SYSTEM MANAGE THEM?

According to [Investopedia](#), “A typical competitive intelligence study includes information and analysis from various disparate sources, including the news media, customer and competitor interviews, industry experts, trade shows and conferences, government records, and public filings.” While CI research often starts with the news, perhaps the most challenging of the source types to integrate is licensed external content, such as research reports from industry analysts like Forrester or Kantar. That’s because aggregating it requires a complicated set of skills and activities, including content industry awareness and experience, the ability to use any aggregation technique (API, FTP, RSS, or crawl, as may be specified by each content publisher), licensing and copyright compliance, normalizing disparate metadata, and search and machine learning across multiple sources. Ask how the content is indexed and tagged, because that determines how deeply documents can be searched and, ultimately, how insights can be discovered.

2. WHAT OPTIONS ARE AVAILABLE IN THE SYSTEM FOR FINDING/UNCOVERING INFORMATION AND INSIGHTS?

Of course, one expects a KM system to have a robust search function, but ask your vendor if they have enhanced means of information discovery. Some KM systems now can distill key insights from documents and present them to users, rather than just presenting a snippet of text and a link. And, consistent with

the preferred workstyle of millennials, a modern KM system should offer a variety of efficient means to curate content for browsing that directly sends users the targeted information they’re after. These means can include a dashboard system, newsletters, recommendation engine, and expert search libraries.

3. HOW DO YOU UTILIZE AI AND MACHINE LEARNING IN THE SYSTEM?

AI-based machine learning is adding value to market and competitive intelligence to KM systems in a range of useful ways—for example, automatically summarizing documents in a search result and distilling insights from them to save users time; and recommending documents of interest for individuals based on their prior search behavior. Recently, with the advent of ChatGPT and OpenAI’s (and Microsoft’s) commercial release of an API for its GPT-3.5 Turbo large language model, enterprise KM systems are becoming capable of succinctly answering users’ direct questions drawing on an organization’s high-quality proprietary content.

4. HOW DO YOU PROMOTE SYSTEM ADOPTION AND USAGE THROUGHOUT THE ENTERPRISE?

Having the ability to search for information is one thing; pushing strategic competitive intelligence insights to people who need them to make timely business decisions is another. In what is rapidly becoming a browse-to-content world, ask your vendors what options they offer KM system administrators to proactively distribute content to users. Strategic dashboards, personal dashboards, newsletters, recommendations, and email alerts all have proven effective.

5. HOW LONG DOES IT TAKE TO IMPLEMENT AND DEPLOY THE SYSTEM

If you were to ask your corporate IT department to build a market and competitive intelligence KM application, it might well take a year or more. A specialized third-party vendor, however, ought to be able to deploy a SaaS-based KM solution within 90 days.

6. HOW DO YOU HANDLE SYSTEM SECURITY?

Ask vendors you are considering to share their performance against the metrics that data security professionals rank on: network security, web application security, patching cadence, DNS health, IP reputation, leaked information, hacker chatter, endpoint security, cubit score, and social engineering. A report from a credible third-party security assessment service, such as SecurityScorecard, is probably the best assurance.

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7. DOES YOUR PRICING FACILITATE ENTERPRISE-WIDE ACCESS?

Beware seat-based pricing or any pricing element based on metrics like usage or storage for an enterprise application—it’s a recipe for disaster... or at least for unpleasant surprises. An annual, enterprise-wide subscription with unlimited usage and storage typically is the cleanest, most predictable way for large organizations with tens of thousands of employees to budget for and purchase this type of KM solution.

8. WHAT IS YOUR CUSTOMER SUPPORT?

Make sure a vendor has a high-touch customer support ethos. A market and competitive intelligence KM solution is complex, and across an enterprise its uses will vary, so customization and “hand-holding” is to be expected.

9. WHAT IS YOUR TRACK RECORD OF INNOVATION?

Look into *what* a vendor historically has done to add value to their KM solution with technology or service, and *when* they did it. This isn’t about “bragging rights”; rather, it’s about a vendor making the effort and investment to deliver advanced capabilities to improve the KM system’s value and the user experience for customers.

10. CAN I TRY BEFORE I BUY?

There’s no more effective way to get a feel for a system than to actually use it. Free trials or “pilots” are relatively rare in the market and competitive intelligence KM solutions space, but they are out there. Find them and try them.

All these considerations are significant because of the very nature of competitive intelligence research. Remember, according to Investopedia, practiced properly [CI](#) “assembles actionable information from diverse published and unpublished sources... [to cultivate] a detailed enough portrait of the marketplace so [an organization] may anticipate and respond to challenges and problems before they arise.”

That is both a daunting task and a mandate to every enterprise seeking to compete successfully in complex, global markets. Using a highly functional CI platform effectively is vital to achieving those goals.

David Seuss is CEO of Northern Light, which he joined in July of 1996; he led an employee group in buying the company in 2002. Previously, David was founder and CEO of Spinnaker Software Corporation, which he led from inception to a public, NASDAQ listed company. Earlier, he was a consultant and manager for the Boston Consulting Group. David holds a MBA with High Distinction from the Harvard Business School and an industrial engineering degree from Georgia Tech.



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