ICS-digital

The Human-Machine Memory Gap

The shift that marketers are underestimating

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The shift that marketers are underestimating

AI systems have fundamentally changed the landscape of discovery, **mediating what users will see, evaluate and choose.** Brand consideration is now evolving with machine interpretation, which demands a rethinking of marketing strategy.

Search is being increasingly intercepted by LLMs, offering contextualised, summarised, and synthesised answers, drastically altering the initial phases of the customer journey online. **Around 50% of searches already have AI-generated summaries, a figure set to rise to over 75% by 2028.[1]**

> This isn't just another search update; it's a search behavioural shift."
>
> *Think with Google – AI-powered Search Behaviours[2]*

AI search traffic is growing rapidly, with a

527%

increase YoY in the first five months of 2025[3].

Machines are retrieving brand information based on context, meaning and consistent signals. Simply being visible is no longer enough to ensure being retrieved by LLMs. Yet many marketers are still interpreting this change through a familiar lens, underestimating the deeper shift that is taking place.

While the fundamentals of SEO are still crucial to any well-rounded digital strategy, a new approach must be considered for a brand to be both retrieved by AI systems - and then recognised and chosen by humans.[4]

The limits of current thinking (visibility ≠ memory)

When approaching the challenges of brand recognition in the era of AI-discovery, most industries are framing this as a ranking or traffic problem. **Much of the discourse follows familiar narratives,** which prioritise traditional keywords and SEO tactics in an AI context.[5]

These approaches are outputs, producing easily measurable results for brands. However, they do not address the underlying mechanics, why those results have occurred, or **why AI systems make the decisions they do.**

While these optimisation tactics remain useful, traditional metrics such as rankings and clicks are insufficient in showcasing how machines are retrieving brand information or why an individual may choose a brand referenced within AI-generated content.

This leaves brands unable to see how they are being interpreted, or why they are being chosen.

> Search is becoming answers, and AI assistants are the middlemen deciding which answers show up."

Surfer SEO – Next Phase of Search[6]

LLMs do not ‘see brands’ or ‘read content’ the same way that humans do, or even the way that previous search algorithms did. They process information through a combination of consistent cues and cross-platform visibility.

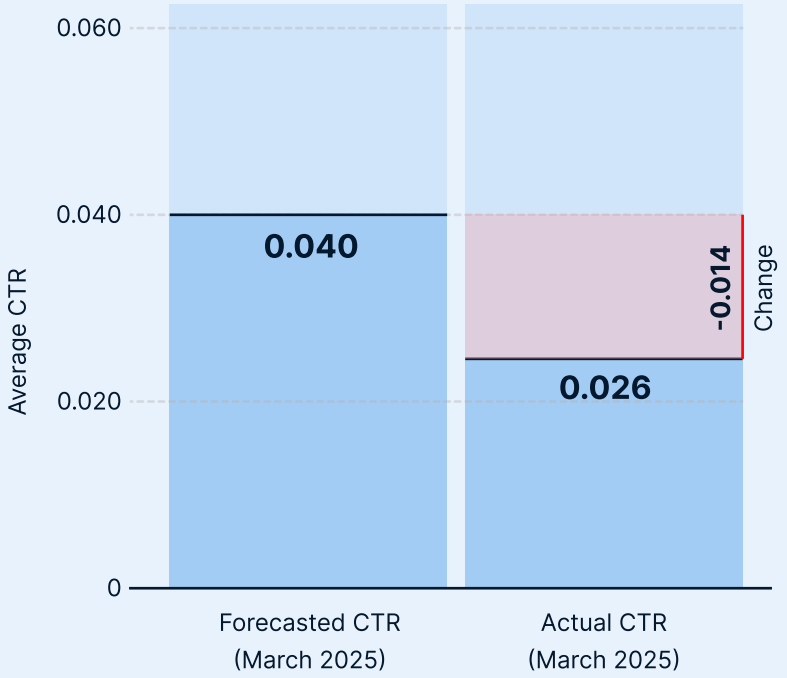
Brand presence needs to include clear, consistent semantic and brand signals to be interpreted by LLMs.

Traffic volume is also not guaranteed by ranking. In fact, research from Ahrefs suggests that the presence of AI overview in search **‘correlates with a 34.5% lower average clickthrough rate (CTR) for the top-ranking page’.**[7]

This suggests that even when a brand is visible in AI, it doesn’t necessarily mean that a human will choose it.

Impact of AIOs on Position #1 CTR[7]

Analysis of 300,000 keywords.



Visibility in AI does not guarantee influence over human choice.

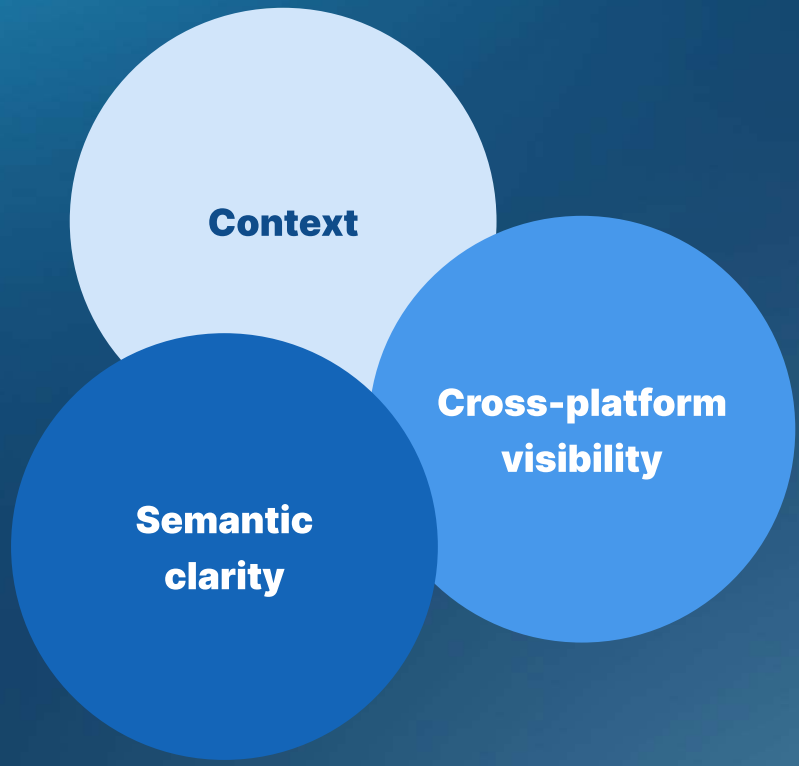
Introducing the Human-Machine Memory Gap

Marketing strategies have historically optimised for one cognitive system at a time, with media and brand activations geared towards human memory and digital performance strategies geared towards what we identify as ‘machine memory’.

While these lines have been blurred by human engagement impacting algorithmic shifts and format preferences, AI systems add a new layer of complexity to an evolving symbiotic relationship.

AI systems now retrieve information and reproduce brand meaning across contexts. This is shaped by factors such as semantic clarity, context, and cross-platform visibility.

A brand can now be highly memorable to people but poorly retrievable by machines, or vice-versa.



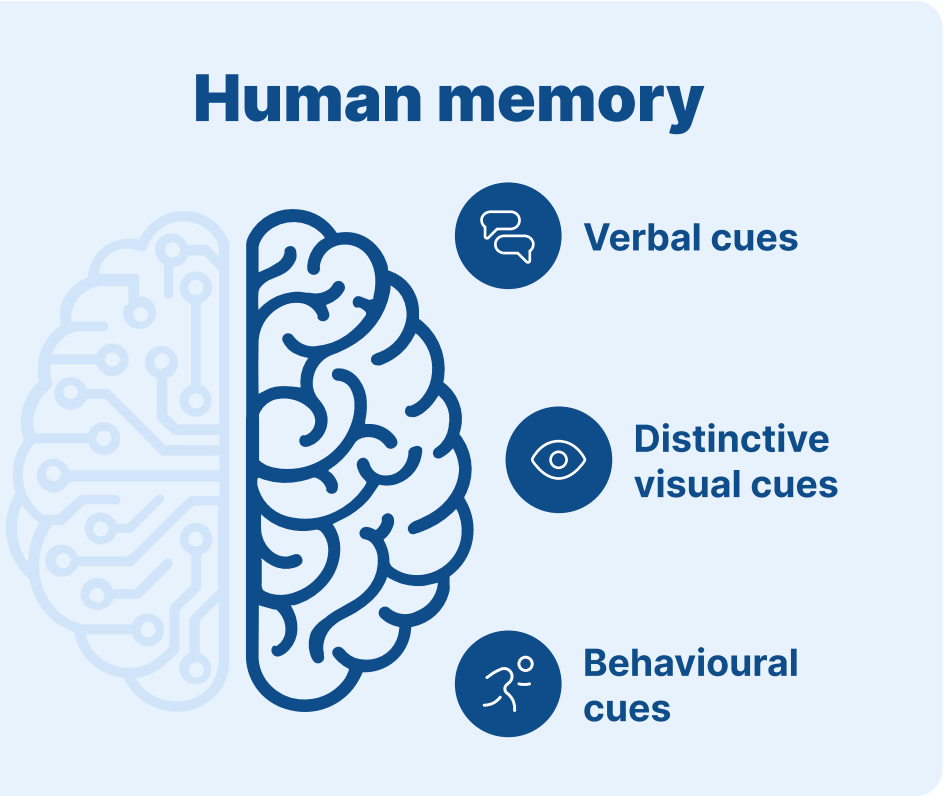
In the landscape of AI-dominated discovery, this separation between human and machine memory poses a risk as they operate differently, but both shape how a brand is interpreted, considered and chosen.

An effective strategy requires optimising for both systems by building brand salience that encodes in both human and machine memory.

Human memory is often associated with an emotional response. **Studies from the Journal of Consumer Psychology show that brands with emotionally-charged experiences are prioritised in the brain.**[8] This is why brands that create emotional connections achieve higher recall than those that focus solely on functional messaging.

Therefore, recall is greatly enhanced when associated with particular cues; these cues can be: **Distinctive visual cues, Verbal cues or Behavioural cues. Symonds' research suggests that factors such as environment, emotions, and individual differences all influence the decisions you make.**[9]

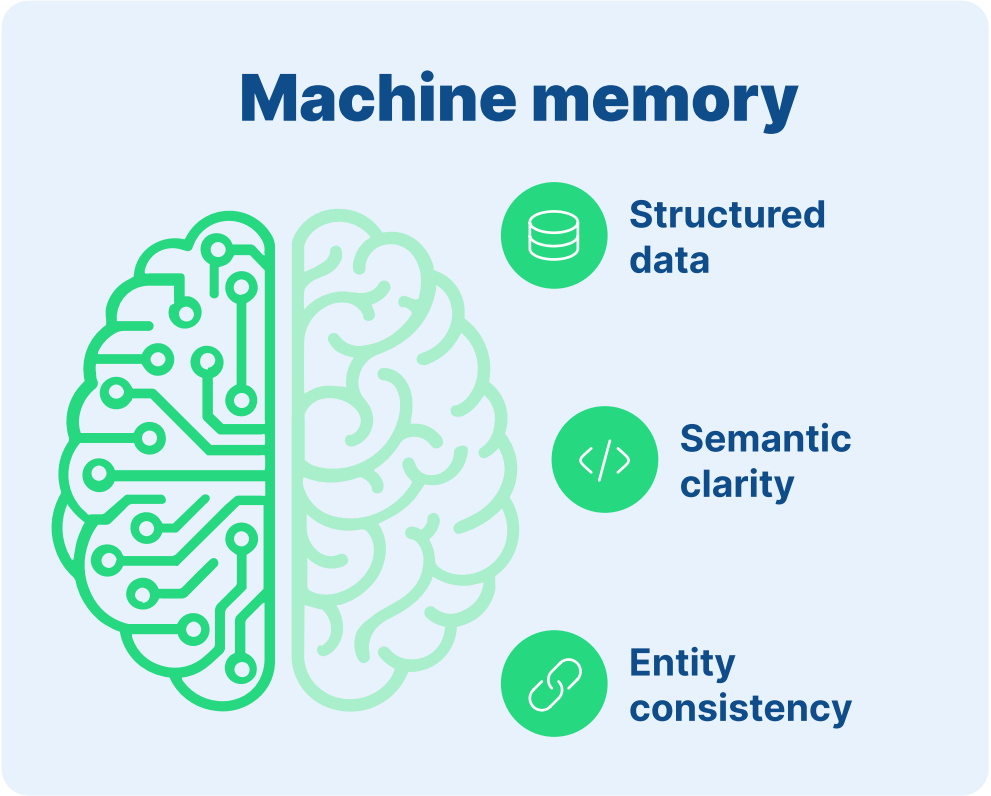
Furthermore, psychological studies suggest that distinctiveness leads people to notice or remember you compared to traditional approaches.[10]



KANTAR BRANDZ

"The most valuable brands in the world have built powerful connections allowing them to create shareholder value faster, resist market downturns and recover sooner from recessions. Brands with powerful connections have three essential qualities: Meaningful, Different, and Salient."

Kantar BrandZ 2025 Global Report[11]



Machine memory functions differently. Machines rely on the **meaning of the information (semantic clarity), objective patterns, and consistency of the brand message** to retrieve signals across large datasets.

AI systems such as **Copilot break content down into structured pieces ('parsing'), where it is then evaluated for authority and relevance.** This shows that LLMs treat content as semantically structured fragments, not as emotional messages or campaigns.[12]

When human and machine understanding doesn't align, a memory gap emerges.

For example, a brand can feel distinctive to people while being inconsistently retrieved by LLMs. The new challenge for brand performance is how to systemically align human-machine memory.

> In generative information retrieval, your content is manipulated, and you don't know how or if it will appear on the other side"
>
> *iPullRank – How AI Mode Works*[13]

Category snapshots

These are illustrative category snapshots, not brand evaluations.

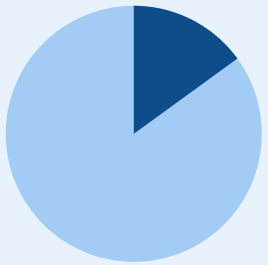
The human-machine memory gap is not a theoretical construct. Across multiple category snapshots, we observe a consistent **contrast between human memory signals and machine memory behaviour.**

Brands with strong, distinctive assets in human-facing marketing often are inconsistently retrieved or disappear completely in AI summaries. These snapshots illustrate how recognisable brands, which deliver distinct human-facing cues, are not being uniformly translated into AI memory.

> Distinctiveness helps brands to be more mentally and physically available and to stand out at the point of purchase".
>
> *Marketing Science Institute / Ehrenberg-Bass*[14]

Only

15%



of brand assets are truly distinctive showing that brands still focus on generic cues.

Ipsos / JKR via Marketing Week[15]

Methodology

Categories analysed

We analysed three category snapshots **(Health & Wellness, Travel, Home & Interiors)**, comparing three brands selected for their human-facing distinctiveness (unique, consistent and memorable brand assets such as logos, brand colours or fonts) and their differentiation (superior, unique product features that provide a reason to buy).

The brands analysed each have verified levels of salience, a term used to describe brand awareness across depth (how deeply a brand is embedded in consumer memory) and breadth (measuring the variety of purchase or usage situations where a brand comes to mind), as defined by Byron Sharp of the Ehrenberg-Bass institute[16].

How AI visibility was measured

We assessed and compared the AI share of voice using Ahrefs Brand Radar, which shows brand mentions and citations across multiple AI platforms. Metrics included the top 1000 prompts that are most relevant to each category.

What this analysis is *not*

These examples are meant to be illustrative snapshots, not diagnostic, and aim to highlight this gap between human and machine memory - not evaluate brand quality or effectiveness.

Health & Wellness

Consumers of health and wellness products often make choices based on brand reputation, rather than purely functional benefits.[17] They rely on familiarity, making risk-averse decisions. Users are asking comparative queries such as ‘best protein supplements for x’, where AI gives simplified recommendations summarised from multiple sources.

Brands such as **MyProtein, FreeSoul and Women’s Best** all feel recognisable to people, but for different reasons. MyProtein, has consistently enforced distinctive assets across long-running campaigns, and FreeSoul, through strong social media presence, while Women’s Best enforces clear cues that differentiate the brand for female audiences and sports nutrition.

MYPROTEIN

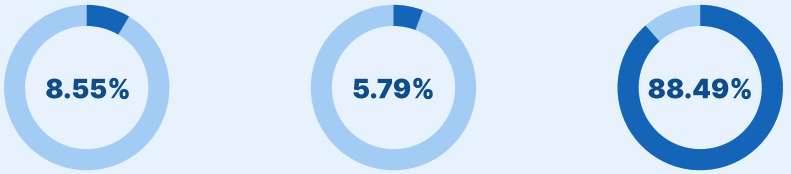
Free* SOUL

WOMEN’S BEST
ENJOY THE DIFFERENCE

These same brands are interpreted differently in AI contexts. Machines retrieve MyProtein as a category anchor, and while it surfaces consistently across core protein and supplement queries, its meaning remains generic in a context that doesn’t reflect distinctive visual cues and limits brand differentiation.

Free Soul appears more intermittently in AI systems, without a stable category role. Women's Best is also retrieved inconsistently, where machine memory encodes the brand unevenly across contexts, weakening its relevance across category entry points.

AI Share of Voice
(All platforms)



FreeSoul | Womens Best | My Protein

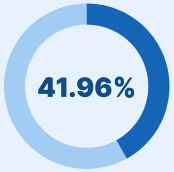
Travel

When travelling, people choose accommodation based on trust and perceived reliability, based on reviews - particularly when booking in unfamiliar locations.[18] **Discovery is increasingly mediated by AI systems,** which compare options and summarise recommendations before users can engage directly with the brand.

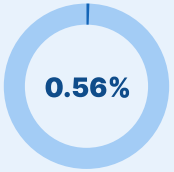
Brands such as **Hilton, CitizenM, and Airbnb** all have unique brand assets and brand differentiation that makes them recognisable to people and associates them across different contexts. Hilton is an internationally known legacy brand with deep brand awareness that is easily recalled across human memory. CitizenM uses contemporary design-led brand assets and differentiates towards affordable luxury; and Airbnb enforces strong distinctiveness across campaigns with both breadth and depth of brand awareness.

Airbnb and Hilton both have stable retrievability. However, CitizenM, **despite having strong human-facing distinctiveness and clear differentiation, shows comparatively weak machine retrievability,** with a low number of mentions across AI platforms. This illustrates how creative distinctiveness and differentiation doesn't equate to a consistent category role within AI systems.

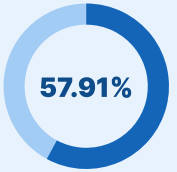
AI Share of Voice
(All platforms)



Hilton



citizenM



airbnb

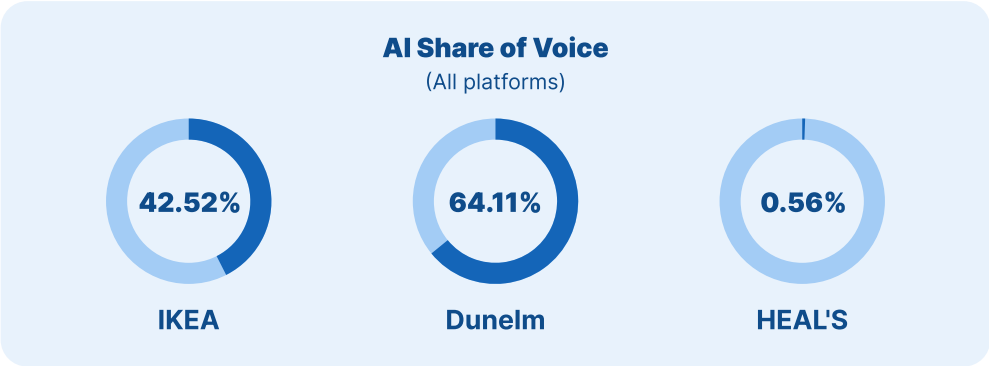
Home & Interiors

People make interior decisions based on perceived quality and design.[18] AI systems mediate the discovery process, summarising retailer options before consumers can engage with a product catalogue.

Brands such as **IKEA, Dunelm, and HEAL's** all feel distinctive to consumers and are differentiated to appeal across different contexts. IKEA enforces distinctive brand assets with strong breadth and depth of brand awareness and differentiation focused on relatable and accessible design. Dunelm has strong distinctive assets and differentiates towards a broad value proposition and HEAL'S uses consistent brand assets while differentiating towards authority, heritage and quality.

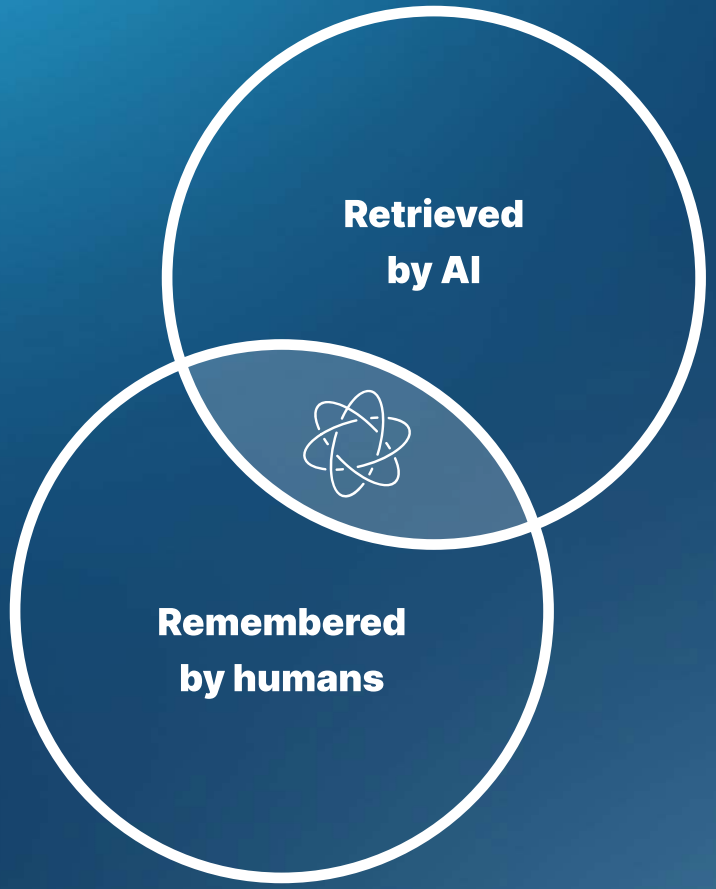
In AI discovery, both IKEA and Dunelm are retrieved consistently, but HEAL'S is encoded narrowly in machine memory and only appears selectively in highly relevant furniture contexts. This further suggests that **brands over indexed within niche differentiation may not always translate into AI-retrievability without highly specific prompts.**

These examples don't suggest that brand strategies are fundamentally flawed; they just further illustrate the growing human-machine memory gap challenge. **And how considering alignment with machine memory and human memory would lead to stronger, more coherent brand meaning.**



Introducing **Distinctiveness Intelligence™**

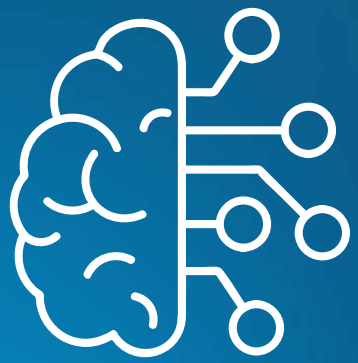
A data-led, behavioural and performance-powered framework that strengthens visibility, enhances AI discovery and amplifies digital distinctiveness.



The new challenge for brands is to be coherent across two cognitive systems. When visibility is no longer enough, brands need to optimise for human emotion and recognition, as well as machine retrieval and reproduction of meaning.

Only targeting one leads to a gap between how brands are represented by AI systems and whether they are remembered by humans.

Distinctiveness Intelligence™ (DI) is our response to this challenge. DI is a strategic approach built to align brand signals that influence both human memory and machine retrieval. The framework is built to power digital marketing across organic and paid channels, including SEO, Digital PR and Paid Media.



DI builds distinctiveness not just as creative differentiation, but as a system of signals that can be remembered by humans, retrieved by machines, and reproduced consistently across contexts.

It aims to address the human-machine memory gap by outlining the phases that build a brand's distinctiveness. This helps ensure it is consistently retrievable and perceived as a differentiated choice at the point of decision.

This is achieved through **a set of reinforcing layers that strengthen the signals that drive recall in human memory and machine representation.** DI acts as a unifying strategic layer, creating consistency across how brands are represented, making those efforts more effective.

> In the era of AI-mediation, where brands need to be recognised by people and machines, **Distinctiveness Intelligence™ helps ensure brands are recalled and selected by both.**

What this means for brands

Risks

The memory gap means new strategic risks. AI summaries are increasingly flattening categories by including fewer brands and pulling in generic meanings. This means there is reduced differentiation when a consumer is considering between brands, even for those with strong human-facing distinctiveness.

> Back in 2022, respondents reported acting to manage an average of two AI-related risks, compared with four risks today."
>
> *McKinsey – The State of AI in 2025*[19].

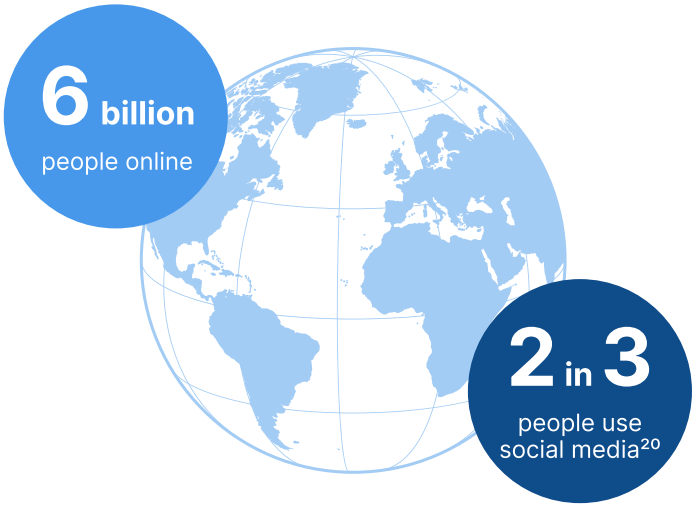
Relying on visibility metrics doesn't equate to recognisability or recommendation - brands can maintain strong rankings while failing to register as distinctive.

Opportunities

However, the memory gap also introduces new opportunities. **Brands that align both memory systems can sustain their visibility across digital platforms,** while enforcing their differentiation for humans.

Brands that **actively respond to this using Distinctiveness Intelligence™ gain greater control over how their brand is interpreted in AI contexts.** They also become more durable during AI interface shifts and gain a stronger alignment between brand and performance teams, around shared memory signals.

Closing: A new brand mandate for 2026



Brands must now navigate an AI-mediated world by optimising for two distinct systems. They have to be remembered by people and retrievable by machines.

Distinctiveness Intelligence™ provides a framework for reinforcing clear, consistent and memorable signals for both humans and AI systems. Brands that align with both will be recognised, recalled, and recommended in AI contexts while sustaining the differentiation that guides human choice.

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Distinctiveness Intelligence™

Remembered by humans.

Retrieved by AI.

Chosen by both.

Want the full framework?
Visit distinctivenessintelligence.ics-digital.com to get started.

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