# Google I/O 2025 revolutionises marketing with AI-driven search and ad innovations



At this year’s Google I/O, the tech giant made a substantial commitment to artificial intelligence, marking not just an enhancement of its back-end tools but a fundamental reshaping of how search, advertising, and brand presence operate in the digital landscape. With two flagship events this May—Google I/O in California and Google Marketing Live in Dublin—Google ushered in a series of ground-breaking updates that signal a dramatic evolution in marketing practices.

In a spirited recap of the Dublin event, The Drum's columnist Andrew Tindall remarked on the advancement of tools and their implications. He noted that while these tools are “genuinely brain-melting,” they also prompt an essential question: “What’s a silly little human marketer’s role in all this?” These rapid changes in technology raise critical concerns about control and capability for marketing professionals as AI takes centre stage.

Central to the announcements was the introduction of “AI Mode” within Google Search, a transformative overhaul that replaces conventional link lists with conversational responses made possible by Gemini, Google’s advanced large language model. CEO Sundar Pichai underscored during the conference that this approach aims to redefine nearly 8.5 billion daily queries while simultaneously addressing competition from nimble rivals like OpenAI. While AI promises greater efficiency, it also threatens the established search hierarchy, which contributes a hefty $198 billion in annual advertising revenue. The challenge lies in evolving the business model without compromising on its profitable foundation.

The updated “AI Overviews” feature is designed to streamline search results, presenting summarised responses embedded with sponsored content. This shift raises critical questions for marketers regarding control over ad placements and targeting. Traditional keyword strategies become less effective in this new paradigm, as advertisers will need to engage with broader themes rather than specific terms—a labyrinthine challenge given the reduced visibility into how information is aggregated and displayed. Google, however, asserts that it is maintaining quality standards for these ads, promising that they will still be relevant and high quality.

Beyond just search, Google also unveiled the AI Max for Search, an innovative automation layer that identifies high-intent queries overlooked by advertisers. By utilising historical data, it provides a lifeline for niche brands, but also complicates strategic decision-making. As marketers find their performance metrics drawn from delayed data and focused on aggregation, there’s a pressing requirement for deeper analytical engagement with data that was previously more transparent.

The event also highlighted the introduction of Asset Studio, powered by Imagen 4 and Veo 3. This tool allows marketers to generate and customise video and image ads via text prompts, significantly accelerating the pace of campaign creation. While efficiency is undoubtedly a benefit, there is the risk that creative outputs become homogenised, diluting brand identity and uniqueness in the process. Google has stated that the tool allows for the maintenance of brand distinctiveness, yet the demands for strong direction from marketers remain paramount.

Moreover, Google sought to make its Performance Max system more transparent by introducing channel-level reporting, enabling advertisers to understand budget allocations across different platforms, from Search to YouTube. Despite these improvements, inherent opacity remains a concern, as many algorithmic processes involved in targeting and optimisation continue to elude clarity. Marketers are now faced with a dual challenge: dissecting the data and processing the intricacies of these new systems.

In the realm of shopping, Google’s virtual try-on tools are now allowing users to upload their own images, marking a shift towards more personalised online shopping experiences. This innovation aims to enhance consumer confidence in purchasing decisions while expanding the visual commerce landscape. However, realisation of these benefits depends on seamless integration of product data and creative assets, presenting operational challenges for brands still leveraging outdated systems.

As the cookie phase-out looms, Google's new Data Manager was announced to create more accurate targeting using first-party data. Yet potential disparities in technological readiness mean that organisations relying on diverse legacy systems might find themselves excluded from these advancements.

The broader message emerging from Google I/O 2025 is unmistakably clear: automation is now an indelible aspect of marketing operations, but intent must remain front and centre. Google is not merely content to be a platform; it aspires to become the operating system of modern marketing, consolidating responsibilities from planning through to optimisation. This move is attractive, particularly to lean marketing teams seeking efficiency. Nevertheless, the increasing complexity of these tools necessitates a more discerning approach to strategy, highlighting that with mass accessibility to similar AI technologies, the ultimate competitive edge will derive not just from the tools themselves, but from the intent and strategy underpinning their use.

In this era of rapid technological change, Google’s developers and marketers must navigate this new landscape wisely, balancing innovation with the integrity of skills that define marketing effectiveness.

## Reference Map:

* Paragraph 1 – [[1]](https://www.thedrum.com/news/2025/05/23/google-io-2025-ai-rewrites-the-rules-modern-marketing), [[4]](https://www.axios.com/2025/05/20/google-ai-shopping-features-virtual-try-on-clothes)
* Paragraph 2 – [[1]](https://www.thedrum.com/news/2025/05/23/google-io-2025-ai-rewrites-the-rules-modern-marketing), [[2]](https://www.ft.com/content/dec83193-c787-4301-8098-4277fdd0e5af), [[5]](https://www.techradar.com/news/live/google-i-o-2025-live-project-astra-gemini-and-more)
* Paragraph 3 – [[1]](https://www.thedrum.com/news/2025/05/23/google-io-2025-ai-rewrites-the-rules-modern-marketing), [[6]](https://www.ft.com/content/b9d13cc7-f0f0-4d0d-9dfd-7d387ac2cdf9)
* Paragraph 4 – [[1]](https://www.thedrum.com/news/2025/05/23/google-io-2025-ai-rewrites-the-rules-modern-marketing), [[2]](https://www.ft.com/content/dec83193-c787-4301-8098-4277fdd0e5af), [[3]](https://www.axios.com/2025/05/23/google-ai-videos-veo-3), [[4]](https://www.axios.com/2025/05/20/google-ai-shopping-features-virtual-try-on-clothes)
* Paragraph 5 – [[1]](https://www.thedrum.com/news/2025/05/23/google-io-2025-ai-rewrites-the-rules-modern-marketing), [[5]](https://www.techradar.com/news/live/google-i-o-2025-live-project-astra-gemini-and-more), [[6]](https://www.ft.com/content/b9d13cc7-f0f0-4d0d-9dfd-7d387ac2cdf9)
* Paragraph 6 – [[4]](https://www.axios.com/2025/05/20/google-ai-shopping-features-virtual-try-on-clothes), [[6]](https://www.ft.com/content/b9d13cc7-f0f0-4d0d-9dfd-7d387ac2cdf9)
* Paragraph 7 – [[1]](https://www.thedrum.com/news/2025/05/23/google-io-2025-ai-rewrites-the-rules-modern-marketing), [[3]](https://www.axios.com/2025/05/23/google-ai-videos-veo-3), [[2]](https://www.ft.com/content/dec83193-c787-4301-8098-4277fdd0e5af)
* Paragraph 8 – [[1]](https://www.thedrum.com/news/2025/05/23/google-io-2025-ai-rewrites-the-rules-modern-marketing), [[5]](https://www.techradar.com/news/live/google-i-o-2025-live-project-astra-gemini-and-more)
* Paragraph 9 – [[1]](https://www.thedrum.com/news/2025/05/23/google-io-2025-ai-rewrites-the-rules-modern-marketing), [[2]](https://www.ft.com/content/dec83193-c787-4301-8098-4277fdd0e5af), [[4]](https://www.axios.com/2025/05/20/google-ai-shopping-features-virtual-try-on-clothes)
* Paragraph 10 – [[2]](https://www.ft.com/content/dec83193-c787-4301-8098-4277fdd0e5af), [[5]](https://www.techradar.com/news/live/google-i-o-2025-live-project-astra-gemini-and-more)

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## Bibliography

1. <https://www.thedrum.com/news/2025/05/23/google-io-2025-ai-rewrites-the-rules-modern-marketing> - Please view link - unable to able to access data
2. <https://www.ft.com/content/dec83193-c787-4301-8098-4277fdd0e5af> - At its recent developer conference, Google emphasized its strategic pivot towards artificial intelligence, unveiling major advancements aimed at redefining its core search business amid rising competition from AI chatbots like OpenAI’s ChatGPT. Co-founder Sergey Brin reappeared publicly to underscore AI’s transformative impact and his daily involvement in Google's AI lab. CEO Sundar Pichai introduced “AI mode,” an overhaul of Google Search that replaces traditional link lists with conversational responses powered by Gemini, its large language model. As AI poses threats to Google’s dominant search market, generating $198 billion in advertising revenue, the company faces the dilemma of evolving without undermining its current business. Google plans new monetization strategies, including high-tier subscriptions and contextual AI-driven ads, alongside tools like Project Mariner and Project Astra, capable of assisting users with real-time tasks. Despite setbacks like previous AI hallucinations and growing pressure from nimble rivals like Perplexity and regulatory concerns, Google maintains competitive advantages through its vast ecosystem and user data. Investor reactions were positive, although long-term success hinges on the performance and perception of its AI tools, which are still prone to flaws. Google aims to balance innovation with financial sustainability while defending its search dominance in a rapidly evolving digital era.
3. <https://www.axios.com/2025/05/23/google-ai-videos-veo-3> - Google has unveiled Veo 3, its latest AI video generator, which creates highly realistic video clips nearly indistinguishable from those produced by human filmmakers and actors. Announced at Google I/O and now accessible to U.S.-based Google AI Ultra subscribers for $249 per month, Veo 3 outperforms competitors like OpenAI's Sora by incorporating dialogue, soundtracks, and sound effects. A viral example by filmmaker and molecular biologist Hashem Al-Ghaili showcases AI-generated characters grappling with self-awareness, sparking online fascination and concern. While some creators welcome the technology, the proliferation of these lifelike videos raises ethical and creative challenges, particularly regarding authorship, consent, and artistic integrity. The full implications for the film industry remain uncertain, as society has yet to develop frameworks to address the blending of real and fabricated media.
4. <https://www.axios.com/2025/05/20/google-ai-shopping-features-virtual-try-on-clothes> - At its annual I/O developer conference on May 20, 2025, Google announced significant upgrades to its AI-powered shopping tools. A key innovation is the enhanced "Try It On" virtual dressing room, which now allows users to upload their own photo to virtually try on clothes, moving beyond previous versions that relied on generic AI models based on selected body types. This personalized experience aims to help consumers better visualize clothing before purchasing. Additionally, Google launched "AI Mode," a chat-like search experience that will incorporate shopping features in the near future. These updates leverage Google’s expansive Shopping Graph, which includes over 50 billion listings, complete with reviews, prices, and availability from global and local retailers. According to Google’s Vice President of Advertising and Commerce, Vidhya Srinivasan, the new tools prioritize personalization by using real user photos instead of stock images or standardized models. Interested users can access the new “try on” feature via Google Search Labs. These advancements underscore the growing influence of AI in transforming the online shopping experience.
5. <https://www.techradar.com/news/live/google-i-o-2025-live-project-astra-gemini-and-more> - Google I/O 2025 unveiled a vast array of technological innovations and AI advancements. Key highlights included the debut of Android XR Glasses in collaboration with Samsung, live-demoed by NBA star Giannis Antetokounmpo, showcasing real-time translation and AI interaction. Project Astra was introduced as a universal AI assistant, arriving on Android and iOS, capable of real-time video analysis and multitasking. A major leap in search technology was demonstrated with AI Mode and Search Live, leveraging multimodal inputs like voice, text, and images for more intuitive queries. Google Gemini's suite saw major upgrades including Gemini 2.5 Pro and Flash versions, enhancing live coding, deep research, and context-aware functions. Gemini Live now offers camera and screen-sharing capabilities, and integrates with Chrome for real-time webpage analysis. New creative tools—Imagen 4, Veo 3, and the comprehensive Flow video suite—offer groundbreaking text-to-video generation with audio. Conference attendees were also introduced to Google Beam, a 3D video conferencing tool, and NotebookLM's podcast-generating capabilities now available on mobile. Google also announced new subscription tiers for AI services, including AI Ultra at $249.99/month. Lastly, Wear OS 6 improvements and AI-driven shopping experiences further showcased Google's multifaceted AI vision.
6. <https://www.ft.com/content/b9d13cc7-f0f0-4d0d-9dfd-7d387ac2cdf9> - On May 20, 2025, Google announced a major overhaul of its search engine by introducing an "AI Mode" that offers conversational, chatbot-like interactions, akin to ChatGPT. This update, now available to all U.S. users via Google Search and Chrome, is part of a broader push to integrate generative AI into Google's services amid increased competition from OpenAI and Anthropic. CEO Sundar Pichai called it a "total reimagining of search," highlighting its potential to serve 8.5 billion daily queries more intelligently. Alongside AI Mode, Google launched new AI agents, including Project Mariner, which can perform complex tasks like booking travel or conducting research, and previewed Project Astra, a multimodal assistant that uses voice and visual inputs. The company is transitioning from an ad-supported model, offering paid subscriptions for advanced AI features—$25/month for "AI Pro" and $250/month for an "Ultra" package. Despite privacy concerns, Google is pushing ahead by enhancing its Gemini large language model, claiming its latest version outperforms competitors in benchmarks. The company is also implementing the Model Context Protocol to facilitate interaction between AI agents across apps and platforms, signaling its commitment to leading the evolving AI ecosystem.
7. <https://io.google/2025/explore/technical-session-5> - In a world where AI agents and humans coexist, what does the web of the future look like, and how could it work? What are agents, and how can Google’s latest client-side gen AI models help you perform agentic behaviors for real-world applications, to complete common tasks on your website faster? We’ll share a vision for an agentic internet capable of using local LLMs to perform actions on a user’s behalf through natural interfaces like text or voice, entirely in the JavaScript stack, along with the emerging world of hybrid Web AI, that embraces the benefits of Cloud and Web AI together with current generation devices.