

Six Trends Changing the Face of Competitive Intelligence



Northern Light

**Shouldn't more
information
lead to better
competitive
intelligence?**



The information explosion of the past 20-plus years – the same two decades that saw the rise of the commercial internet – has brought us to a moment in which, for many organizations, meaningful competitive intelligence (CI) is a scarcer commodity than it ought to be.

This is both ironic and puzzling. After all, shouldn't more information enable the production of better competitive intelligence? Ultimately, yes – but not without help from technology to ameliorate some of the problems created by powerful forces at work in early 21st century business.



Trend #1: The “attention economics” dilemma

The explosion of content in the digital age is overwhelming our human capacity to process it, making “attention” a scarce and increasingly valuable commodity in economic terms. This notion was first put forward by Nobel Prize-winning economist Herbert Simon 50 years ago, who observed that “a wealth of information creates a poverty of attention.” He noted that many designers of information systems incorrectly represented their design problem as information scarcity rather than attention scarcity, and as a result they built systems that excelled at providing more and more information to people, when what was really needed were systems that excelled at filtering out unimportant or irrelevant information.

In an environment notable for “attention scarcity”, what’s really needed are systems that excel at filtering out unimportant or irrelevant information.

Several years ago, a leading research firm conducted an experiment which found that business decision-makers struggled to arrive at the correct response to a business problem when faced with multiple information sources that did not all point in the same direction. That’s because synthesizing information is hard and takes time – perhaps more time than many decision-makers are willing to devote – which points to an important piece of the value that CI professionals offer: synthesizing diverse information sources and providing a coherent narrative based on that synthesis to the decision-makers. The researchers also advocated better data sharing across different parts of an organization, encouraging decision-makers to actively embrace and use each other’s data, and making collaboration easier among different information providers in the organization.

In its annual information industry outlook several years ago, Outsell Inc. reported that corporate CEOs ranked attention economy-related factors – specifically, expectation of immediate answers, and the decline of reading – as the second most impactful societal trend that will affect the industry over the next decade. (Accessibility of data was first.) This speaks directly to Simon’s point: people need help from technology to quickly sort through and make sense of all the information that technology makes accessible.

Interestingly enough, search engines – one of the radical innovations of the internet age – do the opposite. Search engines serve up overwhelming amounts of information and, at least for the leading ones on the web and in the enterprise, do almost nothing to help synthesize that information.

Trend #2: Accommodating Millennials' work style preferences

Young people born during the 1980s and '90s – so-called “Millennials” – are now the dominant slice of the workforce; soon they will be the majority.

As a group, Millennials have several characteristics that impact the collection, processing and presentation of CI. Most significantly, Millennials are browsers, not searchers; they are more social in their approach to learning, preferring recommendations from colleagues and experts over personal research¹. This has implications both for the processes and tools organizations put in place to support their growing Millennial workforce. For example, the traditional notion (and design) of a “search engine” needs to be re-conceived as something more closely approximating a “curation engine” where subject matter experts organize information on a topic for Millennials to browse.

A U.S. Chamber of Commerce study said, “Millennials are more likely to multi-task, they switch their attention between media platforms 27 times per hour, and they are more likely to rely on the recommendations of colleagues than on personal research.” Boston Consulting Group noted that Millennials put an emphasis on speed, ease, and efficiency in all their activities. They summarized the prototypical Millennial attitude as, “I want it fast and I want it now.”

For Baby Boomers and GenXers, search was the radical change in their professional lives. They went from having to go to a corporate library and browse magazines on shelves to being able to go online and find information instantly. As a result, Boomers and GenXers are personal research-oriented and search-oriented.

For Millennials, social media was the radical innovation in their lives. Facebook started its rise around 2007 when Millennials were in their teen and young professional years, and



other social platforms followed. Millennials cast a net to people and gather information, rather than relying on personal research. In a world where the amount of available information is not the problem but the synthesis

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of that information is, this may be the most effective strategy. The truth is that Millennials are extremely efficient information-gatherers, and they are extremely effective at acquiring relevant insights when the tools are right and designed for their cognitive style.

Millennials grab and move on; they don't slow down to focus. Speed is the primary ingredient in successful information delivery to Millennials.

Interestingly, executive business leaders share certain characteristics with Millennials. Both groups are in a hurry; they gather information from other people; they like to be told a story; and they like curated information. Everything an organization does in CI delivery to serve Millennials better will also serve the needs of the C-suite better.



Trend #3: The mobile-oriented, browse vs. search world

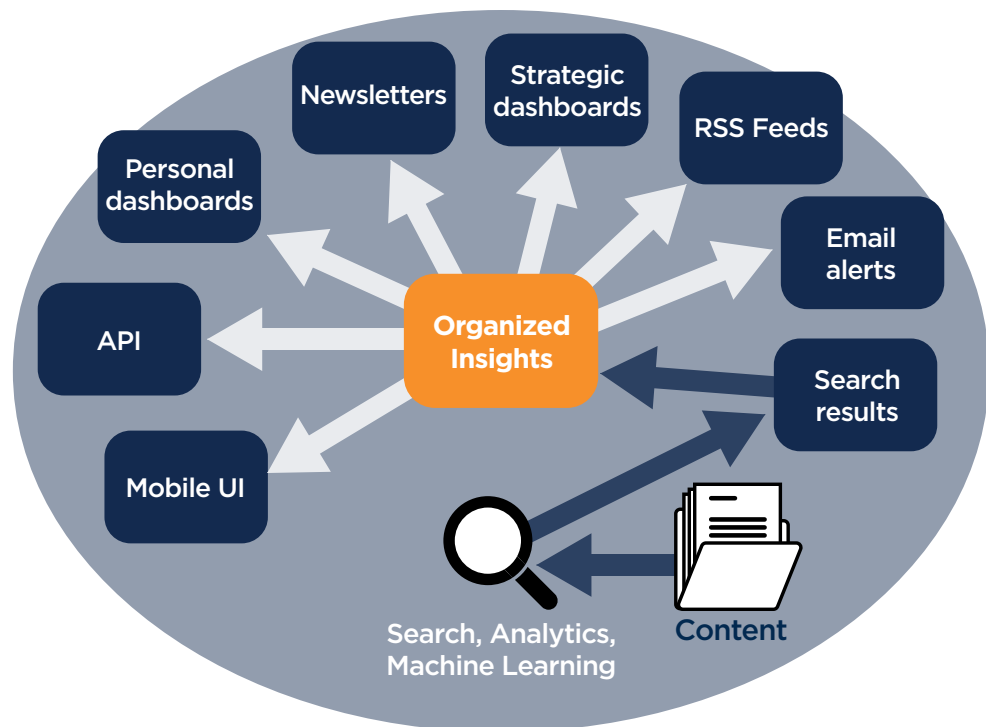
In 2021, virtually all workers have at least some reliance on smartphones. Millennials, however, are especially attached to their mobile devices. They live in a thumb-swipe world and their preferences lean toward easy, seamless access. Accordingly, they prefer a “browse-to-content” model rather than entering queries into a search engine.

If we went back in time 15 years, when laptop computers were the standard for “mobility,” search was the dominant metaphor for consuming competitive intelligence. The job of a CI portal was to aggregate the content, and to apply good search intelligence that could generate meaningful search results. With search, a user types in a query and gets a search result, scans the results list, clicks through to download interesting documents, skims those documents to find information that is useful. It’s a keyboard-based process and frankly can be laborious and time consuming.

But then everything started to change. Within a few years, smartphones and tablets running iOS and Android became ubiquitous. These mobile devices are hostile to keyboard-based processes like search. Typing a complex query with one finger is not much fun on a phone, nor is working through the search results to find and consume the insightful documents. And while voice interfaces are increasingly effective for issuing brief instructions to a device, speech recognition technology is not yet sufficiently robust to be a viable mechanism for complex queries. So the net result of this is search is declining as an information-gathering strategy.

What is replacing search?

As fewer people “search,” the CI professional becomes a human curator delivering insights and curated content to audiences “browsing” to the content most relevant to their interests. There are various mechanisms that deliver such



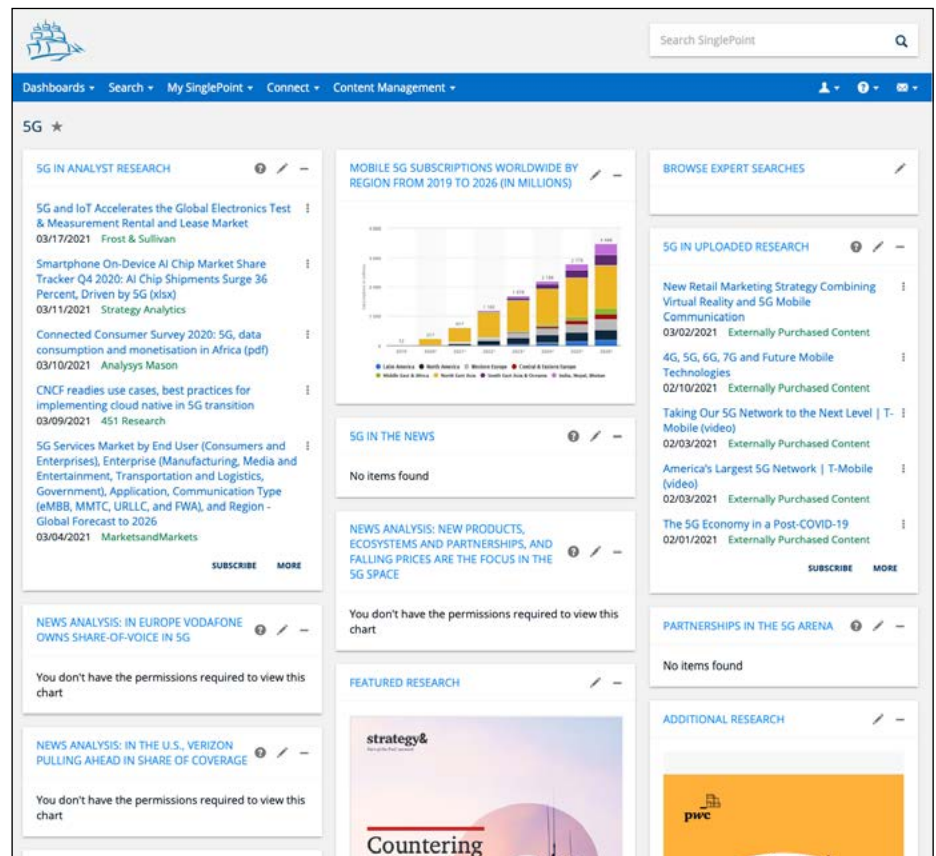
content: email alerts, RSS feeds, strategic dashboards, newsletters, personal dashboards, APIs, and mobile UIs. Together these comprise an “insight distribution ecosystem”.

Of these various insight distribution mechanisms, the strategic dashboard is the most popular. Strategic dashboards organize information around a topic to present insights to the users. Below is an example of a strategic dashboard about the new telecom technology 5G. All of the relevant information is curated in terms of topical content feeds on market research, news, and social media, as well as PowerPoint presentations (that tell the story in an easy to consume way), analytics, and videos. All a user has to do is peruse the page and he or she will get a good overview of what the organization knows about 5G.

The effectiveness of dashboards can be measured through competitive intelligence document consumption and the number of users on the CI system. (Ideally, an organization would measure the number of better decisions that are made based on that intelligence, but that’s hard to do other than with anecdotes.) It’s not unusual to see anywhere from a 3X to 10X increase in research usage when dashboards are deployed, which is good for the business as a whole and for the CI department.

In addition, there can be a one-to-one correspondence between strategic dashboards and newsletters on the same topics. You can use the same expert searches to populate regions automatically of both the dashboard and the newsletter, and the same curators who have subject matter expertise on a given topic can produce the dashboard and the newsletter.

Even power users who are facile with search like browse-to-content solutions. They appreciate having information organized and presented to them. They can jump in, get their overview from the dashboard or the newsletter, and then drill into a topic if they want to.



Of course there still is a set of users that are search-centric. This typically includes the CI staff, market research staff, and power users of an organization’s CI portal (often technology developers and product development people). So excellent search remains an important capability; it is the foundation of content curation for the non-search-oriented people.

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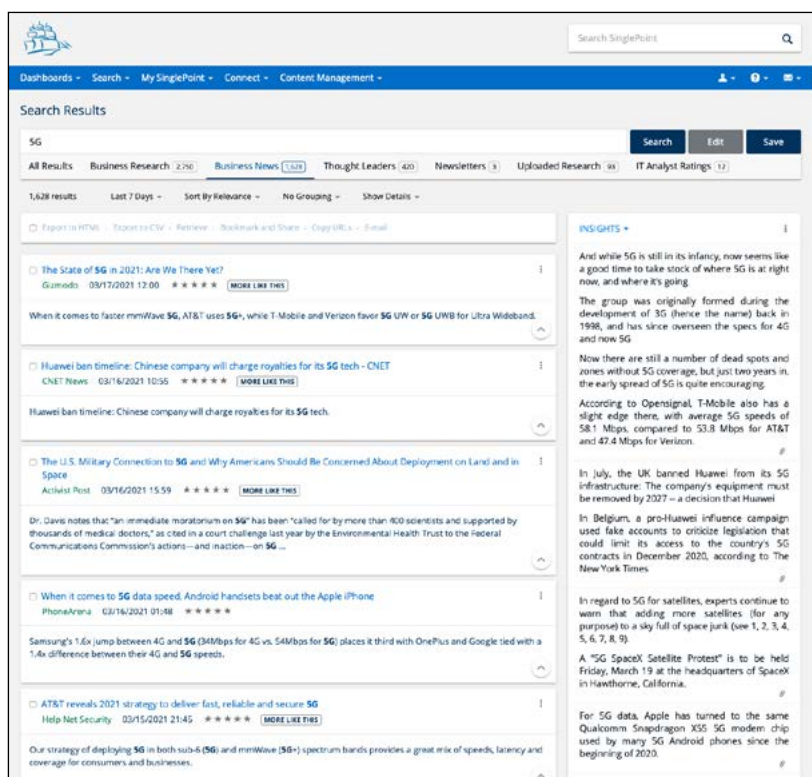
Trend #4: Application of “machine learning” in CI

Applying machine learning to enterprise applications became feasible in 2016 when Google open-sourced its key machine learning algorithms. Machine learning technology has begun to play a role in CI, as some tasks historically performed by CI professionals can now be leveraged by computers. For example, with machine learning, the computer can watch what a user is interested, what they download, what they share, what they’ve bookmarked for themselves or saved for themselves, and what they commented on. Knowing their interests, machine learning algorithms can recommend content to the user. In effect, relevant content will come and find you rather than you having to look for it.

Machine learning also can enable auto summarization of search results. Instead of a user manually scrolling through a search result list and indi-

vidual documents to glean answers to a research question, the search engine reads all of the documents and summarizes the significance of the search result. The user can express an interest in knowing more about a topic – what used to be called a “search query” – and then the system delivers a report rather than a search result. Ultimately, such a capability will make search as we’ve known it unnecessary. The goal is to have the machine do the search and then tell the user what it finds that the user should know.

This is not a fantasy. Consider this automated search report on “new diabetes treatments” run against seven days of news. The intelligent application finds the key points in the documents on the search result and then writes the report, quoting with attribution. Links to the documents are provided for more in-depth drill-down by users interested in a particular point.



The screenshot shows a search results page for the term "5G". The page includes a search bar at the top right with the text "Search SinglePoint". Below the search bar, there are navigation tabs for "All Results", "Business Research (2/90)", "Business News (1/10)", "Thought Leaders (40)", "Newsletters", "Uploaded Research (9)", and "IT Analyst Ratings (12)". The main content area displays a list of search results, each with a title, source, date, and a "MORE LIKE THIS" button. The results include articles about 5G in 2021, Huawei's 5G tech, the U.S. military connection to 5G, and AT&T's 5G strategy. On the right side, there is an "INSIGHTS" sidebar with a plus sign, containing several key points and insights related to the search results, such as "And while 5G is still in its infancy, now seems like a good time to take stock of where 5G is at right now, and where it's going." and "The group was originally formed during the development of 3G (hence the name) back in 1998, and has since overseen the specs for 4G and now 5G."

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A sad but true statistic is that users download only one document on average from each search query. That means they miss the insights from all the other documents on the search results page. With automated insight reports like the one above, all the documents on the search results page are analyzed by the machine and the key insights from the search result as a whole are identified and presented to the user. As a result, the user now has access to all of the insights, rather than just a tiny fraction of them.

Trend #5: The rise of public content

There are some 1.2 billion websites on the internet today. Estimates place the number of internet users worldwide in 2021 approaching five billion – twice as many as just seven years ago – and many of those users are generating as well as consuming content, in particular on social media platforms.

Web content is unruly, misbehaved, messy, scattered, and inconsistently tagged when tagged at all. It's also informative, insightful, timely, and increasingly crucial for business and technical research. The problem is locating, concentrating, and curating the content into coherent topical collections. The noise to signal ratio on the web is very high, and that defeats easy use of web search engines as a means to take full advantage of the excellent content that is out there. But the payoff can be high if one can figure out how to do it.

So curating all that content becomes a vital and potentially overwhelming task.

At one end of the spectrum, it's relatively straightforward to select the government or industry databases to include in an organization's CI content collection; they tend to be well known. For instance, pharmaceutical companies know they can rely on Drugs@FDA.

Culling online news sources can be more challenging. After all, there are thousands of news websites, including major media brands and reputable boutique, industry-specific sites – these are the best for distilling relevant business news. Of course, there also are many dubious click-bait sites that provide no original reporting, which should be avoided in any serious CI effort. The shortest, safest path to reliable business news content for CI is to utilize a reputable business news aggregator.



Other forms of content that can be useful for CI include industry conference presentations, financial and industry analyst reports, market and issue assessments by known thought leaders at consultancies and think tanks, and white papers from leading vendors. Much of this is publicly available, but finding and collecting it can be quite time consuming and require advanced search skills.

Finally, mining social media platforms for meaningful, business-relevant content – the “good stuff” – is a challenge unto itself. Fortunately, social media analytics tools have improved to the point that, with the application of AI, it is possible for a CI professional to efficiently distill insights from the deep well of tweets and posts by and about companies.

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Trend #6: Implications of smaller research staffs

From our work over two decades with the CI staff and related functions at large global enterprises, it is evident that far fewer information professionals (the trained CI experts) are employed by corporations today than were 20 years ago, and those that remain support many more employees than before. Even the largest, research-driven enterprises have only a handful of people on the dedicated research staff.

The CI staff that remains must work smarter and more efficiently to provide curated insights to their wider audiences. It also behooves them to practice at the top of their license, delivering maximum value by focusing on analyzing information vs. finding information, as leading developer of competitive theory and practice Dr. Ben Gilad has argued.

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The key is the ability to deliver self-service research capabilities for the vast majority of an organization's employees who are not skilled researchers, and who want to browse to content across many channels. The machine learning capabilities described above will help to enable that, as will the various delivery mechanisms that comprise an enterprise "insight distribution ecosystem". With machine learning that automatically extracts the key insights in a browseable report, even search becomes a pure browse-to-insight experience.

Northern Light has seen the impact of these various social and technological forces on how large enterprises approach their market research and competitive intelligence infrastructure. Increasingly, they are relying on advanced technology to help them deliver insights and curated information to their internal constituencies.

As one researcher¹ correctly noted:

"As decisions become more multifaceted and answers are needed more quickly, having ready access to meaningful data insights is essential for today's decision makers. Millennials, especially, who are accustomed to getting all sorts of data with just a tap of their mobile device, will have little patience with organizations that can't immediately provide the information they seek. The need for analytics capabilities and speed will only increase as more Millennials enter roles where they have sway over key business decisions."

¹ *To Buy or Not to Buy: How Millennials Are Reshaping B2B Marketing*, IBM Institute for Business Value, 2015



Why CI professionals rely on SinglePoint

SinglePoint is a machine learning powered enterprise knowledge management platform optimized for market research and competitive intelligence. SinglePoint strategic research portals seamlessly integrate and search any number of internal, licensed external, news, video, social media, and government sources with single-sign-on ease. The result is securely hosted, turnkey market and customer intelligence solution that is fully deployed in just 90 days

Competitive Intelligence

One of the principal uses of SinglePoint is as a competitive intelligence portal. SinglePoint enables a company's marketing, sales, product development and other teams to mine market research, news, and specialized industry content for insights into the plans, strategies, and tactics of other players in the company's target markets.

"Having access to terabytes of data doesn't mean an organization has good competitive intelligence (CI) ... for many organizations, meaningful CI is a scarcer commodity than it ought to be."

- Five Trends that are changing the face of CI SCIP CI

Content Options

Conducting competitive intelligence requires accurate information derived from only the most credible sources. Here are the types of content that can be included in SinglePoint portals:

- Licensed subscription research
- Primary research
- Business news
- Peer-reviewed journals
- Conference abstracts
- Industry databases
- Government databases
- Corporate reports
- Authoritative social media authors

**Global Organization
Competitive Intelligence
Case Study:**

**How can SinglePoint
help you with the six
trends face CI?**