

INTEGRATING GENERATIVE AI INTO TEAM-BASED MARKETING WORKFLOWS

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SUMMARY: *As the rapid adoption of generative AI tools in marketing practice continues, most teams still depend on fragmented, individual usage, which limits their ability to harness team-based human insights, enhance collaborative decision-making, and foster innovation. This paper examines how marketing organizations can transition from isolated AI experimentation to coordinated, team-based adoption. Drawing on a content analysis of industry cases and recent research, we identify key patterns of successful integration, common barriers, and enabling practices. We introduce the AI Collaboration Maturity Model, which outlines four progressive stages of human-AI integration in marketing workflows, from ad hoc assistance to fully embedded co-creation. The paper concludes with strategic implications for marketing leadership and practical recommendations for structuring workflows, training teams, and implementing governance to ensure responsible and effective use. Our findings provide a roadmap for marketing teams seeking to embed AI as a collaborative asset, thereby enhancing efficiency, creativity, and cross-functional performance.*

Keywords: *Generative AI, artificial intelligence, marketing strategy, AI implementation, AI adoption, marketing workflows*

INTRODUCTION

Generative artificial intelligence (AI) tools, such as ChatGPT and DALL-E, which create original text, images, and other content, are rapidly reshaping the marketing profession. Nearly 90% of marketers now report using generative AI, with 71% doing so weekly (Cashion & O'Brien, 2024). Since the public launch of ChatGPT in 2022, marketing teams have explored AI tools for copywriting, campaign testing, customer analysis, and data analytics. The ecosystem has grown rapidly, spanning general-purpose models and specialized platforms for content generation, design, analytics, and personalization.

These tools offer real value to marketing organizations. Observers call generative AI a “new powerhouse” in marketing, thanks to its ability to accelerate content production, unlock personalization at scale, and reduce manual effort (Goldman, 2024). Some early adopters report cutting campaign development time in half and reducing content production costs by up to 50% (Katzin et al., 2025). Yet most adoption remains fragmented. Marketers use AI individually, outside of shared workflows or standards, resulting in inconsistent quality, limited scalability, and unclear governance.

This gap between potential and practice is growing. Without structure, teams risk misuse of AI, misalignment with brand voice, and inefficiencies across creative and strategic workflows. Industry analysts and academic researchers alike have warned against “AI-first” strategies that lack coordination, oversight, or clarity on business goals (Kumar et al., 2024; Raisch & Krakowski, 2021). Emerging research suggests that when human-AI collaboration is guided by clear goals, shared responsibilities, and critical oversight, it can outperform both AI-only and human-only efforts (Arora et al., 2025). Moreover, individual AI usage misses the synergies achievable through team-based interactions, which are essential for fully realizing AI's potential in marketing (Langan et al., 2025).

This paper addresses that challenge. Drawing from a content analysis of real-world use cases and recent research, we identify how marketing teams are beginning to integrate AI more intentionally. We introduce the *AI Collaboration Maturity Model*, which outlines four progressive stages of integration, ranging from ad hoc usage to adaptive synergy. The paper also offers practical guidance for marketing leaders on building workflows, team capabilities, and governance structures that support responsible and effective AI adoption.

METHODOLOGY

Research Design

We used a qualitative content analysis approach to examine how marketing teams are incorporating generative AI into their workflows. Our analysis drew from two main sources: (1) case examples and industry reports documenting AI use in marketing, and (2) recent academic studies. By combining practitioner insights (e.g., surveys, case studies) with scholarly literature, we aimed to capture both real-world practices and broader conceptual developments.

Data Collection

We gathered publicly available examples from marketing trade publications, whitepapers, and industry news that described how teams use AI for tasks like copywriting, image generation,

customer analysis, and personalization. We also reviewed academic research from 2023-2025 focused on AI use in marketing, identified through database searches and literature reviews. We prioritized studies that addressed team-based workflows, rather than fully autonomous AI systems.

Data Analysis

We conducted inductive thematic analysis following established procedures in marketing scholarship (Spiggle, 1994; Belk, Fischer, & Kozinets, 2013). Two researchers independently performed open coding on an initial subset of sources to identify emergent categories through constant comparison (Spiggle, 1994). A shared codebook was then developed and iteratively refined, with four overarching categories: (1) AI-human task distribution, (2) workflow integration, (3) oversight and governance, and (4) capability development. All documents were coded in NVivo 14, with disagreements resolved through consensus and new codes added as appropriate. Next, we applied axial coding to uncover relationships among categories and to synthesize findings across practitioner and academic sources (Strauss & Corbin, 1990). To enhance trustworthiness, we maintained an audit trail of codebook revisions, triangulated findings across multiple data types, and sought negative cases to refine the boundaries of emerging themes (Spiggle, 1994; Lincoln & Guba, 1985).

From these patterns, we derived higher-order themes that structured the Results section. While our coding categories above provided the analytic foundation, the themes are presented in more interpretive, practice-oriented terms. Specifically, the Results are organized under three headings (expanding roles and use cases, collaboration challenges and constraints, and enabling factors for effective human-AI collaboration) that together illustrate the trajectory of AI integration and informed the four-stage AI Collaboration Maturity Model. Grounding the model in empirical evidence ensured both theoretical and applied relevance (MacInnis, 2011; Ladik & Stewart, 2008).

RESULTS

Our content analysis revealed how marketing teams are gradually incorporating generative AI into their workflows. Adoption is still uneven in that some tasks have seen dramatic gains, while others remain largely untouched. Most teams are taking a cautious, test-and-learn approach, exploring how to involve AI as a collaborator rather than a replacement. From these cases, several key patterns emerged.

Expanding Roles and Use Cases

Marketing teams are using AI in a growing range of activities, from brainstorming and drafting copy to analyzing customer data and generating personalized content. In these settings, AI often serves as an “ideation partner,” generating fast first drafts or content options that humans then review and refine (Thoughtworks, 2023). This aligns with findings from studies showing that human-AI pairings can outperform either alone in data analysis tasks (Arora et al., 2025). Several teams reported that AI reduced content production time by 30-50% (Katzin, Beaudin, & Ostendorf, 2025), a finding echoed by a field study in which AI collaborators matched human teams in innovation performance (Dell’Acqua et al., 2025).

AI is also enabling scale. For example, Nike used an AI tool to generate 130,000 personalized highlight clips for a Serena Williams campaign, something that would have been impractical with only human labor (Goldman, 2024). The most common use cases observed in our analysis fell into four categories: (1) content creation (text, imagery, video), (2) customer insight generation, (3) workflow automation (e.g., transcription or tagging), and (4) creative strategy support, paralleling broader industry trends (Katzin et al., 2025). Recent surveys confirm these patterns: around 62% of marketers report using AI for text generation, 50-60% use AI-enhanced writing tools like Grammarly, and 45% use image or video generation tools (Cashion & O'Brien, 2024). While creative tasks have seen early adoption, strategic or interactive uses are still emerging.

Collaboration Challenges and Constraints

Despite positive outcomes, teams face several challenges. A major concern is maintaining brand voice and content quality when using AI (Cashion & O'Brien, 2024). Academic research warns that misaligned AI content, if not carefully reviewed, can undermine brand equity (Raisch & Krakowski, 2021). Many teams noted that AI-generated outputs often require extensive human editing.

There are also concerns about over-reliance on AI. Some team members worry it may reduce opportunities to build creative or strategic skills. While only one-third of marketers reported fears of creativity loss in a 2024 industry survey (Cashion & O'Brien, 2024), experimental work has shown that long-term reliance on AI can subtly erode individual judgment and capabilities (Schweidel et al., 2024).

Other risks include bias, factual inaccuracy, and data security, especially when using external AI platforms. Nearly half of companies in a global survey reported at least one negative incident tied to generative AI use (Chui et al., 2023). As a result, many firms have adopted internal review processes requiring human approval before publishing AI-generated content. In practice, teams often treat AI as a research or drafting tool, but not a final authority, weighing the tradeoffs before fully automating any customer-facing output (Schweidel et al., 2024; Thoughtworks, 2023).

Enabling Factors for Effective Human-AI Collaboration

High-performing teams are using several strategies to enhance the value of generative AI. First, human oversight remains essential. Teams that review and refine AI outputs as part of a formal process see better outcomes, an approach supported by large-sample research linking oversight practices to campaign performance (Kumar et al., 2024). Second, training plays a critical role. Teams that invest in prompt engineering workshops, develop internal guidelines, or share best practices through "AI champions" build confidence and drive more consistent results (Acar, 2024). Raising AI literacy is increasingly seen as foundational for long-term success (Katzin et al., 2025). Third, aligning AI tasks with marketing goals improves both efficiency and relevance. Teams saw better outcomes when they defined clear use cases, such as streamlining A/B testing or generating creative variations, instead of applying AI broadly without direction. These findings echo prior research emphasizing the importance of clear objectives and human alignment (Acar, 2024; Raisch & Krakowski, 2021). Finally, the most effective teams took an iterative approach: starting with small pilot projects, gathering feedback, refining processes, and

expanding use over time. This allowed them to build trust in the tools and tailor workflows as they learned what worked best.

In summary, marketing teams vary widely in their adoption of collaborative AI, ranging from tentative, ad-hoc usage to sophisticated, integrated co-creation. The patterns uncovered in our analysis inspired a stage-based framework to classify this evolution. We next present an AI Collaboration Maturity Model that characterizes the progressive levels of human-AI integration observed in team-based marketing workflows.

AI Collaboration Maturity Model

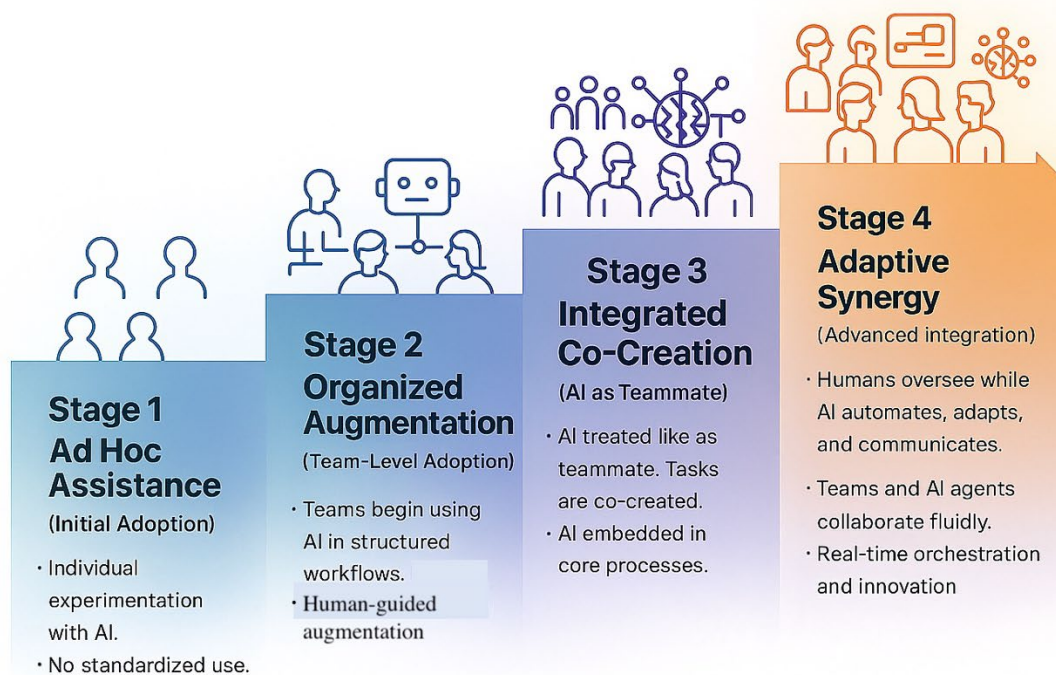
To assess how well AI is integrated into marketing team workflows, we developed an AI Collaboration Maturity Model (see Figure 1). This framework outlines four stages that teams typically progress through as they shift from isolated experimentation to deep, cross-functional AI collaboration.

1. **Ad Hoc Assistance (Initial Adoption):** In the first stage, use of generative AI is experimental and fragmented. Individual team members might use AI tools on their own (e.g., a copywriter using ChatGPT to draft ideas or an analyst using DALL-E to create a visual), but there is little coordination or standardization across the team. AI functions primarily as a personal productivity tool rather than a core part of the team's workflow. Most marketing teams today remain in this early stage in which generative AI is recognized as valuable, but systematic processes and guidelines are not yet in place (Katzin et al., 2025).
2. **Organized Augmentation (Team-Level Adoption):** In the second stage, teams begin incorporating AI in a more structured way for specific tasks and projects. AI is treated as an assistant integrated into team workflows under human direction. For instance, a team might formally include an AI-generated first draft as a step in content creation, with subsequent human editing and approval. Collaboration patterns start to form where members share effective prompts and managers establish guidelines for when and how to use AI in the project lifecycle. At this maturity level, AI primarily informs and augments human decision-making (Thoughtworks, 2023). The team still exercises full control, but AI-driven insights and content are regularly used to support human work, improving efficiency and breadth of ideas.
3. **Integrated Co-Creation (AI as Teammate):** In the third stage, generative AI becomes a collaborative partner woven into nearly every facet of the team's workflow. The distinction between "AI tasks" and "human tasks" blurs, as many tasks are accomplished through iterative human-AI co-creation. For example, an AI system might generate personalized content variations at scale while team members curate and refine the outputs, or an AI might continuously analyze campaign performance data and suggest optimizations during team meetings. At this stage, AI is treated almost like a team member and is assigned well-defined roles in processes, such as idea generator, draft writer, and data analyst. Some routine decisions or content generation processes may be semi-automated with AI, with humans focusing on oversight and creative direction (Thoughtworks, 2023). Achieving this level often requires significant upskilling, trust in

AI, and workflow redesign, but it can unlock substantial gains in productivity and creative capacity.

4. **Adaptive Synergy (Advanced Integration):** This emerging stage represents the frontier of human-AI collaboration, where multiple human team members and multiple AI agents work together seamlessly on interconnected tasks. In this scenario, AI is not just assisting, but orchestrating certain processes and interacting with other AI systems under human supervision (i.e. “bot stacking”). Teams at this level leverage a portfolio of generative AI tools (e.g., separate models for copy, design, and data insights) that communicate with each other and team members in real time. Decision-making becomes a fluid interplay where humans set objectives and creative direction, while AI agents autonomously handle many implementations and adapt based on feedback. Early conceptual work refers to this as “Synergistic AI,” (Langan et al., 2025), a collaborative framework combining the cognitive strengths of multiple users with diverse generative AI bots within a unified environment. Although few organizations have reached this level in practice, it foreshadows how marketing workflows might evolve, with humans and AI agents collectively co-creating strategies, content, and solutions in a highly dynamic, synergistic process (Dell’Acqua et al., 2025).

Figure 1. AI Collaboration Maturity Model for Marketing Teams



MANAGERIAL AND STRATEGIC IMPLICATIONS

As generative AI becomes more integrated into marketing workflows, it brings significant implications for how teams are structured, how talent is developed, and how strategy is formulated. Building on the patterns identified through our content analysis and reflected in the AI Collaboration Maturity Model, we identify five key areas of transformation: roles and skills, workflow design, ethical governance, competitive positioning, and organizational culture.

Evolving Team Roles and Skills

AI is shifting the role of marketers from content producers to curators and directors (Heitmann, 2024). Instead of crafting every message manually, marketers increasingly guide, refine, and interpret AI outputs (Thoughtworks, 2023). This evolution demands new skills, such as prompt engineering, critical review of AI content, and data interpretation, that complement traditional expertise. As new hybrid roles emerge (e.g., AI marketing specialists or prompt librarians), leading firms are already treating AI literacy as a core job requirement.

Workflow Redesign and Leadership Oversight

Fully realizing AI's value may require a rethinking of how teams work. Siloed roles between creatives, analysts, and IT may need to dissolve, allowing AI insights to flow directly into strategic decisions. Coordination between marketing and technical functions becomes critical when implementing AI tools. Leadership plays a central role in aligning AI use cases with strategy, managing risks, and sharing best practices, whether by forming an oversight group or appointing an internal champion. Larger firms may establish formal centers of excellence, while smaller ones may rely on agile, decentralized efforts (Chui et al., 2023).

Balancing Creativity and Ethics

While AI offers scale and speed, overreliance can dull a brand's voice. Poorly supervised AI campaigns have already triggered backlash due to tone-deaf messaging (Goldman, 2024). Studies caution that strategic thinking and creative skill may erode over time if teams default to automation. Leaders should encourage teams to use AI as a creative catalyst rather than a replacement by treating AI-generated outputs as a starting point for human refinement. To ensure consistency and authenticity, organizations should compile documents that effectively capture the company's brand image, voice, and vision, and attach these documents to AI knowledge when co-creating. Ethical oversight is also essential: marketers must uphold standards around data privacy, transparency, and bias mitigation (Cashion & O'Brien, 2024). These aren't just technical issues; they're brand trust issues.

Competitive Advantage and Performance

Teams that integrate AI strategically are outperforming those that don't. Klarna reportedly saved \$10 million annually by producing content in-house using AI, while Cadbury has demonstrated the power of AI-assisted, user-generated content (Boom, 2024; Klarna, 2024). These examples underscore how AI can become a performance multiplier if integrated

thoughtfully. In the long run, we may see a widening gap between organizations that modernize their workflows with AI and those that lag. The former will likely be able to produce content and insights at a scale and precision that traditional teams cannot match, enabling more frequent experimentation and data-driven optimization of marketing strategy. However, this isn't just about tools. The edge comes from aligning AI with business objectives, continuously training teams, and adapting workflows to support experimentation and speed (Katzin et al., 2025).

Culture and Talent Development

Sustainable AI integration hinges on culture. Teams need space to experiment, share learnings, and fail without fear. This means rewarding innovation and empowering individuals to explore AI tools (within ethical boundaries). As roles evolve, so too will hiring in that adaptability and AI literacy may soon be as important as writing or strategy experience. Educational institutions are starting to prepare students for this future (e.g., Anderson et al., 2025), but organizations that invest now in cultivating an AI-savvy workforce will lead tomorrow's marketing landscape.

CONCLUSION

Generative AI is reshaping marketing, but its value depends on purposeful, team-level integration. Our content analysis shows that when human creativity and AI capabilities are aligned through clear goals, skills, and oversight, teams cut production cycles up to 50 % and unlock richer customer insights. Conversely, ad-hoc adoption can dilute brand voice and inflate risk.

The AI Collaboration Maturity Model provides a practical roadmap. By benchmarking their current stage and targeting the next, leaders can convert fragmented AI experiments into disciplined, cross-functional workflows. Quarterly self-assessments, paired with prompt-engineering training and a standing AI-governance check, can help teams progress while protecting brand equity.

As AI tools become more autonomous, marketers must redesign roles, workflows, and culture. Early adopters that combine human judgment with machine speed are already achieving faster go-to-market times and measurable ROI gains. Educational institutions can use the model to prepare students for AI-augmented teamwork (e.g., Narang et al., 2024), while researchers can validate stage transitions and tie them to performance metrics across industries.

Ultimately, generative AI's greatest contribution is not to replace marketers but to amplify them, expanding the scale and precision of marketing while elevating strategic and creative thinking. Organizations that invest now in structured human-AI partnerships will define the next era of marketing leadership.

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REFERENCES

- Acar, O. A. (2024). Beyond prompt engineering: Skills marketers need to deploy generative AI successfully. *NIM Marketing Intelligence Review*, 16(1), 18-23.
- Anderson, J., Nguyen, C. A., & Ucock Hughes, M. (2025). Mapping theory to practice: AI-enhanced teaching theories for fostering diverse perspectives in business education. *Journal of International Education in Business*. Advance online publication.
- Arora, N., Chakraborty, I., & Nishimura, Y. (2025). AI-human hybrids for marketing research: Leveraging large language models (LLMs) as collaborators. *Journal of Marketing*, 89(2), 43-70.
- Belk, R. W., Fischer, E., & Kozinets, R. V. (2012). *Qualitative consumer and marketing research*. Sage.
- Boom, C. (2024). Cadbury uses AI to let you star in one of its classic ads from the last 200 years. *Creative Boom*. <https://www.creativeboom.com/news/cadbury-uses-ai-to-let-you-star-in-one-of-its-classic-ads-from-the-last-200-years/>
- Cashion, F., & O'Brien, J. (2024, December 12). Generative AI takes off with marketers. *AMA Marketing News*. <https://www.ama.org/marketing-news/generative-ai-takes-off-with-marketers/>
- Chui, M., Hazan, E., Roberts, R., Singla, A., Smaje, K., Sukharevsky, A., Yee, L., & Zimmel, R. (2023, June 14). Economic potential of generative AI. *McKinsey & Company*. <https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/the-economic-potential-of-generative-ai-the-next-productivity-frontier>
- Dell'Acqua, F., Ayoubi, C., Lifshitz, H., Sadun, R., Mollick, E., Mollick, L., Han, Y., Goldman, J., Nair, H., Taub, S., & Lakhani, K. (2025). *The cybernetic teammate: A field experiment on generative AI reshaping teamwork and expertise* (NBER Working Paper No. 33641). National Bureau of Economic Research.
- Goldman, J. (2024, October 7). Generative AI is marketing's new powerhouse, when used right. *eMarketer*. <https://www.emarketer.com/content/generative-ai-marketing-new-powerhouse-when-used-right>
- Heitmann, M. (2024). Generative AI for marketing content creation: New rules for an old game. *NIM Marketing Intelligence Review*, 16(1), 10-17.
- Huang, M. H., & Rust, R. T. (2021). A strategic framework for artificial intelligence in marketing. *Journal of the Academy of Marketing Science*, 49, 30-50.
- Katzin, J., Beaudin, L., & Ostendorf, H. (2025, February 10). For marketers, generative AI moves from novelty to necessity. *Bain & Company*. <https://www.bain.com/insights/for-marketers-generative-ai-moves-from-novelty-to-necessity/>
- Klarna. (2024). 90% of Klarna staff are using AI daily, game changer for productivity. *Klarna International*. <https://www.klarna.com/international/press/90-of-klarna-staff-are-using-ai-daily-game-changer-for-productivity/>
- Kumar, V., Ashraf, A. R., & Nadeem, W. (2024). AI-powered marketing: What, where, and how? *International Journal of Information Management*, 77, 102783.
- Ladik, D. M., & Stewart, D. W. (2008). The contribution continuum. *Journal of the Academy of Marketing Science*, 36(2), 157-165.
- Langan, R., Rodrigues, M., Trainor, K., & Nguyen, C. (2025). The evolution of generative AI in marketing education: From collaborative to synergistic learning. *Abstract presented at the Academy of Marketing Science Annual Conference, Montreal, Canada*.

- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage.
- MacInnis, D. J. (2011). A framework for conceptual contributions in marketing. *Journal of Marketing*, 75(4), 136-154.
- Narang, U., Sachdev, V., & Liu, R. (2024). When AI wears many hats: The role of generative artificial intelligence in marketing education. *Journal of Public Policy & Marketing*. Advance online publication. Article ID 07439156251328237.
- Raisch, S., & Krakowski, S. (2021). Artificial intelligence and management: The automation-augmentation paradox. *Academy of Management Review*, 46(1), 192-210.
- Schweidel, D. A., Reisenbichler, M., & Reutterer, T. (2024). Moving beyond ChatGPT: Applying large language models in marketing contexts. *NIM Marketing Intelligence Review*, 16(1), 24-29.
- Spiggle, S. (1994). Analysis and interpretation of qualitative data in consumer research. *Journal of Consumer Research*, 21(3), 491-503.
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research*. Sage.
- Thoughtworks. (2023). *Accelerating product innovation with generative AI*.
<https://www.thoughtworks.com/en-us/perspectives/edition29-AI-product-development/article>