The Man vs Machine Content Challenge

A Real-World Test Gives Humans the Edge over AI (for now?)

A research study from: CMO HUDDLES + MARKETING INSIDER GROUP + RENEGADE
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ChatGPT and other generative AI tools can write fast, and their output can seem surprisingly human. Marketers have taken notice in a big way. Eager for an edge and pressured to cut costs, they’ve sensed an opportunity to create cheaper and better content.

At the same time, many content authors are skeptical. They know all too well the tradeoffs in quality that can come with cutting corners.

Can the technology do the job as well as (or better than) humans? And what’s the best way to use it? Assessments and opinions abound, but what’s been missing so far is the evidence to support them.

To bridge the gap, an agency (Marketing Insider Group), a content hub (Renegade.com) and a B2B CMO community (CMO Huddles) recently joined forces to see how the machine-generated content stacks up against humans. The result was a real-world content authoring test, the first of its kind. Its objective—to gauge the performance of generative AI vs. humans working alone and in concert with AI.
The Test

Given the pace of generative AI evolution and adoption, time was of the essence. Hence, the goal was timely data that could help marketers become more effective in using AI tools. Accordingly, the test’s timespan was short—a 10-week sprint. The sample was modest but manageable—60 articles for the Renegade.com blog authored in three ways by the Marketing Insider Group team:

**Human-authored:** 20 posts written exclusively by people

**AI-generated:** 20 posts generated almost entirely by ChatGPT-3.5, then proofread, fact-checked and lightly edited by the team to eliminate any signs of AI authorship.

**Hybrid (human and AI):** 20 posts generated by ChatGPT-3.5, and rewritten by the team to match the quality of the human-authored posts.

The team tracked Search rankings, visibility and traffic over the test period.¹

¹ See page 15 for a more detailed account of the methodology.
Lessons Learned

Humans come out on top

When it comes to content effectiveness, humans still rule the roost. Human-authored posts improved traffic and rankings by 3x more than AI-authored content. While AI improved visibility on average more than human or hybrid, this edge was the product of a single AI post. That article, about a topic of high interest to the audience, offset AI’s otherwise poor showing.

AI is faster

AI was 3x faster than humans in authoring content. This speed is an obvious advantage in accelerating many aspects of writing, from creating outlines to finding examples, identifying sources, and generating potential topics.

AI can’t do it alone—yet

AI alone won’t replace human authors—at least for now. Inconsistencies and errors in the AI posts were commonplace. As a result, most AI articles required editing to make them acceptable to human audiences. Moreover, all the AI-generated headlines were unacceptable, even with editing. Consequently, even AI posts needed human headlines.

Human tops hybrid, but it’s a mixed victory

Human content generated more site traffic than hybrid, which in turn drove more than AI. But hybrid had bursts of brilliance that led to somewhat checkered results. Additionally, more time went into writing human posts than into rewriting hybrid posts. This advantage for human content leaves room for debate in rating authoring approaches.

Copyright Questions

Cautious content marketers should note two issues related to the use of generative AI tools:

AI content can’t be copyrighted—yet

The US Supreme Court has ruled that AI-generated content (including text) is not copyrightable. Therefore, marketers whose content must be copyrighted should not use generative AI. Then again, they should also ask why a blog post, for instance, would need to be copyrighted in the first place.

The risk of copyright infringement is still unknown

Generative AI is trained on large data sets of works authored by other creators. Thus, marketers and their agencies cannot know for sure that AI-generated content is unique or plagiarism-free, and does not infringe on others’ copyrights. The matter has made its way into the courts, and AI companies are paying attention. For example, Microsoft recently announced it will indemnify users of its AI-powered Copilot software against copyright claims.

For a more extensive analysis of the issue, see Harvard Business Review, “Generative AI Has an Intellectual Property Problem.”
Content works, regardless of who (or what) authors it

In aggregate, the new content delivered a big lift in search results. Visibility (figure 1), site traffic (figure 2), and average rank (figure 3) all improved over the 10-week period.

Figure 1
Visibility Sees a Big Boost
Search visibility for the selected keywords rose from .06% to over 2% as a result of the increased publishing.

Search Visibility is the website’s visibility to users searching for certain keywords. A figure of 100% translates to the #1 position in the Search Engine Page results for these keywords, 0% means the site didn’t appear in the top 100 results.
The high frequency of posting, well above the usual pace for the site, was doubtless a factor. Posting six times per week for 10 weeks increased site traffic (5x) and the visibility of Renegade.com for the targeted keywords from .06% to 2.08%.

Given the net performance boost, the question is what drove it—humans, AI, or a hybrid authoring approach?

**Figure 2**

**Site Traffic Surges**

Increased posting activity over the 10 week period caused site traffic to swell by 5x, until falling back to 2.5x pre-test levels 2 weeks after the test.

**Figure 3**

**Average Ranking Rises**

All content from the test improved average rankings by 7 points, from an average rank of #96 to #89.
Confirming that humans are not yet obsolete, users rewarded their content over AI’s. This was especially true for the metric that matters most—traffic, where human-authored posts topped AI by wide margins (figure 4). Human content also effected a dramatic rise in ranking, driven by the addition of 5 new keyword rankings (figure 5b).

Meanwhile AI content actually caused rankings to fall (figure 5a). AI did finish first in visibility, on the back of a single post. This article boosted visibility for a 3-week period, then faded quickly (figure 6). The reason? A human-written headline that intrigued the audience, but whose copy didn’t deliver.
Based on the data, it seems for the moment that the only drawback to human content is its expense. Human posts were 3x as costly in time spent writing as AI, based on the parameters of the test. That expense isn't insignificant, marketing budgets being what they are. But it means that at the moment the gains from generative AI are financial, not qualitative. Marketers worried about a tsunami of superior AI competitor content can rest easier. The real question remains whether marketers can or should give up quality in exchange for cost/time savings.
The picture could change. As generative AI advances in speed and sophistication, it could eclipse human content. This would surely result in more content for a fraction of the cost. Even so, one wonders how unique any of it would be. Amidst a sea of highly plausible but homogeneous content, could anything stand out? Then again, AI could push authors to innovate new approaches to content that are harder for AI to emulate. How different the situation could be and how soon it might happen is anyone’s guess. Given this uncertainty, look for marketers to demand more measurement of AI vs human authoring approaches.

“High speed means lower quality. True, with high speed you can publish a high volume of content, which may have some top-line traffic advantages. But this isn’t a strategic approach to content. AI isn’t a content strategy.”

Andy Crestodina
Co-Founder / CMO
Orbit Media
Human-authored content also beat hybrid in two out of three metrics. But there were bright spots for hybrid. It performed much better than AI content, and outperformed human across certain weeks in some categories.

Where it counted most—generating traffic—human surpassed hybrid on a cumulative basis. Even so, hybrid showed flashes of promise. It bested human for two weeks at the outset of the test and for around 3 weeks at the end of July / beginning of August (figure 7).

In keyword ranking, human outperformed hybrid consistently. By the end of the test period, human-authored content had enhanced average ranking from #98 to #84, more than double the margin of hybrid’s improvement (figure 8a). New rankings were almost entirely due to human content, but improvements in ranking came more from hybrid posts (figure 8b).
In search visibility however, hybrid pulled off a conclusive win. Beginning on June 21, hybrid led human by convincing margins, with human surpassing hybrid only in the final week of measurement (figure 9). Unfortunately hybrid’s advantage in visibility didn’t translate to more traffic. While more people saw the posts, they didn’t take action to read them.

There is a caveat to these findings. The labor invested in rewriting hybrid posts (1.5 hours) was considerably less than that expended on human-only posts (3.5 hours) (figure 10). Had as much work gone into each hybrid post as went into the human posts, could they have performed as well or better than the human-authored ones? It’s impossible to say, but opens the data up to debate.
Moreover, it’s worth considering—once again—how quickly results might change. That’s not only because the technology is evolving, but because content teams still lack experience with tools like ChatGPT. As authors learn how to use AI tools in more effective, innovative and imaginative ways, hybrid performance seems bound to improve.

“As AI improves and as we become more adept at using AI-powered technology, the success of the hybrid models will increase. However, humans are needed and play a critical role in the creativity, personality, and uniqueness of content.”

Cathy McPhillips  
Chief Growth Officer  
Marketing Artificial Intelligence Institute

Findings in Detail

**Figure 8b**  
**Human gains more new rankings, hybrid improves more existing ones**  
Human posts allowed the site to rank for 5 new keywords.

**Figure 9**  
**Human trails hybrid throughout but finishes higher**  
Hybrid led human content for most of the test period, although human ended on an upswing, adding 1% compared to 0.66% for hybrid.
Methodology in detail

The content team selected 60 topics. These were based on keywords that Renegade.com wasn’t ranking for that research revealed were important to B2B CMOs. They wrote 60 corresponding headlines and randomly divided them into three groups of 20 posts each. The team produced the posts (of 1,000 words each) using one of three authoring processes:

- **Human**
  Written by the content team with no assistance from AI tools.

- **AI**
  Generated by ChatGPT-3.5, with input from the content team, according to the following process:
  1. The content team prompted ChatGPT-3.5 to create an outline based on the topic. For example: “I am writing a blog post targeting CMOs titled [ARTICLE TITLE]. Please create an outline for a 1000-word article using that headline and the keyword [FOCUS KEYWORD].”
  2. Team adjusted the outline as needed.
  3. Team prompted ChatGPT-3.5 to create copy in sections, based on the outline. For example: “Please write the ‘_______’ section of this outline.”
  4. Team formatted the copy from ChatGPT-3.5 to align with that of the human-authored content.

- **Hybrid**
  Generated by AI, rewritten by the content team, by the same initial process as #2 AI-generated above. The team then rewrote the copy to meet the level of quality of the exclusively human-authored content (figure 10).

Writing time was capped for human posts at 3½ hours, AI at 1 hour, and hybrid at 1½ hours (figure 10).

The team organized the posts into a 10-week calendar beginning on May 24 and ending on August 2, 2023, with 6 articles scheduled per week (2 authored by humans, 2 by AI and 2 using the hybrid approach).

The team tracked the performance of all content across 3 metrics: visibility, traffic and rank.
Notes on test constraints

In evaluating any test results, it’s worth considering the structure of the test. For one, the quantity of content (60 posts of 1,000 words each, 20 posts per author type). While this somewhat modest sample size was enough to show clear trends, it also allowed one overperforming AI post to skew the results.

Another consideration is the distribution channel and audience (a website aimed at B2B CMOs). How will the results from this unique group—which consumes and creates large quantities of content—translate to other groups? For instance, might CMOs be extra sensitive to differences in quality between AI and human authors?

Lastly, the relatively short test period (10 weeks) allowed for a rapid rollout and results. This was of great relevance given the brisk pace at which the tested tool (ChatGPT) is evolving. However, it also limited the ability to factor out seasonal trends.
Discussion

What does it all mean for the future of content development?

If the test did one thing for me, it validated the skills and know-how of my team of humans relative to AI. While I’d love to save 75-80% of my costs through AI adoption, we’ve yet to find a tool (and we’ve tested a lot) that can go head to head with the team.

Authorship still matters. People want to hear from other people, because people know what matters to people. AI still struggles with these things. Of course the software may evolve to a comparable level eventually, but right now it’s not ready to replace human writers. That’s not to say there’s no role for AI today. In its current state, it’s really pretty good at doing social copy, generating topics, and repurposing existing content. But for longer-form articles, it’s a support tool at best.

As for how definitively human beat hybrid, I’d first point out the human/hybrid distinction itself is somewhat fuzzy. People already live and work in a hybrid world, and we take this for granted—think about how Gmail finishes sentences, for instance. So how “human” is so-called “human content” really? Aren’t we talking about degrees of hybridity?

Even so, I see human authors as the clear winners over hybrid and AI based on our test. But I’ll concede there’s room for interpretation, given how we structured production.

Lastly, the discrepancy in time expended (on human vs hybrid, Chart #) is somewhat misleading. This is because the content team was doing a lot of background work on all the content (whether human, hybrid or AI). That includes things like keyword research, headline development and pushing the posts live. So while it looks like twice as much time went into “human” as went into “hybrid” posts, it’s more accurate to see it as an extra 2 hours.
I totally agree with Michael on his team’s expertise. They’re awesome. And I’ll add that the most inarguable finding was the confirmation that content actually works.

A big takeaway is that there’s no downside right now to an exclusively human approach—other than cost. The other is that the future looks hybrid. The hybrid approach sped writing/editing time by a 2x factor over humans writing without AI. That’s huge. And it seems safe to assume that as writers gain more experience with AI, both speed and quality can only increase.

Should we ever elect to do this test again, I’d love to measure the performance of a hybrid process that starts with original human intellectual property like an outline, subheads and quotes, and prompts a generative AI tool like ChatGPT to sew it all together into a coherent post. I’ve been taking this approach for recent Huddle Up newsletters and it definitely cuts my writing time in half and still yields a high quality piece (at least I think so!).

Now, as for what hybrid ought to look like, and how authors can best use the technology—all that is still up for grabs. Aligning and optimizing AI with human workflows and processes is likely to be an organic process of discovery that plays out over time. Content marketers and authors who experiment with the tools and innovate new ways of using them will have a key say in this. So will Google and its users who will choose the winners.

Advocates argue that automation isn’t out to replace people, but to free them up to engage in more strategic, meaningful, rewarding work. Sometimes it plays out this way, other times it doesn’t. Could it work out like this for generative AI and content marketing? If so, the bigger question we want to ask is if AI could free authors to write—and so to think—in new ways, or at a higher level. And what would that mean?
## Appendix

### Topics, headlines and keywords

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