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Corporate Communications Generative AI Case Study



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Overview





> ...our reimagining of the 'humans versus machine' narrative was less about rivalry and more about synergy.

The advent of artificial intelligence (AI)-powered productivity tools is hardly the first time in history that machines have introduced massive changes that overhauled workflows and revolutionized the resources available to workers.

More than 100 years ago, the arrival of steam-powered engines, and locomotives, and other engineering marvels of the Industrial Revolution brought to life a "humans versus machine" parable whose undercurrents still ripple through contemporary discourse, especially in the context of artificial intelligence (AI).

At Maximus, we help federal, state, and local governments innovate and improve citizen services. With that in mind, we recently embarked on a research project focusing on the use of generative AI writing assistants.

However, our reimagining of the "humans versus machine" narrative was less about rivalry and more about synergy.



> AI holds the promise of making human creativity and ingenuity more effective.

In our experiment, AI emerged not as an opponent to human intellect but as a tool enhancing our narratives potency. Far from rendering humans obsolete, AI holds the promise of making human creativity and ingenuity more effective.

As communication professionals, our primary role is to convey compelling, memorable, and informative messages. Incorporating AI into this process represents a new era of storytelling, where technology enables us to better craft our narratives.

In an increasingly digital world, learning to work with AI, rather than against it, isn't just a strategic decision—it's a necessity. The case study shared in this report highlights how the the narrative of AI incorporated into communication is no longer about competition but about partnership.

As the lines between technology and business blur, the fusion of human and AI in corporate communication will inevitably become the norm rather than the exception.

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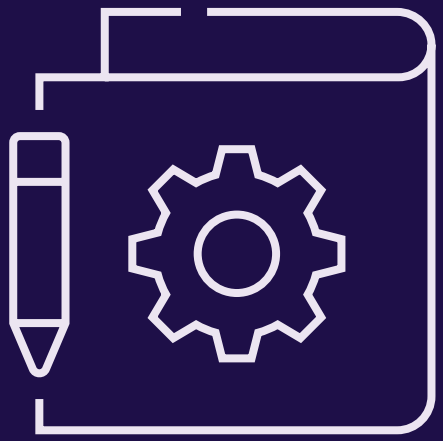
Executive Summary





This study sought to investigate the potential of Artificial Intelligence (AI) writing assistants within Corporate Communications, considering potential benefits, drawbacks, and practical applications through a comparative use case analysis and an employee survey.

Methodology

The study was divided into two efforts:

Content Development

Multiple use cases that reflect our communication tasks were selected. We evaluated the writing tasks from human alone and human with AI approaches using a scorecard that measured various data points, such as time to complete, word count, level of effort, and content quality.

Employee Survey

We conducted an employee survey to capture their perceptions of various writing samples. The focus was on understanding whether employees perceive a difference in quality between human writers, AI, and human writers with AI content. This included evaluating factors like readability, clarity, tone, engagement, and understandability.

Key findings

Efficiencies gained:

AI writing assistants generally led to decreased content creation time, word count, and level of effort, demonstrating their potential for enhancing writing efficiency.



Improved content quality:

Content quality was broadly consistent across all categories when human-only writing was compared with writing supplemented with AI, implying that AI can be as effective, if not more, than humans alone in improving readability and reducing reading time.



Trade-offs can be useful:

In some cases, time spent refining AI content, coupled with a slightly higher word count, resulted in a decreased level of effort and increased engagement by audiences. This trade-off may be worth the extra time for more engaging content.



Reduced level of effort:

Partnering with AI can help manage time-consuming tasks like ideation and drafting, allowing writers to focus on refining and optimizing content.



Partnering with AI can lead to better-rated content:

Content that combined human expertise and AI assistance consistently led to better ratings regarding readability, clarity, tone, main point conveyance, understandability, and engagement.





The study concluded that AI writing assistants can offer substantial benefits, including time efficiency, effort reduction, and improved content quality when coupled with human expertise.

However, the impact of AI can vary depending on the specific nature and complexity of the task. Given the challenges of bias, ethics, and accuracy, careful and ethical application of AI in communications appears to be the way forward.

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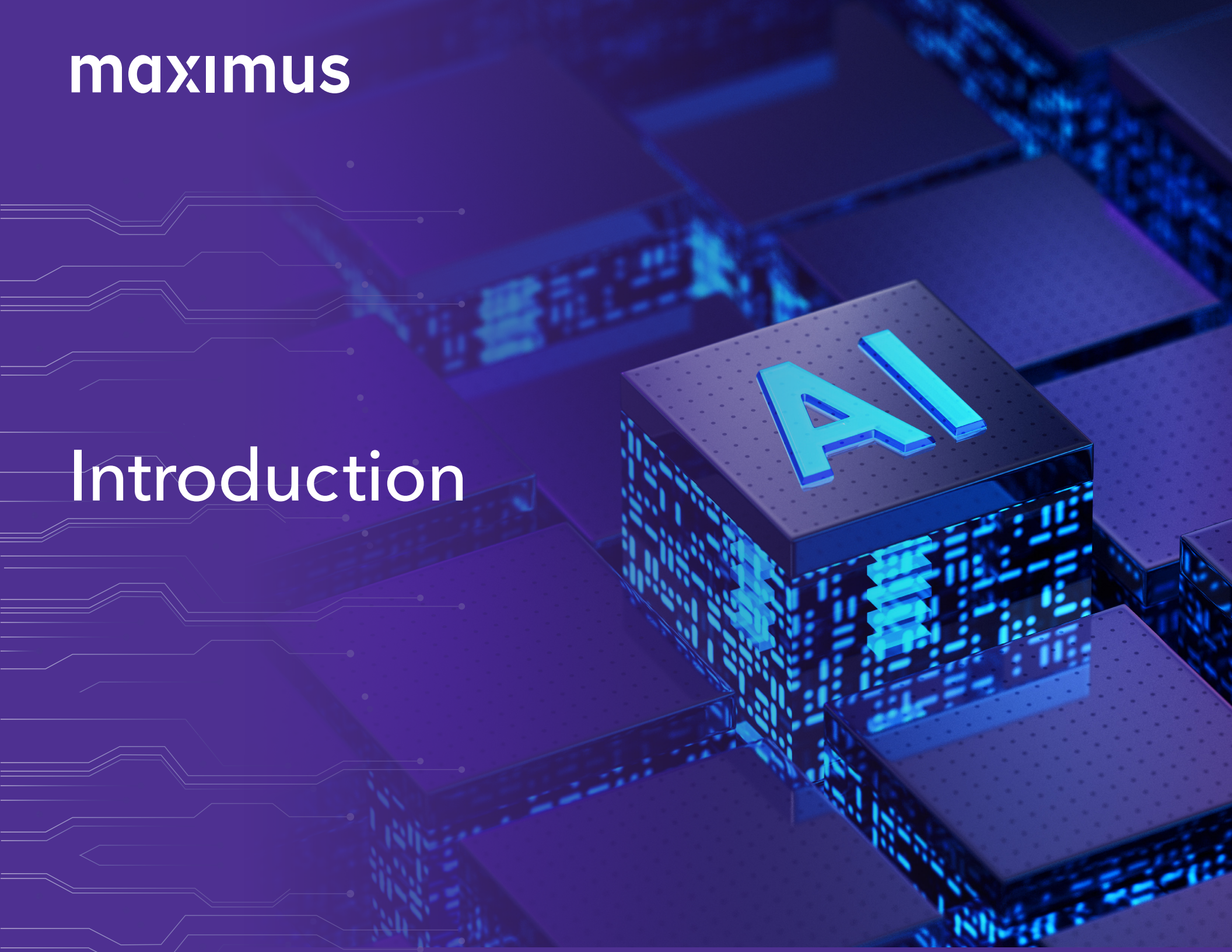
Introduction



Internal communications

Strategic initiatives

Brand and storytelling

Social media

The Corporate Communications team at Maximus is an award-winning team of employees who are the principal experts on communications, storytelling, company's brand, social media, events, video, and websites.

Our primary scope is to help achieve organizational goals by providing communications-related guidance, support, and best practices, acting as trusted sources of information, agilely delivering and adapting messages for audiences across the company, and developing and maintaining the Maximus brand and brand strategy.

Comprised of 12 individuals*, we have four interconnected focus areas (stated on the left).

*As of May 2023

“

72 requests per month
...
email communications, messaging campaigns, executive content, edits and reviews, FAQ documents, surveys, and project consultations.

Who we are

While each of us may concentrate on one of these areas, we work collaboratively, and members frequently contribute to and help with projects and tasks across all focus areas.

Additionally, though Maximus is a global company with operations in nine countries, we primarily communicate with U.S.-based employees. When necessary, we will coordinate with our counterparts in other countries for messages that impact employees worldwide.

On average, our team receives 72 requests per month (through a centralized submission form) from other departments and divisions within the company. The outputs of these requests include (but are not limited to): email communications, messaging campaigns (for events or initiatives), executive content, edits and reviews, FAQ documents, surveys, and project consultations.

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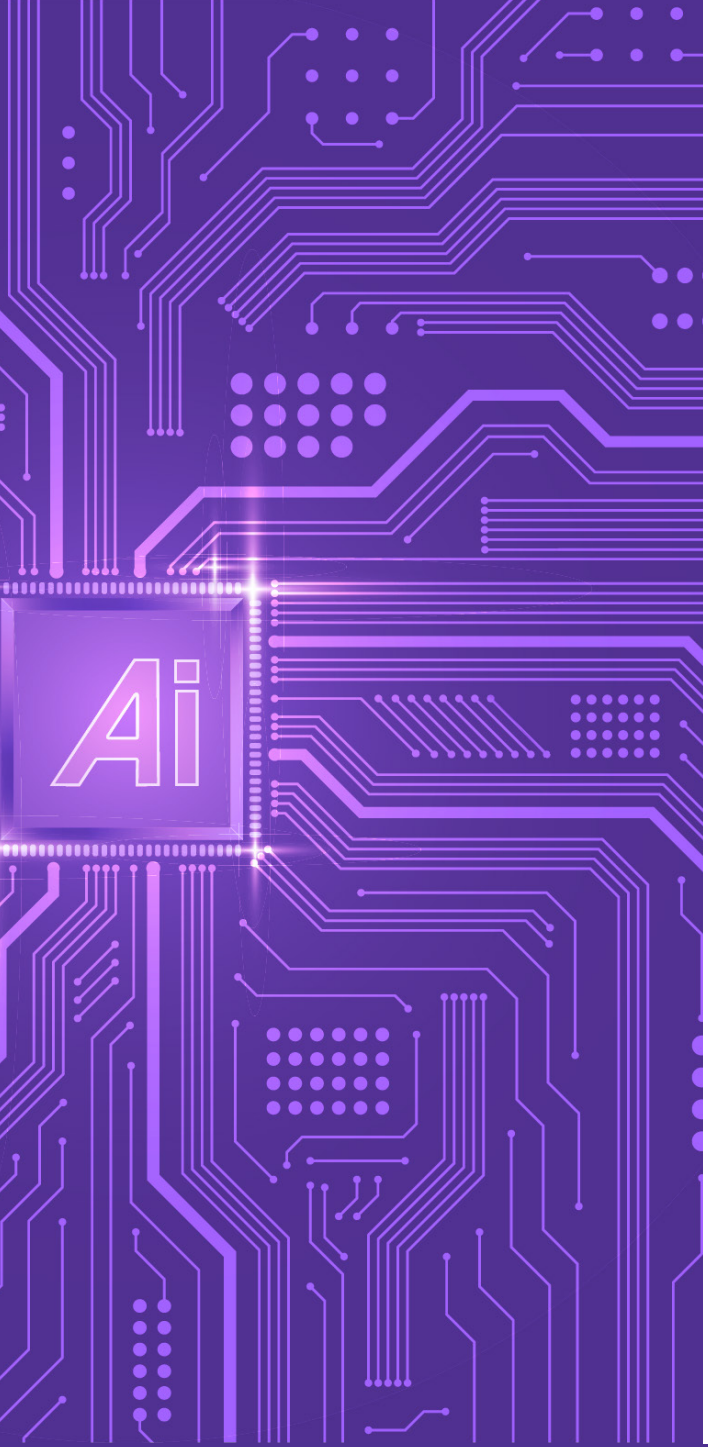
The Case: AI writing assistants in business communications





The field of artificial intelligence AI is rapidly evolving and advancing, and AI technologies have already transformed the communications and marketing industries through the automation of tasks, data analysis, content creation, and content personalization.

However, most communicators have limited education and training in these technologies or lack the confidence to use them effectively, resulting in a fragmented and inconsistent adoption of AI within communications and marketing.

While many professionals in these industries acknowledge and appreciate the potential benefits of using AI in business communications, there is a notable lack of examples and guidelines that outline best practices for using AI in business communications.

AI writing assistants, for example, could likely provide writers with numerous benefits. Still, the actual impact of these tools is unknown without more structured research showing the effect of writing assistants.



We can argue, for instance, that AI writing assistants save writers time and effort while enhancing content quality. These writing assistants use Generative AI, a subset of artificial intelligence where human AI trainers iteratively expose AI to vast amounts of data to "teach" it to identify and understand increasingly complex relationships and patterns.

When human users enter specific prompts into the writing assistant program, the AI pulls from the data it has learned to suggest new content. As trainers introduce more data, the AI program continues to learn and improve, allowing it to accurately predict responses to user prompts and ultimately producing more contextually correct content over time.

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The Challenge





AI writing assistants offer numerous possibilities for business communications professionals, such as enhanced job satisfaction, time savings, and content creation. However, there are limitations, particularly regarding ethical and privacy concerns, accuracy issues, and the potential for bias in AI training.

Many writing assistant tools are open-source and intended for a broad user base, limiting their understanding of nuanced company details, organizational structure, and employee competencies.

Moreover, it remains unclear to what extent AI communication tools have or will have on job displacement. Several communication professionals agree that teams using writing assistants will need to exert a degree of manual effort and carefully review AI-generated content to ensure it is factual, has the appropriate style and tone, and adheres to company brand and cultural standards. Consequently, it seems likely that AI writing assistants will complement human efforts rather than supplant them entirely.

The **time** required to generate content

The **quality** and readability of the content

Grammar, **structure**, and **organization**

Readers' **comprehension** and **experience** of the texts

In exploring the integration of generative writing assistants into business communications, we identified a clear gap in the existing research: a lack of examples that systematically compare examples of human writing with AI and human-AI augmented writing.

Led by Senior Director of Communications Jared Curtis, we undertook a study to gather data on these three types of content creation in relation to one another, with a focus on the measures listed on the left.



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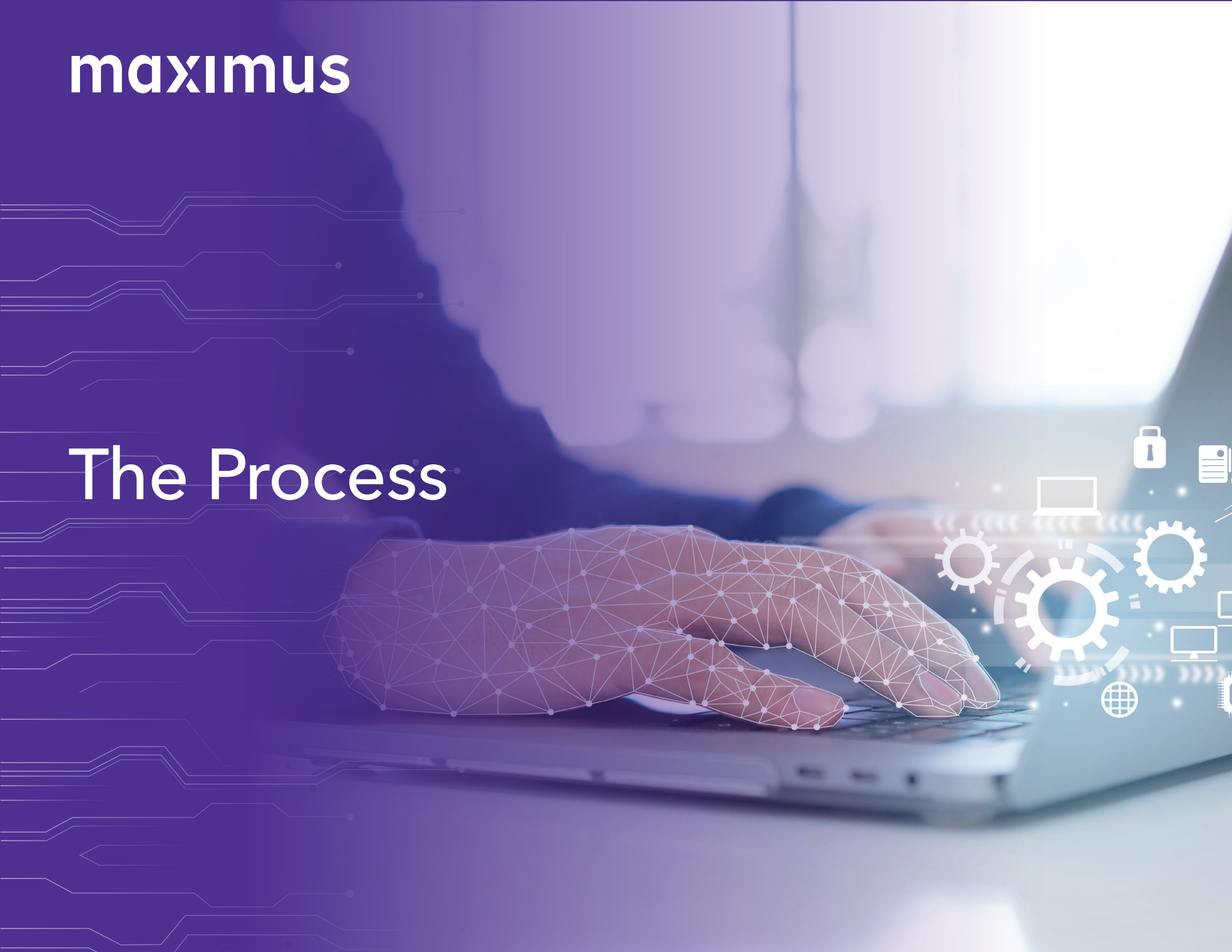
The Process



> We relied on market research and industry expert recommendations to help select four AI writing assistant vendors...

Our AI study took place from March to April 2023, with data collection divided into two components that drew on various research methods to investigate the effectiveness of AI writing assistants in business communications.

Before the data collection phase of our AI study, we relied on market research and industry expert recommendations to help select four AI writing assistant vendors for initial evaluation.

These assessments sought to score, as objectively as possible, each writing assistant's services, capabilities, and pricing.





We also submitted the four tools to Maximus' Software Governance Board and Privacy teams, per company policies and procedures. Based on the evaluations, we selected Writer as our chosen AI writing assistant for this study.

In addition to being the only tool approved by Maximus' Privacy team, Writer offered data protection, security, and inclusivity features that best aligned with our preferences, especially regarding customer data confidentiality.

A staff member from Writer provided us with training on the writing assistant tool, with a specific focus on the "Ask Writer Anything" function for content creation. We also reviewed how to use the tool ethically and the importance of reviewing and fact-checking AI-generated content.

Level of effort

Easy
copied and pasted content with no edits

Somewhat easy
copied and pasted content, updated wording, shortened content

Moderate
copied and pasted various parts, changed sentences or words, organized structure

Hard
wrote content dependently based on an initial draft with significant changes

Very hard
wrote content independently, significant content and/or formatting updates

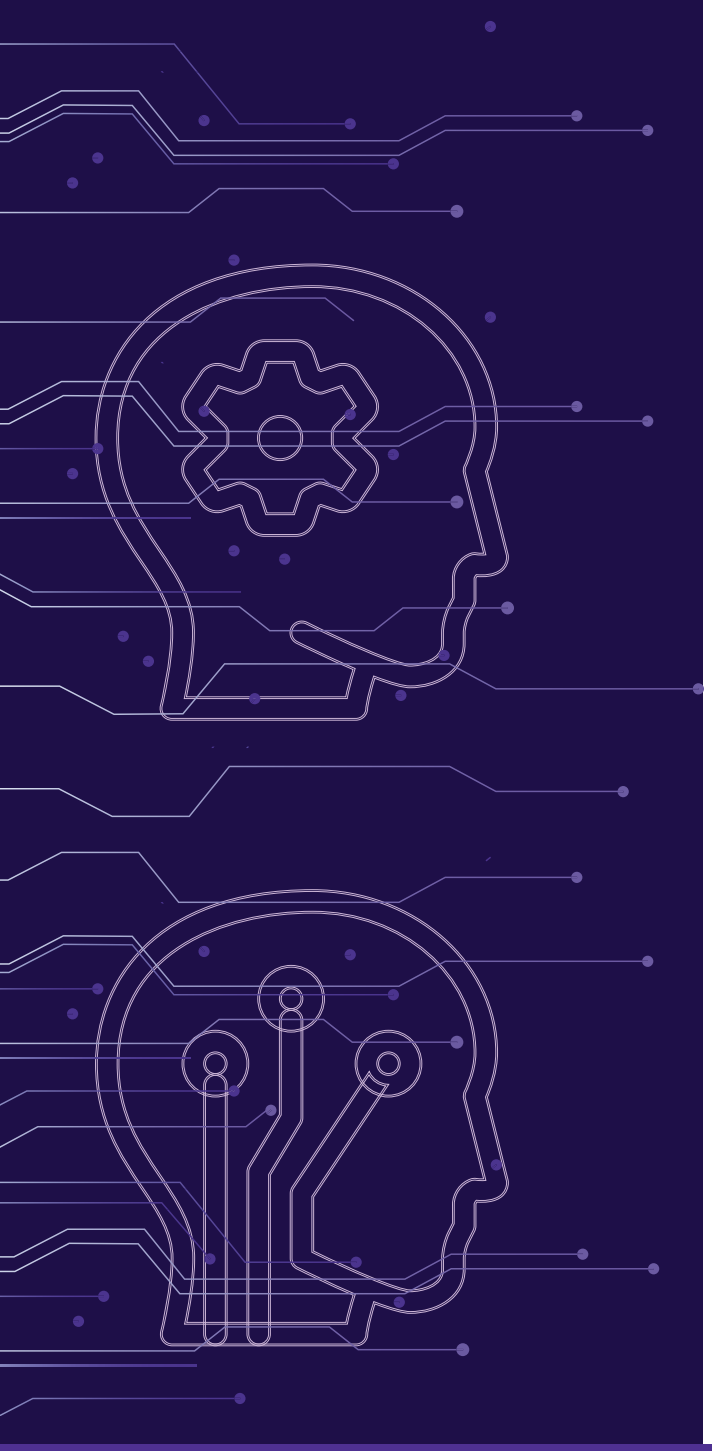
Content Development Study

The first component was a content development study where we tracked specific efficiency and quality metrics for content created independently and using an AI writing assistant in four use cases: feeds, Smart Brevity content, Thought Leadership articles, and social media posts.

We chose these use cases because they represented the variety of content we create regularly and the range of simple to complex tasks we undertake for first drafts.

Using a shared spreadsheet, we reported the time we spent writing the first draft of a communication, as well as word count, level of effort, and Grammarly metrics of readability, clarity, engagement, and delivery (standards already part of our existing writing process).

Two data points were self-reported: the time (in seconds) needed to write the draft and our perception of the effort we put forth as outlined in the chart on the left.



The first 30 days of the content development study focused on human-only writing tasks, resulting in:

- 5 Feeds posts
- 11 Smart Brevity communications
- 5 Thought leadership articles
- 10 Social media posts

Following this, in the subsequent 30 days, we incorporated Writer and generative AI content into our process and produced:

- 4 Feeds posts
- 18 Smart Brevity communications
- 8 Thought leadership articles
- 9 Social media posts

We then averaged the results of each use case and converted the Grammarly metrics into numbers for analysis.

Content Quality Survey

The second component of our study surveyed Maximus employees and asked them to compare writing samples from a human writer alone, AI-generated content only, and material from a hybrid human-AI approach.

We presented employees with a total of nine different writing samples, offering an example of each type of writing for three different topics: a congratulatory message, a reminder to record working time, and a communication about company values. We elected these topics to ensure employees had sufficient knowledge and understanding of the subject matter.

Additionally, we asked different team members to create the content involving a human writer to provide variation in voice and tone and simulate the diversity of messages employees might encounter daily.

The survey software presented the writing samples to employees in a random order, and we did not disclose the author(s) of the samples to avoid influencing any responses.

Additionally, our team kept the overall purpose of the survey confidential to minimize any potential bias in the results.

When completing the survey, employees reviewed each example and used a five-point Likert scale to record their sentiment based on the factors described on the next page.

Readability	How easy was it to read the sample?
Clarity	How clear and concise was the tone of the sample?
Tone	How appropriate was the tone of the sample?
Engagement	How engaging was the sample?
Effectiveness	How effective was the sample able to communicate the main point?
Understandability	How well did the employee understand the sample's subject matter after reading it?

We sent the survey to 35,739 employees and contractors, leaving it open for 14 days. **5,657 employees** completed the survey, providing a **99% confidence level** and a 1.6% margin of error in the results.

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The Results





Content Development Study

Overall, the results of the content development component of our study suggest that using a generative AI writing assistant can lead to increased efficiency by offering time savings, reduced word counts, and lower levels of effort.

Our team members noted that Writer was beneficial in condensing long-form drafts. The Smart Brevity and thought leadership use cases, for instance, saw time savings of 9 and 40.4 minutes, respectively. We also recorded smaller word counts for Feeds and thought leadership and a decreased level of effort for Smart Brevity and thought leadership.

Use Case	Activity	Total Minutes	Word Count	Level of Effort
Feeds	Baseline	4.4	228	1
	With AI	4.5	90	1.5
Total		**+0.1**	**-138**	**+0.5**
Smart Brevity	Baseline	27	154	2.64
	With AI	18	151	2
Total		**-9**	**-3**	**-0.64**
Thought Leadership	Baseline	73.4	691	3.6
	With AI	33	461	2
Total		**-40.4**	**-230**	**-1.6**

Tasks: evaluation of use case results and the difference compared to baseline human only to human with AI. Rounded to one decimal place.



Our results also indicated consistent content quality and improved readability across almost every category when comparing the human-only writing samples with those created with AI help.

For example, the reading time metric decreased across all use cases, meaning readers required less time to review AI-supplemented content.

Meanwhile, Feeds, Smart Brevity, and social media samples showed increases in readability, reflecting the AI tool's ability to produce clear and understandable content.

Conversely, thought leadership only had a nominal improvement in readability, and the results showed mixed clarity scores, indicating that AI writing assistants may have difficulty with complex or nuanced topics and specialized vocabulary.

Use Case	Activity	Reading time(s)	Readability	Overall	Clarity	Engage-ment	Delivery
Feeds	Baseline	58	55	100	5	4	4
	With AI	22	40	100	5	4	4
Total		**-36**	**+15**	**same**	**same**	**same**	**same**
Smart Brevity	Baseline	37	44	100	5	4	4
	With AI	34	41	100	5	4	4
Total		**-3**	**+3**	**same**	**same**	**same**	**same**
Thought Leadership	Baseline	165	49	100	5	4	4
	With AI	51	53	82	4	4	4
Total		**-114**	**-4**	**-18**	**-1**	**same**	**same**

Content quality: evaluation of drafted content results and the difference compared to baseline human only to human with AI. Reading time in seconds.

Finally, the social media results in our content development study suggested that using AI as a supplement can positively impact the level of effort and organic engagement rate but doing so may require more time and result in a slightly higher word count.

Team members commented that they felt the process took longer to use AI, as they often had an idea of the content they wanted to draft for the post, and creating the prompt and refining the output from the AI tool took additional time.

We noted an increase in the organic engagement rate of social media posts that used AI when creating the post content. From this, we inferred that the combination of human and generative AI can produce more engaging material that writers might not have considered independently.

Social media: evaluation of content results and the difference compared to baseline human only to human with AI

Use case	Social		
Activity	Baseline	With AI	**Total**
Total minutes	6.4	10.14	**90**
Word count	67	69	**-138**
Level of effort	3.2	2.92	**154**
Organic Engagement Rate	3.44%	4.40%	**151**

Employee Survey all results: evaluation of employee survey results and the resulting difference compared to human with AI. Rounded to two decimal places. The scores are based on a five-point Likert scale.

Content Quality Survey

Reviewing and analyzing the survey results, we found that the human-AI-supplemented content outperformed AI-alone and human-alone samples in every category.

While survey respondents rated the AI-alone content lower than the human-alone content, they revealed an overall positive sentiment toward the combination of the AI writing assistant and a Corporate Communications team member.

Qualitative comments from respondents described the hybrid samples as clear, concise, engaging, and warm.

Category	Human with AI	Human alone	AI alone
Easy to read	4.14	4.05 (-0.09)	4.00 (-0.14)
Clear and concise	4.10	3.97 (-0.13)	3.88 (-0.22)
Tone	4.11	3.99 (-0.12)	3.96 (-0.15)
Main point	4.11	3.97 (-0.14)	3.92 (-0.19)
Understandability	4.24	4.14 (-0.10)	4.13 (-0.11)
Engaging	3.92	3.79 (-0.13)	3.71 (-0.21)

We did note a curious outlier in one human-AI writing sample that survey respondents scored noticeably lower than the others.

After reading through the comments associated with that sample, we identified a grammatical error and deduced that this error was the cause of the lower score.

To determine if this particular piece of writing affected the overall results, we removed this sample and its AI-alone and human-alone counterparts and reevaluated the data.

We found that the human-AI content once again scored higher in every category, suggesting that combining human expertise and AI assistance can lead to more effective communications in terms of readability, clarity, tone, main point conveyance, understandability, and engagement.

Employee Survey with values removed: evaluation of employee survey results and the resulting difference compared to human-with-AI with values writing samples removed. Rounded to two decimal places. The scores are based on a five-point Likert scale

Category	Human with AI	Human alone	AI alone
Easy to read	4.39	4.14 (-0.25)	4.03 (-0.36)
Clear and concise	4.38	4.08 (-0.30)	3.90 (-0.48)
Tone	4.29	4.07 (-0.22)	3.94 (-0.35)
Main point	4.39	4.09 (-0.30)	3.94 (-0.45)
Understandability	4.48	4.25 (-0.23)	4.17 (-0.31)
Engaging	4.18	3.90 (-0.28)	3.73 (-0.45)

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Takeaways





Overall, our study of AI writing assistants and their potential impact on business communications highlighted the benefits and trade-offs of using such tools while simultaneously emphasizing the importance of careful consideration and adaptation to the unique requirements of each writing task and use case.

After conducting our review of the data, we can offer the following suppositions. First, AI writing assistants can significantly reduce the amount of time spent writing content, thanks to AI tools' ability to generate structured content quickly, provide new ideas, and reduce the time from ideation to writing.

AI can also correct grammar and spelling errors, allowing writers to focus on refining and reviewing and thus lowering their overall level of effort. Moreover, both components of our study illustrated the effectiveness of combining generative AI tools with human writers, especially in terms of improving reading time and engagement.

Second, AI writing assistants have varied and mixed effectiveness regarding the readability and quality of content, particularly with complex or nuanced pieces such as thought leadership articles. Many internal communications, for instance, assume that employees have a baseline understanding of certain topics – the name of the company intranet (My Maximus), a specific event (First Fridays), or a commonly used software program (Microsoft Teams).

While generative AI tools can "learn" a style or tone over time, it requires communication professionals to train the tool, which can be laborious and challenging. Additionally, for some use cases (e.g., social media posts), writers might spend more time generating and refining AI-supplemented content than they would when writing alone.

It is important to note the limitations of our study, namely the small sample sizes of our use cases and the choice to work with only one generative AI tool. Further studies with larger sample sizes, additional use cases and topics, and more writers would help contextualize our data and clarify the impact of AI writing assistants on efficiency, efficacy, and content quality in business communications.

It is also essential that communication professionals invest time and effort in a careful assessment of generative AI and writing assistant tools for their specific needs. The adoption of AI in business communications can provide us with improvements to the writing process, but we must do so with a strategic approach that addresses ethical, privacy, and security standards and avoids introducing bias or misinformation.

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