CONFIRMATION BIAS IN THE KNOWLEDGE ERA

Gabrielle Wasco of The Decision Lab explores how greater access to information could be narrowing our perspectives

Gabrielle Wasco

"At some point, safety is just pure waste. I mean, if you just want to be safe, don't get out of bed, don't get in your car, don't do anything."

To a certain extent, OceanGate's CEO Stockton Rush was right. Innovation is impossible without taking risks – calculated ones, that is. But following the deadly implosion of the Titan submersible in 2023 that killed all five passengers on board, including Rush himself, it was difficult for the public to see the expedition as anything close to calculated.

After all, the warnings weren't subtle. Former employees had long voiced concerns that a safety event involving the deep-sea craft was inevitable, and a letter issued by the Marine Technology Society five years prior cautioned that Oceangate's "experimental approach" could lead to catastrophic outcomes. With so many red flags, how did the Titan ever leave shore in the first place?

Part of the answer may lie in one of psychology's most sneaky thinking traps: the confirmation bias, our underlying tendency to notice, focus on and give greater weight to evidence that fits with our existing beliefs. Determined to prove that deep-sea exploration could be done faster, cheaper and without the constraints of traditional regulation, Rush became increasingly invested in a narrative of success – one that made it easier to dismiss growing safety concerns as overcautious or unfounded.

While it's easy to point fingers at multi-millionaires for their sensationalised mess-ups, we all fall victim to confirmation bias. And yes, sometimes it really does happen when getting out of bed, like deciding you're too tired to work out because your brain already RSVP'd "no" to the gym the night before. Or when getting in the car, assuming someone cut you off on purpose because you already believe most drivers are inconsiderate.

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Although these moments aren't as dramatic, their consequences add up over time – whether that be in the form of increased health risks or an impressive stack of speeding tickets.

In our digital era, with virtually endless information at our fingertips, it's easy to assume that we have the ample tools to fight off confirmation bias. Most of us don't have a team of engineers on standby, but we do have advanced search engines in our back pockets, delivering results in a matter of milliseconds. We do have social media platforms, putting us in touch with whoever,

whenever we want. We do have artificial intelligence (AI), with the promise of on-demand objectivity. However, rather than opening up our perspectives, it seems like most of these tools are keeping us more close-minded than ever before.

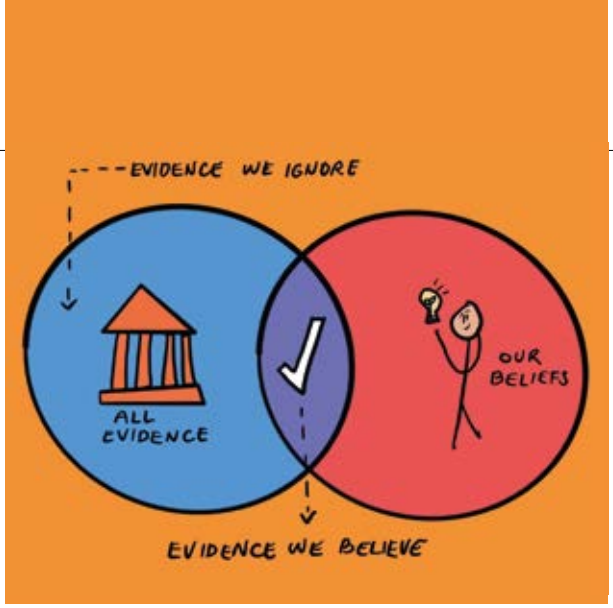
ENTERING THE ECHO CHAMBER

One reason that modern technology might strengthen confirmation bias, rather than dispel it, is its heightened ability to create echo chambers. These are any environments where we only encounter information that reflects and reinforces our own pre-existing beliefs.

Echo chambers keep out dissenting views or opposing perspectives, making these domains fertile breeding grounds for misinformation to spread unchecked (see *The Sentinel*, June 2025). And really, why wouldn't we believe bent truths (or even outright lies) when there is no one there to question them?

Before the internet age, echo chambers often came in the form of tightly-knit communities that were either geographically grounded – such as church groups, town centres or political organisations – or were bound by traditional media sources, like a favourite talk radio station or news broadcasting network. But nowadays, echo chambers tend to put down their roots online through niche forums, private social media groups, and subreddit communities where shared beliefs are rarely questioned and often rewarded.

Given the expansive connectivity promised by the name 'World Wide Web', you'd think we'd be constantly engaging with alternate viewpoints and people from all walks of life. Instead, most of us are confined to virtual landscapes with invisible boundaries. At least in physical communities, you might bump into someone new at the grocery store or pick up a different newspaper on a whim. But online, the walls are ironically much more concrete because most of us don't even realise they exist in the first place.



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Part of this, of course, is due to confirmation bias actively encouraging us to seek out, engage with and, in time, completely submerge ourselves in online spaces that support our own insights. After all, who doesn't want constant validation in the comment section? However, an even larger part of this is driven by filter bubbles: algorithms that recommend content that aligns with preferences we've explicitly displayed in the past – while quietly excluding content that doesn't. Although TikTok has long been called out for creating these bubbles, pretty much every search engine, social media platform and news aggregator reinforces the same dynamic, tailoring our feeds to keep us scrolling, not second-guessing.

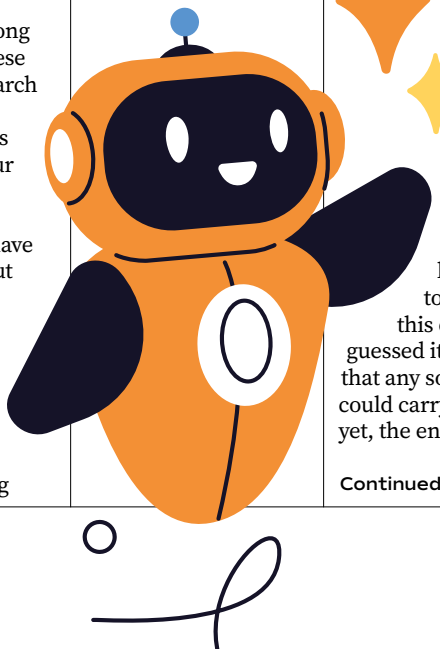
The catch? Before we even have the chance to mentally filter out alternative perspectives, the algorithms have already done it for us.

BIAS BOTH WAYS

In case you have been sleeping under a very large, internet-resistant rock, AI has become a pretty big deal – and a prominent source through which we obtain information. For some of us, this means having ChatGPT constantly open in another window for any quick-ask questions. But even for all the AI skeptics out there, it's almost impossible to escape the grips of generative models thanks to search engines like Google now displaying AI Overviews above search results. Regardless of how you choose to engage with our new assistants, there's a good chance that confirmation bias is still slipping into our interactions.

All of this starts with how we prompt the system. While AI-powered chatbots are meant to produce unbiased and objective outputs, users entering the input rarely exhibit these qualities, instead steering the system in a direction that coincides with our pre-existing beliefs. For example, if you are researching different political candidates in the lead-up to an upcoming election, you will probably get different answers if you search, "Why should I vote for Candidate X instead of Candidate Y?" versus if you asked, "What are the strengths of Candidate X and Candidate Y?".

Through our not-so-neutral framing, we often unconsciously prime the model to search for results based on what we want to hear, reinforcing our initial thought pattern with skewed results.



However, confirmation bias is by no means one-sided in these exchanges. Although we like to think of AI as unbiased and objective, this is usually not the case. Sure, machine learning models may seem impartial because they rely on large sets of data to learn about different topics. But where does this data come from? You guessed it: humans. This means that any source the model uses could carry its own biases. Worse yet, the entire dataset might lean

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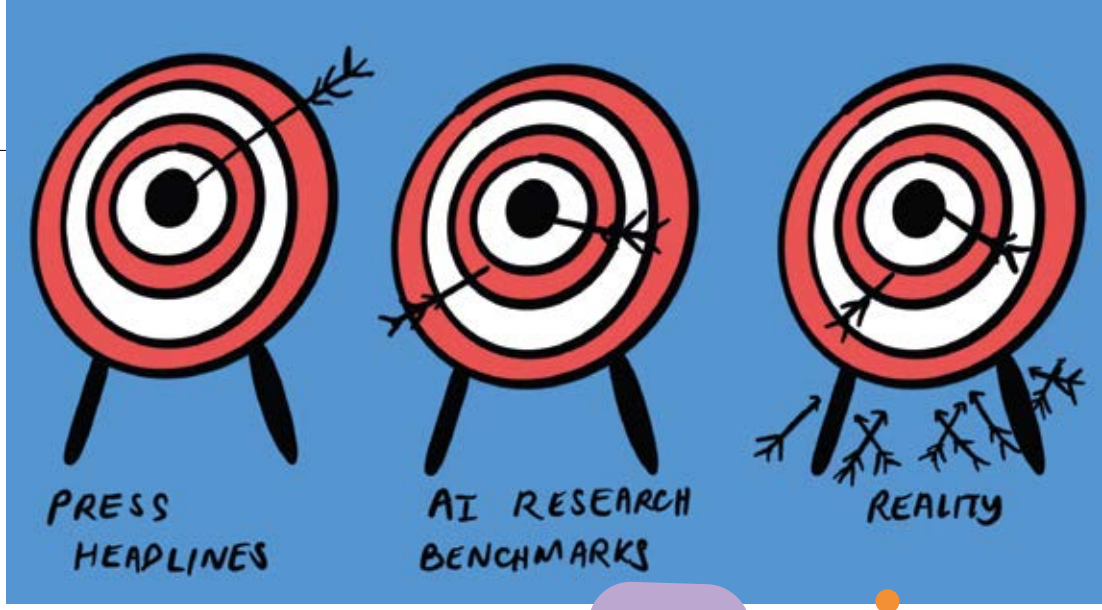

Illustrations supplied by The Decision Lab

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>> From previous page

toward one perspective – like, for example, 70 per cent of the sources supporting Candidate X and only 30 per cent backing Candidate Y. Keep in mind that the purpose of an algorithm is to sift through data and find the 'average' or most common response.

As a result, AI models can unintentionally exhibit their own form of confirmation bias, guiding us toward answers that reinforce certain narratives without us even realising it. In other words, you can already guess which candidate that the model would encourage you to vote for.

WHAT CAN WE DO?

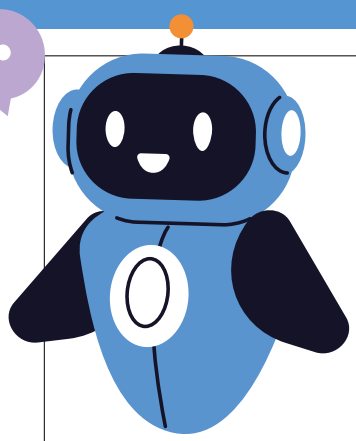
Despite all the advancements of the last century – or, precisely because of them – confirmation bias is harder to avoid than ever before. Rather than opening up our perspectives, technological tools like search engines, social media platforms and AI have become sharp weapons for us to relentlessly defend our own opinions.

The hardest part is that, as with most cognitive errors, the confirmation bias often works subconsciously, meaning that we might not even realise that we are favouring evidence that supports our belief until it backfires – or, at least, someone else is brave enough to call us out.

But don't fret. There are still three basic strategies that all of us can take to sidestep confirmation bias, especially when it comes to gathering information online.

- **Be aware:** The first step is examining our own instincts. When you quickly jump to embrace or reject an insight, pay attention to whether it aligns with your pre-existing beliefs. Remember, just because you want something to be true doesn't make it a fact. Awareness also means keeping an eye out for confirmation biases in the sources we seek out, in particular those that have an 'objective' facade such as AI chatbots.
- **Start with a neutral fact base:** Rather than sticking to your favourite news outlet, try your best to consult a diverse array of sources before taking a stance. Engaging with other forms of media – like podcasts, documentaries or even a good old-fashioned book – can be another way to shake things up and accidentally stumble into new perspectives.
- **Intentionally engage with 'the other side':** Interacting with others that we know have differing perspectives is a healthy way to expose ourselves to viewpoints we might have otherwise avoided and maybe make some new connections in the process. Just be sure to keep things respectful.

All three of these approaches are easier said than done, and are only the first steps when it comes to fighting off confirmation bias in the knowledge era. But by putting just a little more intention into how we gather information, we will be leaps and bounds further in making better, safer decisions – whether that be when getting out of bed, hopping into our cars, or sending submersibles out to sea.



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WHY DO WE FAVOUR OUR EXISTING BELIEFS?

Confirmation bias describes our underlying tendency to notice, focus on and give greater credence to evidence that fits with our existing beliefs.
Read more at www.thedecisionlab.com/biases/confirmation-bias

We humans take shortcuts. Our many biases can be categorised into four areas.
Read more at www.thedecisionlab.com/biases-index