

Best Practices for Writing Market Intelligence Reports in the Age of Generative AI



NORTHERN LIGHT WHITE PAPER
C. DAVID SEUSS, CEO



Traditional vs. Machine Learning Search Processes

Across our universe of 200,000 market intelligence professionals, using traditional search processes users on average download and read only one market intelligence document per search. They therefore fail to acquire the insights from the documents they do not download. Why so few documents downloaded per search query? The reason is the effort to manually scan search results, manually download documents, and manually scan the downloaded documents is too great. So users pick one document and go with it. Millennials, now more than 50% of the workforce, are particularly uninterested in the traditional search process because they have a more “browse to content” cognitive style. (See Northern Light’s white paper: Market Intelligence Portals for Millennials.)

In the Generative AI age, we can change the paradigm by using the machine to read the documents on the search result and write a report presenting the important ideas it finds. We will call this report the “Executive Summary” in this whitepaper. Users of Generative AI solutions are encouraged to start by reading the Executive Summary rather than use the traditional approach of starting by manually examining the list of search results.

A well-crafted Executive Summary will have citations for its important insights and links to the documents contributing the insights. By reading the Executive Summary, users have access to insights from all the best documents on the search result instead of just one. This is a key point; to get your report noticed and downloaded, your insights need to make it into the Executive Summary. The documents featured in the Executive Summary will have the best chance of being consumed by users. Documents that do not show well in the Executive Summary will be more likely to be overlooked and underutilized.

From this point on, every author of market intelligence documents should assume that AI-based machine processes will be the primary means by which users benefit from the insights the documents contain.

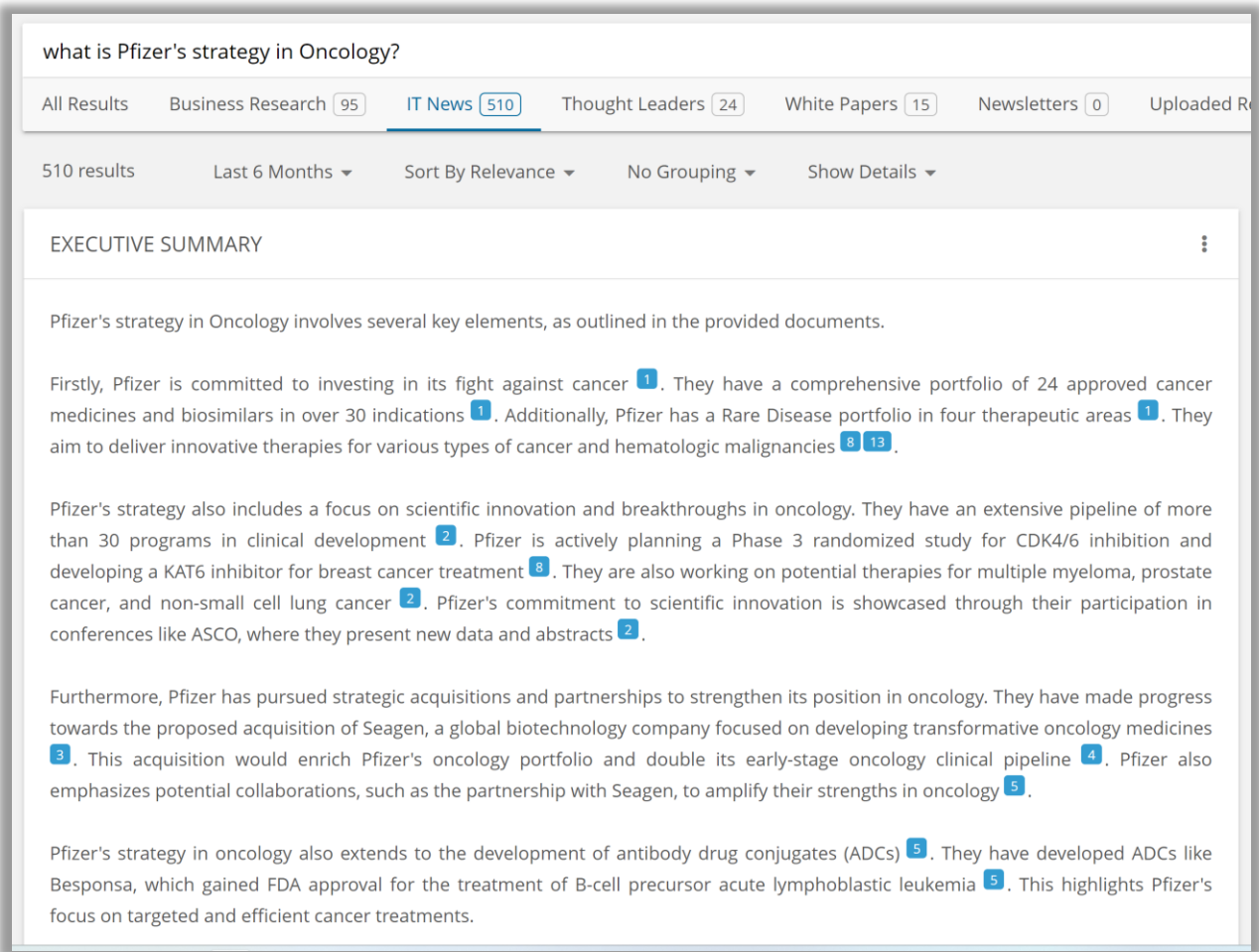
Generative AI uses Large Language Models (LLMs) to answer user questions. LLMs are probabilistic text predictors. They generate text by selecting words that are most likely to come next in a sentence given a context.

For example, if the context is corporate strategy, the AI may notice that oncology therapy company Seagen is often mentioned as having been bought by Pfizer in the documents being used as relevant content to answer user questions. This relevant content can either be the training set for the LLM or a list of documents retrieved by a prior search step and then submitted to the LLM along with a user’s question.

If questioned about Pfizer, the LLM will look for words that complete sentences about Pfizer. For example, it might select “Seagen” to complete the sentence “Pfizer acquired _____.” The more documents that reference the word as a completer of the sentence, the more likely the Generative AI will pick that word when generating text. This is where the probability comes in.

Then if a user asks, “What is Pfizer’s strategy in oncology?”, the AI will look for sentences that it can complete in the context of Pfizer, strategy, and oncology. (It will look for such sentences either in the training data or in the retrieved documents submitted with the question, depending on the configuration of the solution.)

An example of a Generative AI Executive Summary is below. The chicklets display the citation and link to the contributing document when hovered over by the mouse cursor.



what is Pfizer's strategy in Oncology?

All Results Business Research (95) **IT News (510)** Thought Leaders (24) White Papers (15) Newsletters (0) Uploaded R

510 results Last 6 Months ▾ Sort By Relevance ▾ No Grouping ▾ Show Details ▾

EXECUTIVE SUMMARY ⋮

Pfizer's strategy in Oncology involves several key elements, as outlined in the provided documents.

Firstly, Pfizer is committed to investing in its fight against cancer ¹. They have a comprehensive portfolio of 24 approved cancer medicines and biosimilars in over 30 indications ¹. Additionally, Pfizer has a Rare Disease portfolio in four therapeutic areas ¹. They aim to deliver innovative therapies for various types of cancer and hematologic malignancies ⁸ ¹³.

Pfizer's strategy also includes a focus on scientific innovation and breakthroughs in oncology. They have an extensive pipeline of more than 30 programs in clinical development ². Pfizer is actively planning a Phase 3 randomized study for CDK4/6 inhibition and developing a KAT6 inhibitor for breast cancer treatment ⁸. They are also working on potential therapies for multiple myeloma, prostate cancer, and non-small cell lung cancer ². Pfizer's commitment to scientific innovation is showcased through their participation in conferences like ASCO, where they present new data and abstracts ².

Furthermore, Pfizer has pursued strategic acquisitions and partnerships to strengthen its position in oncology. They have made progress towards the proposed acquisition of Seagen, a global biotechnology company focused on developing transformative oncology medicines ³. This acquisition would enrich Pfizer's oncology portfolio and double its early-stage oncology clinical pipeline ⁴. Pfizer also emphasizes potential collaborations, such as the partnership with Seagen, to amplify their strengths in oncology ⁵.

Pfizer's strategy in oncology also extends to the development of antibody drug conjugates (ADCs) ⁵. They have developed ADCs like Besponsa, which gained FDA approval for the treatment of B-cell precursor acute lymphoblastic leukemia ⁵. This highlights Pfizer's focus on targeted and efficient cancer treatments.



The question for the author of a market research or competitive intelligence report becomes: "How do I get my ideas into such an Executive Summary generated by Generative AI?" This will be necessary if the report is to have impact, since it will be the Generative AI that selects which reports to summarize, cite, and link to.

Writing for the Machine

Here are Northern Light suggestions for writing market intelligence reports in a future dominated by Generative AI. Using these principles will ensure an author's key insights are picked for the automated summaries and reports Generative AI algorithms create.

A key concept is that the machine uses sentences as the fundamental unit of idea organization. The most important principle to keep in mind is to use simple sentences that express complete ideas.

- ❖ You should write in simple declarative sentences that have noun subjects and verb predicates that express whole ideas within each sentence. Declarative sentences always end with a period as the sentence terminator, never a question mark or exclamation mark.

Don't say: The study showed how fast ABC servers are. The result: blazing speed!

- ✓ Because the machine uses sentences as the unit of idea organization, it will not automatically associate a word in one sentence with an object in another sentence, even in an adjacent sentence. There is no overlap in the words in the two sentences above and the machine will not relate them directly to one another in the graphs. The second sentence is not a complete sentence in that it has no verb as a predicate, and it may be ignored as a fragment.

Do say: The study showed that ABC servers are really fast and have blazing speed.

- ❖ Questions are to be avoided whenever possible since usually the answer follows the question in another sentence or in tables or lists. We don't usually care about the questions; it is the answers we want. Put the answers into context with a simple declarative sentence ending in a period.



Don't say: How often do users update their antivirus program? 23% said daily, 67% said weekly, and 10% said "been meaning to do that but never get around to it."

- ✓ The machine might not be able to associate the answers to the questions because there is no overlap of words between the sentences and because the answers have such generic words and figures the machine will consider the answers as less important.

Do say: Most users update their antivirus programs weekly (67%), some daily (23%), and some never at all (10%).

- ❖ You should avoid putting the important ideas in lists, or at least only in lists.

Don't say: The key factors in enterprise cloud vendor selection are:

1. Implementation assistance
2. Near instant response to increased server needs
3. Uptime history
4. Cost

- ✓ The machine will be less likely to associate the list to the key sentence above the list that provides context because the words do not overlap in sentences.

Do say: The key factors in enterprise cloud vendor selection are implementation assistance, near instant response to increased server needs, uptime history, and cost.

- ❖ If you need a list or just want one for readability issues, you should repeat the findings in a sentence in notes, a sidebar, appendix, etc. using the principles of simple declarative sentences ending with periods.

- ❖ You should avoid pronouns (he, she, they, it) and pronoun-like words (company, firm) whenever possible.

Don't say: We interviewed key executives in the field such as Frank Smith, SVP of Cloud Computing. He said multi-cloud deployments are the current fastest growing segment of cloud computing.



- ✓ The machine may not be able to find the antecedent of “He” in all cases and if the wrong antecedent is found and substituted, you have just generated fake news. If we stick to the words as they are written for the automated summary you will get: “He said multi-cloud deployments ... ,” leaving the reader of the automated summary to wonder who “He” is.

Do say: We conducted interviews of executives in the field and Frank Smith, SVP of Cloud Computing, said multi-cloud deployments are the current fastest growing segment of cloud computing.

Don’t say: ABC had a good quarter market share wise. The company said cloud computing is winning one big new client after another.

- ✓ While not formally a pronoun, “company” has pronoun-like qualities in that we don’t know who the company is if we only have the second sentence above to work with.

Do say: ABC increased its market share during the quarter as cloud computing won one big account after another.

❖ You should restrain the urge to write with creative expression.

Don’t say: The study shows that compared to XYZ’s servers, ABC’s servers are quicker than a greased pig.

- ✓ Other writers won’t use the greased pig expression and the sentence will be considered less important by the machine.

Do say: The study shows ABC’s servers were faster than XYZ’s servers by a large margin.

❖ You should use standard vocabulary words that other writers are likely to use.

Don’t say: Geospatial location systems are an essential element of driverless car technology.

- ✓ Other writers might call it GPS and, if so, the above sentence will be considered less important.



Do say: GPS is an essential element of driverless car technology.

- ❖ You should not write with social media conventions like hashtags, especially hashtags as subjects or objects in noun phrases.

Don't say: “#IBM bring the technology and #Accenture bring the industry expertise” - sums up why #partnering is so important i... <https://t.co/fCGDJrXXM9>

- ✓ By the way, the above is an actual tweet by an IDC analyst. The machine looks for actual nouns or proper nouns as the subjects of sentences and would conclude this sentence does not have a real subject, thereby lowering its weight when deciding what to summarize. The hashtags can be in their own sentence to avoid messing with good sentence structure.

Do say: IBM bringing the technology and Accenture bringing the industry expertise sums up why partnering is so important. #IBM #Accenture <https://t.co/fCGDJrXXM9>

- ❖ If you use bullet points you should make them complete sentences with noun subjects and a period at the end of each bullet as the terminator.

- ✓ As previously mentioned, the machine looks for sentences as a fundamental unit of idea organization. It won't interpret incomplete phrases that are bullet points as meaningful.

- ❖ When using PowerPoint, you should put any essential oral commentary and the interpretation of graphical elements into the notes field on each slide using the above principles of simple declarative sentences ending with periods. Or append slides that use text sentences that recap the findings in simple declarative sentences ending in periods.

- ❖ If you put a conclusion or comment in a text box on a slide with a graphical element, you should use a complete sentence ending with a period in the text box.

- ❖ You should avoid imperative mood whenever possible.



Don't say: "Reduce the threats against your network."

- ✓ The actual noun subject in this sentence from a meaning analysis perspective is "you" because in the imperative mood the reader of the text is the implied subject. "You should reduce the threats against your network," is the complete thought. Because the actual subject is not in the sentence text, the parsing process may get confused and cannot identify a noun subject. Without a noun subject, the sentence fails a condition required to express a complete idea and might be given lower weight by the Generative AI process.

Do say: "You should reduce the threats against your network. "

Summary

In summary, a key concept is that the machine uses sentences as the fundamental unit of idea organization. So the most important thought to keep in mind when writing in the Generative AI age is to use simple sentences that express complete ideas.

Write in simple declarative sentences that end in periods and avoid pronouns and pronoun-like words (e.g., he or "the company") as subjects of sentences. Do not get creative in the choice of words, do not use the dialect of English known as Twitter (now X), and remember to elaborate PowerPoint presentation slides with notes and summary slides that contain the key findings and spoken commentary. Lastly, avoid the imperative mood whenever it is not too clumsy to add a definitive noun subject to the phrasing.

It is not that hard really. Except for the sentences in the prior paragraph which were deliberately written in imperative mood rather than as declarative sentences, this entire whitepaper is written with these machine-friendly principles. Chances are you did not notice anything odd about the writing style as you were reading it.

About Northern Light

Northern Light provides knowledge management platforms for strategic functions such as competitive intelligence and market research. Based in Boston, Northern Light has pioneered the application of Generative AI and artificial intelligence for the automated analysis and extraction of meaning from large collections of research content. Northern Light's current clients include Fortune 100 market leaders in information technology, pharmaceuticals, financial services, manufacturing, logistics, professional services, publishing, and consumer products. Across its client base, Northern Light has 200,000 marketing and product development professionals as users of its AI-powered search and knowledge management



solutions. Northern Light has unique partnerships with more than 150 of the world's leading syndicated technology and industry research publishers whose content Northern Light aggregates for its clients. Northern Light has been selected by KMWorld as "One of the 50 Companies That Matter in AI."