

The State of Generative AI



MarketMuse



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The State of AI-Generated Content

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About iPullRank

iPullRank is a digital marketing agency led by Michael King and a team of knowledgeable SEOs, diverse creatives, and strategic marketers committed to delivering data-backed results for our clients. Our clients leverage AI innovation to grow organic search visibility with a scientific approach to audience research, content strategy, and technical SEO. Learn more at ipullrank.com.

About MarketMuse

MarketMuse is a content strategy and planning platform that sets the standard for content quality. Our patented AI collects and analyzes your website’s content, prioritizes your best opportunities based on your authority and difficulty to rank, and uncovers competitive insights so you can put your best foot forward with every piece of content. Learn more at marketmuse.com.

Disclaimer

This survey was taken in March 2023. The intent is to evaluate the current perception, adoption and future of AI-generated content. In this case, we are only referring to AI-generated text (for example, articles, ad copy, idea generation). Continue reading to learn more about our findings and methodology.

The History of Natural Language Generation in the Context of Content and SEO

Before we look to the future of AI generation, let's step back in time. We're not going to 1985 in our Delorean. We want to look back at the inception of Natural Language Generation (NLG) and content.

What was the use case for NLG in the online world? That understanding can inform how SEOs and content creators are thinking about the implications going forward. This peek into the history of NLG spins out from the experiences of Jeff Coyle as a present contributor and observer as history unfolded.

In the early 2000s, most businesses didn't understand the potential of leveraging content to attract customers and generate revenue. They didn't have content teams. Traditional advertising dominated marketing strategies.

2001-2005

As businesses began to see opportunities, they invested in content creation. They scaled content creation. The consequence? Exploiting organic search channels.

Doorway pages

Beyond the home page, businesses were now manipulating search engines to drive as much traffic as possible with thin low effort content. Casting the net with thousands of bare-bones pages targeting variations of keywords.

Content Spinners

These pages were built on simple templates and "spin in" the content variables, similar to the MadLibs game from the 90s.

Content creators start developing processes and methodologies to create programmed content at scale.

2006-2011

StatSheet begins to apply this plug-and-play MadLibs content to pages designed to share the statistics of baseball games. Then they took the same statistic concept and applied it to financial pages covering daily updates on the stock market.

2011-2015

Empowered Templates

In 2011, StatSheet rebranded as Automated Insights and partnered with Major League Baseball, National Football League, and most notably, the Associated Press. and other companies started building these 'empowered' templates.

2016

Rules-Based Engine

The Washington Post launched their NLG software Heliograf, an automated storytelling platform that they used to cover every sport at the Rio Olympics. They generated 6X more coverage of the 2016 Presidential Election at a local level.

“The future of automated storytelling is the seamless blend of human reporting and machine generated content,” said Dr. Sam Han, director of data science at The Post. ([Source](#)) But what happens when there's an exception?

In the Olympics, Judo awards 2 bronze medals. The exception would break the template. Heliograf needed to create rules that handled exceptions.

The rules-based engine use case applied to Judo was the first example of NLG in the context of online published content.

2017

Freeform

The use case of the rules-based engine from Judo leads to the modern goals of NLG: freeform text generation.

It doesn't rely on structured data. Input text (a phrase, a sentence, a paragraph) → Parameters (Determined by human interaction) → Generation Algorithm → text generation output.

What does this look like?

- Question answering
- Summarization
- Freeform

That's the translation of our modern AI generation goals. At each stage of this history, the most elite SEOs have been thinking back to 2002, "I can do something with this." There are many search professionals that have been building content at scale for many years (macro or programmatic SEO). And as each iteration is published, they'll see quick wins that ultimately are not sustainable, because the appearance of quality is all smoke and mirrors.

For the past 8+ years, SEOs have found uses:

- Applications in local
- Applications in publishing
- Applications in statistics

The key to these tools, they democratize content creation. And keep in mind, AI doesn't only mean large language models. Other technologies in machine learning have set the stage for our current place in NLG.

Deep learning advancements that have allowed us to get to this point of faster, better performing, predictive text with longer-term memory:

- Transformer XL ([2019](#))
- GPT-2 ([2019](#))
- XLNet ([2019](#))
- GROVER ([2019](#))
- CTRL ([2019](#))

It's so much easier to understand what's happening in this world if you go through this history and watch it develop.

GROVER generated 'fake news,' That was a moment when marketers could understand the true potential for NLG. Some old-school SEOs embraced the technology without naivety. They've seen that it can be used to create content at scale, but they've also seen the punitive consequences of leaning too heavily on it.

So as we fast forward to the potential of tools like ChatGPT, Bard, and MidJourney (among the thousands more built on large language models (LLMs) and other machine learning technologies), we must keep in mind the goals of creating this content.

Are the intentions purely business driven and to what extent is that a bad thing?

For more of Jeff's thoughts on the future of NLG and content quality, watch his interview on [iPullRank's Rankable Podcast](#).



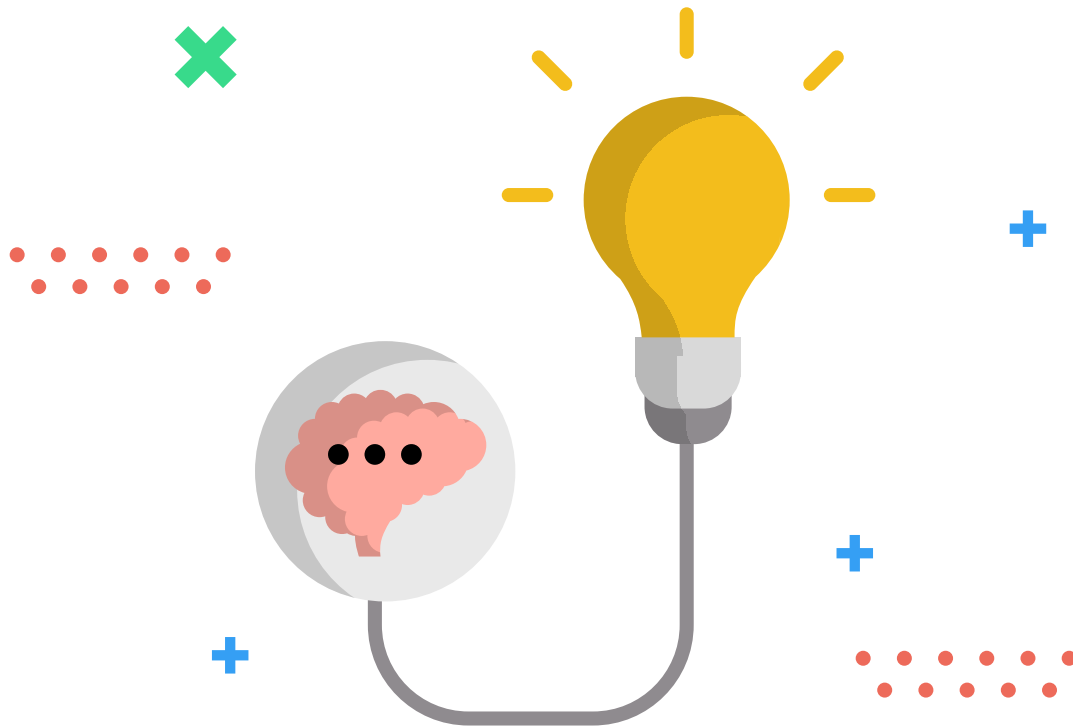
Garrett Sussman
Demand Generation Manager
iPullRank

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Opinions of generative AI are fluid. Everything is advancing rapidly. Presently, maximizing its value depends on your editing, resources, and risk adversity. Companies that can fine-tune these tools on their own content, build their own LLMs, and train their content creators to harness the 10x possibilities of the output will differentiate themselves. But to do that, you need innovators and risk-takers and that's less likely at large enterprise organizations. That's the type of organization I'd want to work with.

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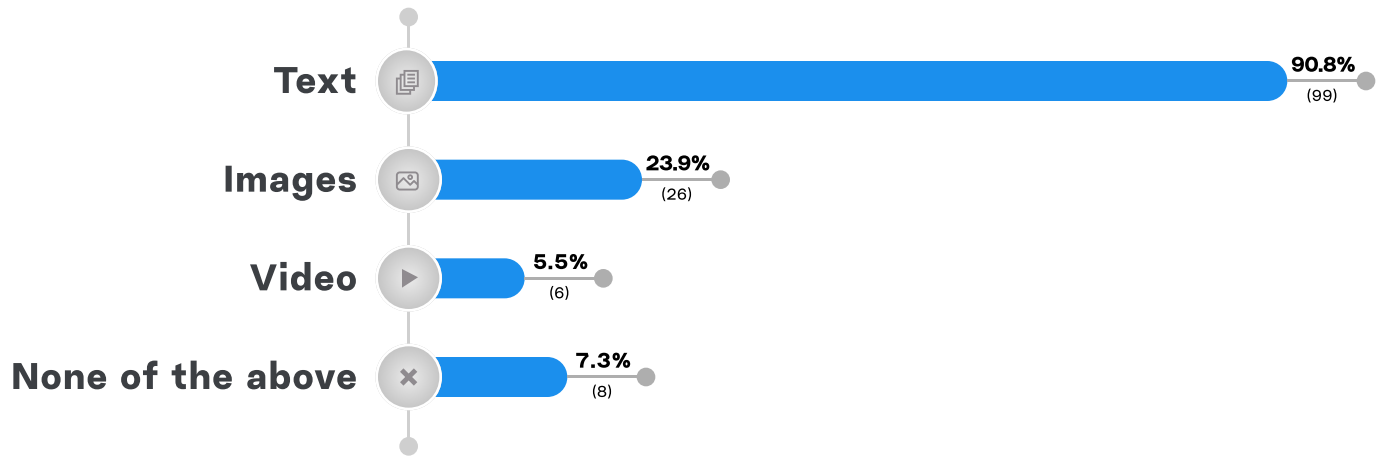
Generative AI For Idea Generation



The proliferation of generative AI software and integrations have created a world of possibilities for marketers. The majority of tactical tasks can be done with the assistance of AI -- from idea generation, to creating outlines and drafts, to video creation and editing. The volume of content will most likely increase at a rate we can't imagine.

The following questions inform what users are currently doing and we will track over time how this changes. As with any software a company brings to the table, an understanding of use, process and definition of success is key. Over time, we aim to understand how this will change as the performance of the output is more understood.

General Generative AI Uses



Company size or industry doesn't appear to be a factor in AI usage. Businesses of all sizes are using AI generation to some extent. The majority of responses indicate that businesses use AI generation for generating text, regardless of business size. A minority also use it for generating images and videos.

Software In Use

For most marketers, generative AI is virgin territory. So it's no surprise to see that they're evaluating multiple platforms.

ChatGPT (an OpenAI product) is currently the preferred one (35% of all responses), with bigger organizations favoring it even more. For companies with less than 100 employees that figure is 28% but jumps to 53% for companies with 100+ employees. When taking into consideration the number of platforms that rely on OpenAI's API, their dominance is even greater.



Use Cases

The respondents use AI for various content generation tasks. Idea generation in the form of topics and headlines is most popular, followed by generating summaries and highlights of existing content. Short-form written content such as ad copy, social media post and emails are also popular. Long-form written content such as blogs or articles along with product pages and other sales collateral are another use case. The least popular, according to the respondents, is using generative AI for image creation.



Marie Haynes
Marie Haynes Consulting

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You know those "everyone is using ChatGPT wrong threads?" Even they are wrong.

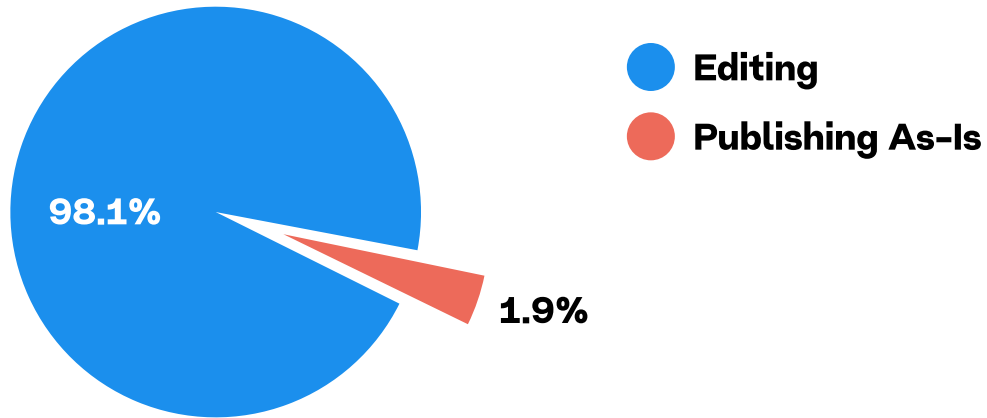
We are trying to use ChatGPT as a way to produce copious amounts of content quickly. But if you use it to its fullest extent, it can help you take your content, your expertise, your tone and passion for a topic, and turn it into something much better than you could have produced without it.

”

What Is The Definition Of Success

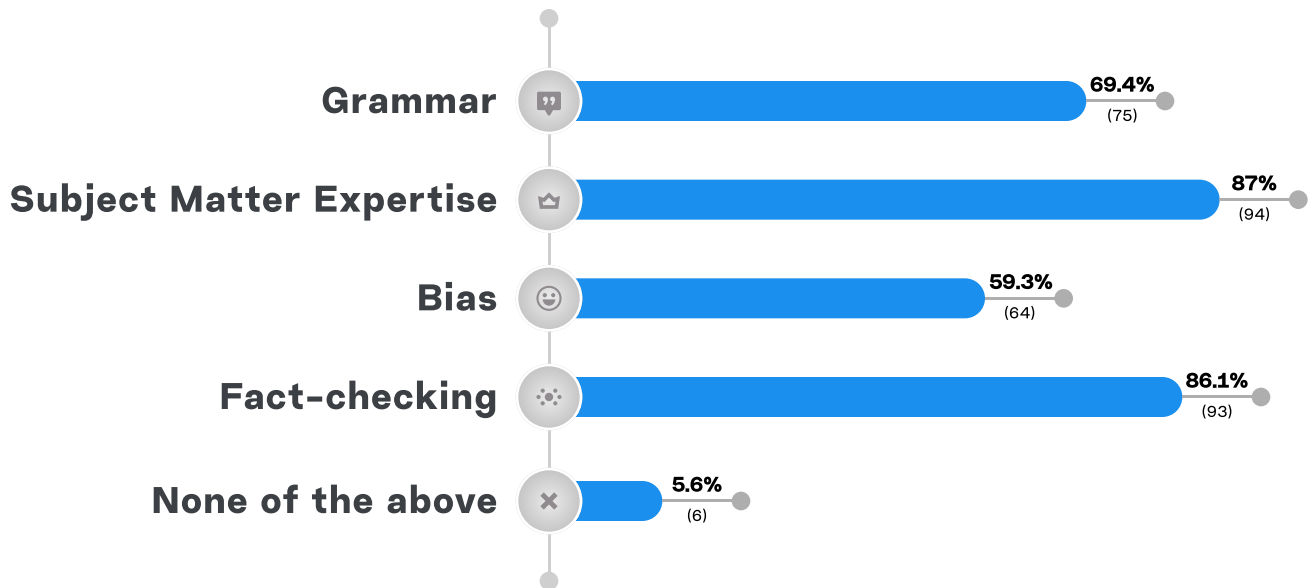
The responses indicate that the success of AI generation tools depends on its ability to increase efficiency, save time, and streamline processes. Some teams use AI to produce repetitive content, while others see it as a complement to their work or a jumping-off point for brainstorming. Success is often measured by the quality of the generated content, the speed at which it is produced, and the scalability of the production process. While some teams have seen significant time savings and increased productivity, others remain uncertain or have yet to see the full potential of AI tools.

Editing vs Publishing As Is



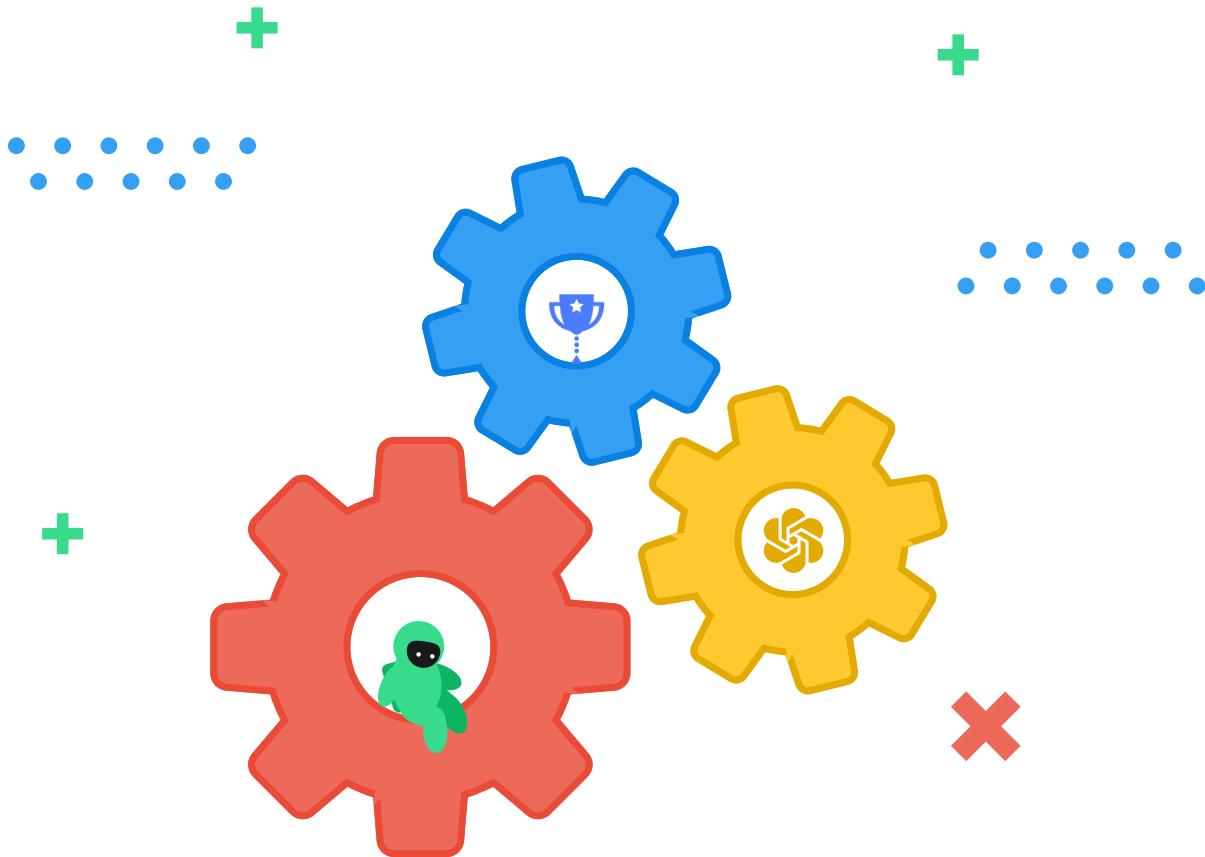
Given the overall distrust, it's not surprising that only 2 respondents publish the generated output as is.

What They Are Editing



Fact-checking is the number one concern when it comes to editing generative AI, followed very closely by subject matter expertise, then grammar, and bias.

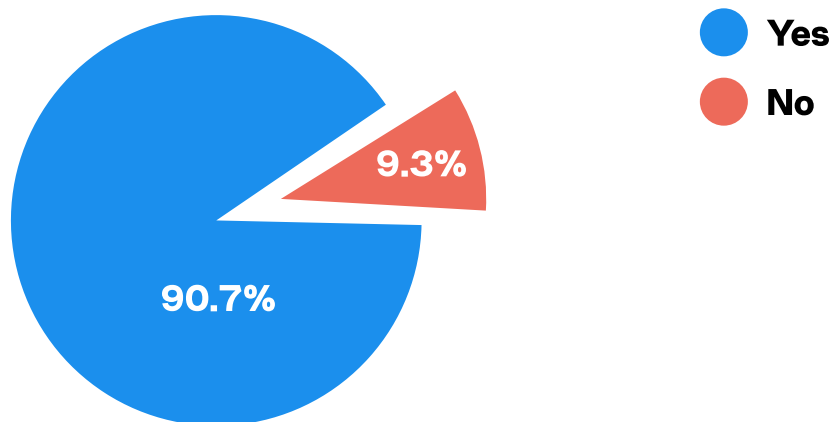
Does AI Help Or Hinder Your Workflow?



Introducing generative AI into your production workflow comes with opportunities and risks. Ideation, summarization, brief creation, and categorization can all be automated with free and paid tools. Content generation can be scaled. But despite the amazing advancements of LLMs, there are significant limitations that need to be considered. Prompt Engineering is a new skill set that requires fine-tuning to deliver an output that matches your expectations. LLMs confidently incorporate factually inaccurate content in the output. There are inherent biases in the training models. But with the mainstream introduction, adoption feels necessary.

As professionals begin experimenting with generative AI solutions, they're also required to adjust their processes, account for the liabilities, and develop their own personal and organizational guardrails as they augment content generation. Given this tension, we wanted to understand whether the tools and use cases have helped them or hurt their workflows.

Does Generative AI Help Your Workflow?



Depending on the context, generative AI can be both a help and a hindrance. When asked specifically if generative AI hinders their workflow, 21% answered in the affirmative.

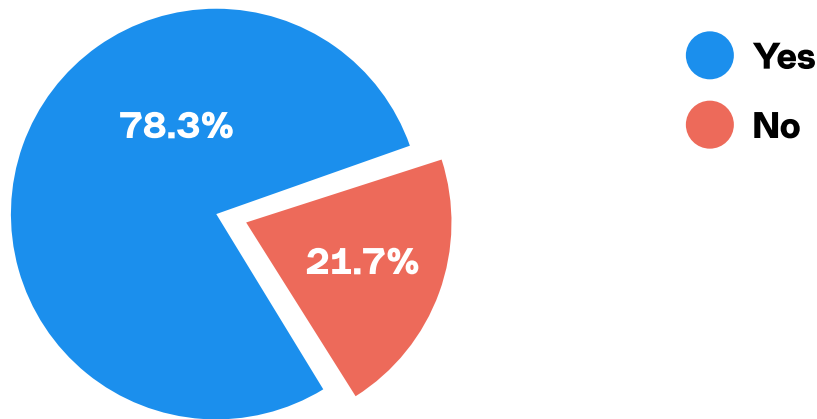
How Does Generative AI Help?

The responses to the question "How does Generative AI hinder your workflow?" are varied. Some respondents state that AI augments their workflow, while others report that they spend a lot of time fixing poorly made AI content or explaining to clients that AI is not a magic content factory. Others mention that AI can be distracting or time-consuming, while others report that it has enhanced their workflow considerably.

A number of respondents expressed concern that AI may negatively impact creativity or cause clients to use AI instead of hiring their agency for copywriting needs. Many respondents mention the need to manage client expectations or to be skeptical of AI output, while others report spending more time on editing and fact-checking.

Some mention the challenge of keeping up with industry changes, while others emphasize the need to navigate the risks and consequences of using AI responsibly. Overall, the responses suggest a mix of benefits and challenges associated with the use of generative AI in various workflows.

Does Generative AI Hinder Your Workflow?



87% of respondents find generative AI to be helpful. The degree to which it is depends on company size. 94% of respondents from companies with fewer than 100 people found generative AI to be helpful, but this fell to 80% for companies with 100+ employees. It's doubtful that size has a critical influence, but other factors, such as the specific AI applications and implementation, may play a significant role.

How Does Generative AI Hinder?

The overarching theme here is an increase in productivity in creating content for a number of media, such as blogs, videos, courses, and email campaigns. Generative AI has helped in various ways including saving time, bridging skill gaps, and scaling repetitive tasks.

Respondents use AI in the content creation process, from researching and outlining to formatting and posting, and has been used for ideation and overcoming writer's block. It has also been helpful in generating titles, creating section outlines, and revising clunky sentences. However, fact-checking has been time-consuming, and the generated content almost always needs tweaking and adjustments.

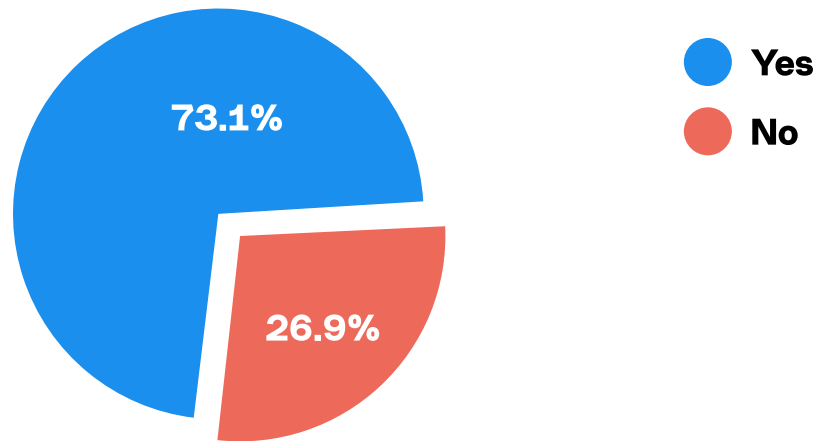
Trust And Adoption



The reputation of generative AI is evolving daily. If we know that the LLMs will hallucinate or include factually unreliable information, do we still adopt the technology and leverage the benefits of generative AI content? Commonly heard in the SEO industry, the question depends on the standards of quality, industry, company size, risk adversity, the resources that you have, and a range of other considerations.

SEOs and marketers might have a better understanding of generative AI, but introducing it at the organizational level opens up a far bigger challenge than individual usage. We asked our survey respondents to assess the quality of the content, consistency of quality, and the general consensus across their organizations to determine trust and adoption rate

Trustworthiness Of AI



The majority of respondents do not trust the content generated by AI, with only a few indicating that they do trust it.



Britney Muller
Consultant & ML/AI Hobbyist
datasci101.com

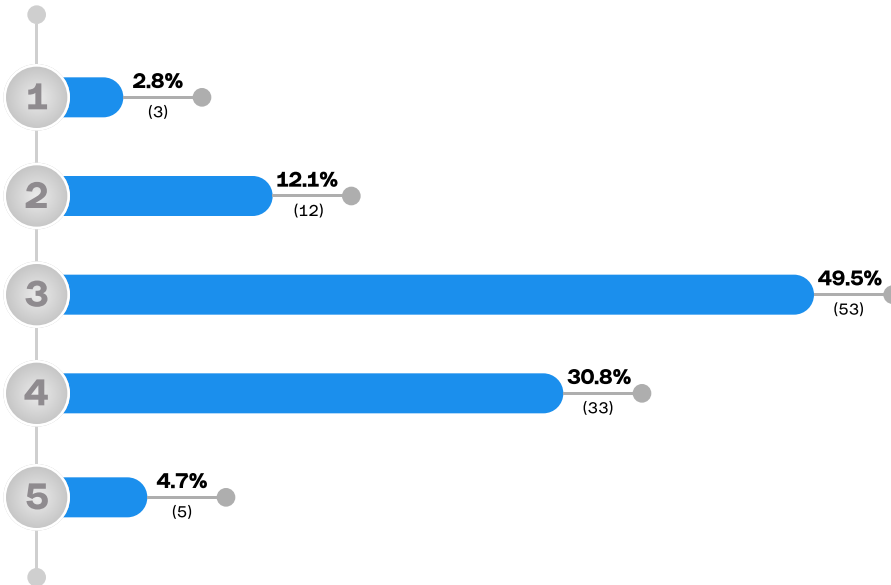
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SEOs (myself included) want to have this new class of AI technology all figured out, but we don't. We're still in the midst of figuring out how to best integrate AI into workflows and have yet to see the results. Feel the ChatGPT/Bard shine will start to wear off as we continue to familiarize ourselves with their limitations.

Also, you aren't behind if you aren't using AI right now but you should start to familiarize yourself with the technology and how it works at a fundamental level to better navigate this ever-evolving landscape.

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How Do You Rate The Quality Of The Generation?



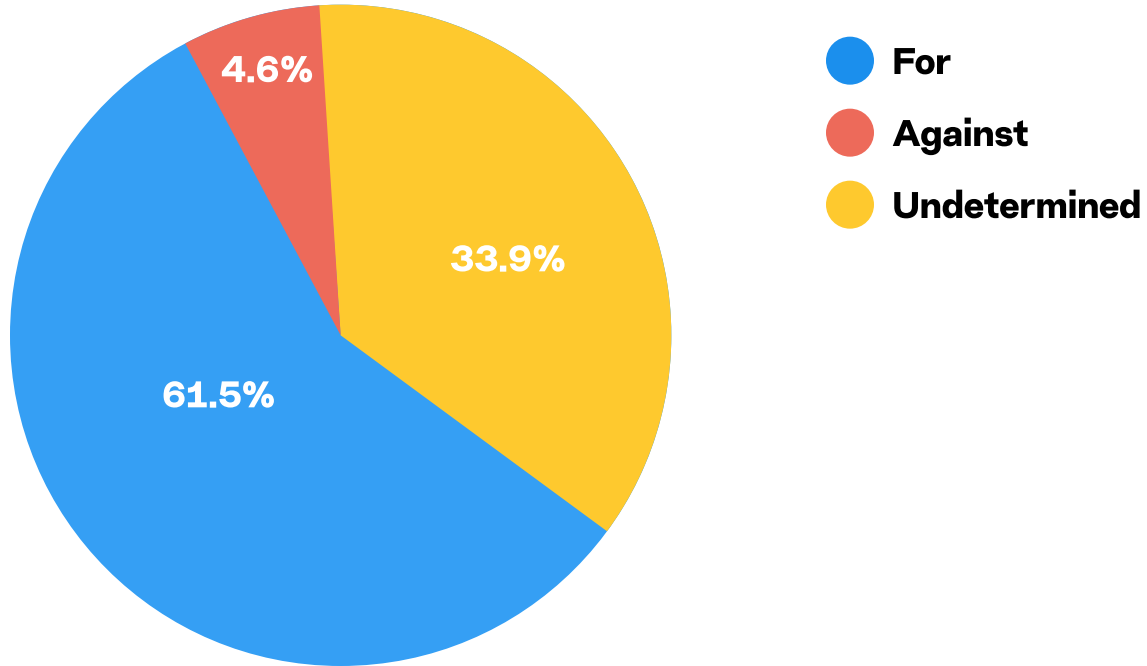
On a scale of 1 to 5, the average rating is... average!

Maintaining Consistency In Content Quality And Aligning Voice/Tone

The responses to this question can be classified into three main groups – using humans to perform some sort of editing and oversight, refining and consistently using specific prompts (prompt engineering), and restricting the use of generative AI for ideation (topics, titles, and outlines).

Depending on their workflow, content teams may use any or all of these approaches. The overwhelming majority (72%) ensure humans provide some sort of oversight to verify the final output. A smaller minority (29%) place emphasis on prompt engineering, while very few (9%) use generative AI strictly for ideation purposes.

What Is The General Consensus Of AI Within Your Company?



Most respondents (58%) are in favor of AI while 6% are against it. The remaining 36% are undetermined – meaning either they’re not sure yet, or they have mixed feelings.



Stephen Jeske
Sr Content Strategist
MarketMuse

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Although it seems like generative AI has brought about radical change, we’ve barely scratched the surface of what’s possible. The explosion of open source AI language models suggests we’ll see more of this embedded into virtually every piece of software and aspect of our professional lives. Things will look a lot different in a year from now.

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The Coming Tidal Wave Of AI-Generated Content



Commentary by John Doherty

John Doherty is the founder of [EditorNinja](#), the internet's favorite flat rate content editing service. He's a veteran SEO and serial entrepreneur based in Denver, Colorado.



Content generated via Artificial Intelligence (AI) already is and will continue to change the content marketing game. It's now possible to produce a lot of first-draft level content for essentially no cost, with just the cost of the humans being paid for their time to write the prompts, wrangle the AI, and ultimately edit the output.

But at what cost? My take, as the founder of content editing service EditorNinja and a long-time content marketer who sees hundreds of blog posts a month come through our systems, is that we as a content industry are not yet understanding the full implications of AI on our workload.

I'm calling this the "Coming Tidal Wave of AI-Generated Content."



Image generated with [DeepAI's Text to Image Machine Learning Model](#)

Generating content via AI, while “cheaper” in some ways, has different implications for content teams than using freelancers. Sure, you don’t have to find, vet, manage, and pay AI in the same way as freelancers, but there are other costs.

1. Someone needs to understand how to write and adjust prompts that facilitate a high-quality output from the AI. If the output isn’t sufficient, they need to understand how to adjust their prompts to achieve a better result. These “prompt engineers” are the new content freelancers, and ideally, they’ll also understand how good copywriting works so they can use their prompts to generate rich content elements like lists or quotes from famous sources.
2. Companies have yet to grapple with the fact that an increase in the amount of content produced, whether through AI or freelancers, requires more people and better processes to facilitate it. You can’t expect to triple your content production with the same team. Just as you wouldn’t expect to triple production with the same number of freelancers, you can’t expect to facilitate triple the amount of content with the same team managing it. At EditorNinja, we’re finding that a lot of content managers are drowning in content because their company has not properly accounted for the headcount support needed.
3. Content generated via AI needs a lot more editing than content created by humans. We’ve found [through our work with AI-generated content](#), and other studies have confirmed the same numbers, that while editing AI-generated content is most similar to developmental editing of human content, AI-generated content also needs deeper fact checking, corrections of logic and argument, and phrasing and narrative work to truly be publishable.

The challenge with editing AI content, we’ve found, is that there’s no writer to whom the content can be returned after editing! Either the editor needs to double as a writer or a company needs to have someone internally tasked with fixing the piece before it’s ready for copy editing and proofreading before publication.

So, how should content leaders be preparing for this incoming tidal wave of content?

1. You need to account for a role responsible for generating the content. Just like you previously, or maybe still, would hire freelancers, now you need a subject matter expert or a prompt engineer who can get the AI to generate good content.
2. You need to move budget from the writing of content to the facilitation and editing of content. This will mean more content managers, more social media managers, and more editors as well as a tighter calendar for content promotion. Budgets that previously went to freelancers now largely will go to content management.
3. You need to account for fact-checking and source finding and citations. In some companies, this is facilitated by editors, though many editors are trained in more “classic” editing like developmental, copy editing, and proofreading. Most companies I speak with are accounting for these needs with their existing or an augmented internal team that is ultimately responsible for the content’s correctness as well as its tone and style.

I am convinced that AI-generated content is the future of content marketing. But just as businesses have taken a long time to come around to content marketing as a viable acquisition channel and doing so required a mindset shift, creating publish-worthy content via AI will require a similar mindset shift in a fraction of the time.

Are you ready for the incoming tidal wave of AI-generated content?

How should organizations approach their generative AI content strategy?



Michael King
Founder & CEO
iPullRank

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Organizations need to first acknowledge the need for a centralized strategy. This in and of itself will be challenging because content is still decentralized in many organizations with different teams taking approaches that vary. The reality is that people are taking individual approaches to using generative AI and there needs to be a series of rules and tools put in place.

The best approach for large organizations is to build a better prompt library and use APIs and connectors to add generative AI functionality within their existing toolsets. Most generative AI tools are pretty nascent and often don't feature enterprise-level functionality, so at this stage, it's best to roll it into existing content management, project management, and editorial workflow tools. That way the learning curve is much lower and the vetted prompts keep teams in alignment.

”



Jeff Coyle
Co-Founder
MarketMuse

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It's crucial to keep your customer needs and business goals as the priority and use generative AI to augment your process vs replace. Customers can identify inauthentic voices and it's hard to gain that trust back.

Consumers are looking for content that feels genuine and reflects the values and beliefs of the companies with which they engage. Organizations need to be careful generative AI doesn't detract from that. Exhibiting expertise is no longer enough to survive in content marketing. Content must be both authentic and authenticatable.

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