Will generative AI chatbots really replace Google?

As more people become frustrated by Google, Max Lunn ponders the disruptive potential of generative AI chatbots on search engines. Whilst tempting to imagine OpenAI's GPT-4 taking over from Google's (dithering) Search, it's likely a more iterative process will happen, where chatbots will eventually become incorporated into Google Search.

Despite being synonymous with searching (and the most visited website in the world), complaining about Google Search has become increasingly common. The gripes generally centre around both the plague of sponsored links, and the fact the top result is rarely the most credible source. SEMrush _found last year_, for example, that almost 30% of people are having to redo their Google searches, either by refining or extending queries. (This is without addressing the search engine's role in the proliferation of polarising misinformation over the last decade).

Mainstream search engines – typified by Google and its PageRank algorithm – have enabled a paradigm shift in the way information is not only located, but organised and ranked. Now, another such shift is taking place with generative AI chatbots. As well as a host of other uses, their complex neural networks allow us to instantly access the information we want without the baggage of

sponsored links or 'gamified' search results: in theory, at least, the result you get is the only answer you'll need.

Even when you click on the most promising Google link, you're taken to a glitchy, ad-ridden dungeon of misinformation full of padding and irritating copy. It follows, then, that those who complain about Google Search will simply take their queries to the bots. Instead of having to filter 4 or 5 different web pages on how best to travel between London and Timbuctoo, people want an answer that takes into consideration all these different routes, accounting for the pros and cons in one neat result.

If those dissatisfied with Google take AI chatbots as their new oracle, what does the future hold for SEO? Entire industries and careers have grown up around SEO: it's used to market goods and services from plushies to plumbing. The question certainly spooked Google, who went into code red following OpenAI's GPT-3's release, worried it spelled the end of days.

Knowledge versus transactions

Talking about this to Andy Allen, co-founder of _Hike_ SEO – who are busy disrupting the small business SEO industry – he points out it's not so easy to draw such grand conclusions about the effect of generative AI chatbots on Google Search, given only a section of the searches will be replaced by AI.

'Ignoring anything where anyone searches for a company' Andy tells me 'keyword searches typically fall into two categories, which is you're either looking to purchase something – so you've got an intent to purchase – or you've got an intent to find out information'.

Andy gives coffee-making techniques as an example for the informational search, pointing out that it's these searches where GPT-4 and its peers will run rings around Google Search. As Andy makes clear: 'Google has to put somebody at number one', meaning its adversarial system doesn't have the ability to give such a well-rounded answer. With regards to the other category of keyword search, the intent-to-purchase, the story is not so simple. Andy gives the search examples of 'plumber Birmingham', 'the best TVs', 'car insurance' – transactional searches where he doesn't immediately see the chatbot format disrupting them. 'In my mind, Google is better because I want to see a list of 10 companies. I can go to their website and look at each one. I don't really want a chatbot _telling me_ which one to use'.

I tend to agree; such a denial of agency doesn't feel right when spending money to fix the pressing problem of a leak or cheaper car insurance. We want the control Google Search offers – or at least the illusion of control, given the SEO tactics going on behind the scenes (I'm pretty sure every plumber I've got

is just some bloke who has gamed the SEO). Andy's point is there's not much risk involved when asking about how to make coffee. But if it's a search that leads to a transaction then the stakes are higher.

Evidently, of course, the projection of a monolithic understanding of truth that such AI chatbots engender through their definitive one-statement-answer is more dangerous in an ideological sense than booking the wrong plumber, but that's a separate discussion.

Live data versus historical data

Andy's other point is that fundamentally (for now, at least) these chatbots don't have access to live data: their training data is always going to be out of date from the very first search. The training data can't be updated, meaning the best they can offer on cheap car insurance would be an educated guess.

An emphasis on generative functionality seems to be the predominant direction of travel for OpenAI's latest offering, GPT-4, with Sam Altman pointing to the model's 'creative' potential (rather than a Google Search replacement). In the GPT-4 demo, for example, Greg Brockman, President and Co-Founder of OpenAI, Brockman submitted a photo of a hand-drawn and rudimentary sketch of a website to GPT-4 and the system created a working website based on the drawing (see the full demo _here_, with the website creation starting around 15.5 mins in).

Search Engine Optimisation to Chatbot Optimisation?

Another hypothetical I'm keen to ask Andy about is whether it will be possible to optimise the information individuals and organisations put online, to ensure its prominent inclusion within the chatbot. If coffee machine companies can no longer boost their branding with SEO-focused blogs about the best way to make coffee, can they try and muscle their way into GPT-4's response?

Andy tells me straight off the bat that 'I don't think anyone would know the answer to that – it's such early days. I don't even know what training data they're using'. I think it's a particularly interesting question as if you can 'game' chatbots the same way that SEO has allowed people to climb the ranks of Google Search, then it won't be a fundamentally 'better' (i.e. less malleable and/or buyable) tool. Andy continues by telling me that 'all we know is it's trained on data – what we know about the priority of that data, or how to get your content to be more important – is very limited'.

I ask him if he thinks anyone will try to crack this, and he reframes the issue: this isn't Google Search versus OpenAI as two competing visions for how to search for information – this is more about a gradual shift from search engines on one side, and generative chatbots on the other. He points out that Google is releasing over 20 AI products this year (it has already released its own chatbot, Bard) and so we won't see one system trumping the other, but an iterative process. Evidently, if Google were to fully convert to chabot based searches à la GPT-4, it's unclear how they would incorporate any paid results here – thus sacrificing a huge amount of revenue.

Andy envisions one situation where Google Search still operates similarly to now, but with a chatbot incorporated into the search result: a more advanced version of the 'knowledge panels' that appear when you search for entities (people, places, organisations, things) that give you a quick snapshot.

He explains: "[L]et's say search you search 'best running trainers under £50' – you will still get the ten blue links, but you will also have a chatbot which summarises the results; crucially, this will be based on the top ten results. You still want to get onto the first page as that will be what feeds the chat response".

Perhaps we will be stuck with Google for a little longer. Hopefully Google's algorithm will thank me for this corrective piece, rewarding Maddyness with a higher ranking.

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